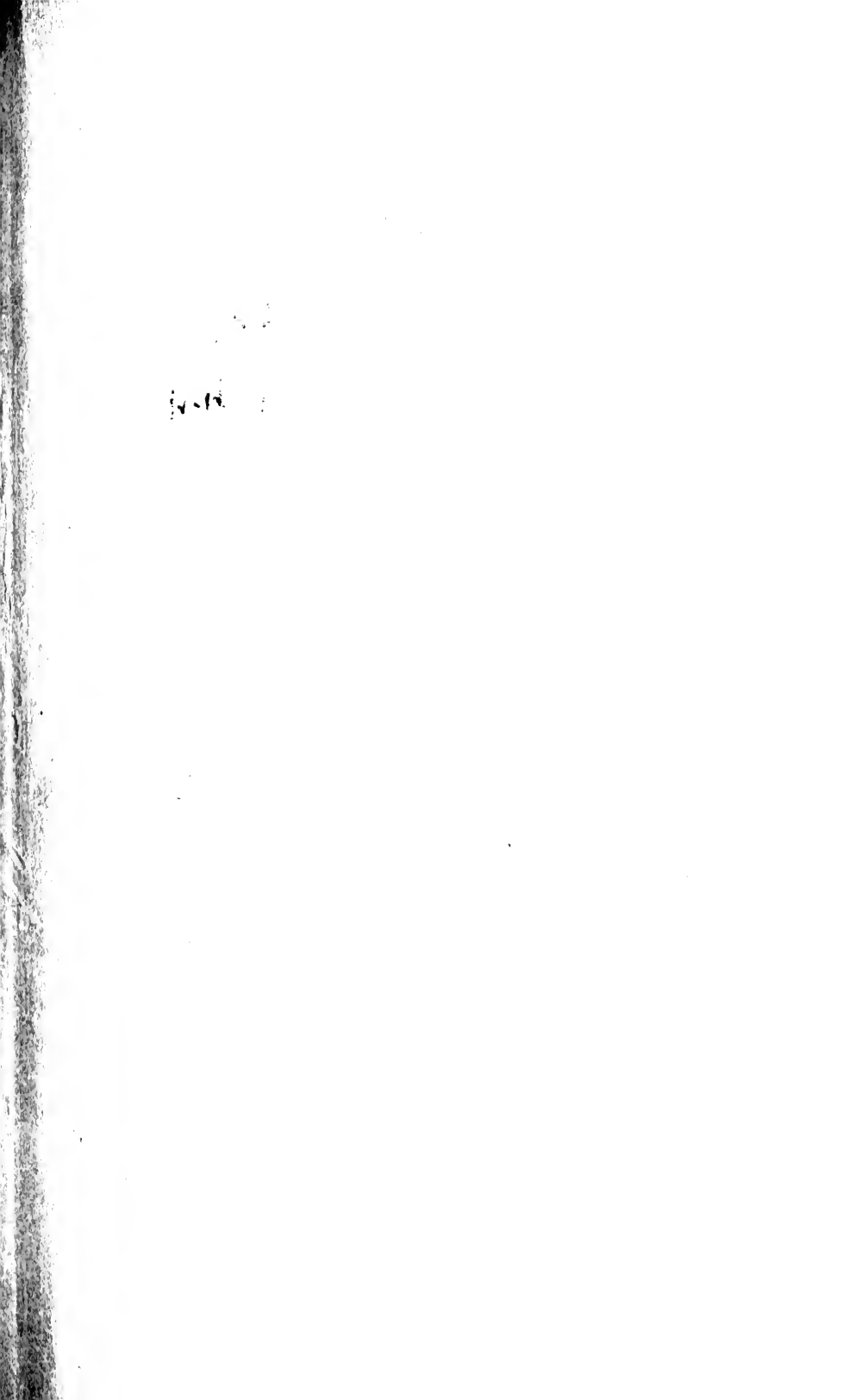


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NATIONAL DEFENSE MIGRATION

HEARINGS

BEFORE THE

SELECT COMMITTEE INVESTIGATING

NATIONAL DEFENSE MIGRATION

HOUSE OF REPRESENTATIVES

SEVENTY-SEVENTH CONGRESS

SECOND SESSION

PURSUANT TO

H. Res. 113

A RESOLUTION TO INQUIRE FURTHER INTO THE INTERSTATE
MIGRATION OF CITIZENS, EMPHASIZING THE PRESENT
AND POTENTIAL CONSEQUENCES OF THE
MIGRATION CAUSED BY THE NATIONAL
DEFENSE PROGRAM

PART 27

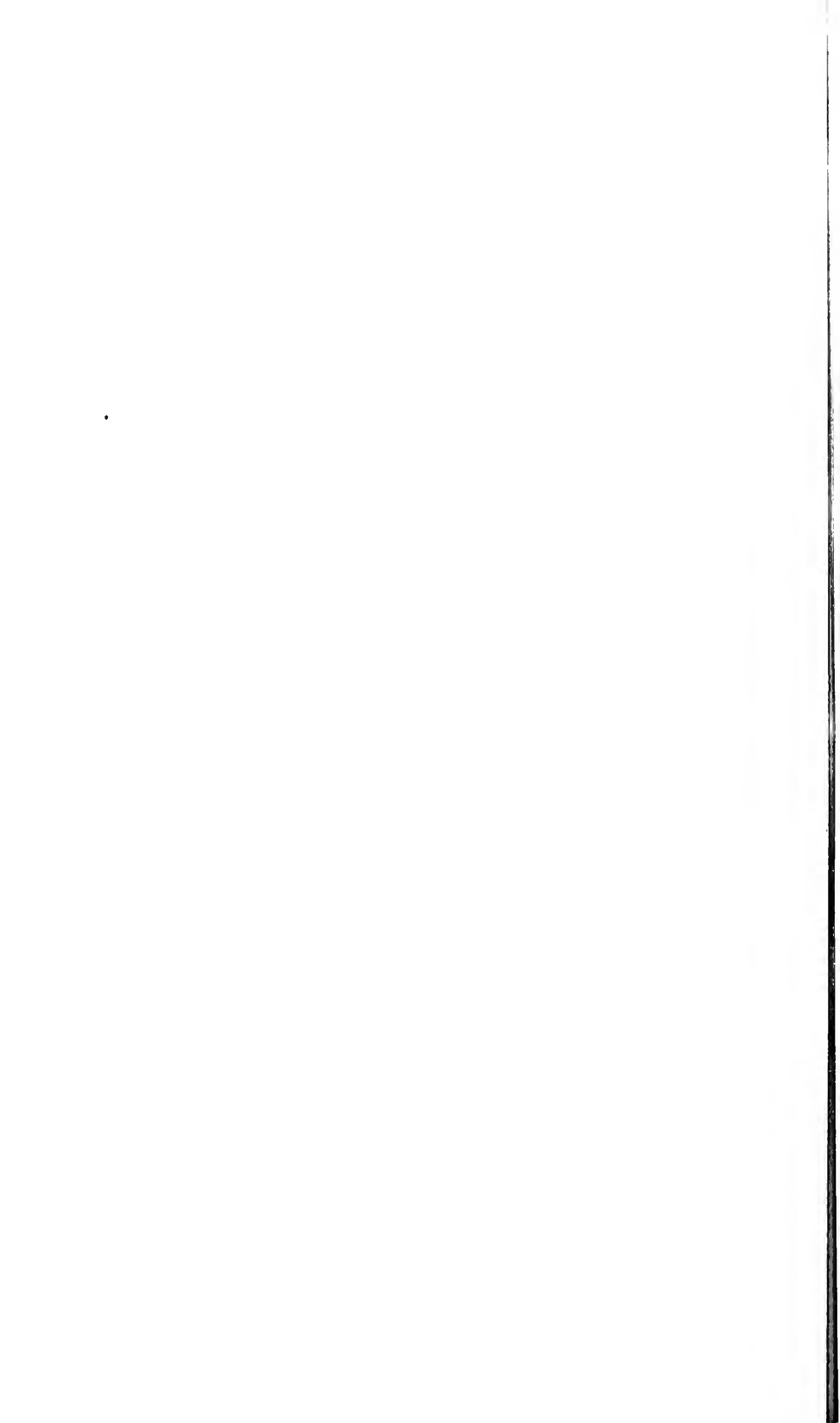
WASHINGTON HEARINGS

FEBRUARY 3, 4, 11, 1942

THE MANPOWER OF THE NATION IN WAR
PRODUCTION—BOOK ONE

Printed for the use of the Select Committee Investigating
National Defense Migration





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Printed for the use of the Select Committee Investigating
National Defense Migration



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SELECT COMMITTEE INVESTIGATING NATIONAL DEFENSE
MIGRATION

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JOHN J. SPARKMAN, Alabama

CARL T. CURTIS, Nebraska

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ROBERT K. LAMB, *Staff director*

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NATIONAL DEFENSE MIGRATION

TUESDAY, FEBRUARY 3, 1942

MORNING SESSION

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE INVESTIGATING
NATIONAL DEFENSE MIGRATION,
Washington, D. C.

The committee met, pursuant to notice, at 9:30 a. m., in room 1536, New House Office Building, Washington, D. C., Hon. John H. Tolan (chairman) presiding.

Present were: Representatives John H. Tolan (chairman), of California; John J. Sparkman, of Alabama; and Carl T. Curtis, of Nebraska. Also present: Dr. Robert K. Lamb, staff director.

The CHAIRMAN. The committee will please come to order. General Hershey will be the first witness.

TESTIMONY OF BRIG. GEN. LEWIS B. HERSHEY, DIRECTOR, SELECTIVE SERVICE SYSTEM, WASHINGTON, D. C.

The CHAIRMAN. General Hershey, we appreciate your coming here this morning. The committee at this hearing is interested in studying the problem of national labor-market policy. Industry, agriculture, and the Army will require additional millions of workers during the next year. It is estimated that in the coming year 10,000,000 additional workers will be needed, 6,000,000 of whom will be new entrants into the labor market, while another 4,000,000 will be shifted from consumer-goods industries. In short, it appears that the Nation will face an over-all labor shortage problem in 1942. As you are well aware, it is critically important that intelligent policies governing labor migration and all other aspects of the labor market should be developed now. The selective service, of course, is a very powerful factor in determining what happens to the supply of labor for industry and for agriculture.

General, Congressman Sparkman will ask you some questions based on the statement you filed with the committee. The statement will be inserted in the record at this point.

(The statement referred to above is as follows:)

STATEMENT BY BRIG. GEN. LEWIS B. HERSHEY, DIRECTOR, SELECTIVE SERVICE SYSTEM, WASHINGTON, D. C.

I am appearing in accordance with the committee's request and have prepared a brief statement covering the specific inquiries set forth in such request.

The Selective Service System has been charged with the responsibility of registering and classifying the entire manpower of this Nation between the ages of

18 and 65, and with the further responsibility of determining which of the men between 20 and 44 should be allocated to the armed forces and which of them should be allocated to wartime production or other essential civilian activities or responsibilities. As a specified amount of money must be so budgeted as to obtain the best use, so also must the supply of manpower be budgeted and allocated so as to obtain the most effective results.

Generally speaking, the following are the users of manpower essential for the war effort and the national health, safety, and interest: (1) The Army, (2) the Navy and Marine Corps, (3) war industrial production, (4) war agricultural production, (5) war transportation, and (6) other civilian activities essential for the welfare of the civilian population or for the war effort.

It is obvious that manpower must be properly allocated among those users. No user can be permitted to acquire more manpower of a particular type than it is determined should be allocated to it after considering the needs of the others.

It would be utterly foolish to take men out of essential war production and induct them into the armed forces when by so doing the Army fails to receive the equipment it must have in order to fight effectively. A proper balance must be maintained, and manpower must be so allocated that a sufficient amount of mechanical equipment will be available for the Army and Navy at all times.

The principles and theories of selective service concerning such balance and allocation have been under careful study and research for many years.

A vast majority of the manpower between the ages of 21 and 36 have already been registered and partially inventoried. Immediately following December 7, 1941, when public opinion became entirely unified and it was obvious that there would be a tremendous war production expansion, coupled with a simultaneous large-scale increase in the size of the armed forces, we promptly requested and obtained legislation to extend the age limits of men liable for training and service and to provide for an extensive inventory of the Nation's manpower.

INVENTORY OF NATIONAL MANPOWER

Under the new legislation, although liability for military service is confined to the men between the ages of 20 and 45, provision is made for Selective Service to inventory all of the manpower between the ages of 18 and 65. The inventory of the men between 18 and 20 and between 45 and 65, who are not liable for service, will furnish the Selective Service System with more detailed information upon which to establish proper deferment policies. By means of proper deferment selective service can, to a considerable extent, control proper allocation of manpower among the users, provided the individual users do not disrupt our operations and upset the proper balance by ruthlessly competing among themselves for the cream of our manpower. Control may be imposed by denying deferment to a man working at a nonessential occupation.

It is imperative that peak production be attained at the earliest possible moment so that the necessary equipment and matériel will be available not only to meet the requirements of our own armed forces, but also to assist in equipping the armed forces of our allies. We must not forget that for every soldier there must be many men working behind the lines to sustain him.

I have already called your attention to the fact that competition among the various users of manpower must be controlled or entirely eliminated. Although war industrial production must be maintained, it should not be permitted to draw unnecessarily upon the supply of potential I-A men or upon manpower engaged in war agricultural production. In recent conferences with management and labor organizations directly concerned with essential industrial production, it was agreed that they would cooperate with us by handling their personnel expansion program in such a manner that the rosters of employees would consist of men of various ages and of various circumstances, and would also consist of a large percentage of women. An employer engaged in essential production who has such an employee pattern is not faced with a very difficult situation when it is recognized that the vast majority of his employees would be entitled to deferment for reasons other than occupational.

CLASSIFICATION OF RESIDENTS

In this connection, too often we overlook the fact that vast numbers of the men engaged in essential activities are deferred for reasons other than occupation, namely, for dependency or by reason of physical defects. Statistics disclose that only about 3.4 percent of classified registrants are in class II, of which 2.5 percent are in class II-A, being engaged in essential nonwar civilian activities, while

0.9 percent are in class II-B, being engaged in essential war activities. In contrast to the small percentage of essential workers who are in class II, and particularly in class II-B, the statistics disclose that approximately 64.1 percent of classified registrants are in class III, being deferred because of dependency. In this class is found the bulk of the workers.

There is no question but that all of the various users of manpower would prefer to use for the most part young, physically perfect men. A survey of our manpower, however, reveals that there are not enough young, 100-percent perfect men to fill the total manpower requirements of all the users of manpower, if we contemplate the possibility of having an armed force of 7,000,000 or 8,000,000 men or more and the production of matériel with which to equip it and also supplement the matériel requirements of our allies.

UTILIZATION OF DIFFERENT AGE GROUPS

In the near future the Army will be inducting, through selective service, men from all age groups between 20 and 45. There is no question but that some of the older men will be assigned to jobs requiring less physical strain than those to which the younger men will be assigned. There are many assignments in the armed forces that can be performed by such older men and by limited-service men just as well as by younger, 100-percent-perfect men. When the armed forces required only comparatively small numbers of men, it was probably advisable to impose very high standards and take only the young, 100-percent-perfect men to perform all assignments, even though some of them could be performed just as well by men who could not meet such standards.

The other users of manpower can utilize older men and women to a considerable extent, so as to relieve the tremendous demand upon the supply of younger men. Unless this is done, there will not be sufficient manpower of different ages and of different types to meet the present and long-term requirements of our war effort.

Some of the younger industries hired their employees almost entirely from among the young, 100-percent perfect men. We have been calling upon them to modify their employment practices by intermingling with their existing employees a sufficient percentage of women and also men of older ages and men who are not entirely 100 percent physically perfect. Employers who already have proportionate numbers of their employees of various ages and circumstances should not discriminate against younger men when hiring in the future, provided such employers employ proportionate numbers of various ages and circumstances.

As I have heretofore indicated, employers who have such a cross section of employees will at worst be concerned only with the replacement of a fraction of their employees, and we have assured such employers that we will cooperate to the maximum so as not to disrupt essential production, and so as to provide for making necessary replacements over a reasonable period of time. The entire concept of occupational deferment contemplated deferments of various lengths of time to take care of situations such as this.

While employers engaged in essential industrial production cannot sit complacently by and expect to be able to employ only young, single, 100-percent perfect men, we definitely recognize that the hysterical action on the part of selective service local boards in refusing necessary claims for occupational deferment must be prevented.

The Selective Service System has thus far acquired information with respect to the supplies of, and demands for, various types of skilled men, from all available sources, both governmental, public and private. It has recognized, however, the need for more detailed and more accurate information, which it plans to obtain from more comprehensive and intensive liaison on National, State and local levels with governmental, public and private agencies and organizations, and also from the occupational inventory contemplated by recent legislation. National headquarters already has direct liaison with labor and management organizations and has received the cooperation of governmental agencies and officials who are concerned with the question of manpower. Such relationships permit valuable exchange of ideas with unusual informality, facility, and speed.

With respect to the occupational inventory, a form, which we propose to use in order to obtain the initial information, has been tentatively drafted by Selective Service with the assistance of various governmental agencies interested in such a survey, and whose cooperation we have requested. After the initial information has been obtained by way of the proposed form, Selective Service intends to keep that information current by requiring the registrants of all ages to file supple-

mental information setting forth specified changes in status. Among other things, by keeping this information current in the local boards, we will have current information on the various matters pertaining to manpower, including migration.

EFFECT ON AGRICULTURE

We have been receiving numerous inquiries about the effect Selective Service is having on agriculture. From the best information available to us from governmental, public, and private sources, on the National, State and local levels, it seems as though there are local shortages of agricultural labor in some areas, particularly in and around the heavy industrial areas, and that the shift of farm labor to war industrial production or to the Army, Navy, and Marine Corps through their recruiting campaigns in farming areas are the two main causes of any such shortages, with Selective Service coming in a poor third.

Proper control of the recruiting practices of the Army, Navy, Marine Corps and war industries will relieve the situation insofar as essential agricultural manpower is concerned.

People living in agricultural areas must recognize that we cannot defer every farmer, every farmer's son, and every farmhand merely because the individual happens to be engaged in the occupation of farming. The test of deferment is whether or not the products from such farm are substantially contributing to our national health, safety and interest in providing food or raw materials which are essential for our armed forces, the armed forces of our allies, or our civilian population.

We have been giving this matter our careful consideration, and we recognize that the problem becomes more acute as increased demands are made on the labor supply by all users. We are supplementing and expanding our contacts with governmental agencies, with farm organizations and other interested groups on National, State and local levels, which, coupled with our occupational survey, should be of material assistance in guiding our policies.

ALLOWANCE AND ALLOTMENT

Allowance and allotment legislation has been proposed, and if enacted in proper form, it will release for induction many registrants, now deferred on the grounds of dependency, who would be contributing to claimed dependents amounts equal to or less than the amount of the allotment.

The Selective Training and Service Act of 1940 charges the Director of Selective Service with the responsibility of getting post-war employment for members of the armed forces, whether inducted through Selective Service or not.

Since the enactment of the act in the fall of 1940, we have been engaged in planning along those lines, and we have a separate division in national headquarters designated as the Reemployment Division. We had to be ready to get reemployment for the inductees who were to be released from active duty at the expiration of their period of training and service, and we actually did put our reemployment machinery into operation with respect to the men over 28 years of age who were released from active duty under the age deferment act.

In setting up our reemployment machinery, we sought and obtained splendid cooperation from the various governmental, public and private agencies and organizations. Our contemplated occupational inventory will merely supplement the forms and procedure which we were using in our reemployment program.

TESTIMONY OF BRIG. GEN. LEWIS B. HERSHEY—Resumed

Mr. SPARKMAN. Let me say in the beginning, General, that if any of the questions I may ask should call for information that you think is not proper to divulge, you are to feel perfectly free to say so.

The first question I want to ask you is this: What is the size of our armed forces at the present time and what do you contemplate the size will be at the end of this year?

General HERSHEY. I couldn't give you the exact number at this time. It is somewhat less than 2,000,000. The Secretary of War has announced 3,600,000 as the objective before January 1, 1943.

That will mean an increase of from 1,900,000 to 2,000,000 more than they have at the present time.

Mr. SPARKMAN. What age groups will be drawn on most heavily for that increase?

General HERSHEY. I should say the twenties in general. But it will depend to some extent on how well the recruiting goes among the 18- and 19-year-olds. The 18- and 19-year-olds are not liable for military service but they are being solicited by the Army, and the 17-, 18-, and 19-year-olds are being solicited by the Navy. So there will be drawings from the 18- and 19-year-old groups, in spite of the fact that the 20- to 45-year-old group are the only ones liable under the Selective Service Act.

Mr. SPARKMAN. The drawings from the 17-, 18-, and 19-year-old groups will be voluntary?

General HERSHEY. Yes.

POLICY ON DEFERMENT

Mr. SPARKMAN. Would you briefly outline for us your deferment policy with relation to industrial and agricultural workers?

General HERSHEY. I might say that the deferment policy on both industrial and agricultural workers should be looked at in the light of the fact that a very large share of those workers are deferred for reasons other than the fact that they are industrial or agricultural workers.

I believe you will find that normally about 12 men who are engaged in agriculture or industry are deferred for dependency for each man who is deferred primarily because he is engaged in agriculture or in industry.

The reason for that is easy to see. The great majority of wage earners, especially as you go in the upper twenties, and particularly in the thirties and forties, are individuals who are maintaining dependents. For that reason, under our present policies, where we defer somewhere around 65 percent of our total number for dependency, we intend to give what we call indirect deferment to the agricultural and industrial workers.

At the present time, about nine-tenths of 1 percent of the men that we have classified have been placed in what we call II-B deferment; that is, men specifically in war industries. We have deferred about 2½ percent of those we classified in II-A which includes those engaged in agriculture, groups in training for skills or professions in which there are shortages, doctors that are engaged at home in taking care of the civilian population, and any other person who indirectly contributes to the war interest by maintaining the structure of society. That group runs to about 500,000 out of a total of 14,000,000 or 15,000,000 already classified.

The CHAIRMAN. The deferment of agricultural workers reaches into the dependency problem more than it does the labor problem. Is that right?

General HERSHEY. In other words, we have some boys who are at home who do not have dependents, but I think you will find that the average individual on the farm has a wife or perhaps a mother or someone that he supports. So, regardless of his age, this young farm worker with a dependent will be placed in class III, because we defer in

the lowest class to which a man is eligible, and dependency is a class III instead of a class II deferment. Hence a man eligible for dependency deferment will not be considered agriculturally or industrially.

SHORTAGE OF AGRICULTURAL WORKERS RECOGNIZED

The CHAIRMAN. Do you take any cognizance of an acute agricultural labor shortage in a particular part of the country in deferment?

General HERSHEY. Yes. We have tried—with what success time alone probably will say—but we have taken into consideration the shortage of agricultural workers.

I personally happen to feel it rather keenly. I know that the agricultural worker that is removed is practically irreplaceable because of the fact that if it is general farming on a small farm—the kind I am particularly familiar with—the worker has to be to some extent the manager.

He has to be able to do things without supervision and, my experience has been—and I grew up on a farm—that his skill and his ability to manage, is the result of having lived on a farm up to the time he is in his twenties. Added to that fact it is difficult, especially in my part of the country, to get people who have not lived under those circumstances, to go into farming. It is an acute problem, because if you remove this fellow you can't get one to replace him.

We have tried rather hard to impress this upon our boards. I have felt sometimes that even among our farmers there is not quite the appreciation of how skilled they are, if you want to use the word "skilled," in describing knowledge of a profession that is rather particular.

Mr. SPARKMAN. Of course, it is your purpose to continue to defer men with dependents?

ALLOTMENTS AND ALLOWANCES

General HERSHEY. Yes, as long as possible, with certain minor changes that may come with the passage, if Congress should, of allotment and allowance legislation later. Dependency is a thing that starts where there is very little dependency either financially or even socially, and it goes to the place where you have a very closely knit family unit where dependency is very high.

Mr. SPARKMAN. Of course, there will always be some deferment, but your point is that as the need becomes greater, the degree of dependency will have to be greater in order to entitle that person to deferment?

General HERSHEY. That is right. The general principle, however, is that dependency will continue to be a very outstanding cause for deferment?

Mr. SPARKMAN. And is it your idea that there may be some system of allotments worked out for maintenance of dependents?

General HERSHEY. Yes.

Within the last 3 or 4 weeks I attended a conference at the War Department concerning proposed legislation of such nature. I think a bill has already been introduced in Congress by Representative Edmiston, of West Virginia.

Three years ago I made a study on this question as a staff officer in the War Department, and I do have considerable general knowledge on the different philosophies on the allotment-allowance laws, and to some extent how they are operated in other countries.

Mr. SPARKMAN. We had an allotment law, of course, during the World War.

General HERSHEY. During the World War there was a straight-out compulsory allotment of half of the soldier's pay, the allotment not to be in excess of \$15 per month. At that time the base pay was \$30 per month which carried, of course, a compulsory allotment of \$15 to the wife. This was matched by a \$15 allowance from the Government to wives with no children. If there were children, the first child was given \$10 per month by the Government and each succeeding child \$7.50 up to a maximum of five children. This would make \$15 which the soldier furnished and a maximum of \$55 which the Government furnished. It is my understanding that, while the actual amounts this time may or may not be different, there will be a bill requested or submitted by the War Department based on the same basic principle; namely, a compulsory allotment matched or exceeded by an allowance from the Government.

Mr. SPARKMAN. In addition to that compulsory allotment there was also a voluntary allotment, was there not?

General HERSHEY. Voluntary allotments are possible now.

Mr. SPARKMAN. But the Government does not match the voluntary allotments with one of their own, do they?

General HERSHEY. No; nor did they in the last war.

Mr. SPARKMAN. I wonder if you could tell us briefly something about similar plans used by other governments?

ENGLISH AND FRENCH SYSTEMS OF ALLOWANCES

General HERSHEY. They have in England a hardship board set up to judge the individual case, and try to make an allowance that will match part of the difference between the loss of pay in leaving civilian employment to go into the Army.

They have a ceiling or a limit to their allowances.

It was my fear, when I made the study over there, that to operate it in this country would be rather difficult, as we would have the tendency to grant the ceiling allotment all the time.

In France they differentiated by areas. In Paris a wife would get so many francs, but in Brest or Boulogne or some other place it would be somewhat less, and in rural areas it would be still less.

I made quite a study of that a few years ago, and with the material I could get together it seemed to me would be getting into something that would be impossible to administer. As this committee knows, we do move around in this country, and if we tried to set up a differential for different parts of the land, we would also have to establish a differential as the dependent moved from place to place, and that would appear to be out of the question.

Mr. SPARKMAN. Let us turn to another subject now. Many competent medical examiners have recommended a rehabilitation program for selectees who have been rejected because of minor physical defects. I wonder if you might give us some thoughts on that subject.

REHABILITATION OF SELECTEES

General HERSHEY. Yes, sir. Last autumn, in October or early November, the President directed the Selective Service System to see what we could do about that. We have set up regulations for a very limited type of rehabilitation.

This involved the rehabilitation of men who could be brought to the general service level. That is, men who could, by minor treatments, be made into general service soldiers.

The regulations on that were ready a few weeks ago when, with the outbreak of the war, we were confronted with another very different situation. We were confronted first with a lowering of eligibility standards; then the Navy itself was undertaking some rehabilitation; and some studies by the War Department will soon be announced, as to the percentage of class I-B men that they will receive for different types of so-called limited service.

It looks now as though we are going to accept without rehabilitation all the classes of men with which our present program concerns itself. If this becomes a fact, it will rather leave our present rehabilitation program without point. We would be rehabilitating people that would be already acceptable for duty in the Army.

Realizing that, and not wanting to get involved in a rehabilitation program that would be out of date before it was started, we set up in Virginia and Maryland some experimental work with the regulations we have drawn, to see how they would work out, believing if the Army does go where we think they are going, this experimental work will be out of date. If they do not and the old regulations remain we will have the experience to launch out on a national scale the program we have set up.

But I want to emphasize that it is very limited in scope. The directive never involved anything but rehabilitating men who are just below the general service level requirements to a point where they will be acceptable for active duty.

I have said, perhaps not too elegantly, we were making a 10-tooth reject into a 12-tooth soldier. We were not attempting things that involved hospitalization to any great extent because we had no facilities except as we rented them. That is, the Selective Service System has medical examiners, but as far as hospital facilities go, we must go out and find them on contract or otherwise.

Mr. SPARKMAN. Well, first, the Army, by lowering its standards, could probably very effectively do that same rehabilitation program after they are in the Army rather than before; could they not?

General HERSHEY. Yes, sir. Before the war, with the limited number of individuals to be taken each year, and looking into 10 years' reserve, they would hesitate to accept a man that they would now gladly accept when we are faced with using manpower and using it only for the period of the emergency.

Mr. SPARKMAN. And as the need for manpower develops, the standards naturally will be lowered?

CANADIAN AND GERMAN STANDARDS

General HERSHEY. Inevitably. In Canada, on the question of teeth, the regulations say "Whole or partial dentures are no cause for rejection. Gross malformation of the jaws is."

And in the German Army you have some five different classes of soldiers; the fifth class is just about able to walk. So when manpower becomes acute, you must inevitably lower standards.

The CHAIRMAN. Suppose you have no teeth at all?

General HERSHEY. In Canada, if you have false teeth, you are accepted—and I suppose if you had no teeth and could get none, they would give you some.

The CHAIRMAN. Whether they fitted or not.

Mr. SPARKMAN. Assuming that you go into the rehabilitation program, as the Army lowers its standards, I presume you would dip a little further down into the group that you might rehabilitate.

General HERSHEY. My feeling on that would depend a little on our experience, but I think that the answer is "No." The President directed us to undertake rehabilitation in an effort to aid and assist the Army, and at a time when the acuteness of medical attention in the country was not as great as it would obviously be very soon.

We are faced with quite a shortage of medical men and anything that tends to duplicate an effort, whether it be an examination or rehabilitation, I believe, does use up medical men and I am afraid we are going to have to use them very sparingly.

LIMITED-SERVICE MEN

Mr. SPARKMAN. What do you think about the policy of the Army taking men for limited service?

General HERSHEY. I think it is a very good policy. I don't want to be too much of a prophet, but I think they will take hundreds of thousands before we are through. I believe a limited service man can well be used, if you find a job in which that particular defect does not act as a hindrance. We can use the example of the one-legged stenographer. In fact, I saw this morning in the paper that there was a one-handed stenographer. So if your limitation is not in the field in which you are operating, you are practically 100 percent.

Mr. SPARKMAN. I have heard a good many comments, not only here, but in different parts of the country, about the Army using healthy, strong young men in positions guarding public buildings or guarding bridges, railroads, and so forth. Isn't a man who might not be able to do field service in the Army one who could perform that type of service?

General HERSHEY. Yes; I am not too well informed of their plans, as of the moment, in the Army. But in the studies we made in the last 5 years, with which I was quite familiar, those men used in what we called the "zone of the interior" were to be very largely the so-called limited-service men.

I do happen to know that in the plans for the antiaircraft defenses in a considerable part of this country, the commanding general has recommended the use of 70 percent class I-B men in these more or less permanent and fixed activities.

USE OF VETERANS OF THE LAST WAR

Mr. SPARKMAN. A great many letters have come to me, and I am sure every Member of Congress received them, from veterans of the last war who are anxious to help out in this war, even though they

may be over age. It seems to me their services might very well be utilized in the "zone of the interior."

General HERSHEY. This is a personal opinion, but I should agree with you. The only restriction that I would make is that he have other qualifications besides having served in the last war. I agree with you wholly.

Mr. SPARKMAN. I was assuming that he was physically able.

General HERSHEY. I wouldn't demand too much physical fitness, providing he is reasonably healthy for a man of his age.

I believe many of those men with their experience, first as soldiers in their youth, and secondly in administrative and other things since that, would give a very fine tone to many of our units. I think they would give a stability to many of our units.

Mr. SPARKMAN. In the second interim report which this committee filed with Congress on December 19, we made a recommendation—recommendation No. 5—with reference to the transfer of labor to war work.

In that recommendation the committee urged a complete inventory of the available labor supply.

It is our impression that the recent amendments to the Selective Service Act providing for the registration of all males from 18 to 65 is the first step toward a complete inventory of our available labor supply inasmuch as there are two groups there from whom you cannot immediately draw soldiers.

Do you agree with me that an intelligent placement and deferment policy requires a complete inventory of our manpower?

General HERSHEY. Absolutely.

Mr. SPARKMAN. And I would like to add also womanpower.

INVENTORY SURVEY TO APPRAISE MANPOWER

General HERSHEY. I would say "Yes." The latter I have not given so much study to. You cannot make an intelligent appraisal of something when you do not know what that something is and, therefore, an inventory survey is the first thing you have to take in appraising manpower or resources. The selective service will have ready in a day or two for submission to the Bureau of the Budget what we call the basic form, or, as a soldier, I call it the occupational service record, of the individual, which eventually, if it is used as we visualize it, will be taken from at least 40,000,000 males and, to whatever extent it is later determined, from women.

Mr. SPARKMAN. What age groups would you include in that?

General HERSHEY. We are starting with 20- to 21-year-olds and the 36- to 44-year-olds. The second group we intend to use is the 21 years and 6 months to 37 years and 6 months.

In other words, in accordance with our conversations with the U. S. Employment Service, we are going to require this record of the individuals who register on February 16, as the first group, and then from the group already registered, classified and deferred. I do not know at present whether the 18- and 19-year-olds will come before the 45- to 64-year-olds or not. However, it won't make very much difference which comes first, because at the speed with which we will register these age-groups there will not be very many weeks or months difference. But we won't do this until we have registered the other groups.

Mr. SPARKMAN. As the labor situation becomes tighter, and the number available grows smaller, would it be your idea to extend the ages from which an inventory would be taken?

In other words, would you ever drop below 18 or ever go above 65?

General HERSHEY. I happen to have been brought up on a farm and I believe there is ability to do work below the age of 18. If that isn't true someone made a mistake with me. And I still like to flatter the upper limits to believe there are things that can be done by people above 65. I do believe very firmly if this war is going to be the kind of war we are visualizing now, it is going to take the use of all of our manpower, and a very intelligent use of it.

ADVOCATES PROHIBITION OF INDISCRIMINATE VOLUNTEERING

Mr. SPARKMAN. General Hershey, the committee has been interested in your suggestion that the Army and Navy ought to stop recruiting volunteers and should obtain their recruits through the selective service. As we understand, you believe indiscriminate volunteering is not the best way of allocating available manpower. Is that right?

General HERSHEY. That is right. In fact, the research that I have done on the manpower procurement makes me believe that, if you are going to use manpower wholly and efficiently, you have got to inventory it. You have to budget it, and allocate it, and you have to allocate it on a central plan and not as each particular man decides or desires his part should be.

The present events and manpower are following very much the pattern of what usually happens. There is a certain amount of working this way and that way, a certain amount of competition, a certain amount of pirating, and that sort of thing, which makes for duplication and inevitably makes for inefficiency because men do lose time wondering what they ought to do, when they should be at work.

Mr. SPARKMAN. Your thought is then that the prohibition of this indiscriminate volunteering ought to apply not only to the Army and Navy, but to industry as well?

General HERSHEY. Yes.

Mr. SPARKMAN. In other words, in order to get the maximum out of the available manpower, there must be a general scheme of allocating that manpower?

BUDGETING OUR MANPOWER

General HERSHEY. I think we will have to budget it just exactly as we would budget our appropriations. That is, we have got to decide not only how many men the Army and Navy and the aircraft production and agriculture and all these other things must have, but we are going to have to go to the refinements of the title. You cannot use all of your best men in any one place. You are going to have to distribute your cream, your rich milk, your skimmed milk, and the bottom of the milk where you can use it, and you must not get men who have capacity to do many things placed on jobs where they must do only a few things, because brains and ability unfortunately, especially when combined with youth, are not too abundant.

Mr. SPARKMAN. Of course, the natural desire of any employer of men is to get young, physically fit men?

General HERSHEY. Yes.

Mr. SPARKMAN. Not only does that create a certain amount of turmoil and discrimination against other groups, but doesn't it also create a large labor turn-over by reason of the fact that you may reach in next month or the following month and take a good many of the young men out of industry?

General HERSHEY. Inevitably.

And it makes little difference whether you push a man into the armed forces by social pressure or whether you attract him by some other means, if this man leaves a vital job, you do create a space from which he came which becomes a problem. On the other hand, if he goes from one industry to another, attracted by wages or other things, you have time lost not only in training but in travel. And many times the moving of one man will move three or four others, because someone moves from elsewhere to take his place, and another man from some other place to take his, and so on. You have no idea of the extent to which time is lost moving around.

Mr. SPARKMAN. You also find organizations seeking to do the same job competing with each other for the labor supply?

General HERSHEY. That is true.

Mr. SPARKMAN. I wonder if you can tell us what the situation is in some of the other countries, how they have handled the problem during the present war?

CONSCRIPTION AND ENLISTMENT IN EUROPE

General HERSHEY. It varies in different countries. In France and Germany, countries where they had compulsory training, they intended in the first World War to bring them in entirely by age groups, which did mean in the first World War Germany had to return hundreds of thousands to factories.

England, of course, maintained the enlistment practice for the air corps and for the navy and, while before this present war they actually did have a conscription plan, in the World War they waited on enlistments.

I do not have the figures, but after Dunkirk, England found itself, of course, very short of material. They had to return a great many men from the armed forces into the factories because they had over-drawn and the need for material transcended the need for men.

There is very little point behind the conditioning and training of men, unless at the end of that period you can outfit them.

Mr. SPARKMAN. I have reference particularly to the allocation or the use of the manpower that was left at home. In other words, the labor supply rather than the handling of the fighting forces.

General HERSHEY. England has gone practically to the conscription of labor, just as it does for the armed forces, which means very close control.

Germany's problem has been somewhat different, because she has had a great many so-called captive nations, which she can use for manpower, which means she can develop far more in the military

forces per population than anyone else. But I think the tendency is, as manpower needs get more and more acute, that more controls are used to keep the men where they are necessary, or move them where it is necessary to have them.

I am talking about labor now, as well as the soldier.

REGISTRATION OF OLDER MEN

Mr. SPARKMAN. In your testimony before the House and Senate Military Affairs Committee you stated that citizens between the ages of 45 and 64 who were to register would not be liable for military service. As a matter of fact they are not, under the law.

It was stated that this registration would give selective service a knowledge of what labor reserves were available. Such knowledge would assist you in developing your deferment policy.

Now, would not the registration of all workers, male and female, with the Employment Service, give you this information equally as well as registration with selective service?

General HERSHEY. That question may be controversial. It would depend, of course, on what sort of law was passed.

SELECTIVE SERVICE CAN REQUIRE THAT INFORMATION BE KEPT UP-TO-DATE

At the present time I believe it is accurate to state that the only agency that has the power to require information on a man and compel him to keep it current and keep the agency exactly informed where he is at all times, is the Selective Service System.

The Department of Justice may exercise the same right over the aliens, but at the present time I think the Selective Service System is the only agency that can require a current knowledge of a man's whereabouts, and capacities. To that extent I think we are able to require and maintain a more complete account of a man than the Employment Service would be able to do, under the present law.

Of course, if Congress gave the power to the Employment Service to require this of all labor, then our part would disappear and our only contribution would be the agencies—some 6,500 that we have locally—that do have some grasp of the manpower within the 21 to 36 limits, and should very soon have a knowledge of the additional age groups.

Mr. SPARKMAN. Is it not true that the labor requirements and the requirements of the armed services for men are so intertwined that the program must be worked out by one agency or, at least, coordinated?

General HERSHEY. No question about that.

Mr. SPARKMAN. And by having this information in your own files, you are certainly able to do that better than you could hope to do it simply by cooperating with some other agency?

General HERSHEY. We feel that not only the U. S. Employment Service, but many other agencies, public and private, may be asking information that we will have to furnish. In other words, I think we will have to be prepared to answer anything that anyone wants to know. Whether we will be able to do it or not, I think is a question. I think we will have to decentralize authority, where action can be very close to the situation. I would hesitate to think of what would

be happening on our battlefronts now if we were controlling the strategic and tactical action from here, and I think, as the war goes on, we have got to make up our minds that we have got to put authority out where the action is.

I visualize on this employment problem that the contact between the Employment Service and us must be on the lowest level, the operating level. You can't accumulate millions of records in one place and handle them rapidly.

Mr. SPARKMAN. You, of course, have no control over the persons from 45 to 64 except to require them to give you this information?

General HERSHEY. I think that is true. I think, however, that you have some control by public opinion. If Congress should consider exercising more controls, they probably would want to base their action on information that would come first if we were going to act intelligently.

Mr. SPARKMAN. Can you tell us something about how the Ministry of Labor in England operates, how it inter-relates the production program with the needs of the armed forces?

PROCUREMENT OF LABOR IN ENGLAND

General HERSHEY. It is my understanding that the Ministry of Labor handles procurement of labor for the armed forces and for production. They began with reserved occupations, that is, those occupations in which all workers above a stated age are deferred. They attempt to protect acute occupations by lowering the age by which deferments are made in that occupation. If, for example, toolmakers were most important, the age limit would be lowered to, say, 17, 18, 19 or 20, and all toolmakers above that age would be deferred. If plumbers were more plentiful, deferments in that occupation would be reserved to 30-year olds and upward.

An individual cannot be deferred solely because he is in a reserved occupation. He must also be above the age specified for deferment in the particular occupation for which he is claiming deferment. As a result of experience, however, they have modified this deferment procedure to one in which each case is taken up as an individual one, bringing this procedure nearer to our own.

REQUIREMENTS OF A LABOR SUPPLY AGENCY

Mr. SPARKMAN. What would be your idea as to the formation of some kind of national labor supply department, including the Selective Service, whose purpose it would be to integrate and develop properly the allocation of our manpower?

General HERSHEY. I think that you must include in an agency of that kind two main classes of organizations, both public and private, namely, the users and the procurers of manpower.

I do not have very specific ideas as to what the composition of such a board should be, but it should have representation from the main users of labor.

I have visualized such a committee as being initially somewhat advisory, operating on the basis of cooperation. One of our difficulties

has been that many times each of the agencies which use men look at the whole pool of manpower as their own individual source of labor and forget there are other boys in the family who must use the car occasionally. I think after we have had a little more meeting of the minds, among our users, the placers of labor will be able to get within the limits of the available supply, the amount of labor required by the users.

But I think it is going to require a get-together of the users and a decision as to who is going to have what.

Mr. SPARKMAN. Assuming such an agency should be created, should it be administered by the military or civilian?

General HERSHEY. I look for it rather to be administered by cooperation; the Army and Navy obviously must have the number of men they can use and use effectively to win the war.

But I probably would answer "Civilian" because, as I said a while ago, and many times before, I do not believe in recruiting as such, and that is about the only part that the armed forces play at the present time in procuring men.

The Selective Service System and the U. S. Employment System are both primarily civilian organizations, and, of course, the private placers of labor are all civilian.

CONFLICTING LABOR POLICIES

Mr. SPARKMAN. Now, General, I have prepared here a rather lengthy question, kind of a cover-all, that I want to propound to you.

It seems to us that national planning of our labor supply is as necessary as national planning of our war production. This means that agencies dealing with the labor market should be integrated or coordinated. Training policies, transfer policies, deferment policies, all of these are at present at work, and sometimes at cross-purposes.

For example, let us say that you defer a farm worker in Nebraska and an aircraft company comes in and recruits this worker for training. In the meantime Selective Service may have inducted many unskilled workers from the very area in which the aircraft plant is located.

In this case the manufacturer is compelled to go outside his local labor market to obtain rural workers, in preference to the urban unemployed and perhaps unskilled. We believe this is happening every day. The local manufacturer goes out and hires the deferred farm worker. In short, there are conflicting policies at work in the labor market, and these conflicting policies may cause great difficulty in the labor market.

In other words, it seems we have to take a national viewpoint of the labor market and institute whatever controls are necessary to obtain consistent national policies which will guarantee the best possible distribution and utilization of our labor supply.

Do you agree in general with that statement?

General HERSHEY. I think I can say that I agree wholly. We, as Selective Service people, because we have to get men for the armed forces and because we must get them without causing unnecessary upsets, must always think in terms of the national picture, and if I understand your question, it was a statement of the fact that we must try to put the men in the place where they can render the maximum

service that the Government requires at this time in whatever field the men can render it best.

That is the basic philosophy that I have been brought up on in Selective Service.

MAXIMUM EFFORT TO BE REQUIRED

Mr. SPARKMAN. It is your opinion that in the present difficulty we are certainly going to be called upon for our maximum effort?

General HERSHEY. I believe so.

Mr. SPARKMAN. And if we fall short in arranging for that maximum effort it simply is going to prolong the war?

General HERSHEY. I am very frightened at our philosophy of abundance. We feel there is abundant labor, abundance of everything, and one of the most disturbing things to me is to overcome the subconscious feeling of everybody that we have plenty of men. We have not.

Mr. SPARKMAN. Don't you think, too, there is still prevalent too much of a feeling of the abundance of our superiority in every respect?

General HERSHEY. We have all the money, all the materials, all the men, and man for man we are worth two or three of them. That is very fine, but it should not be allowed to get too far.

Mr. SPARKMAN. General, I just want to ask one more question.

STANDARDIZING DEFERMENT

We hear complaints from time to time about the irregularity of the operation of the deferment policy. We hear of different Government departments, for instance, in which deferments are granted almost wholesale to those particular workers, even though they may be filling positions of relative unimportance. We hear it also about certain communities or sections.

Would you give us some idea as to the prevalence of that kind of practice and what may be done to prevent it?

General HERSHEY. I might state first of all that inevitably we are going to have rumors and probably well-founded ones, of the application of a law that is administered in a decentralized way. First of all, we have approximately 20,000 local board members, grouped in threes and fives. They will be living under a great many different conditions and necessarily they are going to look at the same thing, if it ever existed, a little differently in different places. Then, of course, human beings have the capacity to be quite different.

Of course, we have taken, before December 7th, a great many measures in attempting to get these boards to think alike. As an example, it is probably rather easy to describe a medical student, but it is a great deal more difficult when you get out into some other endeavor to identify him in the first place, especially if he is taking many other subjects, and having identified him, to try to indicate his need like you can a medical student.

When you look at all the different kinds of things that play a roll in deferment—dependency, occupation, student, physical condition—it is a rather difficult thing to standardize deferments.

Now, war has made a difference in the sense that many of the borderline cases will tend to receive more uniform treatment. In fact, we

will have to be alert to keep our local boards educated to the necessity of protecting our industries sufficiently. With the onset of war, you will get more uniformity, but not necessarily more wisdom in approaching the question.

In any law, no matter what it is, the decision must be made as to whether the authority is going to be centralized by some one person, which it is not with 17,000,000 looking at facts set out in cold type, or whether you are going to delegate it to men who actually see and know the men they actually pick.

If you punch holes in cards you may think you have an accurate record because you have some means which will show that the card is punched exactly right. But you forget that the human being decides where to put the punch mark and there is no basic uniformity even in the Military Service. And it may make a difference between life and death whether the man is ordered to one front or whether he is ordered to another one.

We have tried to get a moderate amount of uniformity. I personally have never worshipped at the base of the uniformity statue, because I think it is an ideal that is never reached. I don't believe that most of our Nation's laws have a constant application throughout the country, and I will be so bold as to say I don't think they should have.

Out in Angola, where I live, our approach as to who should go to war is probably different from that of some other community.

If we are going to have Democracy, we are going to have it at the base. What these people want, providing they meet their obligations, they should have. I don't know who better knows what they should have than they do.

DEFERMENT OF KEY WORKERS

Mr. SPARKMAN. Let's get away from the local communities, and let me hear you speak about Government workers. Naturally you do have a deferment for key workers, but who passes upon whether they are key workers?

General HERSHEY. Well, in effect there is a board operating now trying to get something basic. Two or three of the Cabinet are on the board and they are meeting again tomorrow trying to decide some policies by which the head of a department, or someone to whom the authority is delegated, will sign Forms 42 and 42A which constitute claim and affidavit for deferment. We have had two types that have been unfortunate, the agency or employer who filed a claim for everyone, and the one who filed none. Somewhere in between is the proper place, but it is a difficult thing, because there you have to tell one man "I can get along without you," and the other man that you cannot get along without him.

That is exactly what should happen, but humans, being what they are, tend to dodge responsibility.

As manpower becomes more acute, two things must happen. Local boards, by and large, are not going to be overly impressed with the need for people in the Government. I believe that will be one thing.

Mr. SPARKMAN. I just started to ask you, as a matter of fact, whether there were not a great many people in the Government, including Members of Congress, who could not very well be replaced.

Mr. HERSHEY. I think the average board feels so, and whether right or wrong, I am afraid that is going to be the reaction. The thing we are going to have to face in government, as in industry, is that we are going to have to find how to do more work with less men, which means we have to streamline our operations.

That gets back to delegation. If you delegate authority there isn't quite the necessity for writing back and forth in order to get action. You will need less men to do the same amount of work.

Mr. SPARKMAN. Mr. Chairman, that is all I care to ask General Hershey.

I would like to express my thanks to General Hershey. He has appeared before our Military Affairs Committee a great many times and he always makes a fine presentation as he is doing here.

The CHAIRMAN. In the first place, from your experience, in this field, which is probably greater than any person in the United States, are you still of the opinion that there is a self-satisfied, complacent feeling in the United States?

General HERSHEY. I feel we are in the unfortunate position of having a great deal of complacency and slight hysteria.

The CHAIRMAN. We have been carried away with our bigness. There isn't any particular magic to having manpower of 40,000,000 or 50,000,000 unless you can break it down and get it directly or indirectly in this war program, is that true?

General HERSHEY. That is true.

The CHAIRMAN. There have been no steps taken so far for the registration of women, have there?

REGISTRATION OF WOMEN

General HERSHEY. Our department has not, and I am not familiar with any place in the Government that has. Of course, the O. C. D. had volunteer registration and also there is some proposed legislation, I think, providing for a small number in the Army. I think we have had very good cooperation, especially from the airplane people. I think the airplane people are making arrangements to have as high as 40 percent women in the factories.

The CHAIRMAN. Would the registration of women require new legislation?

General HERSHEY. It would unless you did it on a voluntary basis. If we are going to have registration, it should be definite, positive, and compulsory.

REHABILITATION OF SELECTEES

The CHAIRMAN. General, you spoke about the rehabilitation of selectees, teeth and one thing and another. What about social diseases, sickness, and so forth?

General HERSHEY. I think at the present time the Army and the Navy are either already taking or going to take men with uncomplicated gonorrhoea. The only restriction, as far as the Army is concerned, is the amount of facilities they have available to take care of it.

They are expanding those facilities, but I am not prepared to say when they will have completed them to the point where you could guarantee that each case that was found would be accepted.

I think they are moving somewhat slower in syphilis and in the complicated gonorrhoea cases.

If the past is any criterion of what we are going to do, you cannot justify in the public opinion the deferment of men because of social diseases. I think inevitably the armed forces will have to make arrangements to take them and treat them.

APPEALS

The CHAIRMAN. One more question. I have received quite a few letters from my constituents regarding deferments that have been refused. I invariably answer by telling them that is solely within the discretion of the local board, and they have their appeal, and any congressional influence might be more harmful than helpful. Is that a correct statement?

General HERSHEY. I think that is a correct statement. By and large we have tried to educate the local boards to a belief that they were important and they had their obligations and, except as the law provided for appeals, they would be allowed to operate without interference excepting the tons of information which they get. But after all, you have to furnish them a great deal of information, so they will know what the picture is.

We have tried to let them interpret the information and if they interpret it so it doesn't suit the registrant, he has the right to appeal.

I think your statement might avoid the resentment that might be felt by the local boards that someone was trying to put the heat on them. I want to say here that the way the Members of Congress have cooperated has been most reassuring because we have had practically an absence of Members of Congress trying to instruct our system on how to classify people.

Mr. CURTIS. I think you have some very fine draft boards. I have 25 counties in my district and I have yet to receive a complaint against a local board in any one of them.

General HERSHEY. I am very happy to hear that. With 20,000 people you will have, perhaps, some mistakes, but I have said many times, we are getting service you could not buy.

UTILIZATION OF TOTAL LABOR SUPPLY

Mr. CURTIS. I will try to be very brief, General, but I want to ask you this:

Do you think it is possible for us to run our factories and farms and transportation and communication systems and all essential civilian activities with the kids, both boys and girls, under 20, the women, and the men over 45 and the men between 20 and 45 who are physically imperfect?

General HERSHEY. This would be entirely a curbstone opinion. I should say not, because I am thinking probably in terms of as high as 55 percent of our present dependency cases.

Mr. CURTIS. I would include in that category dependency cases.

General HERSHEY. I could probably say "Yes," although I should like to hedge to this extent.

I think real care must be taken to take out the men who are now physically fit and have no other reason except industrial reasons for

their deferment. Their transfer to the armed forces must be slow enough to insure that production not only maintains its pace and goes ahead, while we bring in the women and deferred classes to replace them. I think that is where care must be exercised to the utmost. Otherwise you will start transferring so rapidly that you will not be able to keep up your production.

Mr. CURTIS. In the territory I am most familiar with, practically everyone is a farmer, and I think those draft boards have a tough problem on their hands. All those boys are in pretty much the same class, and how they can pick out here and pass over there is a most difficult thing.

General HERSHEY. This is one thing we are having some little trouble getting to our draft boards. I think in rural communities the draft boards think they must take someone. By and large this is true. On a theoretical basis, if a draft board had no men in class I-A the draft board would have no quota.

QUOTA SYSTEM

Mr. CURTIS. Now, that comes to the question I would like to ask. The quota for any given county and State is based on the number of men in I-A and not the total population?

General HERSHEY. That is right. But that is a changing thing and, therefore, we have to either take it at a particular time and then as it changes make the adjustment later, or take an estimate class I and adjust as we classify.

Mr. CURTIS. There are no aliens in I-A, are there?

General HERSHEY. Yes.

Mr. CURTIS. Very many?

General HERSHEY. Not at the present time. The men who are registered between the ages of 21 and 37 under the recent amendments are eligible. The declarant alien has been eligible all along, and the nondeclarant alien under the amendments which were passed in December becomes eligible, if acceptable.

Mr. CURTIS. I say this not critically, but merely to bring the facts into the record. I believe there is a situation developing that demands a little attention along that line.

In a rural community where there are no industries or industrial development, no alien population whatever, no congested areas, and where everyone knows everyone else, requests for deferments are very, very few. Those communities are raising a much greater proportion of the Nation's army than others.

I have in mind one county in my district which has the same population it had in the last war. In the last World War, in order to raise about 4,000,000 men they were called upon to furnish 100. Their population has not increased—but that of the country has—and up to date, in order to raise one and three-quarter million men they have already been called on for 97.

I don't expect you to answer that right now, but I wanted to raise that question as to what is happening with your industrial deferments.

General HERSHEY. I will be glad to look into that particular thing. The county I came from is not too different than the one you described and in the World War, because we happened to have two National Guard companies in our district, that is, a company and a detachment, for 18 months we were over our quota.

In other words, the quota did not catch up with us until June or July 1918. I don't know whether you have a volunteer proposition out there that might have made some of that difference.

Mr. CURTIS. No; they have had to draft some.

General HERSHEY. But you may have some delayed credits on some of your volunteers. I don't know.

Mr. CURTIS. I rather think that is not the case.

Do you think that interned aliens and prison labor can be utilized in agriculture and other places?

General HERSHEY. I have not given much thought to it. When I think in terms of agriculture I think in terms of small farms, where each man who works is more or less part manager. We send a man out in the fields, and he decides quite a lot of questions. I would have some difficulty using the type of labor you refer to on the farms I know best about. It would be just a guess with me when you go into larger farming operations.

Mr. CURTIS. We are apt to have a lot of vegetable growers in concentration camps before long; are we not?

General HERSHEY. I think so. I worked on the food production plan in Hawaii and strange as it may seem, in a land that is quite largely devoted to pineapples and sugar, we were very short of individuals who knew how to grow any other things, and one of our big problems was trying to get men who would know what type of thing was coming through the soil and be able to identify it from a weed.

· JUSTIFICATION FOR OCCUPATIONAL DEFERMENTS

Mr. CURTIS. You think for the present, at least, that some occupational deferments are justified?

General HERSHEY. I think they are always going to be justified. I have said this: If there was a need to defer a necessary man before the war the need has become greater since. If he was not necessary before the war and isn't necessary now, he should not be deferred. But the nature of war has changed. The number of men that must be behind the lines has increased. We still think the man who actually goes out to fight is rendering a service that the one who stays behind is not rendering. It is going to be one of our severe psychological problems to see that the man who is content to make things will not get into what the English call a dugout service.

Mr. CURTIS. That is all.

The CHAIRMAN. One question, General, and then we will excuse you.

This committee, as you know, is a defense migration committee, and that is our problem. There are millions of people who, according to our findings, have left their home States and lost their residence there, and have not acquired it in the State of destination.

Have you any difficulty in registering them? From what State are they registered—the State of origin or the State of destination?

REGISTRATION OF MIGRANTS

General HERSHEY. On registration day the man is obligated and allowed to register wherever he is. If he fills in an address not under the jurisdiction of the local board where he registers, his card will be sent to the local board having jurisdiction of such address. We try

to be liberal in allowing men to transfer their classifications. There is no question but that we have some delinquents. As time goes on I think the means of checking on delinquents will be bettered.

There isn't much trouble keeping track of the man who registers, because he is required to report all changes of address and, while we have had some delinquency, I don't think we have had as much as we had in the World War, either as to men who have not registered or, having registered, have not complied with orders from their local boards.

I have been quite encouraged by the response the people as a whole have given to their obligations.

The CHAIRMAN. General, on behalf of the committee, I want to thank you and Major Keesling for coming here this morning and to say to you, speaking personally, that you are doing a fine job with a difficult task.

We thank you very much.

General HERSHEY. Thank you very much, sir. We always appreciated the support we have had from Congress.

The CHAIRMAN. We will take a 5-minute recess now.

(Recess was taken at this point.)

The CHAIRMAN. Will the committee please come to order?

Mr. Davenport, you will be the next witness.

TESTIMONY OF DONALD H. DAVENPORT, CHIEF, EMPLOYMENT AND OCCUPATIONAL OUTLOOK BRANCH, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, WASHINGTON, D. C.

The CHAIRMAN. As you know, this committee has approached the problem of an adequate labor supply through its study of defense migration. We have found much unneeded and wasteful migration. But at this time it seems more important than ever to conserve our manpower and womanpower.

We have asked you to tell us this morning what the over-all labor supply and demand will be in the next year and what some of the consequences of this demand will be in terms of migration.

Congressman Curtis, from Nebraska, will interrogate you.

Mr. CURTIS. Mr. Davenport, I would like you to describe the over-all labor demand for the next year and the changes which will take place in our labor forces as your Division sees them.

Mr. DAVENPORT. If I may start with a picture of what has happened during the last year and a half of defense effort, we can establish a base from which we can project our estimates of the labor requirements that we face in the next 12 months.

As I understand the interest of this committee, it is to inquire into those forces that bear upon the movements of manpower from one part of the country to another, and it was with that in mind that we prepared the material which is included in the prepared statement which I believe you have before you.

(Statement referred to above is as follows:)

STATEMENT BY DONALD H. DAVENPORT, CHIEF, EMPLOYMENT AND OCCUPATIONAL OUTLOOK BRANCH, BUREAU OF LABOR STATISTICS, UNITED STATES DEPARTMENT OF LABOR, WASHINGTON, D. C.

IMPACT OF THE WAR PRODUCTION PROGRAM ON THE LABOR FORCE

During the year and a half from June 1940 to December 1941, employment of wage and salary workers in nonagricultural industries increased by 5 million. Nearly all of this increase was directly attributable to the defense production program. During the first 12 months of this period, the increased wages paid out in defense industries provided the stimulus for a substantial rise in non-defense employment, but this increase was largely wiped out by the curtailment of nondefense production in the last half of 1941, and nondefense employment now stands at approximately the same levels as in the spring of 1940.

Under these conditions, it was inevitable that the increases among various industries should be extremely spotty—that tremendous increases in some cases should be accompanied by relatively small increases in others. Of the 5 million increase, 2.7 million, or more than half, was concentrated in manufacturing industries, while there was an additional half million increase in construction, due very largely to the building of defense plants and housing for defense workers. Increases in mining transportation, and public utilities were also due largely to the increased loads placed on these industries by increased defense activity, while the increase of nearly 1 million in trade is largely the result of the high seasonal levels of retail activity which always take place in December (table 1).

TABLE I.—Changes in nonagricultural employment, June 1940 to December 1941

[In thousands]

Industry group	Aggregate employment		Increase	
	June 1940	December 1941	Number	Percent
Total (wage and salary workers).....	29,737	34,797	+5,060	+17.0
Manufacturing.....	10,040	12,703	+2,663	+26.5
Mining.....	838	907	+69	+8.2
Construction.....	1,321	1,820	+499	+37.8
Transportation and public utilities.....	3,032	3,287	+255	+8.4
Trade.....	6,570	7,503	+933	+14.2
Service and miscellaneous.....	4,137	4,223	+86	+2.1
Government.....	3,799	4,354	+555	+14.6

Prepared by Occupational Outlook Division, Bureau of Labor Statistics, Feb. 3, 1942.

Nearly half of the 2.5 million increase in employment in manufacturing industries from June 1940 to November 1941 was concentrated in the transportation equipment and machinery groups, which showed increases of 84 and 58 percent, respectively. These were the largest percentage increases shown for any group, though increases of 30 to 40 percent were shown by iron and steel, nonferrous metal products, chemicals, and rubber, and all groups except tobacco products increased at least 10 percent. (Table 2 and charts 1 and 2.)

TABLE II.—*Changes of employment of manufacturing industries June 1940 to November 1941*

[In thousands]

Industry group	Aggregate employment		Increase	
	June 1940	November 1941	Number	Percent
Iron and steel and their products	925.5	1,238.2	+312.7	+33.8
Machinery (not including transport)	1,019.2	1,606.5	+587.3	+57.6
Transportation equipment	614.0	1,184.9	+570.9	+84.0
Nonferrous metals and products	265.8	363.3	+97.5	+36.7
Lumber products	621.9	707.8	+85.9	+13.8
Stone, glass, and clay products	290.6	355.6	+65.0	+22.4
Textiles and products	1,526.8	1,845.2	+318.4	+20.9
Leather products	280.8	312.7	+31.9	+11.4
Food products	861.9	968.0	+106.1	+12.3
Tobacco products	89.8	94.6	+4.8	+5.3
Paper and printing	608.1	672.6	+64.5	+10.6
Chemicals, petroleum, and coal products	391.3	489.6	+98.3	+24.2
Rubber products	112.0	149.8	+37.8	+33.8
All manufacturing ¹	8,137.8	10,631.0	+2,493.2	+30.6
Durable goods industries ¹	3,843.3	5,567.7	+1,724.4	+44.9
Nondurable goods industries ¹	4,294.5	5,063.3	+768.8	+17.9

¹ Totals for durable, nondurable, and all manufacturing have been adjusted to conform to trends shown by 1939 Census of Manufactures; group estimates are adjusted only through 1937. Totals for all manufacturing and for nondurable include miscellaneous manufacturing industries, not included in the data for industry groups.

Prepared by Occupational Outlook Division, Bureau of Labor Statistics, Feb. 3, 1942.

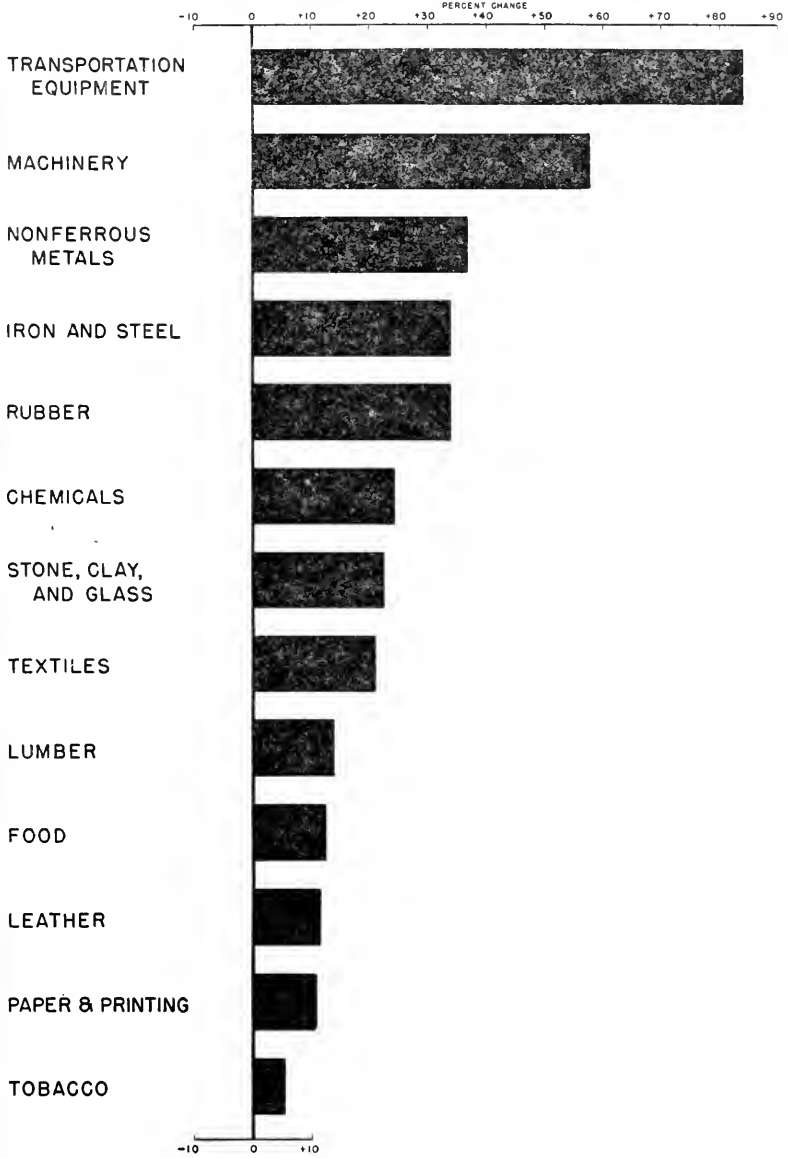
The geographic, as well as the industrial impact of the war program, shows considerable variation. This is indicated particularly by data for the larger cities. (Table 3 and Chart 3). Thus manufacturing employment more than doubled during this period in 4 cities: Long Beach, San Diego, Seattle, and Wichita. Twelve cities showed increases of 50 percent or more, while at the other extreme, seven cities showed increases of less than 10 percent or actual declines in manufacturing employment.

While the range in the percentage increases in employment among the various states and regions was considerable, (Table 4 and Chart 4), nevertheless, it is not as great as one might expect from the concentration of primary defense contracts in a few industries. The geographical dispersion of increases in employment is in part due to the wide-scale subcontracting that has occurred.

It is obvious that both prime contracts and subcontracts have tended to be distributed in accordance with existing productive facilities. Contracts for new industrial facilities, however, have been distributed in such a way as to bring about increased geographical dispersion. Table 5 and Chart 5 indicate that the five regions with the smallest percentage of total United States factory wage earners in 1939 received proportionately a larger share of the new industrial facilities contracts. On the other hand, the four regions with the largest percentage of total factory wage earners in 1939 received a proportionately smaller share of the new industrial facilities contracts.

PERCENT CHANGE IN EMPLOYMENT IN MANUFACTURING INDUSTRIES

JUNE 1940 TO NOV 1941

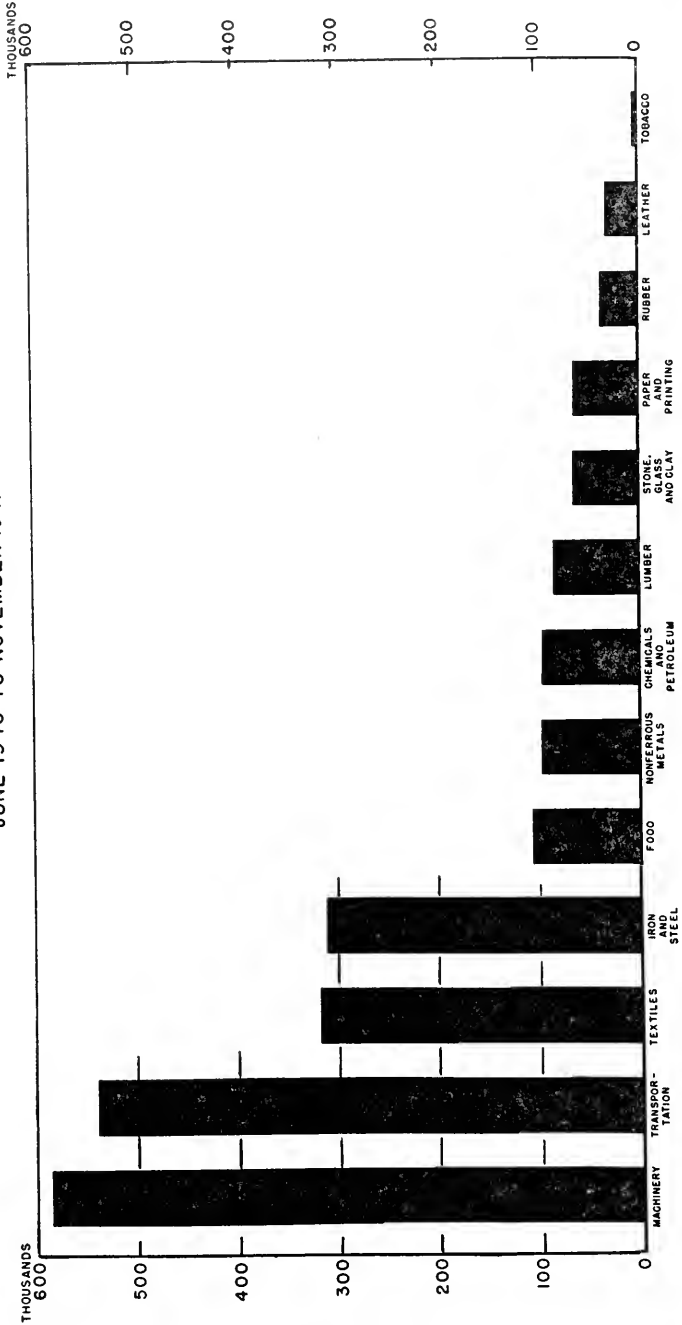


UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

CHART 1.

INCREASES IN EMPLOYMENT IN MANUFACTURING INDUSTRIES

JUNE 1940 TO NOVEMBER 1941



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

CHART 2.

TABLE III.—Indexes of employment in manufacturing industries by metropolitan area

12 months average—1937=100]

Metropolitan area	Employment index		Percentage change June 1940 to November 1941
	November 1941	June 1940	
Akron, Ohio.....	113.9	79.2	+43.8
Albany, N. Y. ¹	115.9	86.5	+34.0
Atlanta, Ga.....	109.7	90.4	+21.3
Baltimore, Md.....	164.5	110.4	+49.0
Birmingham, Ala.....	131.3	100.4	+30.8
Boston, Mass. ¹	142.7	96.7	+47.6
Cambridge, Mass.....	111.9	81.5	+37.3
Lynn, Mass.....	181.4	92.6	+95.9
Somerville, Mass.....	102.3	89.2	+14.7
Boston City and outside ¹	143.8	99.1	+45.1
Bridgeport, Conn.....	159.8	97.1	+64.6
Buffalo, N. Y.....	140.7	102.0	+37.9
Canton, Ohio.....	143.6	88.4	+62.4
Chattanooga, Tenn.....	121.5	93.4	+30.1
Chicago, Ill.....	132.8	96.5	+37.6
Gary, Ind.....	118.9	108.7	+9.4
Chicago City and outside.....	133.6	95.9	+39.3
Cincinnati, Ohio.....	124.7	92.8	+34.4
Cleveland, Ohio.....	136.3	96.9	+40.7
Columbus, Ohio.....	135.6	90.5	+49.8
Dallas, Tex.....	152.4	99.7	+52.9
Dayton, Ohio.....	106.7	87.7	+21.7
Denver, Colo.....	147.1	95.7	+53.7
Des Moines, Iowa.....	112.6	107.8	+4.5
Detroit, Mich.....	93.5	75.6	+23.7
Duluth, Minn.....	85.9	72.3	+18.8
El Paso, Tex.....	98.1	85.1	+15.3
Erie, Pa.....	144.6	99.2	+45.8
Evansville, Ind.....	79.8	88.9	-10.2
Flint, Mich.....	93.6	83.4	+12.2
Fort Wayne, Ind.....	118.5	78.5	+51.0
Fort Worth, Tex.....	113.4	85.9	+32.0
Grand Rapids, Mich.....	120.0	97.4	+23.2
Hartford, Conn.....	150.2	101.7	+47.7
Houston, Tex.....	132.3	95.5	+38.5
Indianapolis, Ind.....	141.9	107.6	+31.9
Jacksonville, Fla.....	150.0	103.6	+44.8
Kansas City, Mo.....	120.6	95.6	+26.2
Kansas City, Kans.....	106.8	91.7	+16.5
Kansas City, Mo., and outside.....	125.9	97.1	+29.7
Knoxville, Tenn.....	120.9	96.3	+25.5
Los Angeles, Calif.....	204.8	114.9	+78.2
Long Beach, Calif.....	327.8	81.8	+300.7
Los Angeles City and outside.....	201.4	115.8	+73.9
Louisville, Ky.....	120.0	95.4	+25.8
Lowell, Mass.....	104.8	79.1	+32.5
Memphis, Tenn.....	115.2	87.3	+32.0
Miami, Fla.....	129.4	77.4	+67.2
Milwaukee, Wis.....	119.9	86.7	+38.3
Minneapolis-St. Paul.....	121.9	90.8	+34.3
St. Paul, Minn.....	122.8	89.9	+36.6
Minneapolis City and outside.....	121.4	91.2	+33.1
Nashville, Tenn.....	110.9	85.0	+30.5
New Haven, Conn.....	143.2	97.8	+46.4
New Orleans, La.....	144.5	92.9	+55.5
New York and Northeastern New Jersey ¹	136.3	100.6	+35.5
Newark, N. J.....	136.0	104.1	+30.6
Jersey City, N. J.....	121.6	96.5	+26.0
Paterson, N. J.....	157.3	113.0	+39.2
Elizabeth, N. J.....	135.3	100.3	+34.9
Yonkers, N. Y.....	119.0	92.7	+28.4
New York City and outside ¹	136.4	100.2	+36.1
Norfolk, Va. ¹	241.7	132.9	+81.9
Oklahoma City, Okla.....	123.9	89.0	+39.2
Omaha, Nebr.....	110.8	91.8	+20.7
Peoria, Ill.....	115.0	86.2	+33.4
Philadelphia, Pa. ¹	124.8	91.7	+36.1
Camden, N. J.....	163.3	118.3	+38.0
Philadelphia City and outside ¹	121.7	89.5	+36.0
Pittsburgh, Pa.....	126.8	95.9	+32.2
Portland, Oreg.....	161.7	105.4	+53.4

¹ Includes employment in Government navy yards and arsenals.

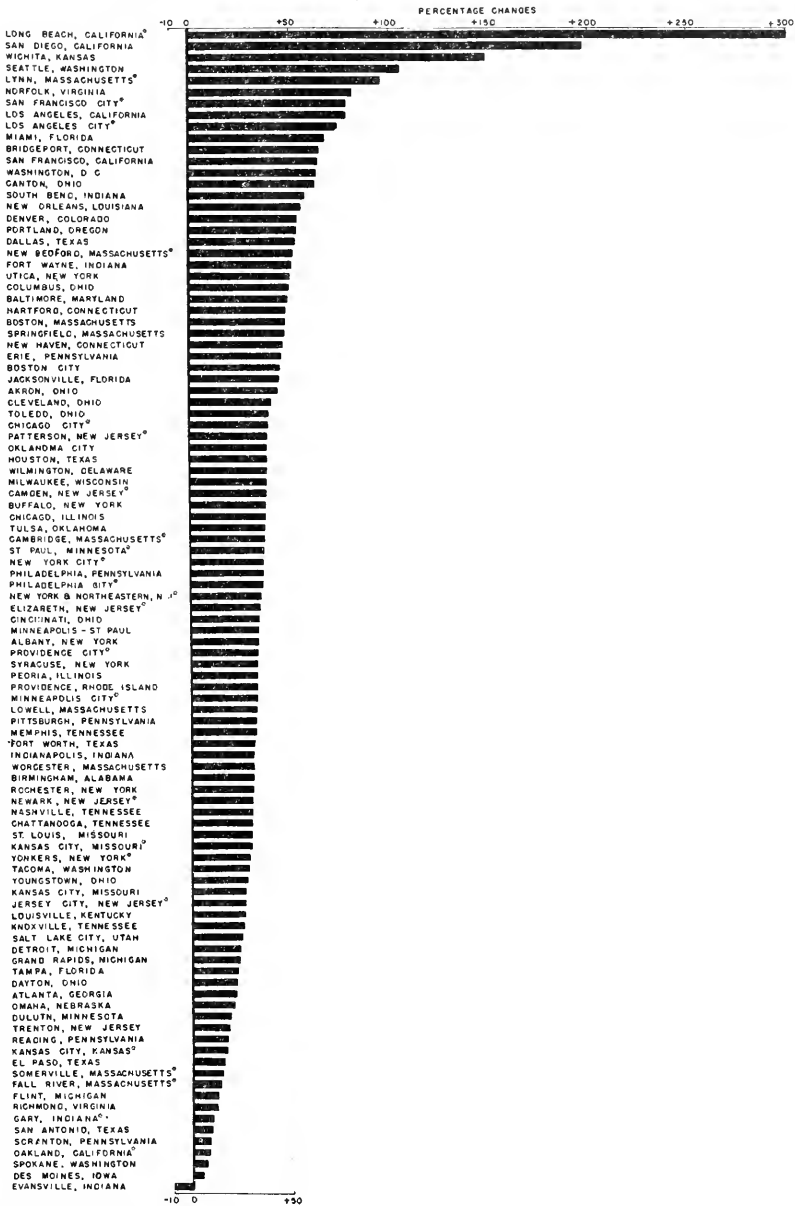
TABLE III.—*Indexes of employment in manufacturing industries by metropolitan area—Continued*

Metropolitan area	Employment index		Percentage change June 1940 to November 1941
	November 1941	June 1940	
Providence, R. I. ¹	124.7	93.7	+33.1
Fall River, Mass.....	110.0	96.9	+13.5
New Bedford, Mass.....	101.1	68.7	+51.5
Providence City and outside ¹	132.6	99.0	+33.9
Reading, Pa.....	76.9	65.7	+17.0
Richmond, Va.....	114.9	102.9	+11.7
Rochester, N. Y.....	125.7	96.2	+30.7
St. Louis, Mo.....	120.0	92.4	+29.9
Salt Lake City, Utah.....	100.8	81.0	+24.4
San Antonio, Tex.....	117.3	107.4	+9.2
San Diego, Calif.....	467.5	157.1	+197.6
San Francisco, Calif. ¹	151.9	92.6	+61.0
Oakland, Calif.....	108.0	100.1	+7.9
San Francisco City and outside ¹	162.2	90.9	+78.4
Seranton, Pa.....	91.8	85.0	+8.0
Seattle, Wash.....	215.2	104.6	+105.7
South Bend, Ind.....	148.9	94.6	+57.4
Spokane, Wash.....	104.4	98.0	+6.5
Springfield, Mass. ¹	134.6	91.3	+47.4
Syracuse, N. Y.....	137.6	103.0	+33.6
Tacoma, Wash.....	123.6	96.4	+28.2
Tampa, Fla.....	138.8	113.3	+22.5
Toledo, Ohio.....	100.5	72.1	+39.4
Trenton, N. J.....	134.6	114.4	+17.7
Tulsa, Okla.....	124.2	90.3	+37.5
Utica, N. Y.....	140.7	93.8	+50.0
Washington, D. C. ¹	174.2	106.6	+63.4
Wichita, Kans.....	271.9	109.4	+148.5
Wilmington, Del.....	132.9	96.0	+38.4
Worcester, Mass.....	122.5	93.0	+31.7
Youngstown, Ohio.....	112.1	88.1	+27.2

¹Includes employment in Government navy yards and arsenals.

Prepared by Occupational Outlook Division, Bureau of Labor Statistics, Feb. 3, 1942.

PERCENTAGE CHANGES OF EMPLOYMENT IN MANUFACTURING INDUSTRIES BY METROPOLITAN AREA, JUNE 1940 TO NOVEMBER 1941



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

* CITY ONLY ALSO INCLUDED IN METROPOLITAN AREA

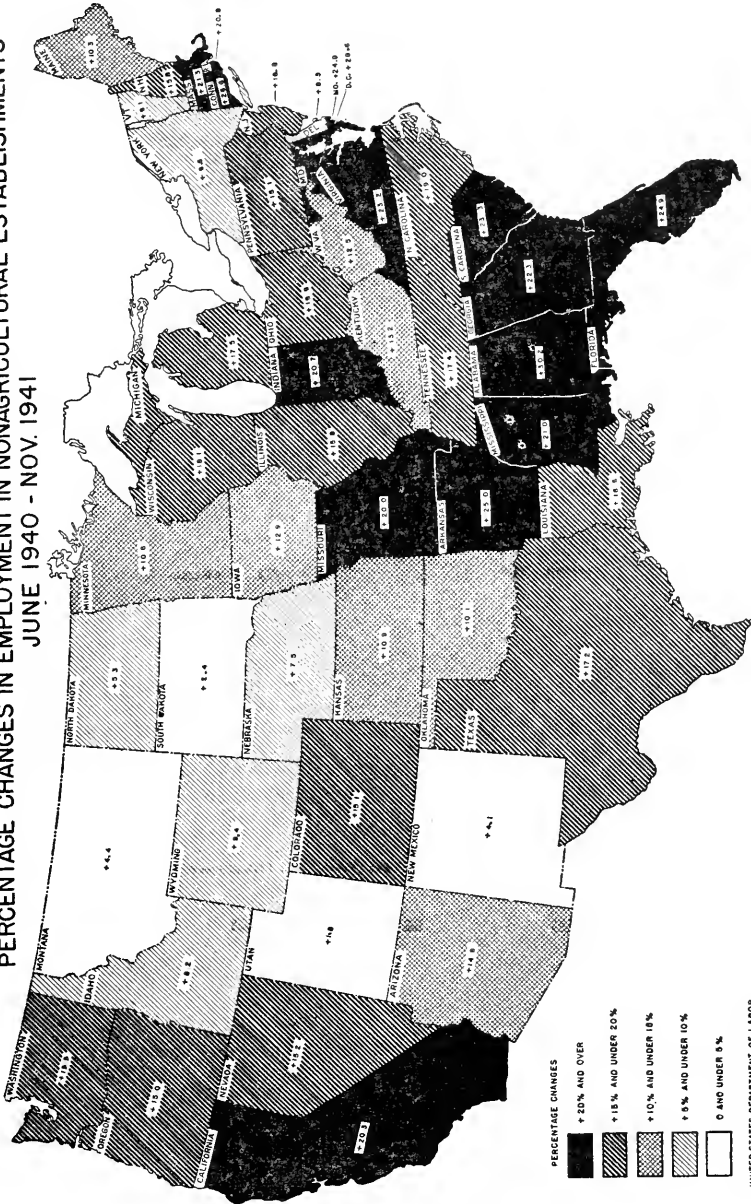
CHART 3

TABLE IV.—Changes in employment in nonagricultural establishments by regions and States from June 1940 to November 1941

[In thousands]

Region and State	June 1940	November 1941	Increase	
			Number	Percent
New England.....	2,448	2,961	+513	+20.96
Maine.....	185	204	+19	+10.27
New Hampshire.....	127	147	+20	+15.75
Vermont.....	74	80	+6	+8.11
Massachusetts.....	1,277	1,549	+272	+21.30
Rhode Island.....	221	267	+46	+20.81
Connecticut.....	564	714	+150	+26.60
Middle Atlantic.....	7,622	8,601	+979	+12.84
New York.....	3,863	4,232	+369	+9.55
New Jersey.....	1,130	1,342	+212	+18.76
Pennsylvania.....	2,629	3,027	+398	+15.14
East North Central.....	6,703	7,881	+1,178	+17.57
Ohio.....	1,749	2,080	+331	+18.93
Indiana.....	767	926	+159	+20.73
Illinois.....	2,219	2,571	+352	+15.86
Michigan.....	1,341	1,576	+235	+17.52
Wisconsin.....	627	728	+101	+16.11
West North Central.....	2,347	2,658	+311	+13.25
Minnesota.....	527	584	+57	+10.82
Iowa.....	403	451	+48	+12.91
Missouri.....	764	917	+153	+20.03
North Dakota.....	76	80	+4	+5.26
South Dakota.....	83	85	+2	+2.41
Nebraska.....	201	216	+15	+7.46
Kansas.....	293	325	+32	+10.92
South Atlantic.....	3,386	4,119	+723	+21.65
Delaware.....	72	78	+6	+8.33
Maryland.....	499	623	+124	+24.85
District of Columbia.....	338	428	+90	+26.63
Virginia.....	488	601	+113	+23.16
West Virginia.....	368	414	+46	+12.50
North Carolina.....	562	669	+107	+19.04
South Carolina.....	270	333	+63	+23.33
Georgia.....	463	566	+103	+22.25
Florida.....	326	407	+81	+24.85
East South Central.....	1,319	1,585	+266	+20.17
Kentucky.....	357	404	+47	+13.17
Tennessee.....	432	507	+75	+17.36
Alabama.....	354	461	+107	+30.23
Mississippi.....	176	213	+37	+21.02
West South Central.....	1,794	2,101	+307	+17.11
Arkansas.....	172	215	+43	+25.00
Louisiana.....	354	420	+66	+18.64
Oklahoma.....	286	315	+29	+10.14
Texas.....	982	1,151	+169	+17.21
Mountain.....	775	847	+72	+9.29
Montana.....	114	119	+5	+4.30
Idaho.....	85	92	+7	+8.24
Wyoming.....	53	58	+5	+9.43
Colorado.....	219	252	+33	+15.07
New Mexico.....	73	76	+3	+4.11
Arizona.....	88	100	+12	+14.64
Utah.....	110	112	+2	+1.82
Nevada.....	33	38	+5	+15.15
Pacific.....	2,387	2,857	+470	+19.69
Washington.....	420	503	+83	+19.76
Oregon.....	246	283	+37	+15.04
California.....	1,721	2,071	+350	+20.34

PERCENTAGE CHANGES IN EMPLOYMENT IN NONAGRICULTURAL ESTABLISHMENTS
JUNE 1940 - NOV. 1941



PERCENTAGE CHANGES

- + 20% AND OVER
- + 15% AND UNDER 20%
- + 10% AND UNDER 15%
- + 5% AND UNDER 10%
- 0 AND UNDER 5%

UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

CHART 4

TABLE V.—Distribution of factory wage earners in 1939 and value of defense industrial facilities contracts¹ through Sept. 30, 1941, by geographic regions and States

Geographic region and State	Factory wage earners, 1939		Defense industrial facilities contracts ²	
	Number (thousands)	Percent of total	Amount (millions)	Percent of total
Total.....	7,887	100.0	\$5,260.5	100.0
New England.....	954	12.1	345.5	6.6
Middle Atlantic.....	2,250	28.5	1,095.0	20.8
East North Central.....	2,195	27.8	1,399.1	26.6
West North Central.....	382	4.8	417.3	7.9
South Atlantic.....	987	12.6	436.7	8.3
East South Central.....	358	4.6	460.4	8.8
West South Central.....	263	3.4	444.6	8.5
Mountain.....	69	.8	141.3	2.7
Pacific.....	429	5.4	374.7	7.1
New England:				
Maine.....	76	1.0	13.3	.3
New Hampshire.....	56	.7	19.0	.4
Vermont.....	22	.3	4.8	.1
Massachusetts.....	461	5.8	133.4	2.5
Rhode Island.....	106	1.3	12.8	.2
Connecticut.....	234	3.0	162.2	3.1
Middle Atlantic:				
New York.....	958	12.1	419.4	8.0
New Jersey.....	433	5.5	190.9	3.6
Pennsylvania.....	858	10.9	484.6	9.1
East North Central:				
Ohio.....	598	7.6	431.2	8.2
Indiana.....	277	3.5	318.6	6.1
Illinois.....	596	7.6	276.0	5.2
Michigan.....	522	6.6	322.5	6.1
Wisconsin.....	201	2.5	50.8	1.0
West North Central:				
Minnesota.....	80	1.0	43.8	.8
Iowa.....	65	.8	71.9	1.4
Missouri.....	179	2.3	203.5	3.9
North Dakota.....	3	(3)	.3	(3)
South Dakota.....	6	.1	.1	(3)
Nebraska.....	19	.2	13.7	.2
Kansas.....	32	.4	84.0	1.6
South Atlantic:				
Delaware.....	20	.3	1.9	(3)
Maryland.....	142	1.8	99.5	1.9
District of Columbia.....	8	.1	9.8	.2
Virginia.....	134	1.7	146.1	2.8
West Virginia.....	75	1.0	111.8	2.1
North Carolina.....	270	3.4	25.4	.5
South Carolina.....	127	1.6	26.6	.5
Georgia.....	158	2.0	7.6	.1
Florida.....	53	.7	8.0	.2
East South Central:				
Kentucky.....	63	.8	44.5	.8
Tennessee.....	132	1.7	166.3	3.2
Alabama.....	117	1.5	230.6	4.4
Mississippi.....	46	.6	19.0	.4
West South Central:				
Arkansas.....	36	.5	64.9	1.2
Louisiana.....	71	.9	73.0	1.4
Oklahoma.....	28	.4	82.4	1.6
Texas.....	127	1.6	224.3	4.3
Mountain:				
Montana.....	9	.1	1.9	(3)
Idaho.....	11	.1	.6	(3)
Wyoming.....	3	.1	.....	(4)
Colorado.....	24	.3	32.7	.6

¹ Includes facilities estimated to cost more than \$25,000 which are direct obligations of the War and Navy Departments (including financing through Government supply and emergency plant facility contracts), Maritime Commission, Defense Plant Corporation, British Government, loans of the Reconstruction Finance Corporation, and certificates of necessity approved (excluding pilot and mechanic training).

TABLE V.—*Distribution of factory wage earners in 1939 and value of defense industrial facilities contracts through Sept. 30, 1941, by geographic regions and States—Continued*

Geographic region and State	Factory wage earners, 1939		Defense industrial facilities contracts	
	Number (thousands)	Percent of total	Amount (millions)	Percent of total
Mountain—Continued.				
New Mexico.....	3	(3)	2.7	.1
Arizona.....	6	.1	.1	(3)
Utah.....	12	.1	39.7	.8
Nevada.....	1	(3)	63.6	1.2
Pacific:				
Washington.....	90	1.1	111.2	2.1
Oregon.....	63	.8	23.4	.4
California.....	275	3.5	240.1	4.6

¹ 2.5 percent not designated to any State and 0.2 percent outside continental United States.

² Less than 0.05 percent.

³ No figures given.

Source: Percent of factory wage earners based on figures given in Census of Manufactures: 1939, "Summary statistics for establishments grouped by size as measured by number of wage earners," November 1941. Percent of defense industrial facilities contracts based on "dollar costs"—Office of Production Management release, Oct. 31, 1941.

Prepared by Occupational Outlook Division, Bureau of Labor Statistics, Feb. 3, 1942.

Among the States the story is very much the same. Of the seven States that had the largest number of factory wage earners in 1939—New York, Pennsylvania, Illinois, Ohio, Michigan, Massachusetts, and New Jersey—only one, Ohio, received a larger than proportionate share of industrial facilities contracts, and in this case the excess in the share of facilities contracts was only a fraction of a percent.

The tables and charts that have been shown thus far indicate that while there have been fairly wide differences in the force of the impact of the defense program on various industries and on various geographical areas, some impact has been felt throughout all segments of our national economy. Under these circumstances it might be supposed that unusually long migrations on the part of labor would not have occurred. Various studies that the Bureau of Labor Statistics has made regarding the source of workers in different defense industries and studies that have been made by the Work Projects Administration and other agencies indicate, however, that the migration of workers has been extensive, not only with respect to numbers, but also with respect to distances. Chart 6 shows the distances that were traveled by 565 workers hired by one Long Island aircraft plant. It will be noted that a few workers traveled the entire distance across the country notwithstanding the fact that there is a very large demand for workers in aircraft plants on the west coast. Of the 565 workers hired, only about one-third lived within 10 miles of the plant; an additional one-half lived within a distance that might be considered roughly commuting distance—up to 30 miles. About one-tenth of the workers came from distances in excess of 100 miles (table 6).

TABLE VI.—*Workers hired by one Long Island aircraft plant classified according to distances from their last previous place of employment*

Distance (in miles)	Number of workers	Percent distribution	Distance (in miles)	Number of workers	Percent distribution
Less than 10.....	179	31.7	250 and over.....	23	4.1
10 and under 30.....	298	52.7			
30 and under 100.....	34	6.0	Total.....	565	100.0
100 and under 250.....	31	5.5			

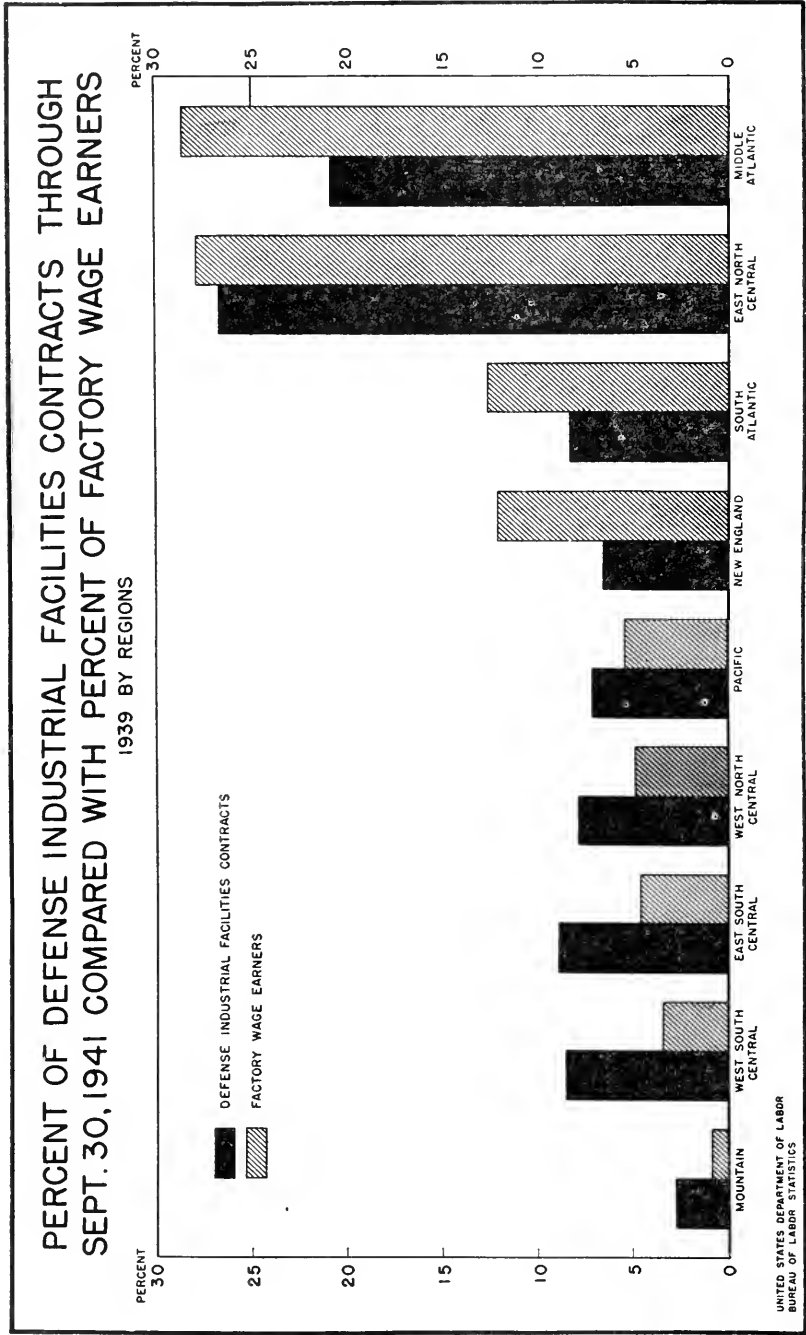


CHART 5

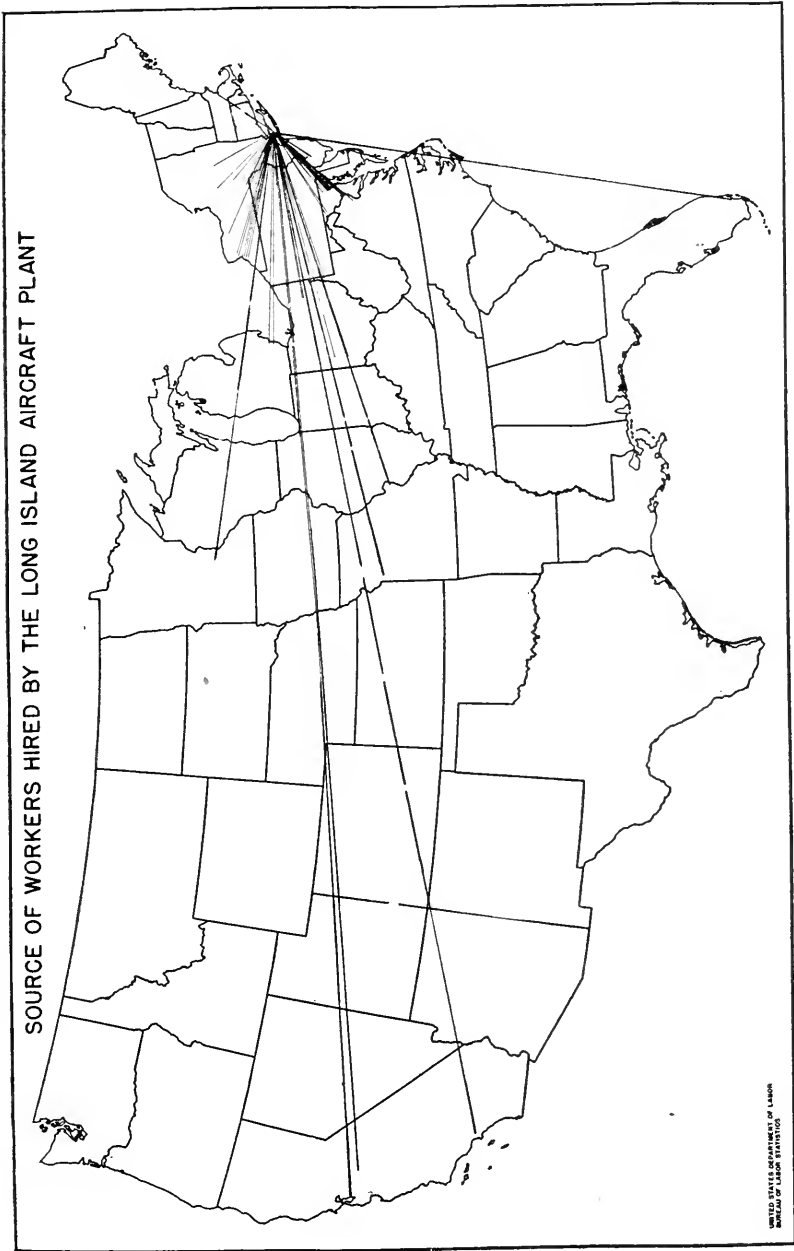


CHART 6

The President's new war production program requires that by the end of this year war production shall engage the services of about 15 million workers, 3 times as many as were so employed in the fourth quarter of 1941. This increase will be brought about only in small part by increases in total employment. Tentative estimates of the Bureau of Labor Statistics indicate an increase in nonagricultural employment of slightly over 2 million from the fourth quarter of 1941 to the fourth quarter of 1942 (table 7, charts 7 and 8).

The increase in total employment and prospective increases in the armed forces for 1942 will not exhaust our labor reserves. If the same proportion of the population were employed as during the last war, we might expect to draw 5 or 6 million people who are not normally in the labor force into the labor market. These people include young persons in school, a fairly considerable number of young unmarried women who are neither at school nor looking for work, some men and married women without children or with grown children who have had work experience but are not currently in the labor market, and some older men who have retired. The reserve can be built up also by keeping people who would normally retire in employment for an additional period of months or years. Women who retire from employment on marriage constitute the largest single source of supply in this group. The retirement of older male workers who have jobs will also be postponed. Finally, there is a considerable body of workers engaged in seasonal employments such as agriculture, lumbering, and Great Lakes shipping, who normally retire from the labor market for 2, 3, or 4 months of the year. To the extent that their services can be used during the slack season, they add to the reserve of manpower available for war and essential civilian production. It is essentially from this reserve that we shall draw workers to replace those who are called to the colors. The increase in the labor force drawn from this reserve in 1942 will probably be large enough to permit the expansion visualized in the face of continued frictional unemployment.

TABLE VII.—*Estimates of population, labor force, employment, and unemployment, 1940-42*

[Quarterly averages, in millions]

	1940			1941				1942			
	2	3	4	1	2	3	4	1	2	3	4
Total population.....	131.8	132.0	132.3	132.5	132.8	133.0	133.2	133.5	133.7	134.0	134.2
Under 14.....	30.7	30.6	30.6	30.6	30.6	30.5	30.5	30.5	30.4	30.4	30.4
14 and over.....	101.1	101.4	101.7	101.9	102.2	102.5	102.7	103.0	103.3	103.6	103.8
Not in the labor force.....	45.6	44.6	46.9	48.2	48.2	45.3	47.3	48.2	46.2	45.2	46.4
In the labor force.....	55.5	56.8	54.8	53.7	56.0	57.2	55.4	54.8	57.1	58.4	57.4
Armed forces ².....	.5	.5	.8	1.1	1.6	1.9	2.0	2.3	3.0	3.6	4.2
Unemployed.....	8.6	8.4	7.4	7.2	6.1	5.1	3.9	4.5	3.7	3.5	2.4
Employed.....	46.4	47.9	46.6	45.4	48.3	50.2	49.5	48.0	50.4	51.3	50.8
Agricultural.....	(1)	(1)	(1)	8.4	10.0	10.2	8.9	8.2	9.7	9.7	8.5
Nonagricultural.....	(1)	(1)	(1)	37.0	38.3	40.0	40.6	39.8	40.7	41.6	42.3
Self-employed, etc.....	(1)	(1)	(1)	5.7	5.6	5.8	5.9	5.6	5.5	5.5	5.5
Wage and salary workers.....	29.5	30.3	31.5	31.3	32.7	34.2	34.7	34.2	35.2	36.1	36.8
Defense.....	.5	.7	1.4	2.4	2.7	3.4	5.0	7.5	10.0	12.5	15.0
Nondefense.....	29.0	29.6	30.1	28.9	30.0	30.8	29.7	26.7	25.2	23.6	21.8

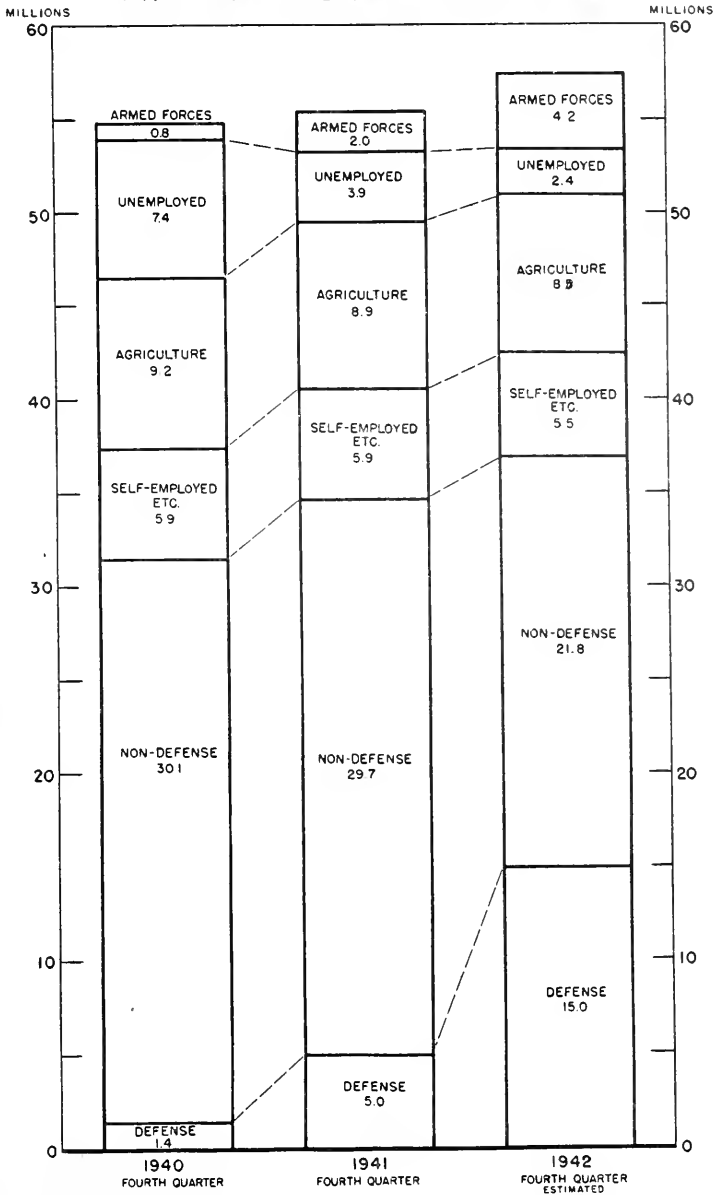
¹ Not available.

² 1942 estimates based on statement by the Secretary of War, January 15, 1942.

NOTE.—Labor force, total civilian employment, agricultural and nonagricultural employment, and unemployment are on the basis of the Work Projects Administration monthly unemployment survey. Nonagricultural wage and salary workers is the Bureau of Labor Statistics series; self-employed, etc., is a residual item.

Prepared by Occupational Outlook Division, Bureau of Labor Statistics, February 3, 1942.

CHANGES IN THE LABOR FORCE AND ITS COMPOSITION

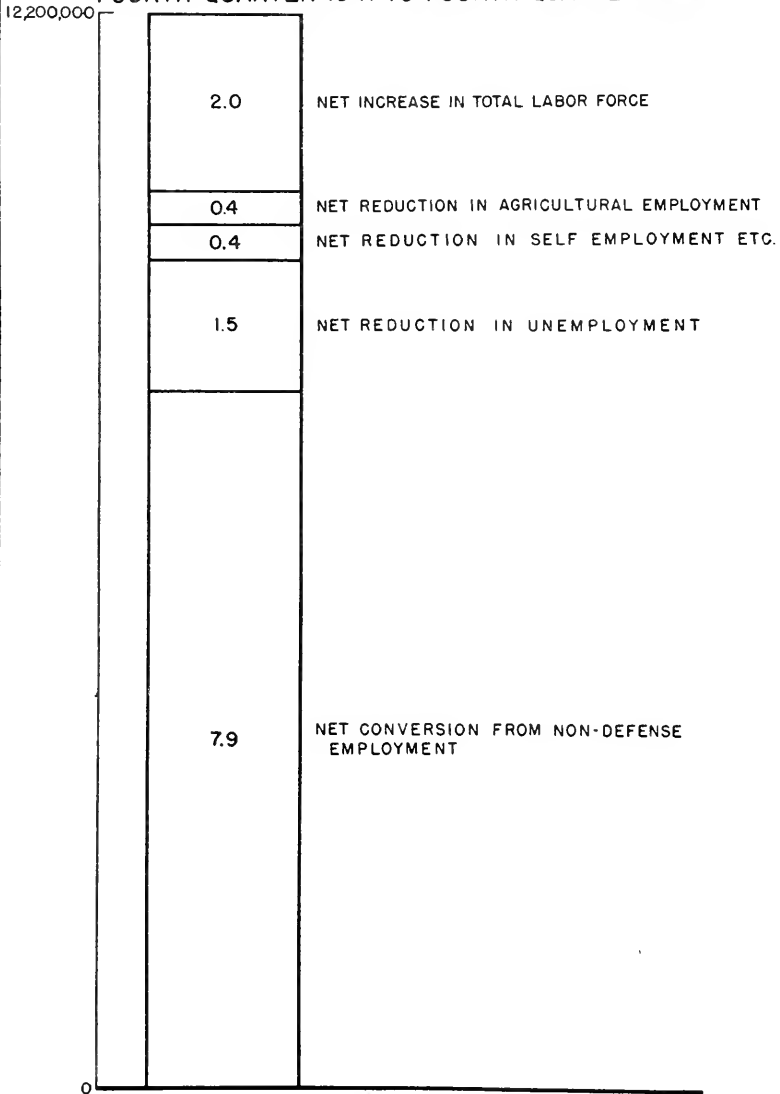


UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

CHART 7

SOURCES OF 12.2 MILLION INCREASE IN ARMED FORCES AND IN DEFENSE EMPLOYMENT

FOURTH QUARTER 1941 TO FOURTH QUARTER 1942



There will be serious local shortages of labor. The unemployed at the present time are not all located in communities with facilities suitable to war production. The distribution of the reserve of manpower not normally in the labor market corresponds more closely to the distribution of total population than it does to the distribution of existing war production. In some centers where war production expanded most rapidly in 1941, this reserve has already been drawn down. Therefore, if we are to avail ourselves of the available labor reserve—both those now unemployed and those who may be drawn into the labor market—it is of the utmost importance that defense production be widely decentralized. Provision will also have to be made for defense housing for the use of those who migrate from areas in which employment cannot be increased to the centers of war production.

Discrimination against the employment of women, of Negroes, and of other minority groups will seriously interfere with the Victory program. Increases in the armed forces will vacate jobs normally held by men. As there are only about 2½ million unemployed males, some of whom are unemployable, and as there will always be some persons unemployed between jobs, it is evident that an increase of 2.2 million in the armed forces will create a real stringency in the market for white male workers of age for military service. Prospective increases of total employment, over and above increases in military forces, will only be possible if employers limit hiring specifications to the technical requirements of the job. To the extent that they refuse to hire Negroes and other racial groups they will create an artificial scarcity of male workers. To the extent that they plan to hire older workers and women, they will ease their problems of recruiting labor.

During the defense period of 1940-41, our labor supply was amply adequate to provide for both the increase in industrial production and the increase in our armed forces without drawing extensively on the potential reserve of persons who can be brought into the labor market during the emergency. The increase in the size of the labor force, at least until December, was about that which might be expected as a result of population growth. We started the defense period with over 8 million unemployed. As employment expanded, this number was rapidly reduced, till by the end of 1941 it stood at slightly less than 4 million. With an anticipated net increase of 2 million in employment and 2.2 million additional needed for the armed forces it might be expected that unemployment would virtually disappear by the end of the year. In fact, however, the conversion of many plants to defense production, and the closing down of others because of shortages of materials, will result in a continuation of considerable unemployment through most of this year. Many of the displaced workers can be transferred to defense work, but their transfer will in many cases require retraining or relocation, and will take time to work out. The increases in employment and in the armed forces will have to be met partly by drawing in people who are not now in the labor market.

While the total number of unemployed will be substantial throughout most of the year, it will be composed of a shifting group of individuals. Large numbers of individuals will experience short periods of unemployment, and only the least employable or those in the most inaccessible areas are likely to experience prolonged and continuous unemployment. It will be unemployment of a type against which unemployment insurance was designed to provide, though for some workers in areas highly dependent upon the production of civilian consumer durable goods, like automobiles, the statutory period of compensation will be too short to meet their needs.

The major expansion of war production in 1942 must come by diversion from production for civilian purposes to production for military purposes. It appears that as many as 8 million workers may be thus diverted to war production.

Many of these workers will continue to work where they are and to make essentially the same products as at present, but the product will be used for military purposes. This is true, for example, of basic metal production such as iron and steel, and also of manufacturing industries making basic industrial equipment and construction materials. Construction will continue to employ about the same number of workers as at present, but virtually all construction will be directly or indirectly for military purposes: i. e., for new war plants, for the housing of troops or defense workers. In these cases there will be little or no delay in switching from production for civilian needs to production for war purposes. No retraining program will be necessary for these workers. The changes in production may not be sufficiently great to make the workers aware of the fact that the ultimate use to which their product is to be put has changed.

In other cases some retooling of the plant and some retraining of the workers will be necessary before the plant can be adapted to war production. This will be the case where the production techniques used to make civilian articles do not coincide with the techniques required to produce any of the thousands of articles needed by the Army and Navy, or parts of these products. It is a problem that will arise especially frequently in connection with the final assembly or sub-assembly of war material, or in connection with the fabrication of highly specialized parts that have few counterparts in civilian life.

The Victory program depends upon this type of conversion of plant and work force to war production wherever it is possible and wherever the simple process of product diversion to war purposes is impossible. Essentially all equipment now used to produce consumers' durable goods must be placed at the service of the war effort. Thus it has already been ordered that there shall be no new automobiles, except for military purposes, while automobile companies are to make tanks, guns, planes, and other instruments of war. There will be similar shrinkage in the production of producers' durable goods. Civilian industry will be limited to the purchase of materials needed for plant maintenance and for meager replacement. The basic machine producing capacity of the country will be needed in its entirety to equip new war plants, to reequip and balance the equipment of plants converted to war production, or to produce final instruments of war.

Insofar as the durable goods industries that make demands upon scarce materials, chiefly the metals, cannot adapt their plant to direct or indirect war production, it will be necessary to release workers for jobs in other war industries. In some instances this may involve the total closing down of a plant. In many more instances it will involve the release of part of the labor force, for in many instances it will not be possible to achieve 100 percent use of a plant—especially of those plants producing finished consumer goods—for war purposes. It must be assumed that where scarce materials are incidental to essential civilian production, as in the use of steel for shoe nails, supplies will be maintained. It is for this reason among others that war production plans presuppose the conversion of most durable consumers' goods industries to war production but the continuation of production of most nondurable goods for civilian production.

The absorption of 10 million more workers on defense production depends in part upon the building of new plants, not yet under contract. Since this takes many months and since in any event toolmaking facilities are required to equip plants already projected, to reequip plants for war production, and to produce new equipment to permit existing plants to achieve balanced production at capacity operation, the Victory program will depend upon a full utilization of existing facilities for war production. This is the more necessary because several millions of the workers needed for Victory production will be drawn from employments that cannot be adapted to war production. Some of them, as has been indicated, will come from plants that cannot be fully adapted. Others will be drawn from agriculture and various forms of self-employment. Still others will come from offices and sales forces that have been engaged in the distribution of durable consumers' goods. The absorption of these millions of workers will be possible only if productive equipment that can be used for war purposes is operated continuously, whether such equipment is found in new plants built especially for war production or in facilities converted from civilian production to war purposes.

Finally, the increase of war production employment to only 15 million presupposes an increase in the number of hours worked in many establishments. A few industries, as for example the machine-tool industry, have already lengthened the workweek for individual workers to the limits of safety. Other industries, especially those producing durable consumers' goods, have averaged little more than 40 hours a week. When these industries are converted to war production, they will either require more workers than has been anticipated or they will have to tend toward 48-hour shift operation. While untrained manpower will be adequate throughout most of 1942 to permit a larger increase in defense employment than is projected, the training problem for those establishments undertaking all-out war production is so large in any event as to make it almost certain that shift hours will be extended.

This does not mean that there will need to be a corresponding increase in the length of the work week for those engaged in civilian production. Conservation of manpower through a general lengthening of the workweek is not likely to be necessary until 1943. As a matter of fact there will be a pressing need in 1942 to find additional employment opportunities for civilian production in order to

maintain the level of living at the highest possible level. Men and women will be available, or can be made available, in larger numbers than they are likely to be used. If materials and machines are available and if there is consumer demand for the products, there will be the manpower to permit a greater expansion of personal services and of the production of consumer goods such as foodstuffs and textile products than has been currently projected in the Bureau of Labor Statistics' tentative estimate of a net increase of employment of slightly more than 2 million for 1942.

TESTIMONY OF DONALD H. DAVENPORT—Resumed

During the last year and a half of defense effort we have faced an expanded demand for labor, at the same time that our armed forces have increased. The impact of that defense effort, which has become a war effort, can be described industrially and geographically, and it is those aspects of this problem that throw light upon the necessity for movements of workers from one part of the country to another.

The first impact of the defense effort was through the demand for increasing quantities of war material which stimulated certain industries.

PRIMARY AND SECONDARY EFFECTS

Obviously the effect upon different industries was varied.

There was a primary effect in the hiring of a great many workers that were capable of turning out the kinds of products that were needed—ships, cargo vessels, aircraft, and so forth, and ordnance items needed to equip both the ships and planes.

The secondary effect was upon the industries that provided the materials required by the increased number of workers engaged in the defense industries.

There was a twofold factor in this. First there came an increase in employment which, of course, proportionately increased pay rolls and spending power.

Secondly, an increased number of hours of work in those plants; pay rolls expanded more in proportion than did employment. This increased spending power had its effect upon civilian industries, the industries that produce the butter rather than the guns.

Therefore, during the first 12, 13, or 14 months of the defense effort, there was a dual expansion of defense and civilian industries. However, beginning in the fall of 1941, the effect of restrictions on raw materials, restrictions in the use of silk for the manufacture of silk hosiery, restrictions in the use of steel, and the use of copper. The exercise of priorities, with respect to the use that could be made of raw materials, began to have a dampening effect upon the industries that produced civilian goods; so that over all today we find that the employment in nondefense industries is back at the level where it was at the beginning of the defense effort and that means a drop of probably 1,000,000 people diverted from the manufacture of nondefense items, into the manufacture of defense items.

Mr. CURTIS. You are referring to workers that have been checked on and referred to your office?

Mr. DAVENPORT. Yes, sir.

Mr. CURTIS. Do you make estimates, aside from your actual enumeration?

Mr. DAVENPORT. Yes, sir.

Mr. CURTIS. And do the figures you referred to include estimates?

Mr. DAVENPORT. Those are over-all estimates.

Mr. CURTIS. Does that include salesmen?

140,000 FIRMS REPORT ON EMPLOYMENT

Mr. DAVENPORT. It does. We have over 140,000 firms that report to us every month with respect to the number of people they employ, their pay rolls, and, in most cases, the man-hours they put in. From those 140,000 returns every month, we make estimates of what the total picture would be if all of the firms employing labor were to report.

We check periodically the sample of firms that report. Those are all voluntary reporters.

We have built up the good will that keeps them reporting to us, over a good many years.

I have here several charts that will show the effect of expansion in employment on different industries.

This chart [indicating] shows the percentage increase from June 1940 to November 1941. The scale runs from zero to 90 at the extreme right.¹

PERCENTAGE INCREASES IN EMPLOYMENT

The first bar represents the manufacture of transportation equipment. This includes shipbuilding, naval vessels, maritime cargo carriers, aircraft, railroad cars, locomotives, and automobiles. The expansion in that category of industries was most marked—approximately an 83 or 84 percent increase in the period from June 1940 to November 1941.

The machinery group, which is strategic from many points of view, and includes machine tools, power equipment, and machine-tool accessories, expanded about 58 percent in the same period.

In nonferrous metals, that is, aluminum, brass, bronze and copper, zinc and lead, the expansion was approximately 36 percent.

Iron and steel expanded about 34 percent; rubber, 34 percent; chemicals, perhaps 26 percent; stone, clay, and glass, around 25 percent; and textiles, lumber, food, leather, paper, and tobacco, about 5 percent.

I have another chart based upon the same figures, which shows the absolute numbers which, in some respects, are a little more illuminating than the percentage increases in the different industries.²

¹This, again, is from June 1940 to November 1941.

The absolute numbers of workers involved in increases of employment from June 1940 was almost 600,000 in the machinery group.

Mr. CURTIS. Do you attribute that increase largely to the production of machines to make defense articles?

Mr. DAVENPORT. Primarily. I would say that was the preponderant influence affecting this group. It was the manufacture of machine tools to tool up the new airplane plants, the new shipyards, the new plants for the manufacture of ordnance.

That is why machine tools and machinery in general constitute a very strategic group. You can't make planes until you have the machinery with which to make planes. Therefore, you must build

¹ See chart 1, p. 10259.

² See chart 2, p. 10260.

your plant, equip your plant, tool up your plant to produce before you can hope to get the war-munitions program out.

Almost 50,000 transportation workers were hired who were not on the pay roll in June 1940; textiles, around 300,000; steel around 300,000; food, also about 300,000; and tobacco, probably 2,000 or 3,000.

Mr. CURTIS. By food, what do you mean; do you mean raising or processing or what?

Mr. DAVENPORT. This is the manufacture of foods. It would include flour milling, the baking of bread, etc.

Mr. CURTIS. It doesn't include farming at all?

Mr. DAVENPORT. No, sir; just the manufacturing industries.

Now, obviously, each one of these industries has certain geographic centers of activity. Therefore, the expansion of these industries means an internal tension in the distribution of your labor force. That alone has resulted in migration of workers from parts of the country which were not affected by the impact of the war production program upon our industries.

The next chart shows the geographic effects of this situation.¹

CHANGES IN FACTORY-WORKER EMPLOYMENT

From 93 cities, each one of which is over 100,000 population, we received sufficient reports from manufacturers in those communities, to enable us to build up an index of the changes in factory-worker employment.

Factory-worker employment is defined in this instance to include not only the private manufacturing establishments, but also the Government manufacturing establishments, such as the Watertown Arsenal, the Frankfort Arsenal, and the various United States navy yards and manufacturing arsenals throughout the country, regardless of whether they are privately or Government owned.

The community designated by the bar at the top is Long Beach, Calif. The bar stretches out to 300 percent. For every one factory worker you had in that area in June 1940 you had three factory workers there in November 1941.

That is the center of one of the greatest expansions of the aircraft industry we have anywhere in the country.

San Diego, Calif., also shows an increase which is second, around a 200 percent increase in the period of a year and a half.

There are in all, I think, 22 communities in which the increase in the number of people working in manufacturing establishments exceeded 50 percent. And it stretches down through a list of about 125 towns to Des Moines, Iowa, that had an increase of probably 4 percent.

Evansville, Ind., actually showed a decrease, but it was unique in that respect.

The reason for the differences in the behavior of these cities, I think, is quite obvious. The identity of Wichita with the aircraft industry, a sudden expansion by reason of some five aircraft plants that located in that community, ties it up pretty closely with one of the most rapidly expanding factors in our war economy, aircraft production.

¹ See chart 3, p. 10263.

Seattle, Wash., which expanded almost 100 percent, is a combination of aircraft—the Boeing Aircraft Co.—and the navy yard in the Seattle-Tacoma area.

One word of explanation in the interpretation of the information on this chart may be pertinent.

In the 93 areas, each community having a population of over 100,000 has been listed separately. In other words, for the Kansas City area there were two items—Kansas City, Mo., and Kansas City, Kans.

New York and northern New Jersey is one area which includes Newark, Jersey City, Paterson, Elizabeth, Yonkers, and New York City, plus the outside. Altogether, we would have, including the subareas, about 125 separate cities plotted.

I should say that they represent areas that include somewhere between 70 percent and 80 percent of our manufacturing employment.

You get a different picture, from the point of view of over-all State figures, over this same period from June 1940 to November 1941.

CHANGES IN EMPLOYMENT PATTERN

Taking the States, and in this case taking all civilian employment, excluding agricultural employment, we find a very spotty condition showing up by reason of the fact that the States in which we find the most rapidly expanding war industries tend to fall into a definite pattern.

The first impact in point of time was naturally in the older industrial areas.

For military purposes, strategic reasons of defense, and what not, the newer establishments in the defense industries that were financed through the expenditure of Government funds, were located outside of the older industrial areas.

This chart shows the over-all effect from June 1940 to November 1941.¹ Had we taken a series of maps from June to July 1940—June to August 1940—you would have seen a gradual change in the pattern because the initial effect was pretty largely on the eastern seaboard and in the State of California.

It wasn't many months before Kansas appeared as one of the States that began to show expansion as a result of Wichita, Kans., being the center of five aircraft plants.

At one time there was only one defense contract in the Wichita area outside of the aircraft contracts to the five aircraft companies; I think that was \$20,000 of flour that happened to be purchased from one of the flour mills in Kansas.

DISTRIBUTION OF WAR PLANTS AND WAGE EARNERS

I think this committee will be interested in the comparison of the geographic distribution of the funds that were made available for the expansion of war plants, with a geographic distribution of the wage earners employed in factories by States, in 1939.

If we take the 1939 wage-earner figures, wage earners in manufacturing establishments, and distribute them geographically, we get a pattern of the location of our factories as of the predefense period.

¹See chart 4, p. 10265.

Then, if we take a geographic distribution of the money that has been made available to expand war plants by States, we get a picture¹ that shows some very interesting comparisons.

The first five areas, the Mountain States, the West South Central, East South Central, West North Central, and the Pacific, are areas in which the States got a share of the new defense-plant money that was greater than they would have gotten if it had been allocated on the basis of the old plant pattern—if it had been allocated on the basis of existing factory labor forces in 1939.

The areas that are designated in the four columns on the right side of the chart: New England, South Atlantic, East North Central, and Middle Atlantic, all received smaller shares of the money that was allocated for expansion of plant facilities than would have been allocated if the money had been divided on the basis of the old plant facility pattern.

Now, it is not our responsibility to appraise the philosophy that determined the allocation of that money. We are fact finders, we are relating the situation which is basic to an understanding of the migration problem that you are struggling with.

That migration problem, as I see it, resulted of necessity from the decisions that were made to expand the manufacturing employment and defense facilities in the areas that previously had not been predominantly manufacturing areas.

Mr. CURTIS. Mr. Davenport, do you expect the trends to indicate in 1942, just as these charts indicate in the past, where the largest amount of additional labor will be required and where it will be curtailed most sharply?

Mr. DAVENPORT. Unfortunately, sir, I am not in a position to answer that fully.

We have made no forecast of the over-all expansion of individual areas, except in specific industries, and there we are advising the Employment Service and the aircraft companies and the shipbuilding companies that are concerned, with respect to what our estimates are of their future requirements, based upon contracts let.

MIGRATION OF WORKERS

I would say in general that the expansion in shipbuilding will have to be along the seacoast, and to that extent shipbuilding will continue drawing people from the interior to work in the shipyards. We expect an expansion there that will be very considerable in the next 12 months, and that will continue.

I have some evidence that I shall show you of the drawing power of one aircraft plant located on Long Island. We were permitted to go into this aircraft plant and examine the personnel records of the recently hired workers, which show that those workers came from a great many different States. There were aircraft plants on the Pacific coast, but three workers left California for the Long Island climate.

One came from Florida.

Most of them, as you might expect, came from the States which are closer to Long Island.²

¹ See chart 5, p. 10268.

² See chart 6, p. 10269.

The figures with respect to those 565 workers that migrated into that area over the period we were studying indicates that 31.7 percent came from within less than 10 miles and 52.7 percent came from an area between 10 and 30 miles, but 15.6 percent came from distances that ran from 30 up to 3,000 miles.

DISTRIBUTION OF PLANTS

There is a movement to have the air engine industry distributed a little more widely than it was a year ago. For a long time the airplane-engine industry was located almost exclusively on the eastern seaboard, whereas the airplane-frame industry, which assembles the frame and the engine and propeller into the frame, was predominantly located in California, on the west coast.

There has been a deliberate attempt to decentralize the manufacture of airplane engines, and we now find some airplane engines being manufactured out in California and others in Ohio.

We see that the predominant locations of airplane frames is still on the west coast. The engine industry and propeller industry is still predominantly on the east coast.

In the early stages of defense effort, there was a greater tendency for the companies holding the prime contracts to do all the work they could do themselves. That meant a greater concentration of employment in their immediate locations.

Since then there has been an effort on the part of the Office of Production Management—now the War Production Board—and others, to encourage, urge, and compel the prime contractor to subcontract a great deal of the work to others. That has had a decentralizing effect.

I think that in part is responsible for the fact that there has been an increase in employment in every State in the Union, and with very few exceptions there has been an increase in employment in a great many different lines of industry that you would not ordinarily think of as being touched by primary defense contracts for planes, ships, and so forth.

MR. CURTIS. How many women does the Bureau estimate will be drawn in the industry during the next year?

MR. DAVENPORT. I think, if I may turn to the next to last chart,¹ we may derive the basis for an answer to that question.

DISTRIBUTION OF LABOR FORCES

This chart shows the distribution of our labor forces in three periods, two in retrospect and one in prospect, the fourth quarter of 1940, the fourth quarter of 1941, and what we estimate the distribution will be in the fourth quarter of 1942.

The height of the bar represents the total number of men and women in the working force, either working or unemployed, or in the armed forces. It is the deployment, if you will, of our human resources in that segment of the population that constitutes the people who are willing to work and able to work and either working or unable to find work.

¹ See chart 7, p. 10271.

In the fourth quarter of 1940—the defense program had been under way since June—we estimate that we had about 1,400,000 that were engaged in activities that might be described as defense employment, employment by reason of the manufacture of defense materials; and in nondefense at that time 30,100,000.

The self-employed group, which is explained as a residual group—those who are running small stores that they own, hot-dog stands, and so forth—we estimate at about five million nine; agriculture, about nine million two; unemployed, about seven million four; and the armed forces, including the Army, Navy, Marine Corps, and Coast Guard, about eight hundred thousand.

In 1941 the picture changed appreciably. The armed forces had expanded to 2,000,000; the unemployed had been drawn down to 3.9 million. That is where we got a lot of the expansion that was called for in defense.

Defense employment expanded to 5,000,000, nondefense shrank to 29.7 million. Self-employed the same figure and agriculture dropped to 8.9 million.

Now, the picture we see ahead of us—and this is based upon considered judgment—it is obvious there is nothing in the Book of Revelations that will help us to find what these figures will be at the end of this year. The Secretary of War did help a little when he told us that the expansion of the Army would be a certain figure. We found out from the Navy what the expansion of the Navy would be, and we estimate our armed forces to be 4,200,000 as an average for the fourth quarter of this year, a figure as of the middle of December 1942. The expansion there will be all males, obviously. To the extent that they are drawn from industry their places will be taken, I make bold to say, by women.

Mr. CURTIS. Why will there still be 2,000,000 unemployed?

Mr. DAVENPORT. The character of the unemployed at that time will be quite different from the character of the unemployed at the present time. If you will look at the lower part of this chart you will see that defense employment is estimated to expand from 5,000,000 to 15,000,000 and nondefense employment to contract from 29.7 to 21.8 millions.

You see a picture of internal tension that will mean that people who are working here, manufacturing civilian goods, will not be needed here, but they will be needed over there [indicating on chart] where the expansion is, for war materials.

Mr. CURTIS. And some can't get over there?

Mr. DAVENPORT. To get the men who are working here to move over there takes time. It takes persuasion, it takes economic pressure, and while that man is making up his mind that he cannot find another job in his home locality he is unemployed, though he is employable.

Mr. CURTIS. Might it not be an element of training?

Mr. DAVENPORT. That is right. He may have to be trained. While he is training, he is unemployed.

It is our judgment that the composition of the 2,400,000 that we figure may be unemployed at that time will be quite different from the point of view of the employability and skills that might be useful, from what it was in the fourth quarter of 1941, and a great deal different from the fourth quarter of 1940.

UNEMPLOYABLES

Mr. SPARKMAN. Your chart does not take into account the unemployable at all, does it?

Mr. DAVENPORT. Those who are strictly unemployable are not included here. The working forces are considered to be those who are able to work, willing to work, and either working or unemployed because they cannot find work.

The term "unemployability" is an elastic term and in this 2,400,000 I would say you will find two groups, a group that will be left unemployed after you have sifted and sifted, and a group which has become unemployed by reason of the conversion of nondefense into defense industries. Many of them are left holding the bag, owning a little home in this community, where there is nothing for them to do, because the industry there produced civilian goods and cannot be converted to the manufacture of war materials. To use that man you have to move him X miles to an industry that can be converted.

Mr. SPARKMAN. A fairly large part of that two million four would be represented by a lag in moving from one point to another?

Mr. DAVENPORT. That is a good way to describe it.

SOURCES OF AVAILABLE LABOR

Mr. CURTIS. If I understand your figures, in order to get 10,000,000 more people working in defense you will take 1,500,000 of the unemployed, and you will get 400,000 from agriculture and the rest will have to be women. And then you will have to take enough women to replace the increase in the armed forces. You will have to employ about three and a half million women. Is that correct?

Mr. DAVENPORT. We have not carried our estimate in terms of sex to the point where I would be willing to say, but I am willing to say that for every man who is drawn out of this picture into the armed forces, you will have to replace him with a woman.

Mr. CURTIS. Why not put a 17-year-old boy there?

Mr. DAVENPORT. We are counting on that to some extent, but how many 17-year-old boys do you have? Have you a picture of that? Not a great many.

Mr. SPARKMAN. 1,300,000.

Mr. DAVENPORT. The Army estimates that 1,220,000 become 21 each year, so the 17-year olds would be slightly in excess of that. The total number of individuals of the ages of 14, 15, 16, and 17 destined for the labor force is 1,400,000. That number could be expanded by drawing on a large percentage of those that normally go to school, or girls that normally don't enter the labor force. Ordinarily we expect a net increase in the labor force of between 700,000 and 800,000 a year, by reason of growth of population. The reason it doesn't expand as rapidly as the classes that enter the working ages, is because you have deaths at the other end. This last chart shows our rough pictures of the sources from which we are going to get this expansion in the war effort, both industrial war effort and armed force war effort.¹ It indicates that somewhere around seven million nine hundred thousand will be converted from civilian, nondefense industries.

¹ See chart 8, p. 10272.

The reduction in the number of unemployed is about one and a half million and the reduction in the number of self-employed about 400,000, possibly 400,000 more from agriculture, and a 2,000,000 increase in the total labor force.

Ordinarily we only count on, as I say, 700,000 to 800,000 increase. That labor force can be increased in these ways: You can reach down and get younger people who normally would be going to school; you can draw in women that normally are not in the labor forces; you can hold people back who normally would be retired at the age of 65 or 70; and you can draw some who have retired back into the labor force. But you can only expand that way once or twice. After you have done that all that you can count on would be the normal increase in your labor force.

EMPLOYMENT OF AGRICULTURAL WORKERS

Mr. CURTIS. How are you going to reduce your agricultural employment, in view of the fact that you are going to demand an increased production and a decrease of available labor-saving machinery?

Mr. DAVENPORT. Well, sir; I imagine the selective service will draw from the agricultural communities, and from those farms that have long been classified as submarginal or marginal farms, farms that merely produce an existence for their operators.

I cannot pose as an agricultural economist but I imagine the net output of agriculture could be increased from the really producing areas and the selective service could still draw off the 400,000 that we figure might be drawn from the farms.

In other words, the local draft boards, if they exercise wisdom, should take into account that this farm, from which John Jones was drawn before their board, is a farm that under no circumstances could be classified as one producing a pound of food for the armed forces or civilian population. It might as well be closed just as many of our plants are closed up through the regular bankruptcy courts.

I can imagine that the local draft boards might exercise that kind of wisdom and if they were imbued with the idea of producing more food products to be thrown on the market, they might use that kind of touchstone in deciding whether or not to continue to allow that farm to operate.

Mr. CURTIS. Mr. Davenport, getting away from some of these details for a moment, I want to ask you a question in connection with the defense migration that we have and the problems it is going to create in the way of housing and health and education and training programs.

OPINION ON LABOR MARKET POLICY

In reference to a national labor market policy, do you have any recommendations as to any changes that ought to be made?

Mr. DAVENPORT. I came in a little after General Hershey started his testimony this morning, but I did not find myself in disagreement with the General's views.

I think the planning for the utilization of our manpower from the point of view of making a 100-percent war effort is highly essential.

My main concern is that the machinery that is set up to execute that plan be simple enough so that it doesn't get bogged down in operation.

I think the General's idea of delegation of authority to the local level and operating on a basis without too much centralization in statistical controls is an excellent one.

Mr. CURTIS. To what extent should there be a consolidation of agency effort?

Mr. DAVENPORT. I have no recommendation to make with consolidation of agencies. If this were peacetime, I would have some recommendations, but my position at the present time is that further shifts merely confuse the job. I have every confidence that the United States Employment Service, now that it is federalized, is going to do a bang-up job, and will play an important part in the defense program.

Mr. CURTIS. Mr. Davenport, is our statistical information set-up adequate?

Mr. DAVENPORT. I suppose the answer to that is that no statistical set-up is ever adequate. You too frequently have to rely on estimates that are based on judgment.

Mr. CURTIS. Is there any particular angle on which study is needed and no study is available?

WOULD OBTAIN MORE ADEQUATE STATISTICS WITH MANDATORY POWERS

Mr. DAVENPORT. I think if we had mandatory powers to get certain information from employers, we would have more adequate statistics at the present time.

The Bureau of Labor Statistics, in contrast to the Census, operates on a basis of voluntary cooperation from employers and when we send out a questionnaire to several thousand employers, I am handicapped by the fact that we have to send a follow-up and possibly a telegram stating that it is the War Production Board that wants the information, that Knudsen, Hillman, or now Nelson wants it, and will they please reply.

I should say an intelligent and discriminatory delegation of mandatory powers to get this information for the purpose of our supreme effort would help a great deal.

Mr. CURTIS. Will the Bureau of Labor Statistics be able to undertake additional defense migration studies within the present year?

Mr. DAVENPORT. If we have the funds. At present we are operating to the full extent of our budget and it will be impossible to carry on any expansion of our present activities without expansion of funds. We have before the Bureau of the Budget requests for half a million dollars additional funds at the present time.

Mr. CURTIS. Are you losing any of your personnel to Selective Service?

Mr. DAVENPORT. Yes, sir; that is a constant source of disturbance to us, as is the loss of personnel to defense industries.

LOSS OF AIRCRAFT EMPLOYEES TO ARMED SERVICES

When you were questioning General Hershey I had in mind a letter we have just received from the personnel manager of Boeing Aircraft. He made an analysis of the number of individuals who had left Boeing Aircraft Co. in the last 3 months. Of that number,

over 300 left to join the armed forces: 150 had been drafted and the others had volunteered.

I suppose that military authorities would indicate there wasn't anything more important than expansion in Boeing Aircraft, so they could deliver the bombers they have on contract. That undoubtedly impairs their ability to deliver their contracts.

It is in the jurisdiction of the local draft boards, as to how they operate on request for deferment from Boeing.

In my own shop I have asked for deferment of a number of individuals who are irreplaceable in making the kind of studies that the war-production program considers essential and I am constantly going to the administrative officer who goes to the Secretary of Labor to request deferment of these individuals.

We have invested in such individuals $1\frac{1}{2}$ or $2\frac{1}{2}$ or $3\frac{1}{2}$ years of professional education. We don't know where, in the present labor market for professional help, we can find anyone to do that job. It will impair our efficiency very much if we have to lose such persons to the draft.

At one time 52 of our secretaries received telegrams from various defense agencies offering them jobs at salaries a grade above what we were paying them. That was one Saturday morning; 52 of our secretaries one Saturday morning received offers of jobs from the defense agencies that are growing very rapidly.

I might indicate that our own agency is a defense agency, but there are, I believe, 200 different defense agencies.

We, too, have expanded. Our present staff is at least double what it was before the defense effort began, but the increase of 450 people on our pay roll has meant the hiring of 600 people to replace those that include the turn-over in that period.

Mr. CURTIS. How far down the scale do you go in showing that certain people, for whom you are requesting deferment, are necessary?

Mr. DAVENPORT. That isn't a question I can answer, because I don't have jurisdiction over that. I can make my recommendations and describe how important an individual is in my operations. They have asked for limited deferment, 2 or 3 months, for individuals in CAF-5 classifications, I believe.

Mr. CURTIS. Eighteen months' experience in any job will make a person much more capable than no experience, but the inconvenience of training an inexperienced person alone does not make him a necessary man, does it?

Mr. DAVENPORT. I wouldn't say so. It would depend somewhat upon the necessities that the agency was facing, and the labor market and the ability to get someone to replace that individual.

I am speaking of persons with specialized training, people who have had special classes in statistics, economics, and accounting, before being hired in those categories by the Bureau. We have been hampered by the raids of other Federal agencies, and by the Selective Service System. We are not crying out for help but the situation is given in answer to your question.

Mr. CURTIS. That is all I have, Mr. Chairman.

The CHAIRMAN. Thank you very much, Mr. Davenport.

We appreciate your coming here very much and your statement will be inserted in the record.

The CHAIRMAN. Our next witness is Mr. John J. Corson who is accompanied by Mr. Collis Stocking, Assistant Director of the Bureau of Employment Security.

TESTIMONY OF JOHN J. CORSON, DIRECTOR, UNITED STATES EMPLOYMENT SERVICE, FEDERAL SECURITY AGENCY, WASHINGTON, D. C.

The CHAIRMAN. As you know, Mr. Corson, this committee, since its creation in April 1940, has been vitally interested in the functioning of and the improvement of the employment services. We have stated over and over again in our reports to Congress that the Employment Service was one of the most important agencies in the Nation for guiding migration. In our first interim report to Congress on October 21, 1941, we recommended the nationalization of the Employment Service as a step which was needed to eliminate the conflict of policies on referral and clearance by the separate State employment services.¹ I am happy, therefore, to welcome you here this morning as the director of the new National Employment Service.

Dr. Lamb will ask you some questions.

Dr. LAMB. In the first place, Mr. Corson, I would like to tell you that your five prepared statements will be put into the record and that they are very much appreciated. I would like to read the titles of them to indicate the scope of the material submitted. First, The New Structure of the Employment Service.

Second, Migration and National Defense, May to November 15, 1941;

Third; Employment of Women in Defense Industries;

Fourth; Labor Displacement Resulting from Material Shortages;

Fifth; In-plant Training as Observed by Public Employment Offices.

All of those topics are in one way or another of interest to this committee.

(The statements referred to above are as follows:)

STATEMENT BY JOHN J. CORSON, DIRECTOR, UNITED STATES EMPLOYMENT SERVICE, FEDERAL SECURITY AGENCY, WASHINGTON, D. C.

I. THE NEW STRUCTURE OF THE EMPLOYMENT SERVICE

INTRODUCTION

The actual declaration of war by the Axis Powers upon the United States of America created unprecedented problems in national defense. The problems, both military and civil, which will obtain during the war period require the production of war and civilian materials on an unparalleled scale.

Successful achievement of this production will require tremendously increased numbers of workers, and the labor supply program must be subjected to continuing review to determine the effectiveness and economy with which all labor resources are being used. This program involves widespread recruitment and training of workers, the orderly and effective transfer of labor among industries, and the controlled movement of workers not only between States but between the major industrial areas of the country as needed to insure maximum production. It is imperative therefore that there be a single centrally directed organization to

¹ See first interim report, House Report No. 1286, p. 42.

carry on the program. Such an organization now exists in the United States Employment Service. Following the President's action in nationalizing the existing State employment services, the United States Employment Service now carries complete responsibility and authority for the operation of all public employment services in the United States.

ORGANIZATION

The maintenance of a Federal system of public employment offices requires the establishment of an organizational structure through which the Director of the United States Employment Service will exercise direct control over all employment service operations in the several States. The new structure is designed specifically to expedite the administrative process, eliminate organizational and functional problems created by rigid State laws and State lines, and provide simultaneous issuance to all field personnel of all matters of uniform policy and procedure.

The departmental organization in Washington has centralized the authority and responsibility for administrative direction and management of the United States Employment Service program in the Director of the United States Employment Service. Field operations of the program have been assigned to an Associate Director.

The 12 regional offices through which line supervision of the State operations is maintained serve geographical areas which closely approximate natural labor market areas of the United States. Decentralization of functions and authority commensurate with the responsibilities and with principles of good management has been made to eliminate lags in making decisions and issuing instructions. Provision has been made for technical and administrative assistance from the departmental offices on administrative and operating problems in the field. Plans call for periodic audit of performance.

Appropriate authority and responsibility for State administration of the United States Employment Service program and for coordination of work with other Federal and State agencies relating to the labor supply program are given to the directors of the United States Employment Service for the several States.

The reorganization of facilities for serving labor market areas bisected by State lines is being accomplished in areas such as Kansas City, Kans., and Kansas City, Mo. Study is being made of all areas with similar problems in order to place responsibility for servicing employers upon one administrative unit. Such unified responsibility will insure application of the "ever widening circle plan" for recruiting labor without restriction by State lines or other artificial barriers or impediments. This plan provides for giving jobs first to qualified workers living near the employment site. When labor in the nearby area is exhausted, the hiring radius is enlarged by successive steps.

CLEARANCE OF LABOR

Principles and practices of clearance recruitment have been reviewed and appropriate regulations established to prevent migration into areas already supplied with unused qualified labor. Complete utilization of local supplies of labor is being attempted, including the use of workers arbitrarily rejected by employers because of physical defects, racial or like discriminations, age and sex. Fuller utilization of available skills through upgrading and job dilution methods is being required before clearance recruitment is initiated. Transfer and retraining of workers with critical occupational skills employed in nondefense and defense industries and who are working below or out of their highest occupational class, is being urged. The occupational files of the Work Projects Administration and the local relief rolls are being searched for suitable candidates for immediate placement or for training before an order is certified for clearance recruitment.

The pooled interview method of mass recruitment for specific employers is being extended by the Employment Service. By this method interviews of groups of selected applicants are arranged for employer representatives at convenient points. An itinerary is frequently arranged for these representatives to interview workers at a number of predetermined points where a sufficient number of suitable candidates warrants a visit by a representative. The pooled interview method has the following advantages:

1. Orders from employers are more specific as to number and acceptable qualifications since the expense of interview is assumed by the employer.
2. Fruitless travel of workers is eliminated by insuring a job before leaving their home community.

3. Employer has opportunity to interview, and frequently accepts, applicants with marginal qualifications not normally referred in the clearance process.

4. Worker has an opportunity to discuss working conditions, etc., with the employer without incurring travel costs or resorting to correspondence.

BASIC PROCEDURES

Within the network of 1,500 full-time local employment offices and 3,000 itinerant service points the employment service will operate with uniform instructions and procedures. Basic procedures are being prepared with the assistance of selected technical personnel from the several States and will be adopted as a standard manual of method and procedure for all States. A continuing process of bringing in selected technicians with recent local office operating experience is in effect to insure the development of practical, workable, and effective procedures,

EXTENSION OF FARM PLACEMENT SERVICE

The Department of Agriculture has established goals for 1942 which will require the greatest production in the history of the United States. Since the United States Employment Service is charged with the specific responsibility of serving agricultural workers and growers a further development of this phase of employment service work has been outlined for the Nation as a whole. Responsibility has been centered in the departmental organization in Washington for planning and coordinating the work in the several States and regions. Close coordination of the work of the Department of Agriculture and the Employment Service is effected through the departmental staff. Authority and responsibility for supervising local operations are centered with the regional representative in the 12 regional offices. One member of the regional office staff has full-time responsibility for the supervision and coordination of operations within and between the several States of the region. Provision is made for an administrative staff member on a year-round or seasonal assignment in each State to supervise and coordinate the farm placement work in each State. Particular emphasis is being placed on the assignment in each local office of placement personnel particularly familiar with farm employer requirements.

The farm placement problem is generally separated into (1) seasonal mass movement of large numbers of workers for specific crop handling, (2) normal farm employment, such as dairy hands, ranch hands, and similar nonmigratory workers. Primary responsibility for planning incident to serving growers and workers is lodged with the regional and State farm placement supervisors. Coordinating the national aspects of the problem and technical and advisory assistance is provided from the departmental staff.

The total problem of the farm labor market is recognized as inseparable from the industrial labor market. Provision for handling of the farm placement work is included as a part of the total operations with appropriate specialization and emphasis needed to effectively handle the problems.

II. MIGRATION AND NATIONAL DEFENSE, MAY TO NOVEMBER 15, 1941

The defense program, with its tremendous impetus to industrial activity, has effected a significant redistribution of the population in this country since the summer of 1940. Hundreds of thousands of job seekers were attracted to the shipbuilding, aircraft, and heavy industry centers of the Atlantic coast and the Northeast, to the expanding aircraft and shipbuilding cities on the west coast, to Gulf Coast shipbuilding centers, and to aircraft production centers in the Middle West. Army camps, powder plants, and similar projects, though concentrated in the South and Southwest, were scattered throughout every area of the country, and while under construction attracted many additional migrants.

Unemployed workers looking for jobs, workers already employed but seeking higher wages, left depressed areas and small communities for centers of expanding opportunity. Out-migration developed from the border States of the South into the industrial areas of the Northeast; from the depressed coal-mining communities of Pennsylvania, Ohio, and West Virginia to nearby centers of heavy goods production; and from the agrarian range and grain States to west coast and middle western industries. Migration was a most important source of labor in areas where there were no large reserves of unemployed local labor to staff the new defense plants, while in some of the older industrial cities there was less need for outside labor.

The majority of migrants to areas of defense activity came from nearby surrounding territory. A smaller but significant number of more highly skilled workers traveled greater distances, widely separated cities exchanged skilled production workers, while skilled construction workers migrated from one project to another over a wide area.

AREAS WITH DECLINING OR STEADY IN-MIGRATION

Because of the accelerating tempo of the armament program it is of particular interest to examine the migration trends that have become evident during the second half of 1941. Reports received by the Bureau of Employment Security from the State employment services¹ since April 1941 indicate that the geographic pattern of industrial migration has not substantially changed since the initial phase of the defense program. Nevertheless, in many areas a change in trends became apparent during the late summer and early fall months. There was a decline in the rate of migration to the following important industrial centers which earlier had noted heavy in-migration: Migration into Connecticut industries which attracted large numbers of workers from all of the New England and North Atlantic States was maintained at a high level during the early summer months but declined after July. Several New England States which earlier noted extensive out-migration reported that migration of workers from nondefense areas was declining during October and early November.

Movements of workers within Pennsylvania from areas of over-supply to defense areas decreased during the later months of 1941. Throughout the summer and fall workers left the depressed coal areas for Bethlehem, Pittsburgh, and Philadelphia, for industries in adjacent States. During the year ending October 1941 about 5,000 workers left Scranton for employment in defense industries located in Connecticut, New York, New Jersey, and Maryland. By November, however, several employment offices in the anthracite area reported that persons who had formerly migrated to other communities, were returning, partly because of high cost of living in defense areas.

Migration into southern Michigan may have started to decline in the fall months: a decrease in out-migration from northern Michigan was observed in November, and was attributed to the reduced rate of employment expansion in southern Michigan.

The heavy influx of workers into East St. Louis, Ill., failed to continue after August. During the spring and early summer, Wichita, Kans., experienced an unusually high rate of in-migration. A Work Projects Administration survey made in September 1941 revealed that 23,000 persons in the city on that date came there since October 1940, a number equal to 20 percent of Wichita's 1940 population. The State employment service reported, however, that migration into the city declined during the late summer and fall months, since most of the labor requirements in the aircraft factories had already been met. It is anticipated that the movement will accelerate early in 1942 when the Boeing Aircraft Co. will start to hire production workers.

Migration declined in the San Francisco Bay area during September and October. Fewer out-of-State workers entered California by automobile in search of manual employment during October than in the summer months, but the number was still over 10,000. The decrease may have been due solely to curtailed agricultural activity. The heavy flow of workers into the Seattle-Tacoma-Bremerton area of Washington was reduced during the fall months, with a noticeable decrease in the number of migrants from the Middle West.

In some of the most important industrial areas, particularly those in the Northeast, there was little evidence of any major change in the rate of migration.

Throughout the Ohio Valley and Great Lakes industrial area, labor supply continued to shift from nondefense to defense areas. Migrants came chiefly from the depressed coal and limestone belts throughout the Northeast but movement of unskilled workers from the Southern States into the cities of this area was accelerating. Migration into Indiana was heaviest in the Calumet-South Bend area. Indianapolis, in the central part of the State, also attracted many workers. There was out-migration from the southern part of the State, several thousand workers having left this section during the first 10½ months of 1941. The population of the northern industrial area of Ohio, including the cities of Cleveland, Ravenna, Sandusky, Canton, and Youngstown, increased substantially through-

¹ Unless otherwise specified, the information summarized in this report covers the 5½-month period from May to November 15, 1941, and is obtained from monthly labor market reports received by the Bureau of Employment Security from its State offices.

out the entire defense period; large numbers of in-migrants came from southeastern Ohio. There was also considerable migration to Cincinnati and Dayton, made up chiefly of workers from adjacent Southern States.

Migration into Baltimore, which attracted numbers of workers from the Middle and North Atlantic States since the beginning of defense work, continued at a high level throughout the summer and fall months. For the 2-week period October 15 to November 1, the Baltimore employment office registered for work 1,251 persons who had been in the city for less than 3 months. Most of these came from surrounding Maryland counties, but there were appreciable numbers from adjoining States.

AREAS WITH INCREASING RATE OF INFLUX

In a number of areas in-migration increased during the summer and fall of 1941. The flow of workers into the industrial cities of up-State New York accelerated during this period. Large numbers of job seekers from the anthracite areas of Pennsylvania and from other parts of New York State entered Buffalo, Niagara Falls, Schenectady, Rome, Massena, and Watertown. Approximately 5,000 workers came to the Niagara Falls area during the year ending October 1941, while Buffalo anticipated a total influx of 22,000 workers by the end of December.

The population of Washington, D. C., increased at an accelerating rate from 664,000 on April 1, 1940, to an estimated 770,000 by the end of 1941, while adjoining suburbs were expanding in a similar manner. A large proportion of this gain resulted from increased Government employment.

Migration into southern Michigan rose during the summer of 1941 but showed some signs of diminishing during the late fall. Records kept by the Detroit Central Placement Office showed that during October 3,100 new applications were received from individuals whose last employment was outside of Detroit. This number was less than the average for the 4 preceding months (3,400 to 3,600) but was significantly above comparable figures for the spring of 1940. The total number of nonlocal workers registering for work in Detroit during the 15 months from August 1940 to October 1941 was 32,000. Since some nonlocal workers undoubtedly entered the city without registering at employment offices, this figure understates the amount of migration into Detroit. Migration into Ann Arbor was also heavy, and the population of the Battle Creek area increased by an estimated 11,000 during 1941.

INDUSTRIAL AREAS WITH LITTLE IN-MIGRATION

Three of the most important metropolitan centers in the Northeast, Boston, New York, and Philadelphia, have been affected only to a slight extent by population shifts since the beginning of the defense program. Skilled metal trades and construction workers continued to leave New York, which offers relatively little defense employment, for work along the east coast and in other areas.

Because of ample local labor reserves there was relatively little migration into Philadelphia in spite of the large volume of defense contracts awarded in that city. A recent Work Projects Administration survey of migration into Philadelphia indicated that migrants entering the city since October 1940 made up a group equal to only 1 percent of Philadelphia's 1940 population, and that, relative to total population, the city had received only one-third as much migration as Baltimore.

Migration into New Jersey industrial cities was relatively slight, in spite of a temporary influx of unemployed workers from the Pennsylvania coal fields during the summer.

SHIFTING TRENDS IN AREAS OF OUT-MIGRATION

In certain areas out-migration which had occurred during the early months of 1941 slackened later in the year. The Mountain and Plains States generally continued to report out-migration of both skilled and unskilled workers to the west coast. Nevertheless, in Nebraska this movement was less during September and October than during previous months, because of the impending opening of the new Martin Bomber plant in the Omaha-Lincoln area. Nevada also noted curtailment of out-migration due to increased activity within the State. Although many workers had left Tulsa, Okla., during the first year of the defense program, proposed aircraft and munitions plant expansion in the city and the high cost of living in defense areas reversed the trend, so that by the fall of 1941 there was considerable migration to the area.

In October and November fewer workers than formerly were leaving Texas for California and other points outside of the State. Many who had migrated earlier in the year were returning because of declining job opportunities and the high cost of living in defense centers.

The flow of workers from Wisconsin and Minnesota to other areas continued, but during the fall months migration into southern and eastern Wisconsin industrial areas from the central and northern parts of the State was increasing. Out-migration to the west coast from Minnesota declined during October and November.

THE SIGNIFICANCE OF CHANGES IN TRENDS

The shifting pattern of migration during recent months reflects the changing economic impact of the defense program. State employment services have attributed the decline in migration to certain areas primarily to a decreasing expansion of defense industry, and in some instances to increased employment opportunities in communities from which migrants came. Lack of adequate housing, transportation, and other community facilities have been secondary factors discouraging further migration into some of these cities. The spreading of defense work, either through placement of direct contacts or through indirect stimulation of industry, has decreased outmigration from some of the smaller cities and formerly undeveloped areas, and occasionally has reversed the trend. Workers who had left their homes frequently returned as local jobs were created. Differentials in cost of living between already overcrowded areas and the home communities counteracted to some extent the lure of higher wages in the larger cities.

War between the United States and the Axis Powers which has already speeded up the tempo of armament production may accelerate the rate of migration into big industrial centers. Speed will be a primary consideration, and it may be quicker to make use of already existing power and transportation facilities than to develop the less active areas. In any case, further important changes in volume and direction of migration will undoubtedly result.

MIGRATION OF CONSTRUCTION WORKERS

The movement of construction workers, which was an outstanding part of early defense migration, was of less relative importance during the later months of 1941. With the completion of some of the major construction projects in rural or non-industrial areas, many of the boom towns reverted to their normal size. Large numbers of the workers, particularly those with skills, migrated to areas where projects were beginning or were still in progress. Many of the unskilled workers drawn from surrounding agricultural localities returned to their farms or once again sought employment as farm laborers. While important new army camps and powder plants were being built throughout the nonindustrial South and Middle West, the bulk of new construction work appeared to be located in the industrial and shipbuilding centers where construction activity accounted for only a part of the total defense employment. Production workers hired for operation of completed munitions plants frequently entered a city at the same time that workers who had been engaged in plant construction were leaving.

Marked shifts in population were observed throughout the Southern States, where most defense employment has occurred in connection with construction projects. Thus, in Alabama, migration into Childersburg, heavy during the spring months, nearly ceased by October, while at the same time workers were drifting into Huntsville, the location of a new chemical ordnance plant, from the entire Tennessee Valley. Peak employment on defense construction projects at Moultrie and Valdosta, Ga., was passed with workers from nearby counties returning to their homes, but migration into Macon and Augusta was developing. Migration of construction labor to Louisville, Ky., very great during the spring months, declined during the summer, and by August was termed "negligible" as thousands of workers were laid off and moved out of the city. In October and November, however, when the Hoosier Ordnance Plant in Louisville began to hire power-machine operators, large numbers of women applying for such employment entered the city from other parts of the State.

During the fall months workers were observed leaving such areas as Charleston, Ind., Milan, Tenn., Morgantown, W. Va., and Radford, Va., all of which had formerly attracted thousands of construction workers.

Construction workers left Ravenna, Ohio, during September and October, but at the same time there was a continued influx of applicants for production work in the munitions loading plant. The Iowa Ordnance Plant at Burlington, which

employed during its construction phase a total of seven to eight thousand out-of-county workers, began extensive lay-offs during October, with most of the dismissed workers leaving the area immediately.

Construction at Fort Leonard Wood was nearly completed by the end of the summer, with resulting out-migration, but large numbers of workers came to the southwest counties of Missouri for work in building new Army cantonments.

During the early summer months, 4,500 workers were recruited from other localities for construction work at Fort Wingate, N. Mex. By September these workers were leaving the area; hundreds were being sent out of the State each month to camp construction work in Texas, Arizona, California, and Colorado. Reports from California offices through the late summer and early fall similarly described large scale shifts of construction workers among the several sections of the State.

The larger Army being organized because of the entry of the United States into the war will result in the rapid construction of a number of new Army camps, while there will also be an increase in the number of Army and Navy munitions and ordnance plants in rural areas. There may be consequently a repetition on a greater scale than before, of the early "boom town" phase of the defense program.

CHARACTERISTICS OF MIGRANTS

Migration was characteristically from smaller to larger communities and from rural to urban areas. Not only were the better qualified skilled and semiskilled workmen in the small towns leaving for defense centers, but a considerable number of unskilled agricultural laborers were hired on local construction projects or left for nearby cities to seek industrial work. State employment service reports emphasized heavy migration of rural workers to the Seattle-Tacoma-Bremerton area in Washington, to Southern California industries, and to Portland, Oreg., where the influx of such labor was said to have been further stimulated by curtailment of agricultural activities during October. Similar rural to urban trends were observed in many other sections of the country. A detailed study conducted by the Florida employment service concerning characteristics of workers coming to the Camp Blanding construction project showed that 26.7 percent of the total applicants registering for work had formerly been agricultural workers; more than 50 percent of these came from within a 50-mile radius of the camp.

The Work Projects Administration surveys on migration revealed that in 16 of the 24 cities surveyed, more than 25 percent of the migrants were rural in origin (from places of less than 2,500 population), while the proportion in some areas was considerably higher: 42 percent in Wichita, 41 percent in Detroit, 38 percent in St. Louis, 45 percent in Macon, Ga.

Occupational characteristics of migrant workers varied considerably in the different localities. According to State employment service reports, the majority of workers coming into Connecticut, New Jersey, Bath, Maine, and Niagara Falls, N. Y., during the fall of 1941 were unskilled. Of 1,241 persons registering with the Baltimore, Md., employment office during the period October 15 to November 1, who had been in the city less than 3 months, 180 were skilled, 252 semiskilled, 432 unskilled, 247 juniors, and 160 clerical and professional workers. Approximately 35 percent of the out-of-town applicants at the local employment office in East Chicago, Ind., were unskilled workers from nearby localities. Nearly one fifth of the out-of-town applicants in the Akron area were skilled, and a similar proportion semiskilled. The great majority of workers migrating into the Calumet-South Bend area of Indiana and into Indianapolis were unskilled, but a considerable proportion of newcomers into Cleveland were qualified in skilled and semiskilled occupations.

A check of employment service registrants made by the East St. Louis, Ill., office from July 25 to August 23, revealed that 23 percent of workers from out of town were skilled, 50 percent unskilled laborers. The majority of in-migrants to Chicago were unskilled. Of the total number of nonlocal workers who registered in Detroit employment offices during the 15 months from August 1940 to October 1941, by far the largest proportion, about 33 percent, were classified as semiskilled manufacturing workers. Almost one-fifth were skilled and about 15 percent classified as clerical and sales workers.

Most of the workers coming into Birmingham and Mobile, Ala., Charleston, S. C., and Newport, Ky., were unskilled; 26.7 percent of the migrants into the Camp Blanding area of Florida were unskilled agricultural workers, 24.9 percent were unskilled production workers, while 14.2 percent were semiskilled and 28.6 percent skilled.

Unskilled workers were the largest group entering Denver, Colo., and Wichita, Kans., but in the San Francisco Bay area a spot-check of out-of-town applicants coming into a local employment office showed that 30 percent were skilled, 50 percent semiskilled, and only 20 percent unskilled.

Many States have indicated that during the past few months there has been a growing movement of semiskilled trainees in aircraft and other industries from areas of training to areas where jobs are available.

While Work Projects Administration surveys of migration generally noted a lower proportion of unskilled workers among the migrants than was indicated by employment service reports, it is possible that a larger proportion of the unskilled than of other groups registered with the employment offices. In 18 out of the 22 cities in which the Work Projects Administration obtained information on previous occupation of migrants, workers in white-collar classifications (professional, semiprofessional, administrative, and clerical) formed over one-fifth of the migrants for whom occupational data were available. The proportion was more than one-third in South Bend, Ind., and Chicago, Ill., while 52 percent of the workers coming into Des Moines, Iowa, and 55 percent of those entering Washington, D. C., belonged to the white-collar group. The proportion of unskilled workers among the migrants was somewhat smaller; unskilled workers were one-fifth or more of the total migrants in 12 out of the 22 cities. Skilled and semiskilled craftsmen and machine operators formed the largest group of in-migrants in most of the cities surveyed by the Work Projects Administration.

That the unemployment rate among migrants has varied considerably among different localities is indicated both by information from the State employment services and by the Work Projects Administration migration studies. According to the employment services, unskilled workers had the highest unemployment rate, but apparently did not remain long in any particular area if unsuccessful in locating work. Skilled workers, both in construction and industrial production, were often assured of definite jobs before arrival in the new locality, and even without such assurance had relatively little difficulty in obtaining work. Agricultural laborers were employed in large numbers on construction work in rural areas, but in the cities their employment depended not only on the amount of unskilled work available but also upon the degree of competition with unemployed workers already resident in the community. Most of the unskilled workers migrating to defense centers in Maine, Connecticut, and New Jersey, were able to obtain work, but in other cities, such as Baltimore, East Chicago, Calumet, South Bend, Indianapolis, and Cincinnati, they were less successful. The percent of migrants unemployed at time of survey by Work Projects Administration ranged from 3 percent in Fort Wayne, Ind., to 20 percent in Chicago. In 9 of the 24 cities covered, the unemployment rate was 10 percent or more; the rate was especially high in Wichita, Kans., St. Louis, Mo., Fort Smith, Ark., and Los Angeles County, Calif.

As in the early months of the defense program, the majority of workers migrating were in the younger age groups, and were younger than the workers already resident in the community to which they came. Their youth gave the migrants a competitive advantage over the resident workers, although in a number of areas unemployment was high among the youngest group of migrants with no previous work history. Many of the western grain and range States observed that most of the workers leaving for the west coast and other industrial centers were young men with few family ties. Throughout all States, workers trained in defense courses were predominantly of this type. A considerable proportion of workers left their families in the home community, sending for them later.

The great majority of the migrant job seekers were men. Negroes were strikingly underrepresented among the migrants. In the cities surveyed by Work Projects Administration, the ratio of Negro in-migrants to total 1940 Negro population in the cities was much less than the corresponding ratio for the white population. There are a few indications, however, in reports from employment offices, that the number of unskilled southern Negroes coming into the industrial northeast was beginning to increase during the fall months.

FUTURE IN-MIGRATION

Any specific estimates as to future volume of in-migration are necessarily uncertain at best. Information obtained from some of the special labor market surveys made by the State employment services and the Bureau of Employment Security in areas of defense activity is summarized in appendix I. This appendix indicates some of the areas into which migration may be heavy during the early months of 1942, and also indicates localities where the peak of activity may have been passed.

LABOR DISPLACEMENT AND MIGRATION

Displacement of labor because of curtailed civilian production will stimulate additional migration. Special community surveys made by the State employment services in a number of areas where labor displacement has occurred or is anticipated show that displacements of this kind had not been great in volume through November 1941, but will soon become more severe and will affect an increasing number of communities. Entry of the United States into the war, which occurred after most of these surveys were made, will undoubtedly intensify the immediate problem, but at the same time will hasten the reabsorption of workers.

Labor displacement has been most heavily concentrated in the Great Lakes and Ohio Valley industrial area, but has also affected the Atlantic Coast States. Localities suffering most heavily from unemployment arising out of these displacements are those with little or no expanding defense industry to take up the slack and which are beyond commuting distance of other towns with expanding defense production. The following areas present especially serious problems:

Lay-offs have been most spectacular in the Detroit area; it is estimated that from 120,000 to 145,000 workers will be displaced when 100-percent curtailment of automobile production becomes effective. Though aircraft, tank, and ordnance production will eventually take up much of the slack, it may be near September 1942 before employment in defense industries expands sufficiently to absorb all displaced workers.

While Detroit has had larger quantitative displacements, Flint will probably experience a larger relative unemployment than any other major industrial area in Michigan. Thirty-seven thousand to forty-two thousand workers in the General Motors plants will be out of work. Although the tank program may be centered in Flint, demand for workers may never exceed fifteen thousand, and will not develop for a considerable time. The same kind of situation to a lesser degree will prevail in Pontiac, Bay City, Jackson, and Lansing.

The most serious area of displacement in Wisconsin is centered in Racine and Kenosha, where the chief industries were the manufacture of refrigerators, hosiery, and bedsprings. More than half of the working population of La Crosse will be unemployed because of curtailment in rubber production and other industries. Manitowoc, Eau Claire, Kewaunee, and West Bend have suffered from shortages of aluminum for nondefense production, while in Eau Claire the situation will be further intensified by the rubber shortage. A serious displacement is also expected in Sheboygan.

Almost one-third of the 400 industrial wage earners in Albert Lea, Minn., have already been displaced, and further lay-offs are anticipated because of brass and steel shortages. Many workers have been laid off in Newton, Kellogg, and Albert City, Iowa.

Curtailed production caused by material shortages has also resulted in serious unemployment in certain sections of Ohio—especially London, Mansfield, Defiance, and Williams County. In addition, as civilian rubber production is curtailed, Akron and the area surrounding it will be confronted with mass unemployment.

A number of communities in Illinois, including Kankakee, Aurora, Decatur, Elgin, and Belleville, have been seriously affected by curtailment in sheet metal, machinery, and stove industries, while an automobile glass manufacturing concern in Ottawa laid off over a thousand workers. Except in Belleville, reabsorption of unemployed workers will be negligible without defense contracts. The situation in Indiana communities such as Evansville, Kokomo, New Castle, and Plymouth, which have been dependent on automobile and refrigerator industries, is very similar.

Three Pennsylvania towns—Indiana, Meadville, and New Kensington—have been affected by rubber, copper, and aluminum shortages needed for the manufacture of textiles, zippers, and aluminum household utensils.

Metal shortages have caused displacements in the jewelry industry of Attleboro, Mass.; hundreds of employees are being released with little chance for further employment within the commuting area. As many as 7,500 workers may be displaced in Jamestown, N. Y., a furniture manufacturing center, with no nearby industries into which they can be absorbed. There is serious unemployment affecting thousands of workers in Trenton, N. J., as General Motors shuts down its plants.

Although the community surveys do not contain information on the extent of out-migration from affected areas, the monthly State labor market reports issued

during October and November indicate that priorities unemployment is beginning to influence migration trends. Skilled workers in nondefense plants throughout the country, anticipating lay-offs, have been obtaining more permanent jobs in defense industry. Migration to New Jersey, to Elmira and Jamestown, N. Y., and to certain cities of Pennsylvania declined because increasing lay-offs of local workers in nondefense industries reduced employment opportunities for nonlocal workers. Displaced workers migrated to other areas from Evansville, Ind., and from Wyoming. A recent increase in the proportion of skilled and semiskilled workers among the migrants into Indianapolis and into southern California was attributed to priority lay-offs in other localities. A Texas employment office noted that a number of workers with factory and machine-shop experience who were formerly employed in middlewestern and eastern industries were passing through the State on their way to the west coast in search of employment. The Los Angeles employment office reported an increase in the already heavy migration from North Central and Southwestern States because of labor displacements.

The evidence above suggests that displacement will have a net effect of increasing migration, particularly among skilled and semiskilled workers. At the same time there may be important areas where in-migration for defense employment will be reduced because of the availability of local labor formerly engaged in non-defense work.

The duration of unemployment, its severity in particular areas, and the resulting volume of migration, depend upon factors that can be at least partially foreseen and controlled. If defense contracts are awarded promptly to employers in distress areas it may be possible to convert equipment to war uses with relatively little delay; in these circumstances workers will be likely to remain in the vicinity. However, most contracts up to the present time have been allocated in the larger industrial centers and to the bigger companies, who are already engaged in production or in plant conversion. The importance of meeting production schedules in the war emergency may lead to further placement of orders with these larger corporations, and may conflict with a policy of minimizing labor dislocation by wide contract distribution. As a result there may be considerable out-migration of workers from areas without contracts, and further migration of labor into already expanded cities will be necessary.

Serious out-migration from areas such as southern Michigan may occur in spite of large armament production contracts if workers anticipate a long period of unemployment before conversion of plant is completed. In such situations, much depends on the speed with which plans for war production are drawn up and initiated.

There is also a need for retraining the many workers whose previous skills are adaptable to, but not identical with, war production requirements. Unnecessary delay in retraining would not only aggravate unemployment and stimulate unnecessary migration, but would also create labor shortages when plants begin to operate.

CONCLUSION

Migration stimulated by the defense program was heavy through November, the close of the period covered in this report. The movement into areas which were approaching their peak of defense employment was declining, but new areas which had been slower to feel the first effects of industrial expansion were experiencing a decreasing rate of out-migration or an acceleration in the rate of influx. Migration was rural to urban in character, and drained off labor supplies from the small communities. Migration of construction workers was of less relative importance than in the initial phases of the defense program, but displacement of workers from civilian production was beginning to have a perceptible effect on migration trends. The entry of the United States into the war, with prospective increase in army and navy construction work and with drastic effects on industrial production, may greatly increase the volume of migration of all types during the next year.

Migration has served an important function in bringing workers to essential production tasks, but much of it has also been wasteful, resulting in unemployment among migrants and preventing efficient absorption of available local labor. While further dislocation because of the war effort will be unavoidable, careful planning by Government agencies responsible for the war production program can help in keeping needless migration at a minimum.

APPENDIX I.—*Labor market surveys*¹

City or metropolitan area	Date survey issued	Estimated ² in-migration	Date of estimated in-migration
Alabama:			
Childersburg	July 14, 1941	2,000-2,700	May 1941 to May 1942.
Gadsden	Nov. 7, 1941	100	September 1941 to August 1942.
Mobile	Dec. 16, 1941	12,000	November 1941 to October 1942.
Arkansas: Camden	Oct. 11, 1941	100	October 1941 to September 1942.
California:			
San Diego	Dec. 26, 1941	21,000	By November 1942.
San Francisco	Apr. 11, 1941	21,400-23,400	April 1941 to March 1942.
San Jose-Sunnyvale	July 21, 1941	250	July 1941 to June 1942.
Colorado: Denver	May 16, 1941	1,000-1,200	By February 1942.
Connecticut:			
Bridgeport	Nov. 24, 1941	4,000-5,500	By July 1942.
Hartford	Dec. 3, 1941	5,000	By December 1942.
Meriden	Nov. 10, 1941	200-250	November 1941 to April 1942.
New Britain, Bristol	Nov. 25, 1941	1,000-1,200	By Dec. 31, 1942.
New Haven	July 19, 1941	400	July 1941 to June 1942.
Florida: Jacksonville	July 21, 1941	500	June 1941 to June 1942.
Georgia:			
Macon	June 5, 1941	500-600	June 1941 to May 1942.
Savannah	July 2, 1941	3,500	June 1941 to June 1942.
Illinois:			
Heerin, Carbondale	Oct. 13, 1941	1,000	By March 1942.
Joliet, Wilmington	Sept. 9, 1941	4,000-4,600	August 1941 to August 1942.
Rockford, Beloit (Wis.)	June 4, 1941	425-525	May 1941 to May 1942.
Savanna	June 2, 1941	100-125	By May 1942.
Indiana:			
Indianapolis	Aug. 1, 1941	6,000	August 1941 to July 1942.
Madison	May 3, 1941	1,200	By June 1942.
South Bend	Feb. 19, 1941	2,500-3,000	August 1941 to March 1942.
Iowa:			
Burlington	Sept. 4, 1941	2,600	August 1941 to June 1942.
Des Moines	Oct. 29, 1941	1,000	January to June 1942
Kansas: Wichita	Nov. 5, 1941	15,000	By March 1943.
Kentucky: Louisville	June 19, 1941	3,500	By April 1942.
Maine: Portland	June 24, 1941	4,000	By February 1942.
Maryland: Baltimore	Nov. 1, 1941	15,400	September 1941 to Mar. 31, 1942.
Massachusetts: Boston	May 5, 1941	7,000-8,000	By December 1942.
Michigan:			
Niles	June 26, 1941	350	July 1941 to June 1942.
Washtenaw County	May 29, 1941	23,000	By May 1942.
Mississippi: Pascagoula	Dec. 22, 1941	1,500	December 1941 to September 1942.
Nebraska: Omaha	July 23, 1941	5,000	July 1941 to July 1942.
New York:			
Dunkirk	July 8, 1941	600-700	By March 1942.
Farmingdale, Bethpage	Nov. 10, 1941	500-1,000	September 1941 to February 1942.
Staten Island	May 21, 1941	2,000-3,000	By Dec. 31, 1942.
Utica, Rome	Dec. 12, 1941	2,500	Do.
North Carolina: Wilmington	June 10, 1941	3,000	By July 1942.
Ohio:			
Canton, Alliance, and Massillon	May 22, 1941	3,500	By Feb. 1, 1942.
Cleveland	May 6, 1941	6,000	May 1941 to April 1942.
Columbus	Apr. 7, 1941	3,200-4,600	1941-1942.
Hamilton, Middletown	July 21, 1941	500-700	By June 1, 1942.
Lima	Dec. 3, 1941	200	By Feb. 28, 1942.
Lorain and Elyria	Oct. 20, 1941	700	October 1941 to March 1942.
Sandusky	Nov. 5, 1941	800-1,000	By Apr. 30, 1942.
Sidney, Piqua, Troy	Oct. 13, 1941	200	September 1941 to February 1942.
Springfield	Aug. 27, 1941	4,200	By May 1942.
Oklahoma:			
Choteau	Oct. 11, 1941	500	By October 1942.
Tulsa	Nov. 28, 1941	2,000	December 1941 to March 1942.
Oregon: Portland	July 12, 1941	2,000	By August 1942.
Pennsylvania: Erie	Nov. 13, 1941	150	September 1941 to February 1942.
Rhode Island:			
Newport	May 19, 1941	1,700-1,800	By Mar. 13, 1942.
Quonset Point	May 9, 1941	1,000	By 1943.
Tennessee:			
Knoxville, Alcoa	Aug. 7, 1941	320	April 1941 to July 1942.
Memphis	Oct. 29, 1941	700	October 1941 to March 1942.
Milan, Humboldt	Sept. 19, 1941	2,350	July 16, 1941, to April 1942.

¹ The labor market surveys have been undertaken jointly by the Bureau of Employment Security and the State employment services in selected local labor markets affected by defense activity for the purpose of forecasting the labor demand, the available local supply, and expected shortages. The information in this table does not include all areas in which surveys have been made, but only those giving estimates of in-migration during 1942.

² This estimate applies only to the number of workers that will have to be imported from outside the commuting area if defense production schedules are to be met. It does not include secondary migration of service and other nondefense workers, nor does it estimate the mass of migrants who may be attracted to the area because of uncontrolled rumor and publicity.

APPENDIX I.—Labor market surveys—Continued

City or metropolitan area	Date survey issued	Estimated in-migration	Date of estimated in-migration
Texas:			
Beaumont, Port Arthur, Orange.	Oct. 18, 1941	2,500	July 1941 to July 1942.
Dallas, Fort Worth	Feb. 28, 1941	17,000	By Dec. 31, 1942.
Houston, Baytown	July 16, 1941	250	June 1941 to June 1942.
Utah: Ogden	Nov. 13, 1941	3,500-4,500	September 1941 to June 1943.
Virginia:			
Hampton Roads	Nov. 26, 1941	20,000-29,000	Do.
Radford, Dublin	June 16, 1941	1,000	June 1941 to May 1942.
Washington: Seattle, Tacoma, and Bremerton.	July 8, 1941	37,000-46,000	September 1940 to December 1942.
West Virginia:			
Charlestown	May 6, 1941	1,600	By August 1942.
Morgantown	Oct. 15, 1941	115	By July 1, 1942.
Wisconsin:			
Racine, Kenosha	July 15, 1941	150-200	June 1941 to June 1942.
Sturgeon Bay	Nov. 6, 1941	200-300	By March 1942.

III. EMPLOYMENT OF WOMEN IN DEFENSE INDUSTRIES

During the past year an increasing number of occupations in which there were labor shortages have been reported to public employment offices. Not only have these shortages been noted in supplies of specific skilled workers, but in many areas a virtual exhaustion of the local labor supply has been reported. In these latter areas many employers have begun to learn that a large number of semi-skilled and unskilled jobs formerly considered suitable only for men, can be performed equally well by women. In total numbers, placements of women in many of these jobs have not yet been significant. However, there are indications that the increasing labor demands of the victory program will have to be met by the sharply increased employment of women. Adequate staffing of the manufacturing establishments of arms producers will depend not only on the employment of all women presently unemployed, but in addition upon recruiting hundreds of thousands of women not now in search of work.

CURRENT PLACEMENTS

While the total number of women placed by public employment offices has steadily increased, it has not kept pace with the increase in placements of men. In the third quarter of 1941, placements of women numbered 525,200 as compared with 385,800 in the corresponding quarter of 1940, an increase of 36 percent; placements of men, on the other hand, increased almost twice as much, from 605,600 to 1,029,100, an increase of 70 percent. Thus, even though the actual number of women placed in all occupational groups except the skilled group increased, placements of women, as a fraction of all placements, declined. In the manufacturing industries the number of women placed increased by 33 percent, from 82,500 in the third quarter of 1940 to 109,500 in the third quarter of 1941, compared with an increase of male placements of 74 percent from 200,300 to 348,000.

The number of women placed in 20 key defense industries increased from 13,500 in the first quarter to 16,900 in the third quarter of 1941. The largest increases were in the aircraft and parts industry (from 460 to 1,300) and in the chemical products industry (from 400 to 1,000). However, the actual number of women placed in these industries has been very small compared with the number of men.

During the year, the most striking increases in women's employment were made in the professional and managerial occupations, where placements of women rose from 20 percent to 29 percent of all placements in this group. This gain is undoubtedly due to the continuing increase in job opportunities and the shortage of highly trained men developing in the Nation.

The number of women enrolled in defense training and reemployment refresher courses has been negligible. From the beginning of the training program through September 1941 only 8,824 women were enrolled compared to 670,192 men. However, 6,000 of the enrollments of women took place from July through September 1941, indicating an increasing participation in the training program.

The limited number of women trained is accounted for by the failure, until recently, of employers to relax their restrictions on the employment of women. Appropriations for defense training specify that selection of trainees be based on "the existing and anticipated need for defense workers in occupations essential to the national defense."

Recent labor market surveys of the Bureau of Employment Security report increasing instances of training for women. In Hagerstown, Md., 400 women are being trained in sheet metal, woodwork, machine shop, and welding work. Training programs for women on machine tool operations and subassembly work for aircraft plants are being inaugurated in New Jersey and Ohio.

Many other instances of the relaxations of employer specifications concerning women have been reported. Many plants unable to obtain sufficient numbers of semiskilled workers, have filled vacancies with women. The most encouraging reports are from aircraft firms, which until recently employed few women, yet in December 1941 hired several hundred women production workers. There are indications that this is on the increase. By the spring of 1942, California aircraft firms expect to hire hundreds of women trainees. A large plant manufacturing supercharger units will hire 700 women by April 1942. In addition, clearance orders reported by public employment offices show increasing requests for women workers.

POTENTIAL EMPLOYMENT OPPORTUNITIES

As noted, increasing opportunities for the employment of women are developing. In an effort to indicate what jobs might be suitable for women, the Bureau of Employment Security is preparing an analysis of all jobs occurring in key defense industries. At present only 623 occupations designated as essential to national defense have been analyzed. Latest available information indicates that women are now employed in only 27 of these. An analysis of the duties performed by workers in the remaining occupations indicates that 251 are apparently suitable for women. Of these, 199 have a training period of less than 6 months. Another group of 188 occupations appears to be partially suitable for women. Among these some breakdown of the job may be necessary, or some rearrangements of the industrial process might be required in order to employ women. Of the entire list of 623 occupations only 57 appear to be entirely unsuitable for women.

These facts are even more striking when the number of hires anticipated by defense employers is considered. For the period September 1941 to February 1942, 315,000 job openings were reported in the selected list of occupations. Of this number, less than 20,000 were openings in occupations in which women are now employed. On the other hand, 115,000 were reported in occupations apparently suitable for women and 110,000 more in occupations partially suitable for women.

It is possible that very recent developments have enlarged the number of occupations in which women are currently employed. However, it may be readily seen that great numbers of jobs can be performed by women and that the use of this reservoir of workers has only begun. Public employment offices throughout the country are encouraging employers to make fuller use of women. The technical services of job analysts of the Bureau are available to assist in achieving necessary job break-downs. Local employment offices are familiar with State regulations concerning the use of women workers and can indicate to employers what problems may be encountered in conforming to these regulations. In view of the need for additional workers in many areas, and the probability of Nationwide labor shortages in many more occupations within the coming year it is becoming increasingly important to make the fullest possible use of this additional source of labor.

IV. LABOR DISPLACEMENT RESULTING FROM MATERIAL SHORTAGES

THE PROBLEM

Up to the outbreak of war the total volume of unemployment created by shortages of materials, supplies, and equipment had not been large. Generally speaking, the country as a whole was relatively untouched by such disemployment although a small number of communities have been seriously affected and many others were threatened with serious problems. Since December 7, the picture has changed rapidly. The virtual cessation of rubber and automobile production which was immediately ordered has been and will be followed by further reduction of output in innumerable consumer-goods industries. Un-

doubtedly, this country has suddenly been confronted with a labor displacement problem of great magnitude, although its duration will probably be relatively short, depending upon the speed with which industry gears itself to the President's victory program.

Of approximately 2,725,000 workers engaged in those consumer-goods industries which are being or will be directly affected by curtailment orders and material shortages, between 1,000,000 and 1,500,000 will probably be displaced pending conversion of consumer-goods plants to war production, further expansion of existing rearmament plants, and the construction of new ones. It seems unlikely that much more than another 1,500,000 workers, primarily in the service and distributive industries, will be laid off through the indirect effects of curtailed production in the primary consumer-goods industries. A very large proportion of the workers who will suffer from the indirect impact of priorities are employed by automobile dealers as salesmen or mechanics. Of the somewhat more than 400,000 workers in this field, it is doubtful that as many as half will be displaced.

Although no completely reliable figure is available on the number of workers unemployed today because of curtailment orders and material shortages, in all probability it does not exceed 400,000. Exactly how many displaced workers will be unemployed at any given time it is extremely difficult to estimate, but of the estimated maximum displacement of 3,000,000 workers, not more than half are apt to be out of work on any given date. The volume of labor displacement and the size of the problem to be met from one day to the next depend on the rate of displacement as against the rate of conversion, expansion of existing facilities, and construction of new facilities for war production. The faster the rate of lay-off, the greater the volume of unemployment with which we shall have to cope; the greater the speed of conversion and expansion, the more likely will it be that the displacement problem will be of no great magnitude. This was illustrated by the forecast of defense employers in November of their anticipated hires and lay-offs during the ensuing 6-month period. At that time some 10,600 establishments surveyed by the United States Employment Service indicated that through April 1942 they expected to hire 469,600 workers; over the same period, their lay-offs were expected to total 146,900. The outbreak of war has, of course, upset all predictions. We know, however, that within the next few months, both the lay-off rate and the hiring rate will be greatly increased. It is possible although not probable, that if industry can shift quickly from peacetime production to war production, neither the volume nor duration of priority unemployment will be serious.

A large proportion of workers already displaced is concentrated in Michigan's automobile and related industries. In that State, initial claims for unemployment compensation, which indicate approximately the number of workers currently laid off from jobs in nonagricultural and nonservice employment, totaled 192,400 during December, 165,600 more than in November. In the Nation as a whole, initial claims in December amounted to 1,032,000, an increase of 70 percent over November, as compared with only a 20-percent increase between the same 2 months of 1940. Although the volume this December was only somewhat more than 200,000 greater than the volume of initial claims a year ago, probably many more than 200,000 are unemployed because of inadequacy of materials, supplies, and equipment. This December, a much smaller number of lay-offs can be attributed to the usual seasonal slackening in certain industries, because the seasonal pattern in many fields has been eliminated by war orders. Additional evidence of the impact of priorities upon employment is that in the 8 States—Michigan, Illinois, Indiana, Ohio, Pennsylvania, Massachusetts, New Jersey, and California—in which the greatest volume of displacement has occurred, the number of initial claims filed at local employment offices during December was more than double those received in November, whereas 1 year ago the increase was only 23 percent.

The Bureau of Employment Security is receiving, through the local offices of the United States Employment Service, a report on hundreds of plants which have been forced to reduce their staffs because of curtailment orders and material priorities or which anticipate making such lay-offs within the near future. An analysis of the 450 reports received during December covering firms with original employment of approximately 371,000 indicated that these firms have already laid off or will lay off, within the next few months, about 113,300 workers, nearly one-third of their working force. Analysis of comparable reports received during the previous month had indicated approximately a 26 percent lay-off rate. Actual layoffs reported by the firms surveyed in December total only 45,300; the other 68,000 were anticipated. However, these figures on actual lay-offs and the esti-

mates of future lay-offs are both undoubtedly seriously understated; not only because all firms affected by priority unemployment did not fill out a report, but also because of existing uncertainties as to future production plans, most employers are not able to accurately estimate their future lay-offs.

The problem of disemployment is serious in its effects on particular areas and in certain industries, especially those using metals, chemicals, rubber, and textiles. The area that appears to be hardest hit is the Great Lakes and Ohio region. Most of the communities which have been certified by the Office of Production Management as distressed areas which are to be given preference in the awarding of defense contracts are located in this section of the country. In Michigan, not only Detroit, but Flint, Kalamazoo, Muskegon, Greenville, Benton Harbor, Saint Joseph, Bay City, Grand Rapids, Jackson, Lansing, Pontiac, Royal Oak, Saginaw, Wyandotte, and numerous smaller communities are being seriously affected. In Indiana, communities with an increasingly serious volume of unemployment include Anderson, Evansville, Indianapolis, Muncie, South Bend, Terre Haute, Kokomo, and New Castle; in Illinois, Belleville, Decatur, Elgin, Aurora, Kankakee, Danville, Freeport, Galesburg, Bloomington, and Shelbyville; in Wisconsin, Kenosha, Racine, Eau Claire, La Crosse, Sheboygan, West Bend, Manitowoc, and Ripon; in Ohio, Akron, Bridgeport, Cleveland, Dayton, Mansfield, Springfield, and Youngstown. However, in most sections of the area, particularly Michigan, a substantial portion of the displaced workers will be reabsorbed by June 1942 and the remainder sometime in the second half of 1942. In fact, there will even be serious shortages of workers in many occupations after these workers are reabsorbed.

The Middle Atlantic States also face an increasingly serious displacement problem, largely because so many of their plants are engaged in consumer goods production. However, the problem in this area will probably be mitigated fairly rapidly because most of the displacement is taking place in the larger metropolitan areas, such as Philadelphia, Pittsburgh, and Erie, which are active with defense contracts. The situation in Trenton, N. J., however, is apparently grave. Approximately 3,000 workers have already been laid off and an additional 2,800 are scheduled to be laid off in the near future; the reemployment prospects for these men are not promising. In New York City, there are more than 50,000 unemployed construction workers alone, with little prospect of employment. Hundreds of small firms and a number of larger ones in New York City are suffering from material shortages. The situation there will probably become more acute.

The other section of the country with serious displacement problems is New England. Here, rubber and woolen curtailment orders will result in the unemployment of 35,000 woolen workers and 10,000 rubber workers. Previous curtailment orders and increasing material shortages have or will throw out of work a minimum of 10,000 in the costume jewelry industry, plus additional thousands in the hardware, clocks, and watches, electrical appliances, and other metal products industries, if materials are not forthcoming. It is probable that the number of workers displaced will not exceed the number of new workers to be engaged by the expanding war industries and by those plants converting to war production. Temporarily, however, there will be a lag during which a considerable number of workers will be without jobs.

Throughout the rest of the country, although certain localities and industries are hard pressed, the problem cannot be considered serious. The Pacific coast, for example, is booming with aircraft and shipbuilding production and little difficulty is anticipated in absorbing the relatively few workers displaced by material shortages. Very few places in the Rocky Mountain and Great Plains areas are vulnerable to priority restrictions. In the South, construction labor will be the chief sufferer, but if contemplated Army cantonments, air bases, and industrial expansion plans go through, there will be a substantial demand for construction workers in this section of the country.

Analysis of plant surveys received in December by the Bureau of Employment Security indicates that along with the automotive and automobile parts industry, priority unemployment will most seriously affect those plants making stoves and heating equipment, furniture and other lumber products, textiles and apparel, rubber products, and jewelry, clocks, and silverware. In all these industries, firms reporting during December indicated that total lay-offs will decrease their staffs by 35 to 45 percent.

Lay-offs in the automotive and automobile parts industries will largely occur in Michigan, Indiana, Missouri, New Jersey, Ohio, and Pennsylvania; in firms manufacturing stoves and heating equipment, in Illinois, Pennsylvania, Ohio,

and Michigan; in plants making furniture and other lumber products, in Pennsylvania, Ohio, and Michigan; in textiles and apparel plants, in Pennsylvania, New York, Massachusetts, Connecticut, Indiana, and Rhode Island; in the jewelry, clocks, and silverware industry, in New England and Illinois.

On the basis of the December analysis, over half of the workers already displaced are semiskilled, somewhat less than a third unskilled, and approximately 15 percent in skilled professional and managerial occupations. For those firms anticipating future lay-offs, the proportion of semiskilled workers to be furloughed was even greater whereas the proportion of unskilled workers laid off is expected to decline.

Of the 146,900 workers to be laid off during the 6-month period ending May 1, 1942 on the basis of November 1941 expectations in 10,600 defense and related establishments, only 11,500 or 8 percent were skilled workers; 66,200 or 45 percent were semiskilled workers; and, unskilled workers accounted for 40,500. In the skilled trades, occupations in which the most lay-offs were anticipated included stove moulder, general sheet-metal worker, electroplater, and arc welder; however, the demand during this 6-month period for sheet-metal workers and arc welders far exceeded the anticipated lay-offs. In the semiskilled trades, the most numerous lay-offs were anticipated for general assembler (automobile manufacturing) heavy stock punch-press operator, floor assembler, metal buffer, spot welder, and subassembler (automobile manufacturing); however, anticipated hires of floor assemblers were more than triple the number of anticipated lay-offs.

Although merely because they are so numerous, more plants with employment of less than 100 workers or 250 workers have laid off or will lay off workers, nevertheless, a considerable number of fairly large firms have also been compelled to curtail production and employment drastically. In the automotive field, large establishments predominate; most of those affected are making very sizeable lay-offs. In most of the other industries dependent upon metal the firms are of medium size and, of course, are the ones most frequently affected. In general, the larger plants are not making numerically small lay-offs but are being forced to furlough substantial groups of employees.

ROLE OF THE EMPLOYMENT SECURITY PROGRAM IN CONNECTION WITH LABOR DISPLACEMENT PROBLEMS

The employment security program, jointly directed by the Social Security Board and State agencies, has been making a notable contribution toward the alleviation of distressed areas arising out of the lack of materials. This contribution has been made in three ways. In the first place, local public employment office representatives are calling upon all plants which have experienced or are faced with the prospect of lay-offs of 50 or more workers, in order to determine: (a) How serious the lay-off is; (b) the materials lacking; (c) the skill of the workers laid off; (d) whether the plant facilities are convertible to defense production; and (e) what the employment opportunities are for displaced workers. This information is supplied both to the Contract Distribution Service and to the Labor Division, Priorities Branch, of the Office of Production Management, in order that both agencies may be informed quickly as to the seriousness of the situation and what equipment is idle. The information is also made available to the State employment services and the Regional Labor Supply Committees of the Office of Production Management in order that those agencies might give immediate consideration to the steps which might be taken to relieve the situation. As a result of these joint actions, there have been numerous instances of awards of contracts to firms which are faced with shut-downs or materials have been supplied through a speeding up of delivery. A lay-off of 500 workers in a railroad equipment concern was recently averted by expediting a shipment of steel.

In addition to signaling the occurrence or the possible occurrence of lay-offs to the Office of Production Management so that proper action can be taken, the United States Employment Service has also been instrumental in placing many workers laid off or in directing them to training courses in order to provide them with skills that can be readily utilized by firms in need of workers. Recently 3,400 workers were laid off by an automobile assembly plant. Shortly after, these workers were registered with the local employment office and jobs were found for about half of them. This instance can be multiplied many times.

The third way in which the employment-security program helps to relieve the hazards of unemployment arising out of a lack of materials is through the unemployment compensation program. Through this program, workers who meet the eligibility provisions of the State laws are compensated for their loss of employment by the payment of benefits equal to about one-half of their regular weekly

wages. Under existing provisions of the State laws, they can probably draw about 12 weeks of benefits during any 12-month period. This, of course, will vary between States in accordance with the provision of the State law, as well as the earning power of workers laid off. In Michigan, for example, most of the workers laid off are probably eligible for benefits for \$16 a week for about 15 weeks. Such payments can tide many workers over their period of unemployment. If contracts can be speedily awarded and supplies assured to many plants otherwise faced with labor displacements, unemployment insurance can probably serve to maintain workers' standards of living, and at the same time keep them in the community so that they are available when restaffing of the plant begins. If, on the other hand, contract awards of conversion cannot be made within 3 months following the lay-off, it is very likely that a considerable number of workers will remain unemployed thereafter until such time as conversion is accomplished or they may leave the community for jobs elsewhere.

V. IN-PLANT TRAINING AS OBSERVED BY PUBLIC EMPLOYMENT OFFICES

Severe labor shortages in occupations essential to the defense program have focused attention on training inexperienced workers and upgrading employed persons as solutions to ever more pressing recruitment problems. Many of the current labor shortages are in occupations so highly skilled that rapid training of new workers is impossible. In these situations it becomes necessary to transfer or retrain workers from nondefense industries and to upgrade persons already employed in defense establishments. From an inspection of labor supply and demand data collected by the United States Employment Service in November 1941, it is apparent that these methods of meeting labor requirements will have to be employed exclusively in many highly skilled occupations. This is especially true in aircraft, shipbuilding, and ordnance production. Since November, of course, the plans for greatly increased war production have produced estimates of labor needs far in excess of those reported at that time. Among metal machining occupations with heavy demands in November and with few fully qualified employment service registrants are: All-around machinist, for which defense employers anticipated almost 21,000 openings prior to April 1942; bench machinist, over 4,000 openings; marine machinists, 3,700 openings; milling machine operator, 6,400; turret lathe operator, 5,600; tool maker, 8,200; and die maker, 1,600. The number of qualified registrants was in no case adequate to meet these demands, ranging from about 260 die makers to 2,500 all-around machinists. Other acutely short occupations are aeronautical draftsman, tool designer, machine shop inspector, aircraft wing frame builder, pneumatic riveter, airplane woodworker, and, among shipbuilding occupations, ship fitter, ship carpenter, ship joiner, and ship electrician. Shortages may be actually more acute than these data indicate since many of those who are registered with the employment service in these categories probably fail to measure up to employer specifications or are located where no demand currently exists.

In-plant training in the present emergency is of special significance in meeting such labor requirements, since it supplies the only possible means of filling the huge demands for skilled labor developed by the arms program. An investigation of employment service reports from 14 representative States indicates that such training is in progress in both large and small establishments operating in all parts of the country. The States reviewed were selected to include a variety of defense activity and are widely distributed geographically.

The programs by which management is training workers and upgrading employees vary among industries and are adjusted to the immediacy of the need for workers. Whereas before the present emergency, training normally consisted of the regular apprenticeship program, usually of 4 years' duration, the emphasis at present is on training "on the job" designed especially to give rapid, efficient training to produce immediately needed skills in a minimum of time. This method was proved the most effective means of rapidly training workers in World War No. 1. It has been bolstered in the present war, however, by supplementary training offered under the national defense vocational training program. Supplementary training courses are directed toward teaching employed workers additional skills, and are scheduled in such a way that regular work is not interrupted. This program differs from the regular apprenticeship program in that the training is designed to meet the immediate need for qualified workers for specific jobs within the plant.

TRAINING ON THE JOB

In connection with on-the-job training, industry is breaking down highly skilled operations into component tasks and training less skilled workers for these unit jobs. An example is found at a shipbuilding company on the Gulf coast which broke down a November demand estimate for 2,800 skilled workers into a demand for 1,500 skilled and 1,300 semiskilled persons in December. Meantime, an in-service training program was set up to take care of about 2,000 workers. A radio manufacturing plant in Maryland employs a job analyst whose full time is devoted to analyzing and simplifying job processes in the plant. An intensive in-service training program has been inaugurated in an attempt to upgrade the present personnel.

In-plant training is used also to add to the experience or skills already possessed by the worker and make possible his upgrading to a higher skill. Numerous evidences are found in the ordnance and aircraft industries. At an ordnance works in South Carolina, general helpers are trained in 6 months under the supervision of leadmen to be semiskilled workers. At an airplane assembly plant in Kansas, a systematic training program is in operation under which experienced precision machinists are trained as tool makers and aircraft jig builders. In the field of airplane accessories, a plant in the Midwest is satisfying its demand for highly skilled crystal grinders by training workers within its own laboratories.

On-the-job training may be given new workers as soon as they enter the employ of a firm. An aircraft plant in Florida, anticipating an increase of 800 workers, hires defense-training graduates and gives them additional in-plant training until progress justifies their advancement to regular jobs. An aircraft assembly plant in Connecticut has taken over the training program formerly conducted by the State board of education for its prospective employees to control instruction more closely than was possible in a public course. A vestibule school has recently been installed at a Minnesota ordnance plant for the purpose of inducting job leaders, supervisors, and key workers into the plant. These workers will later give on-the-job training for production workers. Samples of all the machines used in production are provided for the school. An aircraft plant in Kansas operates its own so-called finishing school. The plant selects trainees from the national defense training courses and private schools and pays them 30 cents an hour while it verifies their training and determines their efficiency and capacity for production. The trainees are then instructed in the plant's procedures, shop practice, and blueprints and immediately upgraded.

Another device for alleviating shortages of skilled craftsmen is found in upgrading and training workers in parent plants for employment as key skilled workers in new plants. By means of on-the-job training, a new plant can then be staffed around this nucleus of transferred skilled workers. For example, a munitions firm is training, in its Connecticut plant, workers to operate munition plants in Kansas City, Mo.; Salt Lake City, Utah; and Denver, Colo. This method is also practiced by a machine tool company in Texas for its nearby subsidiary. A corollary method, that of sending workers to other plants to receive training for work in skilled and supervisory capacities, is practiced by an ordnance works in Kentucky. This approach has also been noted in Massachusetts, where specialized workers needed at one metal-trades plant were trained in another shop on machines similar to those they were to operate.

The Federal Government is assisting the in-plant training program for new workers by placing Work Projects Administration workers as learners in essential occupations in defense plants. After a short period of training and observation in the plant, the trainees are transferred to the employer's pay roll, providing they have acquired the minimum skill necessary for employment. The trainee's wages are paid by the Work Projects Administration during the training period, which may not exceed 160 hours. Wages paid by the Work Projects Administration to in-plant trainees are equivalent to the established learner wage. This arrangement had been in operation on a Nation-wide scale for only 3 months by December 1941, yet more than 375 defense production plants in essential industries had requested participation in the plan. These plants, located in more than 28 States, are producing such vital defense equipment and materials as aircraft, arms, Diesel engines, tools, instruments, iron, steel, and brass. Of the 2,300 Work Projects Administration workers who had completed training during this period, 93 per cent had been immediately placed. On January 1, 1942, about 750 Work Projects Administration workers were in training.

SUPPLEMENTARY TRAINING

To supplement on-the-job training undertaken by industry, the Federal Government provided training supplementary to employment, a phase of the vocational education for national defense training program. As of November 30, 1941, 578,000 persons employed in defense industries had received training through this program. A steel fabricating plant in Pennsylvania requires employees to attend supplementary national defense courses at the public high schools. When these employees are promoted to more skilled jobs, trainees from national defense pre-employment refresher courses are hired. More than 300 employees of a shipbuilding employer in Texas are attending courses at Lamar College as a prerequisite to upgrading. Officials in a plant on the lower gulf coast, anticipating a need for ship fitters, have broken down the occupation into 4 specialized operations. By requiring workers to take supplementary training courses in these operations they have added considerably to the proficiency of their workers, while quickly solving their labor problems. A Michigan shipbuilding firm, anticipating a shortage of skilled workers when its labor force is expanded from 1,200 to 1,800 has had a supplementary national defense training program set up to qualify their employees for upgrading.

An aircraft plant in Kansas employs an analyst to promote and supervise supplementary training. He determines the need, suggests improvements in the program to the national defense training authorities, and assists in the selection of employees to attend such courses. In addition to the supplementary training activities of the defense training program, the engineering service and the management defense training programs are offered to industry to overcome shortages of qualified workers. A steel company in Pennsylvania selected 250 of its employees to attend Pennsylvania State College extension courses in defense engineering to qualify them to fill key positions.

Another method employed by plants for recruiting skilled workers consists of reimbursing persons for tuition spent for a training course qualifying them for specific jobs in the plant. In the past 18 months a Minnesota plant, manufacturing gun mounts, has hired 250 men who had taken a special defense course (tuition \$122) at an industrial institute, refunding tuition at the time of hiring. A textile products firm in Massachusetts refunds the tuition to employees taking courses at a textile school or university upon satisfactory completion of the course.

APPRENTICESHIP

Although the apprenticeship program looks farther into the future, it has also been expanded to meet constantly increasing demands for the country's future skilled mechanics. Fifty-nine thousand apprentices are being trained under standards approved by the Federal committee on apprenticeship standards, an increase of about 50 percent over January 1941. The training program extends usually for a period of 4 years, the rate of pay advancing at specified intervals according to recommended schedules.

Formal indenture apprenticeship programs, in a number of apprenticeable occupations, have been inaugurated at an aircraft plant on the west coast in addition to foremen training programs. An electrical products company in New England is clearing through the employment service for machinist apprentices. At a shipbuilding corporation in South Carolina, a special apprenticeship program has been set up in addition to the regular 4-year apprenticeship program. This program is designed to train skilled helpers in a period of 1½ to 2 years. A metal trades plant in Kentucky has recently set up a full 4-year apprenticeship program.

An apprenticeship program in the construction trades has been developed in Rochester in cooperation with the local government apprenticeship representatives of the board of education, employers, union officials, and the employment service. This need for this program is clear since one union, probably typical of others, has revealed that the average age of its members is 50 years or more. As a result of the conferences, about 20 individuals will start apprenticeship training in January. In connection with this new program, apprentices for the plumbing and steamfitting trades will receive part-time training from the vocational education for national defense program. The trainees will be paid by the employers for study time and will attend school once a week beginning January 5. Boys between 18 and 22 are eligible.

OTHER FEDERAL SERVICES

The Federal Government has sought to encourage industry to expand its training activities through the advisory service of the Training-Within-Industry Section of the Office of Production Management. This service is rendered upon the specific request of an employer and ranges from explaining to management the value of training in solving labor recruitment problems to making detailed analyses of the training and manpower problems and counseling on programs to be used. As of September 1941, advice had been given to 1,736 companies employing 2,786,000 workers, among them many aircraft firms. In addition, during the past 2 months, 792 plants employing 1,302,000 workers had agreed to use the new job-instructor-training program of Training-Within-Industry. This is a short course in the technique of training given to a few selected foremen and supervisors who pass along this instruction to leadmen who train large numbers of workers engaged in actual operations.

To assist in upgrading, job break-down, and training planning, the United States Employment Service has made available to employers the services of trained job analysts. These analysts, often in cooperation with Training-Within-Industry representatives, enter the plants to analyze jobs and interview workers. All possibilities of upgrading or promoting workers are explored. If insufficient skills are found through this method, recommendations for job simplification are made. The recommended program is carried out by the plant itself. Job analysts are available through local employment offices throughout the country.

OPERATION OF IN-PLANT TRAINING PROGRAMS

Most plants do not rely on a single type of training. For example, a tractor company in Illinois operates the following types of courses with these enrollments.

Course	Enrollment	Type of training
Foundry.....	21	4-year apprentice training program.
Machine shop.....	270	
Pattermaking.....	9	2-year on-the-job training course.
College graduate course.....	53	
Production machine shop.....	164	
Sheet-metal.....	52	Employees enrolled in courses at Illinois Institute of Technology in Chicago.
Mechanical engineering.....	19	

A recent report from Texas points out that the Employment Service, the Training-Within-Industry Section of the Office of Production Management, the Apprentice Training Program, and the Department of Vocational Education are working with Texas employers in determining the gross occupational demand and the supply that the employers can furnish by means of training and upgrading, in order to arrive at the net demand which must be supplied from the open labor market or from preemployment training schools.

An analysis of the expected labor market developments in the San Francisco Bay area in California (through April 1942) yields an indication of the part played by the training programs in satisfying employer needs. Scheduled hires in the 21 bay area shipyards for this period total 29,000. On-the-job training is expected to furnish a total of 14,650 workers of whom 700 can be advanced to foremen, 6,650 to skilled, and 3,300 to semiskilled jobs. Supplementary defense training is expected to make it possible to upgrade approximately 7,000 workers to skilled status, 1,400 to semiskilled status, as well as to make 3,000 unskilled workers more competent at their jobs. The remaining hires will be made from among preemployment defense training course graduates, public and private vocational school graduates, and from apprentices being advanced to journeymen status.

GROWING NEED FOR IN-PLANT TRAINING

Up to the present time in-plant training has been undertaken by employers at their own initiative, with the encouragement and assistance of Government agencies. Many far-sighted employers have seen in training-within-industry programs the solution to labor supply problems hampering expansion of their

production. Now that production must be increased manifold to supply our own and other nations' war needs, in-plant training will be needed almost universally to staff new and converted plants. Not only should existing programs be continued and enlarged but new programs of on-the-job training and optimum upgrading should be instituted as fast as they can be planned. Both defense and nondefense employers should extend this type of training to the limit of their capacities, since both groups can contribute to the need for essential skills. The facilities of the Training-Within-Industry Branch of the Office of Production Management should be extended. The United States Employment Service will continue to lend all possible aid to the program, and to supply technical assistance where necessary.

TESTIMONY OF JOHN J. CORSON—Resumed

DR. LAMB. With reference to the first of these statements, you have already covered the subject to some extent in part 1 of your prepared statement.

Can you tell the committee some of the reasons why the President saw fit to nationalize the Employment Service? I may say that in the committee's first interim report last October, the committee recommended that Congress give serious consideration to the need for such nationalization for the duration of the emergency period, and, therefore, anticipated the move, although they did not call for an Executive order, but for congressional consideration of the matter.

Can you tell the committee some of the reasons why the President saw fit to nationalize the Employment Service?

NATIONALIZATION OF EMPLOYMENT SERVICE

MR. CORSON. In answering that question, I think we must look prospectively at the problems which are apt to confront the Employment Service in the months ahead. Meeting the demands of the "victory program" will require the most careful conservation of all our skilled labor, the fullest utilization of all other available labor, and the most efficient management of all our labor resources.

The steps that must be taken to insure that those ends are attained will require the very widespread recruitment of workers from all sections of the country, a much more expanded training program, and the orderly transfer of labor among industries. They will require the controlled movement of workers, not only between States, but between industrial areas.

We will likely have to take steps that have not heretofore been a function of the Employment Service. I think the President's action in asking each Governor to make available the State Employment Service facilities was based upon a realization of what was to come rather than deficiencies in the operation of the Employment Service in the past.

When we realize the amount of additional manpower that will be required, as was stated by Dr. Davenport and General Hershey, it becomes clear that we will have to budget our manpower as carefully as we budget what funds we have. It becomes apparent that this cannot be done without a national service that can tap labor resources wherever they may be and make them available wherever they must be.

From what I understand of the discussions that took place in the Cabinet prior to the President's action, it was this prospective look

as to the steps that would have to be taken to mobilize our labor resources that gave rise to this action—the President's request for the nationalization of the Employment Service.

I think it should be said that the response from these several Governors to the President's telegram was significant evidence of the willingness of each of the States to cooperate, and a recognition on their part of the necessity for a National Employment Service to do this particular job.

POLICY OF THE "EVER-WIDENING CIRCLE"

Dr. LAMB. I notice on page 2 of part 1 of your statement, that you refer to the policy of the "ever-widening circle." I would like to ask a question with respect to that.

It is obviously necessary to employ all local labor reserves before recruiting workers from outside of the given area; that is to say, all qualified local labor reserves.

But once the local labor reserves are fully utilized, should you go to the nearest pool of labor reserves to recruit your workers, or should you go to those areas whose labor reserves are the least productively employed at the present time?

Would it not be desirable to go to the old Cotton Belt in the South or to the Appalachian area, where the available labor supply is contributing very little to our national war effort, to obtain your recruits, rather than to the nearest labor reserves which may be more productively employed than the labor reserves in the area I have mentioned?

In other words, isn't it necessary to take a national viewpoint on our labor supply and its allocation, rather than to think of the labor market in terms of local units?

Mr. CORSON. I think it is necessary to do both. Recognizing the interests of the human being who is asked to move, and the practical question whether or not he will move in response to an offer of a job, I think we have to consider first those people in the local labor market. Before we are through, however, we will have to make a positive and aggressive effort to recruit the manpower in such areas as you speak of, where there is an available supply of manpower that is not being productively used at present.

We will have to go beyond merely offering them jobs and actually make a positive effort to find them and bring them to the jobs.

I think that effort will be aided by the occupational inventory to be obtained in connection with the selective-service registration. It will furnish a questionnaire form which will indicate the occupational characteristics of the individual and give the Employment Service access to the names and whereabouts of the individuals who might be utilized.

It will put in our hands direct access to a number of individuals who have not been previously registered in employment offices.

AGE GROUPS TO BE REGISTERED

Dr. LAMB. As we understand it, this forthcoming registration of all males from 18 to 64 in age, being conducted by the Selective Service Administration, will yield occupational data, one copy of this to go

to the Employment Service, one copy to the Census, and the third to be left with the local selective service board. Is that correct?

Mr. CORSON. That is correct. I would like to qualify my answer to this extent. The only presently scheduled registration is one for the ages 20 to 44. The Selective Service Act provides for the registration of those from 18 to 65. Registration of those in other age groups than from 20 to 44 is not yet scheduled.

Dr. LAMB. But may be anticipated?

Mr. CORSON. Yes; it may be anticipated.

Dr. LAMB. In this collection of occupational data, will Selective Service Administration and its local boards receive direction from the Employment Service?

Mr. CORSON. The answer is "Yes." We have for some time been advising the Selective Service as to those occupations in which shortages exist now or are anticipated. Selective Service has been making that information available to local draft boards. Local draft boards, in individual cases, have already been asking the advice of the local employment offices.

Dr. LAMB. This is in respect to deferment?

Mr. CORSON. This is in respect to deferment.

Dr. LAMB. Is this on the basis of national shortages or local and regional shortages?

Mr. CORSON. This is on the basis of national shortages.

OPPOSED TO COMPULSORY REGISTRATION

Dr. LAMB. Would you, speaking either as the Director of the U. S. Employment Service, or as an individual, be in favor of the compulsory registration of all manpower and womanpower with the Employment Service?

Mr. CORSON. I would not be in favor of such a registration at this time. I think, in the development of our whole national labor policy, cognizance should be taken of the depletion of our available labor resources. The time may come when we will have to take steps which are not now necessary. I do not think such a complete registration is essential now. The shortages are not sufficiently great at this time, although we must look forward to the time when it will likely be necessary to register women as well as men.

That depends upon the depletion of the available labor supply. I would hope that as we go along we can develop, in more concrete terms than has yet been developed, a national labor supply policy that would be related to the depletion of available manpower. Such a policy would indicate a series of successive "next steps" to be taken as that labor supply is progressively depleted until it is no longer able to meet developing needs.

Dr. LAMB. You are probably acquainted with the operations of the British Ministry of Labor in national service, in the manner in which they operate the British equivalent of the selective service system, together with the placement of industrial and other workers. What proposals, if any, do you have for closer integration of Selective Service Administration and the Employment Service in this country? Would you recommend that the Selective Service Administration be placed within the Employment Service?

Mr. CORSON. I would not.

APPROVES SELECTIVE SERVICE PROCEDURES

Dr. LAMB. The present procedure is working satisfactorily?

Mr. CORSON. From an operational standpoint the present procedure is working quite effectively.

This is an aside, but I find General Hershey very helpful and very cognizant of the problems from the standpoint of the Employment Service, in developing those policies which are essential to our effective operation.

I might add that in undertaking this job as Director of United States Employment Service, I started out knowing something of the British experience and philosophically thinking it would be preferable to have a registration of at least those not within the military age groups made by and through the Employment Service.

Practically, I do not now think that is desirable or feasible. The local employment offices are now faced with the necessity of meeting employers from day to day and taking care of applications from employees. They are not equipped at this time to take on this substantial additional job of registering millions of men who are now not seeking jobs. Consequently I think the arrangement worked out with the Selective Service, whereby through their machinery we will obtain a copy of the individual's questionnaire, indicating his occupation and skills is a practical way of obtaining the same end in a manner that makes it useful.

Dr. LAMB. The United States Employment Service has been responsible for setting down the occupational characterizations upon which this registration will take place, is that correct? In other words, these characterizations are satisfactory categories for your purposes?

Mr. CORSON. The Selective Service has requested us to devise the form that will provide the occupational information.

Dr. LAMB. So when their data become available to you, you will be able to make good use of them, both nationally and locally?

USE OF SELECTIVE SERVICE'S OCCUPATIONAL LISTINGS

Mr. CORSON. Yes. Full use of them will mean that the material will be available in the local office. We will have there a file of these occupational questionnaires which will be sorted out to show by occupations, and particularly by critical occupations, the names and addresses and number of individuals in that community who possess those skills.

Dr. LAMB. You will not have any national tabulations, either sample or total, by say punch cards, of the results of this?

Mr. CORSON. No; we will not. However, tying together the availability of that data in our local offices will be tied together through what we technically call the clearance system. That system comes back to this concept of the "ever-widening circle." When an employment office can't fill an employer's request in the local area, that order is simultaneously made known to the offices in the next widest circle, and immediately enables them to make use of the data obtained from the Selective Service questionnaire.

Dr. LAMB. On the basis of the selective service registration you will never be able to anticipate situations which may arise, but only when they have arisen.

Mr. CORSON. I am not sure I understand you.

Dr. LAMB. If you had a tabulation of this kind, you would have a thorough picture of the available skills centralized, and the possibility of future shortages developing.

Can you approximate that from other sources, sufficiently well, so that this is not necessary?

Mr. CORSON. In our opinion we can; and, of course, we can supplement some of our available data from the knowledge of trends of the critical skills that will be derived from these questionnaires, without the necessity of setting up a statistical count of the total.

The Census Bureau is considering the advisability of making such a count. A count of many millions would be involved in this particular registration, and the time consumed will not be short. In the meantime, from an operating employment service angle, those individuals will be continuously moving. Thus we cannot count upon the availability of so many machinists in a particular area when a tabulation becomes available 6 months later.

KEEPING REGISTRATION CARDS UP TO DATE

Dr. LAMB. On the other hand, is not a possible weakness of keeping these cards in the local office, that the registrations taken at a certain period of time will cease to be accurate after a limited period of time?

Mr. CORSON. Only to a limited degree, for this reason: The local draft board will be notified of the movement of the individual who has been registered. When attempting to meet an employer's order for a number of workers of a particular skill, when we find that a particular individual whom we wish to refer has left the address on his questionnaire, we can find his whereabouts through the notification of the local draft boards.

Dr. LAMB. This country has taken two important steps toward control of the labor market; first, a complete registration of the labor supply, and second, a nationalized employment service, with uniform policies and procedures.

CONTROL OF HIRING IN CRITICAL SKILLS ADVOCATED

Is the next logical step the control of all hiring by the Employment Service?

Mr. CORSON. A next logical step is the control of hiring in critical skills through the employment office. I am not sure it will ever be necessary to have a control of all hirings through Employment Service, and, again, I am concerned with the ability of the employment local office to handle such a job. The control of all hiring would be a burden local employment offices could not now meet.

The problem at the moment is the meeting of orders for certain limited skills, particularly in the metal trades. If we are to meet the demands of those employers whose production is most essential to the war effort, if we are to be able to supply them with the number of machinists that they require, it may be necessary in the near future to say that all such hirings must be made through the employment offices. The employment office would refer a limited number of workers with critical skills to employer A in preference to employer B. Such a step may be necessary to provide the production of bombers and tanks that we are counting on.

Dr. LAMB. The line of questioning I have been pursuing arises in part from the observation of the committee as it has gone around the country, that the situation which is not anticipated today because there is no machinery set up for anticipation, becomes the serious situation of tomorrow, and consequently we are one or two or three jumps behind. A method for anticipation in advance is, I am sure, desirable, and I am concerned with the ways in which the U. S. Employment Service, for example, collaborating with other agencies, is able to approximate these necessary procedures, even though it does not have machinery for hitting the nail on the head.

What substitutes would you say exist for such anticipations as I described?

Mr. CORSON. I don't believe there are any substitutes for that anticipation. I think we should be developing now the ways and means in which such control would be made effective, and that requires careful collaboration by many who would be affected.

In the Labor Division of the now War Production Board, we have been considering such steps, and when they would be necessary.

Dr. LAMB. The committee in its second interim report advocated a comprehensive plan¹—I think it is correct to say somewhat more comprehensive in operation than anything that preceded the War Production Board, and perhaps then envisaged by the Executive order recently issued.² That comprehensive production plan has as an inextricable adjunct the operation of a successful employment service plan. In fact, I will go further and say the Employment Service becomes, under those circumstances, a part of production operations.

RELATIONS BETWEEN EMPLOYMENT SERVICE AND LABOR DIVISION OF WAR PRODUCTION BOARD

What are the relations between the Employment Service and the Labor Division of the War Production Board?

Mr. CORSON. This morning I have been in contact two or three times with the Deputy Director of the Labor Division. There are very few, if any, problems of any major importance within the Labor Division in which the Employment Service is not given an opportunity to express its viewpoint and contribute to the policy of the Labor Division.

Dr. LAMB. Take, for example, the recent situation which has now come to a head, the shut-downs in the automobile industry.

As we understand it, no comprehensive plans existed or exists for the reemployment and, insofar as necessary, the retention of all of those workers. A bill is now pending before Congress to subsidize their period of disemployment until they can be reemployed and put into training, but the training plans are not clearly stated. What is the present situation, for example, in the automobile industry, as you know it?

Mr. CORSON. The disemployment in Detroit is, of course, increasing and will reach substantial proportions. As to whether there has been a program developed to meet that situation, I will say this: There was no lack of consideration of that eventuality in Detroit or of anticipation of it.

¹ See House Report No. 1553.

² See Executive Order Jan. 16, 1942.

Dr. LAMB. You mean in Detroit, in the Employment Service?

Mr. CORSON. And in the Labor Division of the then O. P. M.

You suggest by your question that there should have been a plan for the absorption of those workers in other areas?

Dr. LAMB. Or possibly for their reemployment there at a fairly early date, and particularly a plan for retaining those people for jobs, the existence of which was already anticipated.

Mr. CORSON. You have a problem of maintaining certain labor forces which, although disemployed for the time being, will be urgently needed again in 3, 6, or 9 months.

Dr. LAMB. It is for the duration of the unemployment, and what happens to them during that period that the committee is particularly concerned with.

Mr. CORSON. Certainly we have been concerned with the fact that here is a pool of manpower not being used at this period of time. How to utilize it and have any assurance that it will be available again when needed for the reopening of the plants which will have been converted, is the problem.

WAR DISPLACEMENT BENEFITS

Dr. LAMB. By subsidizing them, I should think you would have some control over the question of whether they would be available and, in turn, that would operate to employ as many of them as possible in training projects which would directly place them where conversion is going on.

Mr. CORSON. That was definitely contemplated in the program that the President presented to Congress with respect to war displacement benefits.

I have forgotten whether it is specifically stated in his message, but it has certainly contemplated that the war displacement benefits would not be available to individuals who were referred to training and did not undertake such training or to such individuals who, when offered jobs in essential war industries, were unwilling to accept such jobs.

That was suggested by the staff of the Labor Division of O. P. M.

Dr. LAMB. The committee's observation, from the beginning of last summer to the end of September, is that the workers were not reluctant to take training, that they took it with alacrity. When they secured it they found, in too many cases, that they were trained with no job in sight. What I am raising here is the question of the training program being related to a job in sight, and the character of the training program taking such a direction.

Mr. CORSON. In Detroit you should recognize that the displacement in the automobile industry is a general displacement, displacing a greater proportion of the total labor force of the industry than usual. It involves many people for whom training was not needed. They cannot go back to jobs in the bomber plants without a period of training. There are others who will need a certain measure of retraining. I don't know the precise plans that have been made for such retraining. I do know that the defense training staff in the Labor Division has been laying such plans.

The function of the Employment Service is, of course, to develop from the employers their estimates as to the prospective needs for

labor in a variety of skills, in order that we can contribute that to the plan for training.

Dr. LAMB. Perhaps I ought to direct my question to you as Chief of the Labor Supply Division rather than as the Chief of the United States Employment Service, and ask you, as Chief of the Labor Supply Division, what you would consider adequate plans for anticipating and directing people to jobs, and training for those jobs. In other words, aren't we, as I observed before, two or three steps behind on this situation; and if so, to what extent are we able to overtake our delayed action?

TRAINING PROGRAM IN DETROIT

Mr. CORSON. I wouldn't agree that we are two or three steps behind. We have a training program in Detroit, and substantial efforts have been made within the last several weeks, to obtain, by loan, begging, borrowing, or any other device, additional facilities which would permit the training of additional workers in and about Detroit.

Dr. LAMB. I think that is a criticism of the failure to anticipate the situation. This committee investigated as long ago as last September and found this situation arising and to be anticipated, so the fact that the facilities are now overtaxed was to have been expected, I think, as long ago as October 1.

Mr. CORSON. I don't know whether this present situation was adequately anticipated—I will accept your presumption that it was not, because I frankly don't know, having no connection with it at that time—but I think it would be still questionable whether additional facilities could have been developed, even if it were foreseen 60 or 90 days earlier.

Dr. LAMB. What I mean is that the ideal facilities for training workers are within-industry-training facilities, and the need for those could have been foreseen providing the proper action to convert had been taken.

What discussion has gone on, either with the Employment Service or the Labor Supply Division of what proportion of our labor force should be drawn from among the ranks of women, what proportion should be Negroes, and what proportion made up of older workers? Is that a matter of consideration at the moment?

UTILIZATION OF WOMEN, NEGROES, AND ALIENS

Mr. CORSON. It is and, of course, we have been concentrating for some months now upon encouraging fullest utilization of women, and of Negroes. Recently the problem of aliens has become more acute. We are striving for the fullest utilization of all those groups within the local communities.

We have taken such steps as the local employment office can, by pointing out to employers the availability of these groups, making known to the employer that his order can be filled with qualified individuals coming from these groups, and dissuading him from insisting on specifications that discriminate against these groups.

These efforts have not been wholly successful. Many employers still insist upon such specifications. The depletion of the available

labor supply will necessarily have an influence upon them in getting them to modify such specifications in the future.

We have cases where employers contributed to the services of our occupational analysts in analyzing jobs, breaking them down, eliminating the heavier work in some of them, in order to make a redistribution of jobs in such a way that women could be more effectively used.

We have had some very encouraging results in some plants in the use of women in such jobs.

However, this is a continuing job. We have to continue to bring to the attention of employers the available supply of women, Negroes, aliens, and physically handicapped workers. Their services will become increasingly essential to the whole war effort as we go along, and our labor supply becomes increasingly depleted.

Dr. LAMB. Training will be a key to that problem also, will it not?

Mr. CORSON. Yes; a key to the use of these groups.

Dr. LAMB. And that again becomes the function of the planning ahead, so that the training will eventuate in jobs and not in a blind alley.

MOBILIZATION OF FACILITIES FOR TRAINING

Mr. CORSON. I think the planning is going on to a greater degree than your questions imply, if I may say so. Each week we discuss regularly with Colonel McSherry, in charge of defense training, the data which comes through our offices, as to shortages in particular occupations; the location of these shortages by areas, and anticipated shortages in other occupations. We are constantly making that information available to those in charge of planning defense training, and they are steadily mobilizing their facilities to make training available in those particular skills and places needed.

There is the problem of continuing the mobilization of facilities for training to meet those needs, as well as individuals to be trained.

Dr. LAMB. Would it be your point of view that within-industry-training programs are most successful and most satisfactory?

Mr. CORSON. Yes; I think they are essential to the further expansion of our labor supply.

Dr. LAMB. Do plans exist for requiring employers to set up adequate within-industry-training programs or is that on a permissive basis?

Mr. CORSON. On a permissive basis.

Dr. LAMB. Do you think the time is coming when it may be necessary to require such programs of all employers who have defense contracts?

Mr. CORSON. It is like the old saying: You can lead a horse to water but you can't make him drink. It is somewhat that sort of problem.

As long as you can convince the employer of the utility of training and as long as you can demonstrate to him that the trained product is good, there is no necessity for compulsion.

I think that is the approach that will have to be used for a considerably longer period of time. That, plus the influence of a statistical diminution of available labor supply will be sufficient, I think, to result in the actual utilization of training programs.

Dr. LAMB. I would like to pursue another line of questioning.

What is the relationship of management and labor to the operations of the Employment Service? Is there an advisory council of some kind, local, regional, or national?

FEDERAL ADVISORY COUNCIL FOR EMPLOYMENT SECURITY

Mr. CORSON. There is a Federal Advisory Council for Employment Security, composed of representatives of the labor movement and the public. That advisory council has met within the last month for 2 days, and has gone over the entire problem we are discussing here today.

In addition, in most of the States, although not all, there have in the past been advisory councils to the State employment service and the State unemployment compensation boards.

In many local areas, there are local advisory committees.

In our opinion, the Federal operation of the Employment Service requires a greater emphasis upon the existence and use of such advisory committees than was heretofore necessary.

The tendency of bureaucrats to be bureaucrats, if you will, will be minimized if we can insure that the local office manager is in touch with, and consulting with, a local advisory committee, made up of representatives of labor and management within that community.

There are outstanding examples throughout the country, of the effectiveness of the local advisory committees.

Dr. LAMB. Will the increasing difficulties of operating the deferment system increase the need for that?

Mr. CORSON. It will be one of the factors that will increase the need for it. You have suggested that a next step might be the requirement that all hirings, or at least all hirings in certain categories or labor market areas, be made through employment offices. That, I think, is a matter which should be done in consultation with the local advisory committees, to develop an understanding of why this has become necessary.

Dr. LAMB. What is the basis on which those committees have been chosen?

Mr. CORSON. It has varied a great deal and we are trying at the moment to take stock of the circumstances prevailing in each State as to the selection of those committees.

Dr. LAMB. Who appoints the national committee?

Mr. CORSON. The national committee was appointed by the Social Security Board.

Dr. LAMB. Would you recommend a consolidation of all agencies dealing with labor supply and training, in order to obtain unity of policy, or do you think you are approaching that through the present organization?

Mr. CORSON. I wouldn't recommend a consolidation of all agencies. These agencies, like the Employment Service, are already taxed to capacity to keep abreast of the job and keep thinking ahead of the job.

To move them and go through the derangement caused by shifting and consolidation, might, I think, be a handicap, rather than a gain.

I think the arrangements now in effect between the several agencies in the field of labor supply are relatively effective. However, I think that there is an urgent need for the clearer formulation at least of a national labor-supply policy that will give us not only a clear chart

of our course for the immediate weeks ahead, but for the year 1942 and the year 1943.

As I see it, the United States Employment Service is bound to be confronted with great difficulties in supplying the requisite labor to man these industries in the latter part of this year, and if not then, at least in 1943.

The available supply of labor, if every method is used to utilize it, is going to be something less than necessary to meet the demands. It is going to require every possible effort to provide the requisite supply of labor.

If that is to be the case, then I think the need for thinking now of the policies that will prevail in 1943 is highly essential.

NEED FOR JOINT POLICY-FORMING COMMITTEE

Dr. LAMB. So you would say that a policy-forming or determining committee of a joint character between, say, the Federal Security Agency and the War Production Board and Labor Department and Selective Service Administration was more needed than the placing of the administration of a consolidated labor supply and training office in any one of these agencies?

Mr. CORSON. I would.

Dr. LAMB. That is all that I have.

Mr. SPARKMAN. No questions.

The CHAIRMAN. Thank you, Mr. Corson.

Your statement and testimony have been very valuable and they were presented very ably and well.

The committee stands in recess until tomorrow morning at 9:30.

(Whereupon, at 12:20 p. m., the committee adjourned until 9:30 a. m., Wednesday, February 4, 1942.)

NATIONAL DEFENSE MIGRATION

WEDNESDAY, FEBRUARY 4, 1942

MORNING SESSION

SELECT COMMITTEE INVESTIGATING
NATIONAL DEFENSE MIGRATION,
HOUSE OF REPRESENTATIVES,
Washington, D. C.

The committee met at 9:30 a. m., in room 1536, New House Office Building, Washington, D. C., pursuant to notice, Hon. John H. Tolan (chairman) presiding.

Present were: Representatives John H. Tolan (chairman), of California; John J. Sparkman, of Alabama; and Carl T. Curtis, of Nebraska.

Also present: Dr. Robert K. Lamb, staff director of the committee.

The CHAIRMAN. The committee will please come to order. Mr. Myers is our first witness.

TESTIMONY OF HOWARD B. MYERS, DIRECTOR OF RESEARCH, WORK PROJECTS ADMINISTRATION, FEDERAL WORKS AGENCY, WASHINGTON, D. C.

The CHAIRMAN. Mr. Myers, as you know, this committee has drawn upon the publications and testimony of the staff of the Work Projects Administration in the past and particularly upon your own Division of Research. We have been impressed with the high quality of your research work and we want you to know that the 52 defense-migration studies which your Division has made have been of the utmost value to this committee.

Congressman Curtis will interrogate you.

Mr. CURTIS. Mr. Myers, what is your position with the Work Projects Administration?

Mr. MYERS. I am Director of Research for the Work Projects Administration.

Mr. CURTIS. And how long have you held that position?

Mr. MYERS. Since the beginning of the program in 1935.

Mr. CURTIS. Have you made any studies in reference to the movement of workers or migrants?

52 STUDIES OF DEFENSE MIGRANTS

Mr. MYERS. Yes. In an attempt to help get at the facts on migration, my division has made 52 studies of defense migration in various cities of 25,000 and over throughout the country in the last few months.¹

¹ See pp. 10449-10633.

Mr. CURTIS. Now, your cities of 25,000 and over—were those the points where you studied the incoming migrant?

Mr. MYERS. That is correct.

Mr. CURTIS. And you studied the outgoing migrant at the same points?

Mr. MYERS. No; the studies were designed to measure the movement of persons into each of the cities, those who had come in since October 1, 1940, and still resided in the area when the survey was made in the fall of 1941.

Mr. CURTIS. Of those 52, did you pick out problem spots in the defense program?

Mr. MYERS. Most of the cities were so-called hot defense areas. We also took a number of cities which at that time did not have defense activities, in order to get an indication of the situation in areas without large volumes of war contracts.

Mr. CURTIS. Can you give us your estimate of the total number of defense migrants during the last year?

Mr. MYERS. Yes. Congressman, I have a brief statement here, together with a series of charts, which summarizes some of the facts about these migrants and estimates the number. Would you like to have me present that?

Mr. CURTIS. Your statement will be received in evidence and placed in the record at this point.

(The statement referred to above is as follows:)

STATEMENT BY HOWARD B. MYERS, DIRECTOR OF RESEARCH,
WORK PROJECTS ADMINISTRATION

DEFENSE MIGRATION ¹

For the second time in 10 years the United States is experiencing a sharp increase in worker migration. In the 1930's migration was stimulated by depression, in the 1940's it is being stimulated by the imperative demands of war. The concentration of war orders in a relatively small number of areas is creating great demands for additional labor in some cities. At the same time the growing impact of priorities and shortages of materials is squeezing large numbers of workers out of their previous jobs in many sections of the country. The result is a growing volume of migration of workers and their families toward war boom towns.

FOUR SOURCES OF LABOR SUPPLY

Broadly speaking, employers with war orders have turned to four sources of labor supply:

1. The local unemployed.
2. Local workers already employed, but in nonwar industries.
3. Local nonworkers coming of working age or induced to enter the labor market by the prospect of easily-secured jobs at good wages.
4. Workers and potential workers from other areas.

In most cities the workers required for war industries have been supplied largely from the first three sources—that is, from various groups in the resident population. This is both a natural and a desirable development, as large supplies of actual and potential workers have been readily available in nearly all centers of war activity.

For example, there were nearly 8,000,000 unemployed in the United States in October 1940. One year later the number had shrunk to approximately 4,000,000. Unemployment is still high, though less formidable than it was. Even the most active war centers still have their unemployed—workers who, though clearly employable, are not acceptable for the available jobs because of age, race, sex, or

¹ The studies on which this statement is based were conducted by Mr. Malcolm J. Brown of the Labor Market Research Section, Division of Research, Work Projects Administration, under the supervision of Dr. John N. Webb, Chief of the Labor Market Research Section. Mr. Brown assisted in the preparation of the testimony herewith presented.

lack of training. As the need for workers increases further, and as restrictive hiring limits are relaxed, many of the remaining unemployed will succeed in obtaining jobs.

The number of workers who have shifted from nonwar to war jobs in the same locality is not known but, stimulated by higher earnings in war industries, the shift is probably already very large. The rapidly growing effects of materials shortages will sharply accelerate these shifts during 1942, thus providing additional local workers for the expansion of war production.

Nonworkers, too, have recently been entering the labor market in substantial numbers, and this movement also is growing. New entries to the labor market, particularly students and housewives, have already offset a large part of the loss resulting from the withdrawal of workers to the armed forces.

In an increasing number of war production centers, however, the primary sources of resident labor possessing the needed skills and characteristics are running low. In these areas local deficiencies in the labor supply are being met by a growing flow of workers from other areas.

Workers from out of the city are of two types: commuters, who ride back and forth between home and work each day; and migrants, who move to the active area. This distinction is an important one. When defense industries are located in or near great population centers, commuters may supply a very large part of the extra labor needed. But when defense industries are located in a sparsely settled area, migration is required. The Ravenna (Ohio) ordnance plant, which draws from a labor force of nearly 1,000,000 workers living within a radius of 40 miles, may depend mainly upon commuters; but the Iowa ordnance plant at Burlington, with only 100,000 workers living within a 40-mile radius, must employ a large proportion of migrant workers.

Defense migration has been dramatized by the rapid massing of large numbers of workers in isolated Army-camp and powder-plant towns, in the great new aircraft-production centers, in the resurrected shipbuilding centers—in such towns as San Diego, Pascagoula, Wichita, Bath, Hartford, Burlington, Shreveport, Seattle.

The needs of war have transformed the disliked transient of the depression into the respected war worker of today. The border patrols of a few years ago are being replaced by a variety of devices to encourage migration, including advertising by private contractors, expansion of the public employment office clearance system, and defense housing and community facility programs. Poor housing, overcrowding, health hazards, skyrocketing rents and inadequate school, sewer, and water systems are now matters of public concern, partly because it is feared that such undesirable conditions may discourage the migration of needed workers.

STUDIES OF MIGRATION TO DEFENSE AREAS

It is clear that defense migration is raising increasingly serious problems, and that these problems urgently require analysis. In an endeavor to help get at the facts, the Work Projects Administration Division of Research some months ago undertook a series of studies of migration to defense areas. These surveys, sponsored by the Federal Security Agency, were designed primarily to determine how many workers and persons had moved to the area during the past year, where they had come from, what types of people they were, the occupations and industries in which they had been employed, the success of various groups of migrants in finding employment after migration and the extent to which they had shifted to new occupations and industries after migrating. The surveys covered the activities of civilian workers only, and no attempt was made to gather information about persons who had left the survey city during the year.

The information was secured through a sample census of each area, using techniques generally similar to those of the Work Projects Administration monthly report of unemployment. Particular attention was given to coverage of rooming houses, lower-priced hotels, defense housing projects, and tourist and trailer camps.

In all, 52 areas were selected for survey. Most of the cities selected had received large war material orders or construction contracts; a number of towns with few war contracts were included as control areas. Data are now available for each of these cities, and with the permission of the committee, will be submitted for the record.

The data make possible a number of observations concerning defense migration, pre-war phase. It should be said at the outset that generalization concerning the

movement is hazardous. The situation varies markedly by locality, depending on such factors as the type and intensity of defense activity, the size of the resident labor supply, the economic situation in nearby areas, and the ability of the community to house and service the incoming population.

Before going further, I should point out that by no means all migration to defense areas is defense migration in the narrow sense. Broadly speaking, one nondefense worker moves to a defense town for every worker who comes in to take defense employment. The enticing prospect of a job draws clerical and service workers as well as skilled metal tradesmen, operatives and construction workers. Many of these workers secure jobs which contribute indirectly to the war effort, others join the ranks of the resident unemployed. All contribute, however, to the social and economic problems which migration raises and, consequently, all are included in the discussion which follows:

In general, defense migration has been of two main types: (1) The movement of construction workers to camp and new facility sites, many of which have been located in rural or small-town areas; (2) the movement of workers to war industry centers, for the most part the larger cities. The industrial movement has been less spectacular, but is of longer duration and, socially and economically, is much more important. I shall discuss primarily this latter type.

RATES OF MOVEMENT

Perhaps the primary point to make concerning defense migration to date is that, by and large, it has flowed in smaller volume than many of the more excited newspaper and magazine stories would have us believe. This early overestimation of the volume of migration is understandable, however. It takes a relatively small number of migrants in a community to create numerous problems. For example, the District of Columbia was already so congested when the defense program first began, that a very small in-migration would have exhausted all the available housing. There were only 3,800 habitable rental vacancies in the District last February. In the absence of a considerable construction program, an annual migrant rate of only 2 or 3 percent would have exhausted these vacancies by November. The actual migrant rate for the District was 7.8 percent. It is no wonder that in-migration to the District seemed even greater than it was.

This is not to say that recent migration has not been tremendous in some areas. The movement to large construction jobs has been impressive, but most of this has been temporary. It is true, further, that a few industrial towns have experienced a hectic mushroom growth. Migrants into San Diego, Calif., total 27 percent of the 1940 population—the highest rate among the 51 areas surveyed. Wichita, Kans., a booming aircraft center, is second, with a 20 percent migration rate. While the rate of migration is lower, some of the larger cities have experienced truly astounding in-movements. For example, more than 150,000 persons moved into Los Angeles and its satellite towns¹ during the year following October 1940. In the same period, more than 50,000 persons have moved into Washington, D. C. and more than 40,000 to Seattle, Wash.

These cases are exceptional, however. In half of the 51 areas for which data are available the migration rate has been 5 percent or less, and in only 10 of the 51 cities has it been 10 percent or more.

Chart 1 shows, in array, the migrant rates of all the cities included in the Work Projects Administration surveys.

At the top of the chart are the "hottest" war-boom cities: San Diego and Wichita (aircraft), Newport News (shipbuilding), and Long Beach and Seattle (aircraft and shipbuilding). The active construction centers also appear high on the chart; note in particular the position of Burlington, Wichita Falls, Corpus Christi, and Fort Smith, cities which were in the midst of large-scale war construction programs when they were surveyed.

Some of the cities at the bottom of the chart are cities with little or no war-stimulated activity, such as Newburgh, Washington, Pa., and Brockton, for example. Many, however, are active war centers which have been able to expand production without much migrant labor. St. Louis, with war contracts valued at more than a quarter of a billion dollars, is seventh from the bottom; Pittsburgh is third from the bottom; and Philadelphia, with a billion dollars in contracts, is at the very bottom of the array. Most of these cities had large numbers of resident unemployed workers when the rearmament program began, and in most cases, the local unemployed population is still large, even today.

¹ This figure includes migration to Long Beach, Belvedere, Beverly Hills, Huntington Park, Southgate, Santa Monica, Burbank, Alhambra and Inglewood.

Our estimates show that approximately 2,250,000 persons and 1,000,000 workers living in cities of over 25,000 population October 1941, had entered these cities after October 1, 1940. The over-all migrant rate for cities over 25,000 population was 4.3 percent.

It is important to note that these figures refer to in-migration only, not to net population gain. As a matter of fact, it seems clear that some of the cities suffered a net population loss during the first year of the defense program. Terre Haute, for example, had a higher proportion of housing vacancies late in 1941 than in April 1940, and almost certainly lost population. There may be several other such cities in the list. Even in the most active cities, there was doubtless some out-migration during the period covered by the surveys.

DECREASED RATE OF MOVEMENT

On the other hand, the surveys indicate that the rate of migration has been increasing in most areas. It is probable that migration will grow even more rapidly during the coming months, stimulated by the marked intensification of the war effort, by the near absorption of the resident labor supply in certain "hot" areas, and by rapidly growing priorities unemployment. The rubber shortage will inevitably make commuting more difficult, so that cities like Bridgeport, Bristol, and Ravenna, which are now dependent on a large number of commuters, must be prepared to house great numbers of migrants when large-scale commuting is no longer possible. During the first year of war, migration should exceed by a considerable margin the volume during the prewar period.

EMPLOYMENT OF MIGRANTS

Second, it is pleasing to report that defense-migration thus far has been, on the whole, strikingly successful. In half of the areas surveyed the unemployment rate for all migrant workers is 7 percent or less; in a fourth of the areas it is 4 percent or less. Only one city out of nine has a migrant unemployment rate of 15 percent or more. Chart 2 shows the migrant unemployment rates for all the survey cities.

Important war-industry centers fall at both ends of the array shown in chart 2. Highest unemployment was reported in Fort Smith, Ark., where large numbers of workers had flocked in in anticipation of the start of work on a new Army camp. Very high unemployment was also found in Long Beach, Los Angeles, and Wichita. In San Francisco, San Diego, Seattle, and Corpus Christi, unemployment was relatively high, indicating that workers were arriving faster than they could be absorbed. But in Bristol, Baltimore, Washington, D. C., Burlington, South Bend, Warren, and Bridgeport, which are likewise important centers of war activity, migrant unemployment was exceptionally low.

In view of the almost completely unguided nature of the movement, and considering the fact that the surveys included considerable numbers of migrants who had very recently arrived in the area and had had little opportunity to adjust themselves, the unemployment rates reported among migrants are surprisingly low. In terms of obtaining employment defense migration presents a welcome contrast to the tragic experiences of migrants during the depression.

Not only have the great majority of the defense migrants obtained jobs, large numbers of them have got better jobs than they held before migrating. Occupational upgrading has been widespread. Shifts among manual workers from unskilled to semiskilled, and from semiskilled to skilled have been especially frequent. As a result of this process the proportion of migrants working at unskilled occupations is surprisingly small—in the great majority of towns less than 10 percent. Income data were not obtained, but in view of the occupational upgrading reported and the relatively high wages and full employment in most war industries, it seems clear that the incomes of a large proportion of the migrants have risen.

Although migrants in general have been quite successful in finding jobs, certain groups have fared less well than others. Women have been far less successful than men in obtaining jobs—in most areas their rate of unemployment is three or more times that for men. Negroes, too, have been relatively unsuccessful as migrants—their unemployment rate is three or more times the rate for whites in most areas to which Negroes have migrated in appreciable numbers.

Young workers have been generally more successful than their elders. The very young group is a striking exception. In the great majority of areas workers under 20 reported the highest unemployment rate of any age group. Most of these youth have, of course, entered the labor market recently, and have had little or no previous work experience. Workers 45 years and over reported, in

general, consistently higher unemployment than average (see appendix tables 3 and 4).

As would be expected the migrants who have been in the area longest tend to have the lowest unemployment rates. In general, migrants who have come from nearby areas tend to report less unemployment than those who have traveled far, probably because the former group more often return home if they fail to get a job.

In nearly all areas skilled manual workers and professional and technical workers have the lowest unemployment rates among the migrants. The least successful occupational groups are nearly always the service workers, particularly domestics, who often report extremely high rates of unemployment.

TYPES OF MIGRANTS

Negroes make up only a small proportion of the migrants to war-industry centers. In half of the survey cities, 3 percent or less of the migrants are Negroes, and even in the South, migration rates for Negroes are much lower than for whites. This is understandable, in view of the widespread discrimination against Negroes in war industries. It contrasts sharply with experience in the first World War, however, when a large-scale migration of Negroes to northern industrial centers took place. As the demand for labor increases and present employment restrictions are relaxed, it is probable that Negroes will begin to move in greater numbers.

Chart 3 shows the proportion of Negro migrants in each of the survey cities.

As the chart indicates, the highest proportion of Negroes was found in Macon, followed by Wichita Falls and Atlanta. Among northern cities, the highest proportions were found in Baltimore, Washington, Pa., Pittsburgh, Washington, D. C., Johnstown, and Battle Creek; in these cities, however, Negroes made up only 7 to 11 percent of the migrants.

There were relatively few female workers among the migrants. Half of the cities reported 18 percent or less females among the migrants, and only 9 cities reported more than one-fourth of the workers to be females. (See appendix table 6.)

Contrary to popular impression, relatively few of the migrants are coming from agriculture. This is rather surprising in view of our large agricultural labor reserve.

The proportion of workers drawn from agriculture is shown for each city in chart 4.

In half of the survey cities, 9 percent of the migrants or less are farm workers. Even in the South, the proportion is usually below 15 percent, and in the industrial East, the proportion is in most cases negligible.

War industry centers thus far have secured their workers primarily from urban areas. Most of the rural migrants have come from villages; the proportion from the open country is very small.

Few of the migrants have traveled far; in most centers the average distance is less than 125 miles. The California cities are outstanding exceptions to the general rule. Migrants to Long Beach have moved an average of more than 1,000 miles, while Los Angeles migrants have averaged nearly 1,300 miles. (See appendix, table 8.)

PATTERNS OF MOVEMENT

In order to illustrate the patterns of geographical movement traced by recent migrants maps have been prepared showing the place of origin of the migrants interviewed in six cities in different sections of the country. (See charts 5-10.)

The short distance traveled by migrants to most cities is well illustrated by the maps for Bridgeport, Philadelphia, Oklahoma City, and St. Louis. Philadelphia migrants, for example, moved predominantly from New York City, Scranton, and Wilkes-Barre. Bridgeport migrants came principally from the same three cities, plus Westchester County. Practically none of the Bridgeport migrants had moved from south of Philadelphia, and relatively few came from north of Boston. In Oklahoma City, migrants had moved principally from Tulsa, Seminole, Shawnee, and numerous county seats within half a day's automobile drive. Most of the St. Louis migrants came from southeastern Missouri and southern Illinois.

In Seattle, the distance traveled is somewhat greater; a substantial number of migrants had moved from the Twin Cities, and from numerous small towns and rural places across Montana, North Dakota, and Minnesota. Many others came from San Francisco and Los Angeles. Even so, the bulk of the Seattle migrants had moved from Portland, Spokane, Tacoma, and from the small cities within the State of Washington.

Los Angeles County migrants provide one of a very few exceptions, among the 51 cities surveyed, to the general rule that recent migrants have been drawn from the immediate neighborhood of the receiving area. Most of the Los Angeles migrants originated in a strip running north and south through the Midwest from the Twin Cities to Dallas, and including Sioux City, Omaha, Lincoln, St. Joseph, Kansas City, St. Louis, Oklahoma City, and Tulsa.

The Bridgeport and Philadelphia maps well illustrate the influence of depressed areas on defense migration, since a particularly large proportion of migrants in both cities had formerly lived in the Pennsylvania anthracite region. Neither the Oklahoma City nor Los Angeles maps, however, show any great migration from the poorer counties in the Oklahoma Ozarks, whose outmigration during the 1930's was dramatically brought to the Nation's attention.

Finally, the maps show that the great bulk of recent migration to cities is from cities, rather than from rural places. In Philadelphia and Bridgeport, migration from rural places is negligible, and in Seattle, Los Angeles, and Oklahoma City it is far outweighed by urban migrants. St. Louis reported the highest proportion of rural migrants, nearly two-fifths of the total.

AGE GROUPS

Migrants as a group are young, as chart 11 shows.

In half of the cities the average age of all migrant workers is 29 years or less; in no city does the average rise as high as 35 years. The figures reflect both the greater mobility of young workers and the low hiring age limits in many war industries. In the aircraft town of Wichita, Kans., where hiring restrictions are unusually severe, the average age of all migrant workers is under 25 years. In Bristol, the Los Angeles satellite cities, Baltimore, San Diego, Bridgeport, and Seattle—all important war-industry manufacturing cities—the average age was also very low, ranging from 25 years to 27 years. In practically all the war-construction centers, on the other hand, migrant workers were older, averaging 31 years to 33 years.

The migration surveys provide evidence that the rising demand for labor in centers of war activity is drawing nonworkers into the labor market in considerable numbers. In half of the cities surveyed 14 percent or more of the migrant workers had never had a job at their previous residence; and in four cities, Wichita, St. Louis, Bridgeport, and Nashville, this group made up one-fifth or more of the migrant workers. Most of these persons were students and housewives entering the labor market for the first time. The employment record of this group is often poor; in more than half of the cities the proportion who have obtained jobs is smaller than for migrants with work experience.

The proportion of one-person families among the migrants at their new locations is extremely high, ranging from 30 to 50 percent for most areas and reaching a peak of 78 percent for Washington, D. C. It is well known, of course, that single persons are highly mobile. Large numbers of these one-person families are incomplete, however; in many towns the proportion is more than one-third of all one-person families. In half of the towns, 15 percent or more of these workers left their families behind when they migrated. In part this separation reflects the normal instability of the migration process—the breadwinner leaving his family behind until he settles in a new location. In part, however, it results from the serious housing shortages existing in many areas with large war contracts.

A striking relationship between the proportion of migrant families which are incomplete and the availability of housing is afforded by a comparison of the migration data with the findings of a series of residential vacancy surveys recently conducted in many of the same areas by the Work Projects Administration Division of Research. A comparison of vacancies and the proportion of workers migrating without their families is presented in chart 12.

As the chart demonstrates, there is a strong general tendency for migrant workers to leave family members behind when migrating to cities with low vacancy rates, and to bring all family members with them when crowding is less severe. In Bristol, at one extreme, the habitable vacancy rate was 0.2 percent, and 60 percent of the workers with families had migrated without their families. In Oklahoma City, at the other extreme, the habitable vacancy rate was 4.5 percent, and only 4 percent of the workers with families migrated without their families. Several cities, of course, are exceptions to this rule; in Oakland and Corpus Christi, for example, migrants tended to bring their families along in spite of a general housing shortage, and in the Los Angeles area, they tended to leave their families behind even though housing was relatively plentiful. The general relationship is nevertheless unmistakable.

It is clear that many migrants leave their families behind simply because they are unable to find housing accommodations for them. Inadequate housing thus increases the proportion of migrants who are unstable and, in consequence, tends to increase the labor turn-over rate in war industries.

The extent of doubling up among multi-person families shown in Chart 13, provides a further index of the congested housing conditions in centers of war activity. Doubling up is common in all of the areas surveyed; in half the areas, 30 percent or more of the multi-person migrant families are either sharing their dwelling with other persons, or living in hotels and trailers. Doubling up was particularly severe in Wichita Falls, Bridgeport, San Diego, Warren, Baltimore, Burlington, Wichita, and Washington, D. C.

The Work Projects Administration surveys show conclusively that considerable population movements have already taken place and that migration is still on the upswing. The all-out war effort, accompanied by rapid shifts in industrial concentration, vast new demands for labor in some areas and large-scale priorities unemployment in other areas, and diminishing primary labor sources, is certain to provide a marked stimulus to the further movement of population. Last year, situations like those found in San Diego and Wichita were rare. A year from now they may be common. We are clearly in for large-scale migration of labor during the next few years.

In many respects this migration may differ from that experienced to date. It appears probable, for example, that as the demand for labor grows migration from rural areas will increase, the movement of women and Negroes will also grow, and these groups will be more successful than heretofore in obtaining jobs.

Defense migration is already creating serious economic and social problems in many communities. It is important that these be solved and that they be solved quickly.

Meantime, we should not forget the post-war migrant problems now being created. It seems probable that many war industries will shrink as rapidly as they have arisen, that the present extreme concentration of industrial activity will be to some extent reduced, and that the country will again face large-scale unemployment. These changes will provide new stimuli to migration. The course of post-war migration, however, will be far less happy than that of the present day. Post-war migration may well be depression migration all over again—the type with which we have become all too familiar during the decade just ended.

As the experience of the depression years abundantly illustrates, the wise direction of large-scale population movements is an extremely difficult task. To keep suffering to a minimum and to avoid the creation of new depressed areas requires careful planning over a considerable period of time. It is essential that such planning be undertaken at once.

Chart 1

MIGRANT RATES

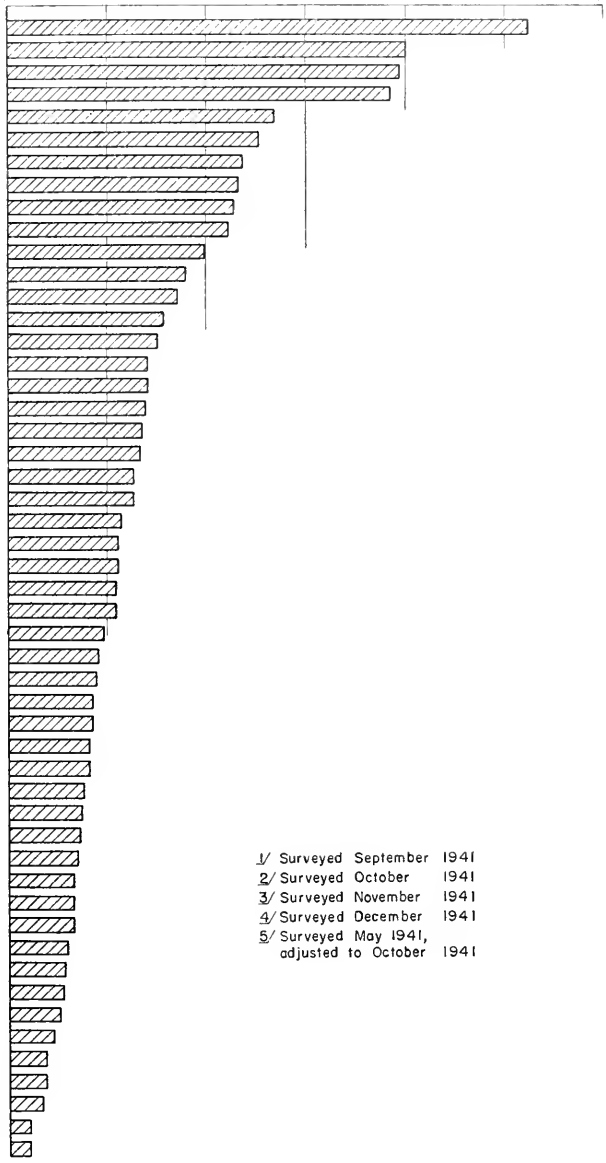
(PERCENT RELATIONSHIP OF MIGRANT PERSONS TO 1940 POPULATION)

October 1, 1940 to the Specified Date of Survey

Percent

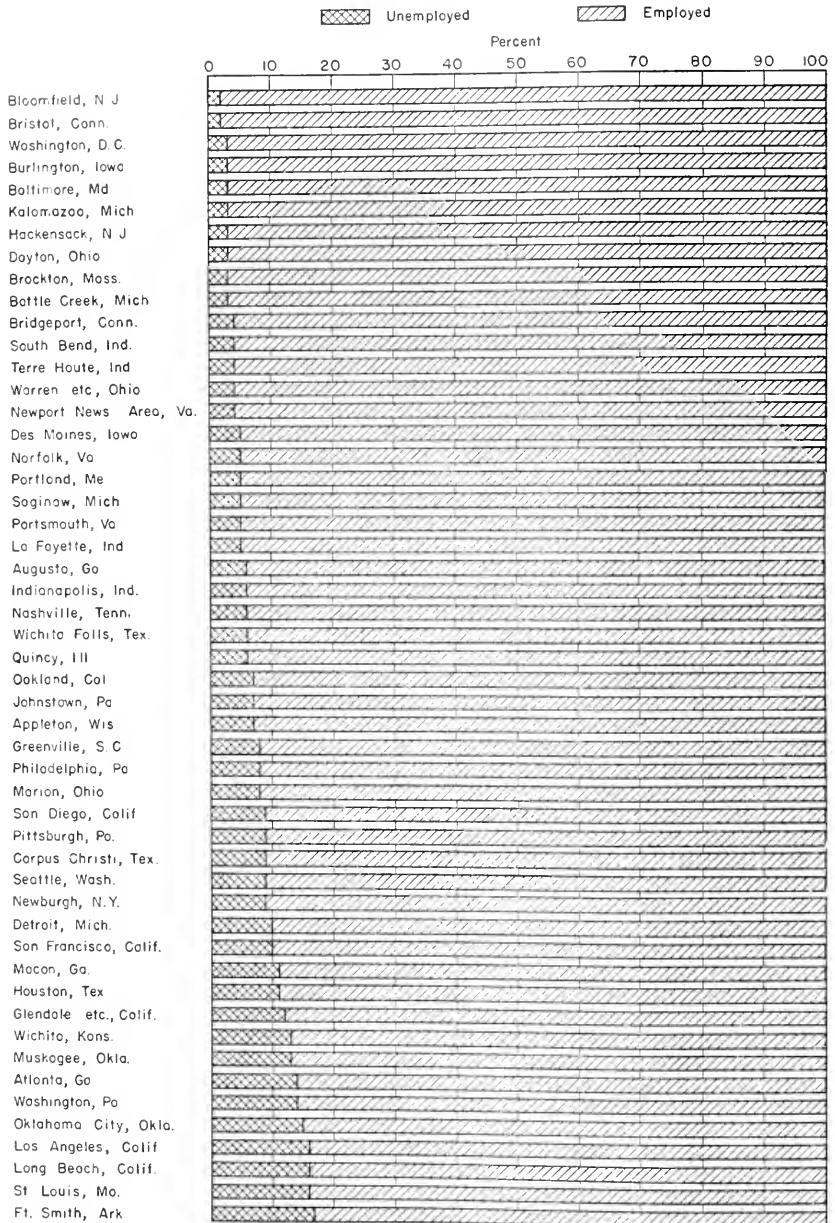
0 5 10 15 20 25 30

- San Diego, Calif. 4/
- Wichita, Kans. 1/
- Newport News, Va. 3/
- Burlington, Iowa 3/
- Long Beach, Calif. 3/
- Portsmouth, Va. 1/
- Wichita Falls, Tex. 2/
- Norfolk, Va. 2/
- Seattle, Wash. 3/
- Corpus Christi, Tex. 2/
- Fort Smith, Ark. 1/
- Glendale etc., Calif. 3/
- La Fayette, Ind. 2/
- Washington, D.C. 3/
- Warren etc., Ohio 3/
- Augusta, Ga. 2/
- Macon, Ga. 1/
- Los Angeles, Calif. 3/
- Bridgeport, Conn. 3/
- Oakland, Calif. 3/
- Bristol, Conn. 3/
- Oklahoma City, Okla. 1/
- Muskogee, Okla. 2/
- South Bend, Ind. 3/
- Marion, Ohio 4/
- Doyton, Ohio 4/
- Battle Creek, Mich. 3/
- Des Moines, Iowa 3/
- Portland, Me. 2/
- Houston, Tex. 2/
- Quincy, Ill. 4/
- San Francisco, Calif. 3/
- Appleton, Wis. 3/
- Nashville, Tenn. 2/
- Terre Haute, Ind. 4/
- Baltimore, Md. 1/
- Saginaw, Mich. 3/
- Atlanta, Ga. 3/
- Greenville, S.C. 1/
- Indianapolis, Ind. 2/
- Kalamozoo, Mich. 3/
- Newburgh, N.Y. 3/
- Washington, Pa. 2/
- Detroit, Mich. 5/
- St. Louis, Mo. 3/
- Hackensack, N.J. 3/
- Brockton, Mass. 3/
- Bloomfield, N.J. 3/
- Pittsburgh, Pa. 3/
- Johnstown, Pa. 2/
- Philadelphia, Pa. 1/



1/ Surveyed September 1941
 2/ Surveyed October 1941
 3/ Surveyed November 1941
 4/ Surveyed December 1941
 5/ Surveyed May 1941, adjusted to October 1941

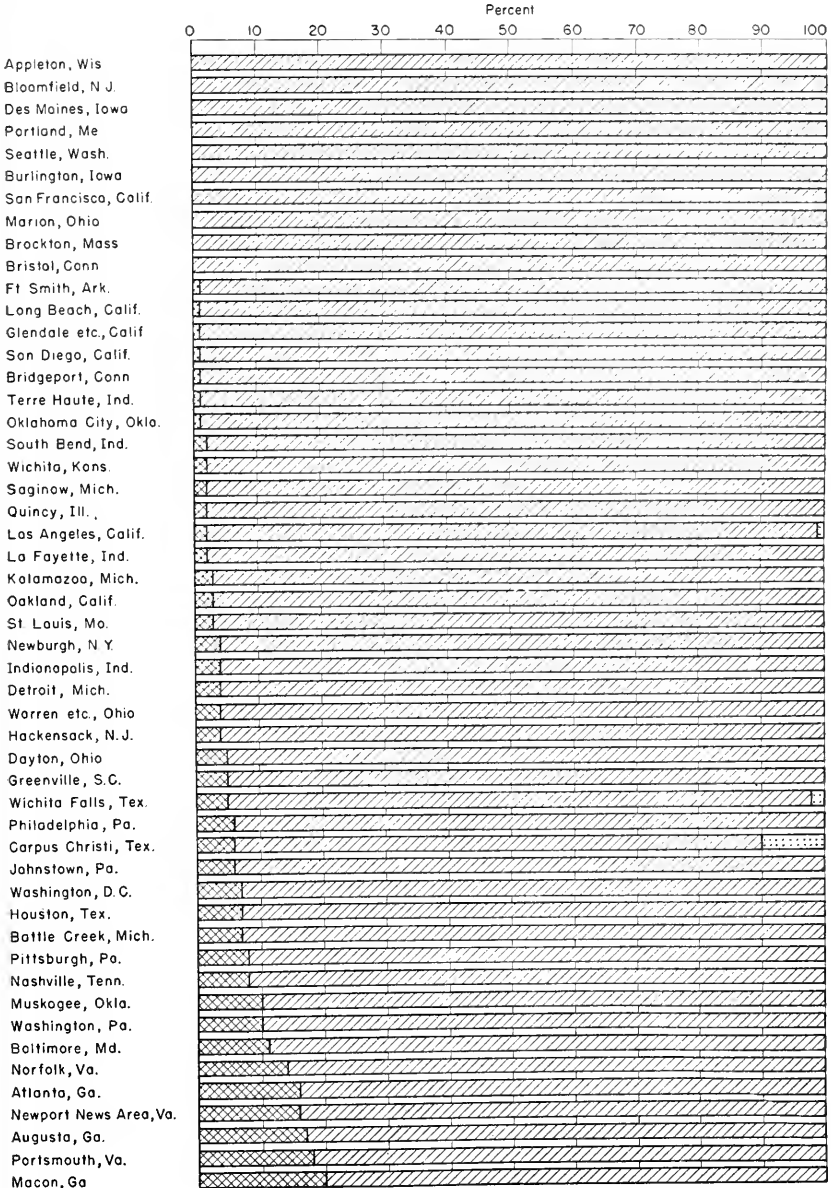
Chart 2
 EMPLOYMENT STATUS OF MIGRANT WORKERS
 (PERCENT DISTRIBUTION)



Source Appendix table 2

Chart 3
RACE OF MIGRANTS

Negro
 White
 Other



Source: Appendix table 5

Chart 4

PROPORTION OF MIGRANT WORKERS ENGAGED IN AGRICULTURE AND IN INDUSTRIES OTHER THAN AGRICULTURE, AT THEIR LAST RESIDENCE

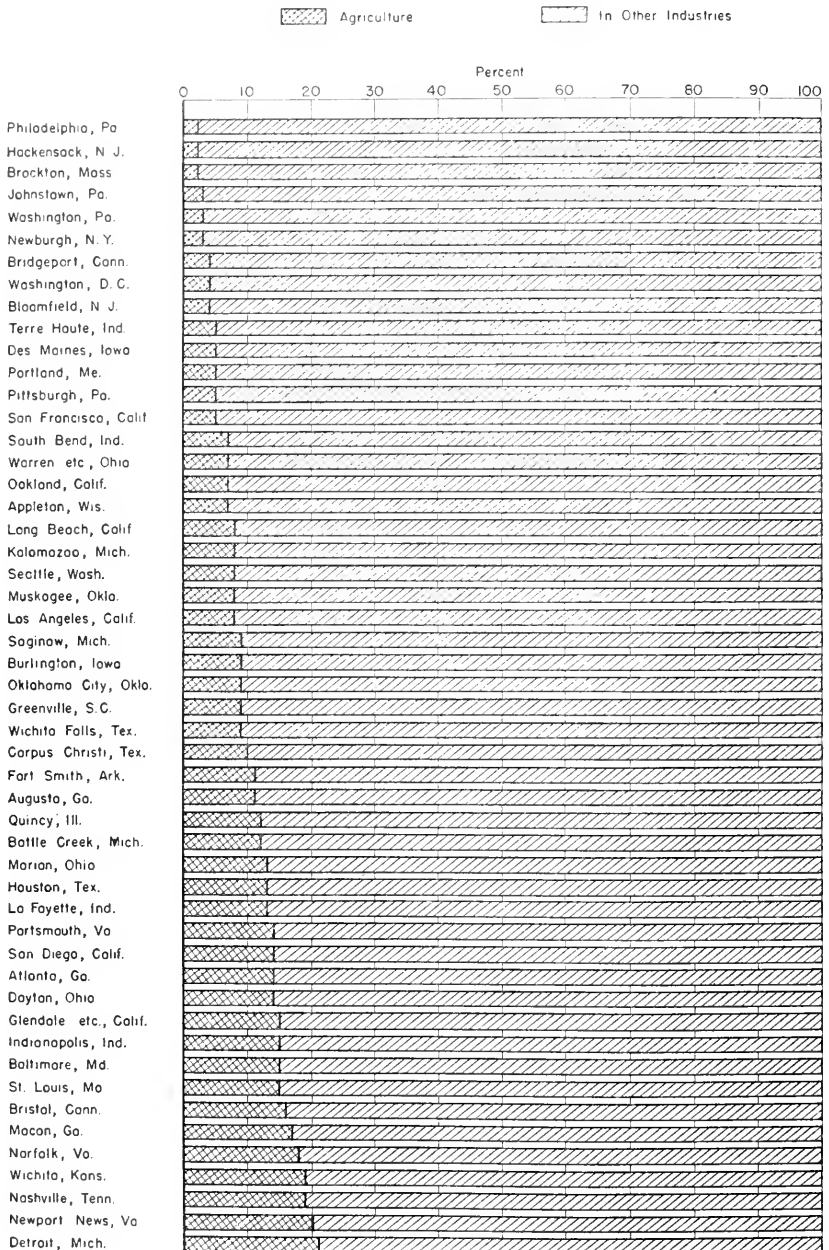


Chart 7
PLACE OF ORIGIN OF 527 MIGRANT WORKERS
INTERVIEWED IN OKLAHOMA CITY, OKLAHOMA

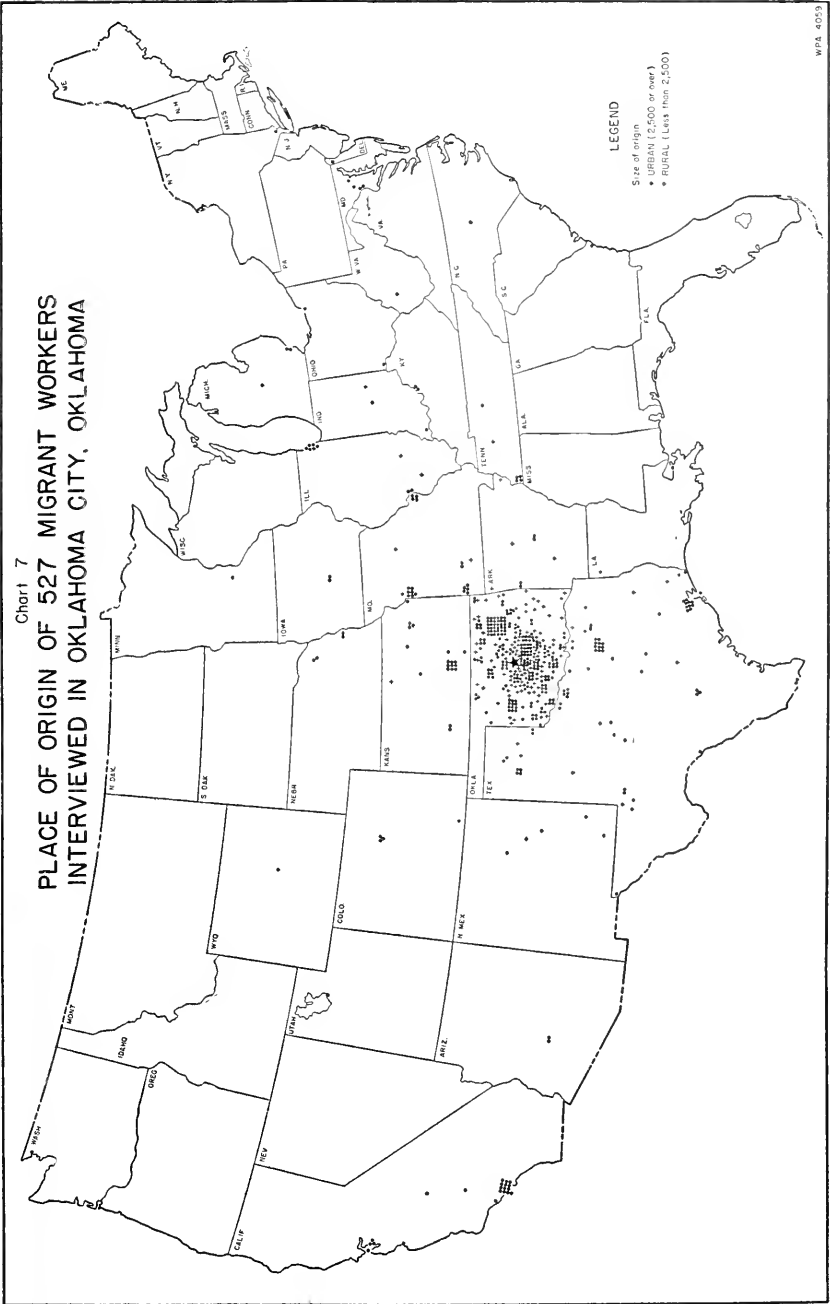


Chart 8
PLACE OF ORIGIN OF 827 MIGRANT WORKERS
INTERVIEWED IN ST. LOUIS, MISSOURI

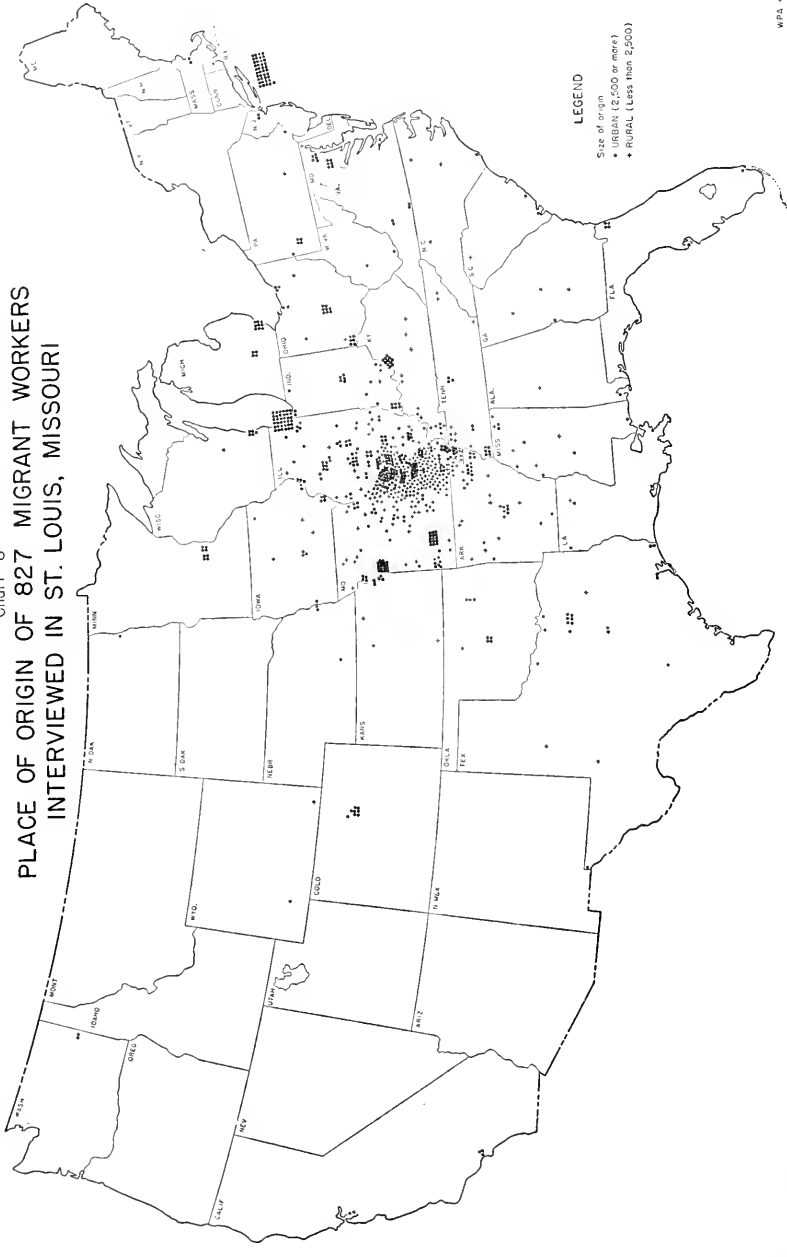


Chart 9
 PLACE OF ORIGIN OF 1,573 MIGRANT WORKERS
 INTERVIEWED IN SEATTLE, WASHINGTON

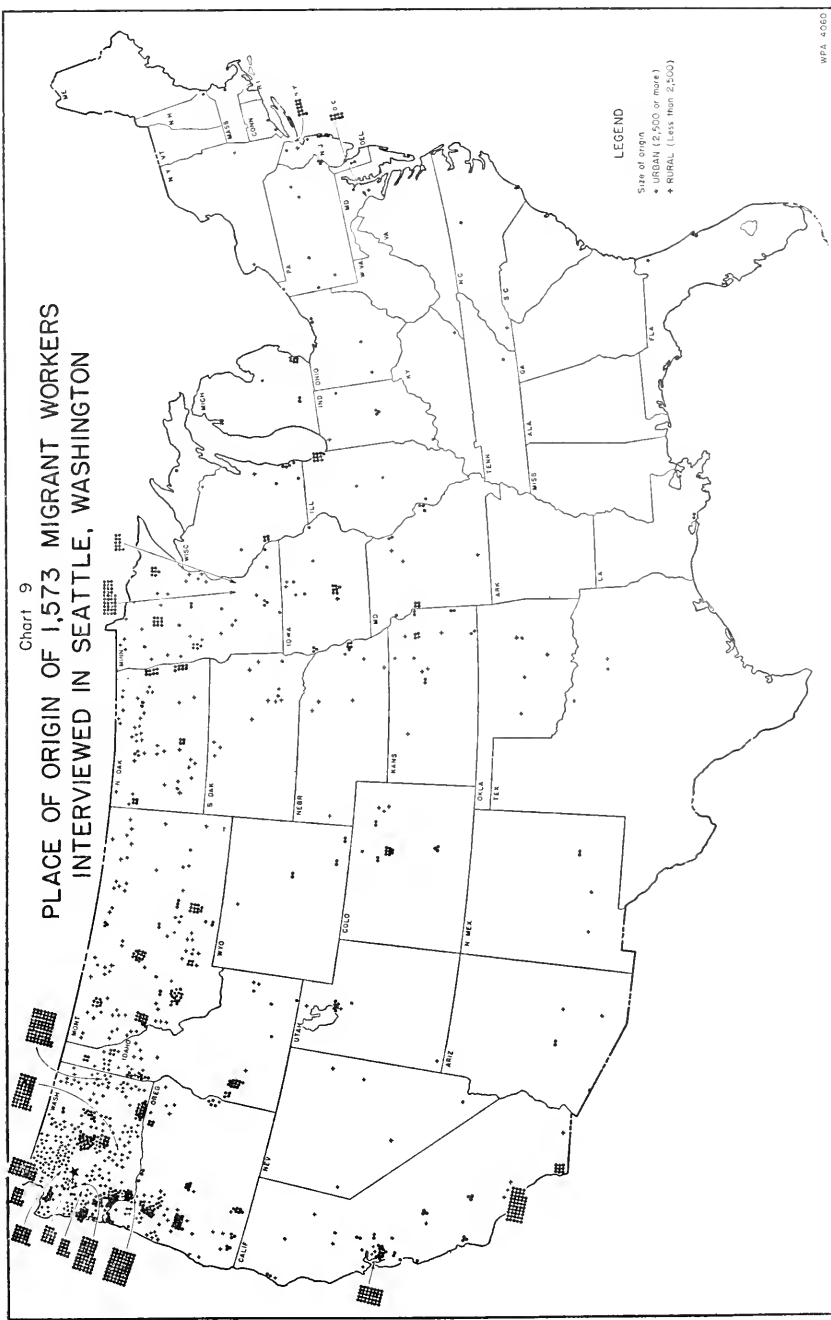


Chart 10
PLACE OF ORIGIN OF 2,065 MIGRANT WORKERS
INTERVIEWED IN LOS ANGELES COUNTY

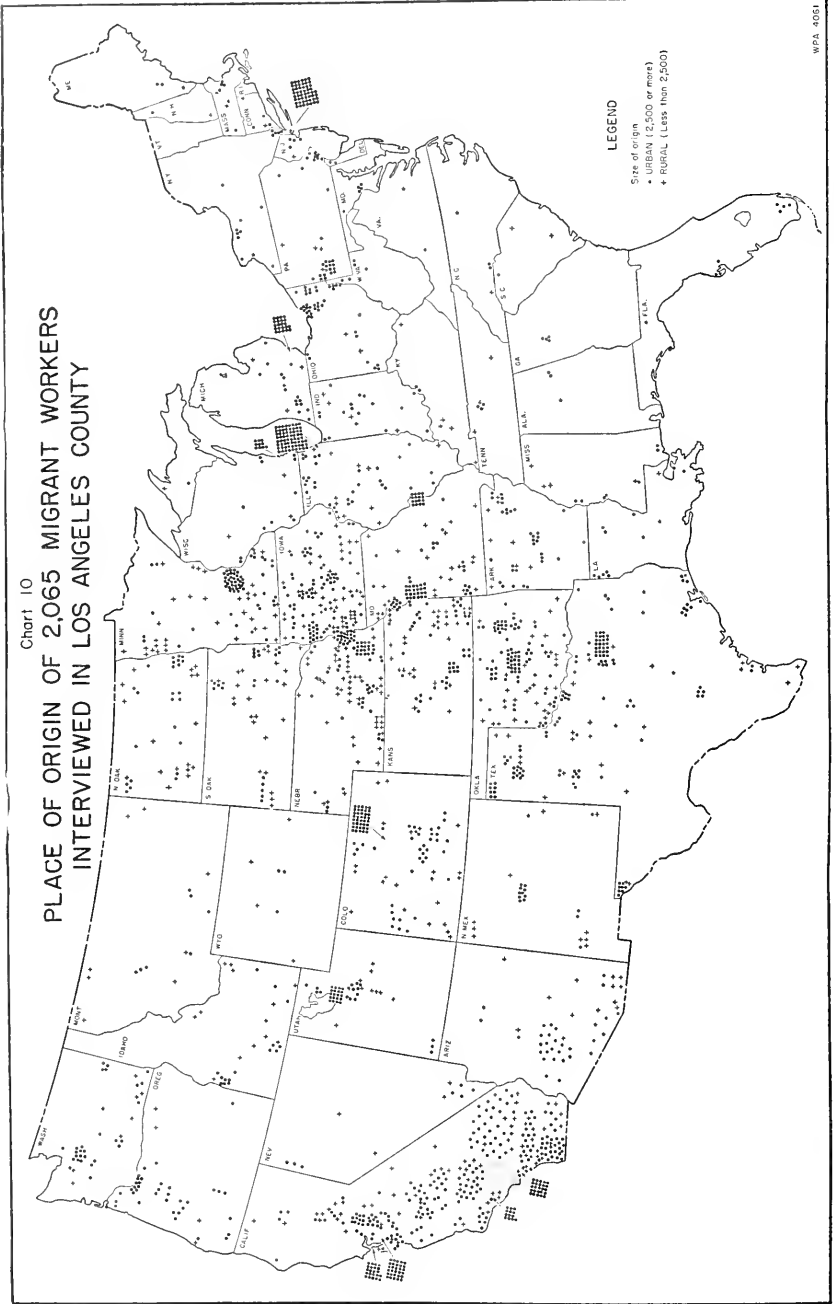


Chart 11

AGE OF MIGRANT WORKERS
(PERCENT DISTRIBUTION)

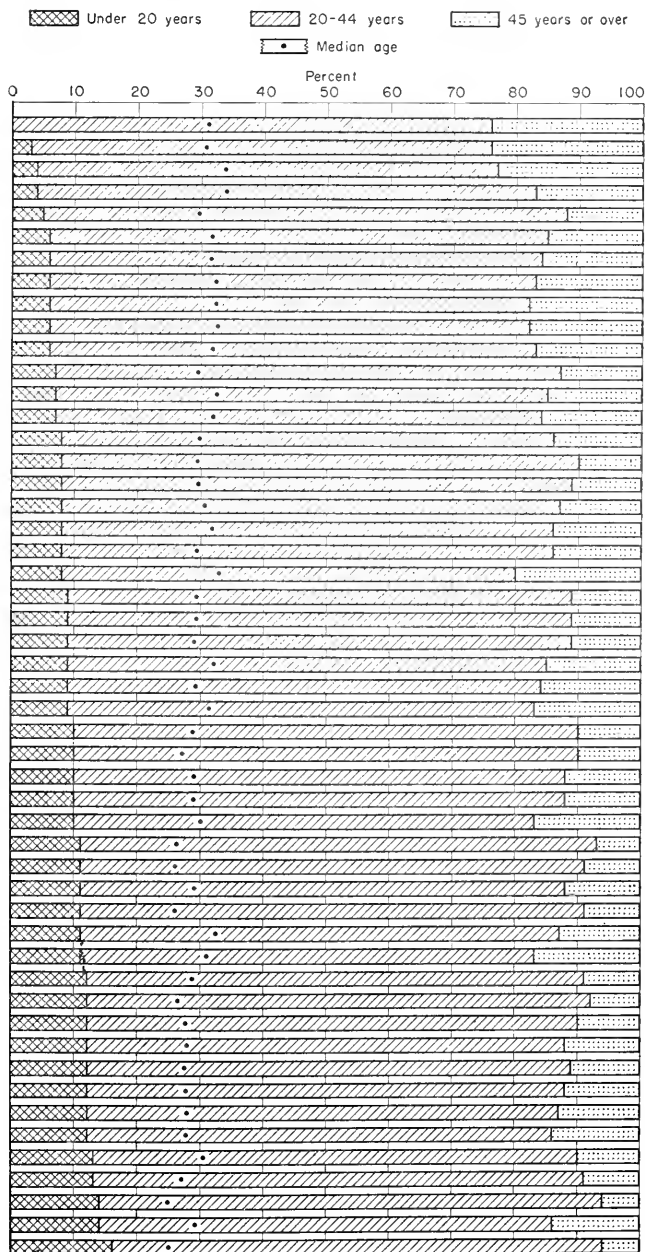
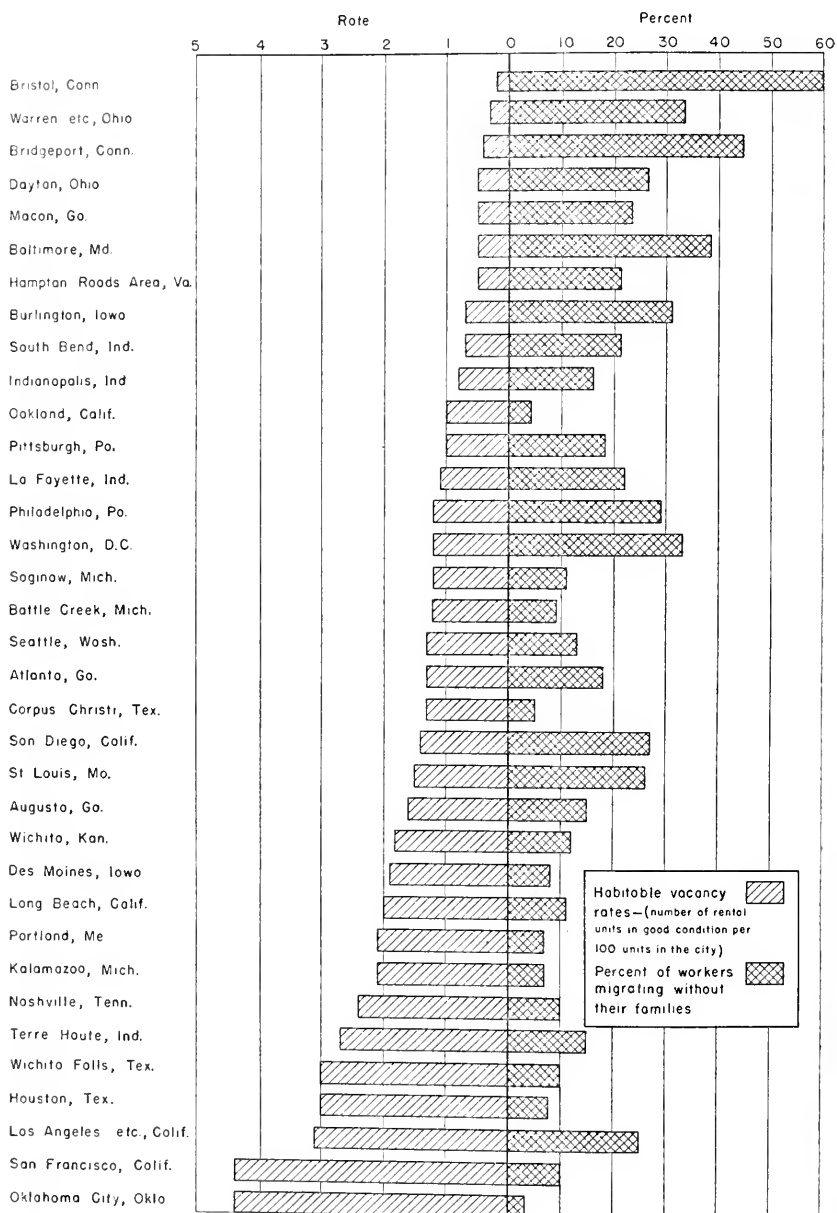


Chart 12

HABITABLE RENTAL VACANCY RATES AND PERCENT OF WORKERS MIGRATING WITHOUT THEIR FAMILIES

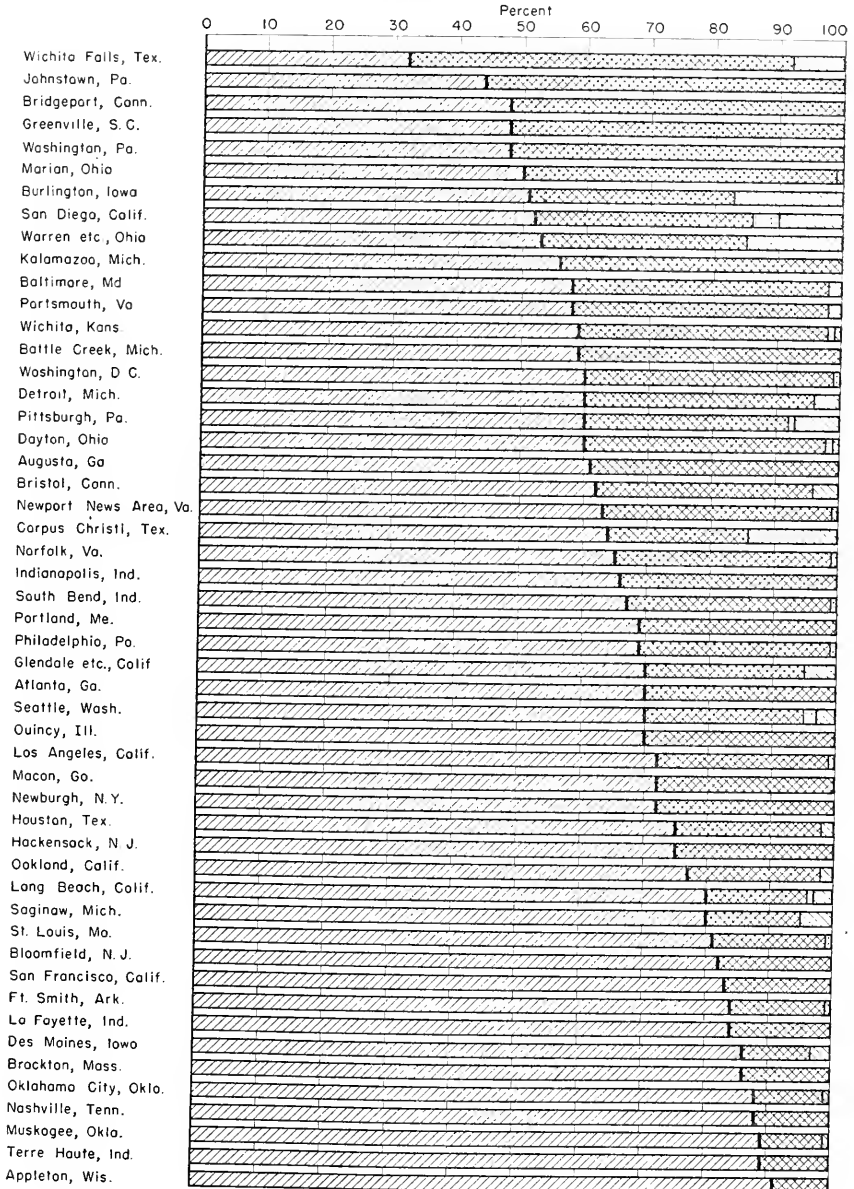


Source Appendix Table 10

Chart 13

LIVING ARRANGEMENTS OF MULTI-PERSON MIGRANT FAMILIES
(PERCENT DISTRIBUTION)

In separate dwelling
 Sharing a dwelling
 In hotels
 In tourist and trailer camps



Source: Appendix table II

In addition to the charts and tables herewith, reference is made to the detailed migration surveys made under the direction of Howard B. Myers and referred to in his testimony. These surveys are printed herein as exhibit 1, pp. 10449-10633, and cover the following areas: Akron, Ohio; Appleton, Wis.; Atlanta, Ga.; Augusta, Ga.; Baltimore, Md.; Battle Creek, Mich.; Bloomfield, N. J.; Bridgeport, Conn.; Bristol, Conn.; Brockton, Mass.; Burlington, Iowa; Chicago, Ill.; Corpus Christi, Tex.; Dayton, Ohio; Des Moines, Iowa; Detroit, Mich.; Fort Smith, Ark.; Fort Wayne, Ind.; Glendale, Calif. (see Los Angeles); Greenville, S. C.; Hacksensack, N. J.; Hampton Roads area, Va.; Houston, Tex.; Indianapolis, Ind.; Johnstown, Pa.; Kalamazoo, Mich.; La Fayette, Ind.; Long Beach, Calif. (see Los Angeles); Los Angeles, Calif.; Macon, Ga.; Marion, Ohio; Muskogee, Okla.; Nashville, Tenn.; Newburgh, N. Y.; Newport News, Va.; Norfolk, Va.; Oakland, Calif.; Oklahoma City, Okla.; Philadelphia, Pa.; Pittsburgh, Pa.; Portland, Maine; Portsmouth, Va.; Quincy, Ill.; Saginaw, Mich.; St. Louis, Mo.; San Diego, Calif.; San Francisco, Calif.; Seattle, Wash.; South Bend, Ind.; Terra Haute, Ind.; Warren, Ohio; Washington, D. C.; Washington, Pa.; Wichita, Kans.; Wichita Falls, Tex.

WORK PROJECTS ADMINISTRATION DEFENSE MIGRATION SURVEY

TABLE 1.—Number of migrant persons and migrant rates

City and State	Migrant persons in the city at the time of the survey per 100 persons in April 1940 population	Estimated number of migrant persons	City and State	Migrant persons in the city at the time of the survey per 100 persons in April 1940 population	Estimated number of migrant persons
Philadelphia, Pa. ¹	1.0	19,800	South Bend, Ind. ³	5.5	5,600
Johnstown, Pa. ²	1.0	700	Marion, Ohio ⁴	5.5	1,700
Pittsburgh, Pa. ³	1.6	17,500	Muskogee, Okla. ²	5.7	1,850
Bloomfield, N. J. ³	1.8	730	Bristol, Conn. ²	6.3	1,900
Brockton, Mass. ³	1.8	1,200	Oklahoma City, Okla. ¹	6.3	12,900
Hackensack, N. J. ³	2.2	560	Oakland, Calif. ³	6.6	29,700
St. Louis, Mo. ³	2.5	20,800	Bridgeport, Conn. ³	6.7	9,900
Detroit, Mich. ³	2.7	50,900	Los Angeles, Calif. ³	6.9	103,400
Washington, Pa. ²	2.8	700	Augusta, Ga. ²	7.0	4,600
Newburgh, N. Y. ³	2.9	900	Macon, Ga. ¹	7.0	4,050
Indianapolis, Ind. ²	3.2	12,600	Warren, etc., Ohio ³	7.5	4,090
Kalamazoo, Mich. ³	3.2	1,730	Washington, D. C. ³	7.8	51,700
Greenville, S. C. ¹	3.2	2,450	La Fayette, Ind. ²	8.5	2,500
Atlanta, Ga. ³	3.4	10,250	Glendale, etc., California ³	8.9	31,900
Saginaw, Mich. ³	3.5	2,900	Fort Smith, Ark. ¹	9.9	3,600
Baltimore, Md. ¹	3.6	30,500	Corpus Christi, Tex. ²	11.1	6,400
Terra Haute, Ind. ⁴	3.7	2,300	Seattle, Wash. ³	11.4	42,100
Nashville, Tenn. ²	4.0	6,600	Norfolk, Va. ²	11.6	16,700
Appleton, Wis. ³	4.0	1,150	Wichita, Falls, Tex. ²	11.8	5,300
San Francisco, Calif. ³	4.2	26,700	Portsmouth, Va. ¹	12.6	6,400
Quincy, Ill. ⁴	4.2	1,700	Long Beach, Calif. ³	13.4	22,000
Houston, Tex. ²	4.4	15,900	Burlington, Iowa ³	19.2	5,000
Portland, Maine ²	4.5	4,000	Newport News area, Virginia ³	19.7	7,300
Des Moines, Iowa ³	4.8	7,700	Wichita, Kans. ¹	20.0	23,000
Battle Creek, Mich. ³	5.4	2,300	San Diego, Calif. ⁴	26.1	59,900
Dayton, Ohio ⁴	5.4	11,400			

¹ Surveyed September 1941.

² Surveyed October 1941.

³ Surveyed November 1941.

⁴ Surveyed December 1941.

⁵ Surveyed May 1941, adjusted to October 1941.

TABLE 2.—Estimated number and employment status of migrant workers

[Ranked by proportion of workers unemployed]

City and State	Estimated number of migrant workers	Percent distribution			City and State	Estimated number of migrant workers	Percent distribution		
		Total	Unemployed	Employed			Total	Unemployed	Employed
Bloomfield, N. J.	350	100	2	98	Johnstown, Pa.	450	100	7	93
Bristol, Conn.	1,150	100	2	98	Appleton, Wis.	500	100	7	93
Washington, D. C.	36,800	100	3	97	Greenville, S. C.	1,090	100	8	92
Burlington, Iowa	2,900	100	3	97	Philadelphia, Pa.	12,900	100	8	92
Baltimore, Md.	16,600	100	3	97	Marion, Ohio	675	100	8	92
Kalamazoo, Mich.	850	100	3	97	San Diego, Calif.	29,900	100	9	91
Hackensack, N. J.	210	100	3	97	Pittsburgh, Pa.	8,800	100	9	91
Dayton, Ohio	5,800	100	3	97	Corpus Christi, Tex.	3,200	100	9	91
Brockton, Mass.	450	100	3	97	Seattle, Wash.	23,200	100	9	91
Battle Creek, Mich.	1,000	100	3	97	Newburgh, N. Y.	430	100	9	91
Bridgeport, Conn.	6,000	100	4	96	Detroit, Mich.	16,300	100	10	90
South Bend, Ind.	2,700	100	4	96	San Francisco, Calif.	12,200	100	10	90
Terra Haute, Ind.	1,000	100	4	96	Macon, Ga.	2,050	100	11	89
Warren, etc., Ohio	2,250	100	4	96	Houston, Tex.	7,100	100	11	89
Newport News area, Virginia	3,760	100	4	96	Glendale, etc., California	16,300	100	12	88
Des Moines, Iowa	3,400	100	5	95	Wichita, Kans.	13,000	100	13	87
Norfolk, Va.	7,350	100	5	95	Muskogee, Okla.	800	100	13	87
Portland, Maine	1,700	100	5	95	Atlanta, Ga.	4,450	100	14	86
Saginaw, Mich.	1,800	100	5	95	Washington, Pa.	290	100	14	86
Portsmouth, Va.	2,950	100	5	95	Oklahoma City, Okla.	5,000	100	15	85
La Fayette, Ind.	1,100	100	5	95	Los Angeles, Calif.	48,200	100	16	84
Augusta, Ga.	2,400	100	6	94	Long Beach, Calif.	9,000	100	16	84
Indianapolis, Ind.	5,100	100	6	94	St. Louis, Mo.	11,200	100	16	84
Nashville, Tenn.	3,000	100	6	94	Fort Smith, Ark.	1,500	100	17	83
Wichita Falls, Tex.	2,200	100	6	94					
Quincy, Ill.	700	100	6	94					
Oakland, Calif.	11,500	100	7	93					

TABLE 3.—Comparison of the percent of unemployment among all migrant workers and among migrant workers under 20 years of age

City and State	Percent unemployed, all workers	Percent unemployed, workers under 20	Percent by which (b) exceeds (a)	City and State	Percent unemployed, all workers	Percent unemployed, workers under 20	Percent by which (b) exceeds (a)
	(a)	(b)	(c)		(a)	(b)	(c)
Bloomfield, N. J.	2	10	+400	Bridgeport, Conn.	4	6	+50
Burlington, Iowa	3	12	+300	St. Louis, Mo.	16	24	+50
Philadelphia, Pa.	8	29	+263	Bristol, Conn.	2	3	+50
Newburgh, N. Y.	9	33	+267	Houston, Tex.	11	16	+45
Saginaw, Mich.	5	17	+240	San Diego, Calif.	9	13	+44
Portsmouth, Va.	5	15	+200	Oakland, Calif.	7	10	+43
Appleton, Wis.	7	20	+186	Norfolk, Va.	5	7	+40
Portland, Maine	5	14	+180	Battle Creek, Mich.	3	4	+33
South Bend, Ind.	4	11	+175	Long Beach, Calif.	16	20	+25
Indianapolis, Ind.	6	14	+133	Newport News area, Virginia	4	5	+25
Nashville, Tenn.	6	14	+133	Seattle, Wash.	9	11	+22
Wichita, Kans.	13	30	+131	La Fayette, Ind.	5	6	+20
Augusta, Ga.	6	13	+117	Baltimore, Md.	3	3	0
Detroit, Mich.	10	20	+100	Quincy, Ill.	6	6	0
Oklahoma City, Okla.	15	30	+100	Pittsburgh, Pa.	9	8	-12
Atlanta, Ga.	14	26	+86	Corpus Christi, Tex.	9	5	-44
Marion, Ohio.	8	14	+85	Los Angeles, Calif.	16	8	-50
Fort Smith, Ark.	17	31	+82	San Francisco, Calif.	10	4	-60
Dayton, Ohio	3	5	+67	Kalamazoo, Mich.	3	1	-67
Wichita Falls, Tex.	6	10	+67	Brockton, Mass.	3	(1)	(2)
Muskogee, Okla.	13	21	+62	Washington, D. C.	3	(1)	(2)
Glendale, etc., California	12	19	+58	Hackensack, N. J.	3	(1)	(2)
Johnstown, Pa.	7	11	+57	Warren, etc., Ohio.	4	(1)	(2)
Greenville, S. C.	9	14	+56	Des Moines, Iowa.	5	(1)	(2)
Macon, Ga.	11	17	+55	Washington, Pa.	14	(1)	(2)
Terre Haute, Ind.	4	6	+50				

1 Less than ½ of 1 percent.

2 Not ascertainable.

TABLE 4.—Comparison of the percent of unemployment among all migrant workers and among migrant workers 45 years of age and over

City and State	Percent unemployed, all workers	Percent unemployed, workers 45 years and over	Percent by which (b) exceeds (a)	City and State	Percent unemployed, all workers	Percent unemployed, workers 45 years and over	Percent by which (b) exceeds (a)
	(a)	(b)	(c)		(a)	(b)	(c)
Washington, D. C.	3	10	+233	Augusta, Ga.	6	8	+33
Kalamazoo, Mich.	3	8	+17	Macon, Ga.	11	14	+27
Newburgh, N. Y.	9	22	+144	Newport News area, Virginia	4	5	+25
Hackensack, N. J.	3	7	+133	South Bend, Ind.	4	5	+25
Saginaw, Mich.	5	11	+120	Washington, Pa.	14	17	+21
Dayton, Ohio	3	6	+100	La Fayette, Ind.	5	6	+20
Brockton, Mass.	3	6	+100	Glendale, etc., California	12	14	+17
Greenville, S. C.	9	17	+89	Appleton, Wis.	7	8	+14
Marion, Ohio	8	7	+88	Los Angeles, Calif.	16	18	+13
San Diego, Calif.	9	17	+89	Corpus Christi, Tex.	1	1	+11
Johnstown, Pa.	7	13	+86	Muskogee, Okla.	9	10	+8
Nashville, Tenn.	6	11	+83	Burlington, Iowa.	3	3	0
Pittsburgh, Pa.	9	16	+78	Oakland, Calif.	7	7	0
Warren, etc., Ohio	4	7	+75	Bridgeport, Conn.	4	4	0
Terre Haute, Ind.	4	7	+75	St. Louis, Mo.	16	16	0
Battle Creek, Ind.	3	5	+67	Long Beach, Calif.	16	23	+44
Quincy, Ill.	6	9	+50	Des Moines, Iowa.	5	7	+40
Houston, Tex.	11	16	+45	Detroit, Mich.	10	14	+40
Long Beach, Calif.	16	23	+44	San Francisco, Calif.	10	14	+40
Norfolk, Va.	5	4	+40	Portsmouth, Va.	5	7	+40
Wichita, Kans.	13	9	-31	Fort Smith, Ark.	17	23	+35
Atlanta, Ga.	14	9	-33	Seattle, Wash.	9	[12]	+33
Portland, Maine	5	2	-60	Baltimore, Md.	3	4	+33
Philadelphia, Pa.	8	1	-87	Oklahoma City, Okla.	15	20	+33
Bloomfield, N. J.	2	(1)	(2)				
Indianapolis, Ind.	6	(1)	(2)				
Bristol, Conn.	2	(1)	(2)				

1 Less than ½ of 1 percent.

2 Not ascertainable.

TABLE 5.—Race of migrants
[Ranked by the proportion of Negroes]

City and State	All migrants	Negro	White	Other	City and State	All migrants	Negro	White	Other
Appleton, Wis.	100	0	100	0	St. Louis, Mo.	100	3	97	0
Bloomfield, N. J.	100	0	100	0	Newburgh, N. Y.	100	4	96	0
Des Moines, Iowa	100	(1)	100	0	Indianapolis, Ind.	100	4	96	0
Portland, Maine	100	(1)	100	0	Detroit, Mich.	100	4	96	(1)
Seattle, Wash.	100	(1)	100	(1)	Warren, etc., Ohio	100	4	96	0
Burlington, Iowa	100	(1)	100	0	Haekensack, N. J.	100	4	96	0
San Francisco, Calif.	100	(1)	100	(1)	Dayton, Ohio	100	5	95	0
Marion, Ohio	100	(1)	100	0	Greenville, S. C.	100	5	95	0
Brockton, Mass.	100	(1)	100	0	Wichita Falls, Tex.	100	5	93	2
Bristol, Conn.	100	(1)	100	0	Philadelphia, Pa.	100	6	94	0
Fort Smith, Ark.	100	1	99	0	Corpus Christi, Tex.	100	6	84	10
Long Beach, Calif.	100	1	99	(1)	Johnstown, Pa.	100	6	94	0
Glendale, etc., California	100	1	99	(1)	Washington, D. C.	100	7	93	0
San Diego, Calif.	100	1	99	(1)	Houston, Tex.	100	7	93	(1)
Bridgeport, Conn.	100	1	99	0	Battle Creek, Mich.	100	7	93	0
Terre Haute, Ind.	100	1	99	0	Pittsburgh, Pa.	100	8	92	0
Oklahoma City, Okla.	100	1	99	0	Nashville, Tenn.	100	8	92	0
South Bend, Ind.	100	2	98	0	Muskogee, Okla.	100	10	90	0
Wichita, Kans.	100	2	98	0	Washington, Pa.	100	10	90	0
Saginaw, Mich.	100	2	98	0	Baltimore, Md.	100	11	89	0
Quincy, Ill.	100	2	98	0	Norfolk, Va.	100	14	86	0
Los Angeles, Calif.	100	2	97	1	Atlanta, Ga.	100	16	84	0
La Fayette, Ind.	100	2	98	0	Newport News area, Virginia	100	16	84	0
Kalamazoo, Mich.	100	3	97	0	Augusta, Ga.	100	17	83	0
Oakland, Calif.	100	3	97	(1)	Portsmouth, Va.	100	18	82	0
					Macon, Ga.	100	20	80	0

¹ Less than ½ of 1 percent.

TABLE 6.—Proportion of male and female workers in the migrant labor force
[Ranked by the proportion of female workers]

City and State	Total	Female	Male	City and State	Total	Female	Male
Washington, D. C.	100	45	55	Glendale, etc., California	100	17	83
Muskogee, Okla.	100	30	70	Bristol, Conn.	100	17	83
Atlanta, Ga.	100	28	72	Augusta, Ga.	100	17	83
Macon, Ga.	100	28	72	Detroit, Mich.	100	17	83
Greenville, S. C.	100	28	72	Pittsburgh, Pa.	100	17	83
Nashville, Tenn.	100	28	72	Corpus Christi, Tex.	100	17	83
Newburgh, N. Y.	100	28	72	Oakland, Calif.	109	16	84
Quincy, Ill.	100	27	73	Indianapolis, Ind.	100	15	85
Kalamazoo, Mich.	100	26	74	South Bend, Ind.	100	15	85
Los Angeles, Calif.	100	25	75	Portland, Maine	100	15	85
Des Moines, Iowa	100	25	75	Bloomfield, N. J.	100	15	85
Washington, Pa.	100	25	75	Portsmouth, Va.	100	14	86
San Francisco, Calif.	100	25	75	Marion, Ohio	100	14	86
La Fayette, Ind.	100	24	76	Newport News area, Virginia	100	13	87
Appleton, Wis.	100	23	77	Wichita, Kans.	100	13	87
Terre Haute, Ind.	100	22	78	Saginaw, Mich.	100	13	87
Oklahoma City, Okla.	100	22	78	Warren, etc., Ohio	100	13	87
Philadelphia, Pa.	100	22	78	Haekensack, N. J.	100	13	87
Seattle, Wash.	100	22	78	Dayton, Ohio	100	12	88
St. Louis, Mo.	100	21	79	Fort Smith, Ark.	100	12	88
Brockton, Mass.	100	21	79	San Diego, Calif.	100	12	88
Battle Creek, Mich.	100	20	80	Wichita Falls, Tex.	100	11	89
Norfolk, Va.	100	20	80	Burlington, Iowa	100	10	90
Houston, Tex.	100	19	81	Baltimore, Md.	100	10	90
Bridgeport, Conn.	100	18	82	Johnstown, Pa.	100	10	90
Long Beach, Calif.	100	18	82				

TABLE 7.—Proportion of migrant workers engaged in agriculture and in other industries at their last residence

[Ranked by the proportion in Agriculture]

City and State	All workers	In agriculture	In other occupations	City and State	All workers	In agriculture	In other occupations
Philadelphia, Pa.	100	2	98	Greenville, S. C.	100	9	91
Hackensack, N. J.	100	2	98	Wichita Falls, Tex.	100	9	91
Brockton, Mass.	100	2	98	Corpus Christi, Tex.	100	10	90
Johnstown, Pa.	100	3	97	Fort Smith, Ark.	100	11	89
Washington, Pa.	100	3	97	Augusta, Ga.	100	11	89
Newburgh, N. Y.	100	3	97	Quincy, Ill.	100	12	88
Bridgeport, Conn.	100	4	96	Battle Creek, Mich.	100	12	88
Washington, D. C.	100	4	96	Marion, Ohio	100	13	87
Bloomfield, N. J.	100	4	96	Houston, Tex.	100	13	87
Terre Haute, Ind.	100	5	95	La Fayette, Ind.	100	13	87
Des Moines, Iowa	100	5	95	Portsmouth, Va.	100	14	86
Portland, Maine	100	5	95	San Diego, Calif.	100	14	86
Pittsburgh, Pa.	100	5	95	Atlanta, Ga.	100	14	86
San Francisco, Calif.	100	5	95	Dayton, Ohio	100	14	86
South Bend, Ind.	100	7	93	Glendale, etc., California	100	15	85
Warren, etc., Ohio	100	7	93	Indianapolis, Ind.	100	15	85
Oakland, Calif.	100	7	93	Baltimore, Md.	100	15	85
Appleton, Wis.	100	7	93	St. Louis, Mo.	100	15	85
Long Beach, Calif.	100	8	92	Bristol, Conn.	100	16	84
Kalamazoo, Mich.	100	8	92	Macon, Ga.	100	17	83
Seattle, Wash.	100	8	92	Norfolk, Va.	100	18	82
Muskogee, Okla.	100	8	92	Wichita, Kans.	100	19	81
Los Angeles, Calif.	100	8	92	Nashville, Tenn.	100	19	81
Saginaw, Mich.	100	9	91	Newport News area, Virginia			
Burlington, Iowa	100	9	91		100	20	80
Oklahoma City, Okla.	100	9	91	Detroit, Mich.	100	21	79

TABLE 8.—Average distance traveled by migrant workers

City and State	Average distance	City and State	Average distance
	<i>Miles</i>		<i>Miles</i>
Fort Smith, Ark.	130	Kalamazoo, Mich.	95
Glendale, etc., California	1,190	Saginaw, Mich.	90
Los Angeles, Calif.	1,270	St. Louis, Mo.	160
Long Beach, Calif.	1,070	Bloomfield, N. J.	65
Oakland, Calif.	350	Hackensack, N. J.	60
San Diego, Calif.	1,100	Newburgh, N. Y.	70
San Francisco, Calif.	300	Dayton, Ohio	130
Bristol, Conn.	145	Marion, Ohio	90
Bridgeport, Conn.	115	Warren, etc., Ohio	115
Washington, D. C.	290	Muskogee, Okla.	85
Atlanta, Ga.	90	Oklahoma City, Okla.	120
Augusta, Ga.	100	Johnstown, Pa.	90
Macon, Ga.	70	Philadelphia, Pa.	80
Quincy, Ill.	85	Pittsburgh, Pa.	100
Indianapolis, Ind.	95	Washington, Pa.	100
La Fayette, Ind.	70	Greenville, S. C.	70
South Bend, Ind.	110	Nashville, Tenn.	85
Terre Haute, Ind.	85	Corpus Christi, Tex.	240
Burlington, Iowa	140	Houston, Tex.	175
Des Moines, Iowa	155	Wichita Falls, Tex.	160
Wichita, Kans.	135	Newport News area, Virginia	150
Portland, Maine	100	Norfolk, Va.	170
Baltimore, Md.	170	Portsmouth, Va.	190
Brockton, Mass.	60	Seattle, Wash.	260
Battle Creek, Mich.	125	Appleton, Wis.	75
Detroit, Mich.	340		

TABLE 9.—Age of migrant workers

¹ [Ranked by proportion of workers under 20 years]

City and State	Percent distribution				Median age	City and State	Percent distribution				Median age
	All work-ers	Under 20 years	20-44 years	45 years or over			All work-ers	Under 20 years	20-44 years	45 years or over	
Brockton, Mass.....	100	(¹)	76	24	31.1	Pittsburgh, Pa.....	100	10	80	10	28.9
Washington, Pa.....	100	3	73	24	30.6	San Diego, Calif.....	100	10	80	10	27.2
Burlington, Iowa.....	100	4	73	23	33.7	Indianapolis, Ind.....	100	10	78	12	29.2
Newburgh, N. Y.....	100	4	79	17	33.9	Houston, Tex.....	100	10	78	12	29.1
Des Moines, Iowa.....	100	5	83	12	29.7	Augusta, Ga.....	100	10	73	17	30.1
Oakland, Calif.....	100	6	79	15	31.7	Newport News area, Virginia.....	100	11	82	7	26.3
Muskogee, Okla.....	100	6	78	16	31.6	Washington, D. C.....	100	11	80	9	26.1
San Francisco, Calif.....	100	6	77	17	32.3	Battle Creek, Mich.....	100	11	77	12	29.2
Portland, Maine.....	100	6	76	18	32.3	Greenville, S. C.....	100	11	80	9	26.0
Warren, etc., Ohio.....	100	6	76	18	32.6	Johnstown, Pa.....	100	11	76	13	32.5
Marion, Ohio.....	100	7	80	13	29.7	St. Louis, Mo.....	100	11	72	17	30.8
Wichita Falls, Tex.....	100	7	78	15	32.5	Atlanta, Ga.....	100	12	79	9	28.8
Corpus Christi, Tex.....	100	7	77	16	31.9	Glendale, etc., Califor- nia.....	100	12	80	8	26.4
Hackensack, N. J.....	100	6	77	17	31.8	Dayton, Ohio.....	100	12	78	10	27.7
Los Angeles, Calif.....	100	8	78	14	29.9	Macon, Ga.....	100	12	76	12	28.1
Nashville, Tenn.....	100	8	82	10	29.6	Baltimore, Md.....	100	12	77	11	27.5
Philadelphia, Pa.....	100	8	81	11	29.7	La Fayette, Ind.....	100	12	76	12	27.0
Oklahoma City, Okla.....	100	8	79	13	30.5	Kalamazoo, Mich.....	100	12	75	13	28.7
South Bend, Ind.....	100	8	78	14	31.7	Seattle, Wash.....	100	12	74	14	27.8
Long Beach, Calif.....	100	8	78	14	29.5	Detroit, Mich.....	100	13	77	10	30.4
Fort Smith, Ark.....	100	8	72	20	32.8	Bridgeport, Conn.....	100	13	78	9	27.0
Portsmouth, Va.....	100	9	80	11	29.4	Wichita, Kans.....	100	14	80	6	24.9
Saginaw, Mich.....	100	9	80	11	29.4	Appleton, Wis.....	100	14	72	14	29.3
Norfolk, Va.....	100	9	80	11	29.1	Bristol, Conn.....	100	16	78	6	25.2
Terre Haute, Ind.....	100	9	76	15	32.1						
Bloomfield, N. J.....	100	9	75	16	29.3						
Quincy, Ill.....	100	9	74	17	31.4						

¹ Less than 1/2 of 1 percent.

TABLE 10.—Habitable rental vacancy rates¹ and percent of workers migrating without their families

[Ranked by habitable vacancy rates]

City and State	Vacancy rate	Percent without families	City and State	Vacancy rate	Percent without families
Bristol, Conn.....	0.2	60	Seattle, Wash.....	1.3	13
Warren, etc., Ohio.....	.3	33	Atlanta, Ga.....	1.3	18
Bridgeport, Conn.....	.4	44	Corpus Christi, Tex.....	1.3	5
Dayton, Ohio.....	.5	26	San Diego, Calif.....	1.4	27
Macon, Ga.....	.5	23	St. Louis, Mo.....	1.5	26
Baltimore, Md.....	.5	38	Augusta, Ga.....	1.6	15
Hampton Roads area, Vir- ginia.....	.5	21	Wichita, Kans.....	1.8	12
Burlington, Iowa.....	.7	31	Des Moines, Iowa.....	1.9	8
South Bend, Ind.....	.7	21	Long Beach, Calif.....	2.0	11
Indianapolis, Ind.....	.8	16	Portland, Me.....	2.1	7
Oakland, Calif.....	1.0	4	Kalamazoo, Mich.....	2.1	7
Pittsburgh, Pa.....	1.0	18	Nashville, Tenn.....	2.4	10
La Fayette, Ind.....	1.1	22	Terre Haute, Ind.....	2.7	15
Philadelphia, Pa.....	1.2	29	Wichita Falls, Tex.....	3.0	10
Washington, D. C.....	1.2	33	Houston, Tex.....	3.0	8
Saginaw, Mich.....	1.2	11	Los Angeles, etc., California.....	3.1	25
Battle Creek, Mich.....	1.2	9	San Francisco, Calif.....	4.4	10
			Oklahoma City, Okla.....	4.4	3

¹ Number of vacant rental units in good condition per 100 units in the city.

TABLE 11.—*Living arrangements of multiperson migrant families*

[Ranked by the proportion of families occupying a separate dwelling]

City and State	Percent distribution					City and State	Percent distribution				
	All families	Separate dwelling	Sharing a dwelling	In hotels	In tourist and trailer camps		All families	Separate dwelling	Sharing a dwelling	In hotels	In tourist and trailer camps
Wichita Falls, Tex.	100	32	60	(1)	8	Philadelphia, Pa.	100	69	30	1	0
Johnstown, Pa.	100	44	56	(1)	(1)	Glendale, etc., California.	100	70	25	(1)	5
Bridgeport, Conn.	100	48	52	(1)	0	Atlanta, Ga.	100	70	30	(1)	0
Greenville, S. C.	100	48	52	0	0	Seattle, Wash.	100	70	25	2	3
Washington, Pa.	100	48	52	0	0	Quincy, Ill.	100	70	30	(1)	0
Marion, Ohio.	100	50	49	(1)	1	Los Angeles, Calif.	100	72	27	(1)	1
Burlington, Iowa.	100	51	32	(1)	17	Macon, Ga.	100	72	28	0	0
San Diego, Calif.	100	52	34	4	10	Newburgh, N. Y.	100	75	23	(1)	2
Warren, etc., Ohio.	100	53	32	(1)	15	Hackensack, N. J.	100	75	25	0	0
Kalamazoo, Mich.	100	56	44	0	0	Oakland, Calif.	100	77	21	(1)	2
Baltimore, Md.	100	58	40	0	2	Long Beach, Calif.	100	80	16	1	3
Portsmouth, Va.	100	58	40	(1)	2	Saginaw, Mich.	100	80	15	(1)	5
Wichita, Kans.	100	59	39	1	1	St. Louis, Mo.	100	81	18	1	0
Battle Creek, Mich.	100	59	41	(1)	0	Bloomfield, N. J.	100	82	18	0	0
Washington, D. C.	100	60	39	1	0	San Francisco, Calif.	100	83	17	(1)	0
Detroit, Mich.	100	60	36	(1)	4	Ft. Smith, Ark.	100	84	15	(1)	1
Pittsburgh, Pa.	100	60	32	1	7	La Fayette, Ind.	100	84	16	(1)	0
Dayton, Ohio.	100	60	38	1	1	Des Moines, Iowa.	100	86	11	0	3
Augusta, Ga.	100	61	39	0	0	Brookton, Mass.	100	86	14	0	0
Bristol, Conn.	100	62	34	0	4	Oklahoma City, Okla.	100	88	11	(1)	1
Newport News area, Virginia.	100	63	36	0	1	Nashville, Tenn.	100	88	12	(1)	(1)
Corpus Christi, Tex.	100	64	22	0	14	Muskogee, Okla.	100	89	10	(1)	1
Norfolk, Va.	100	65	34	(1)	1	Terre Haute, Ind.	100	89	11	(1)	0
Indianapolis, Ind.	100	66	34	(1)	0	Appleton, Wis.	100	91	9	0	0
South Bend, Ind.	100	67	32	1	0						
Portland, Maine.	100	69	31	(1)	(1)						

1 Less than ½ of 1 percent.

TESTIMONY OF HOWARD B. MYERS—Resumed

MR. MYERS. For the second time in 10 years, the United States is experiencing a sharp increase in worker migration. It is true that most war-production centers are still able to meet their labor needs largely by drawing on local sources of supply, but in an increasing number of areas these local sources are running low and a growing stream of migrants is coming in.

SCOPE OF SURVEYS

This series of studies, which we undertook in the fall of last year, were designed to show how many workers and how many persons had moved to the area during the past year, where they had come from, what types of people they were, the occupations and industries in which they had been employed, their success in finding jobs after they migrated, and the extent to which they shifted to new occupations or new industries.

The surveys covered civilian workers only and no attempt was made to get information on workers who had left the area during the year.

Now, before presenting some of the findings of these studies, I should like to point out that workers from out of the city are of two types—commuters and migrants.

War industries located near great population centers—for example, those in Ravenna, Ohio—are frequently able to meet a large part of their labor needs by employing workers from neighboring areas who commute daily to and from the factories. Industries in more sparsely settled areas—an illustration is Burlington, Iowa—must depend largely on migrant workers.

The availability of commuters thus has a pronounced effect on defense migration. The surveys did not attempt to measure the extent to which commuters supplemented or substituted for migration to war-producing centers.

Migration to war-industry towns has by no means been restricted to war workers. Roughly speaking, one nondefense migrant has moved into a defense town for each worker who has secured a war job.

Mr. CURTIS. Have those nondefense migrants gotten jobs?

Mr. MYERS. A considerable portion have.

Mr. CURTIS. In what type of work?

Mr. MYERS. Either in the service industries in the area, or in jobs not directly related to the defense program, such as domestic service. Some have been unemployed and the percentage of unemployed of that group has been larger than for the war workers.

The CHAIRMAN. Are those nondefense workers from industrial areas?

Mr. MYERS. For the most part they are from industrial areas, from the cities.

The CHAIRMAN. Proceed.

MIGRATION LESS THAN ANTICIPATED

Mr. MYERS. By and large, migration to defense areas has been smaller than a good many of the more excited newspaper articles have suggested. That is not to say that recent migration has not been very large in some areas.

During the year following October 1940 more than 150,000 persons moved into Los Angeles County, more than 50,000 to Washington, D. C., and more than 40,000 to Seattle, Wash.

These are exceptional cases.

In half of the 51 cities surveyed the migration rate has been 5 percent of the total resident population, or less, and in only 10 of the 51 cities has it risen to 10 percent or more.

The first chart I have here shows the migrant rates for all cities included in the survey.¹

At the top of the chart are the hottest war boom cities: San Diego, Calif.; Wichita, Kans.; Newport News, Va.; Burlington, Iowa; Long Beach, Calif.; and so on.

The active construction centers also are high on the chart. Note particularly Burlington, Iowa; Corpus Christi, Tex.; and Fort Smith, Ark. Those are cities in which large-scale construction programs were in progress at the time the survey was made.

At the bottom of the chart are some cities with little or no war-stimulated activity, such as Newburgh, N. Y.; Washington, Pa.; and Brockton, Mass. Many, however, are active war centers which have been able to expand production without a great influx of workers.

¹ See chart 1, p. 10324A.

St. Louis, Mo., for example, has had war contracts valued at more than a quarter of a billion dollars and is seventh from the bottom; Pittsburgh is third from the bottom; and Philadelphia with a billion dollars in contracts is at the bottom.

Most of these cities had large numbers of resident unemployed workers when the contracts were received, and in most of these communities unemployment is still fairly large.

Our estimates show that approximately two and a quarter million persons, including about 1,000,000 workers living in cities of over 25,000 population, had moved to those cities after October 1, 1940. The over-all migrant rate for cities of over 25,000 population was 4.3 percent.

It is important to note that these figures refer to in-migration only, and not to net population gain.

Mr. CURTIS. To what extent do you have figures on where these people came from?

Mr. MYERS. We have data on that and I have a series of maps here I should like to present in a few moments which show the movements in six of the cities.¹

MEANING OF IN-MIGRATION

Mr. SPARKMAN. May I ask what you mean by "in-migration," with reference to these particular cities? Does it mean crossing State lines or coming from a certain distance away from that point?

Mr. MYERS. It means that on October 1, 1940, they lived outside the county or the corporate limits, usually the county. Then on the date of our survey, which was September, October, or November, 1941, they lived inside the corporate limits of the area.

Mr. SPARKMAN. Suppose they were working there and commuting from a distance 30 or 40 or 50 miles away?

Mr. MYERS. We would not cover them and, as I suggested a moment ago, that group in some areas is quite important. In Ravenna, Ohio, there evidently has been a great deal of commuting. We cannot reach those people in the surveys without covering a tremendously broad area.

It is pretty clear that in some of the cities—for example, Terre Haute, Ind.—there has been a net population loss during the period because some workers have moved out while other workers were moving in. Even from the most active cities there was undoubtedly some out-migration during the period.

The surveys have not measured that out-movement.

The surveys indicate that the rate of migration has been increasing in most areas. It is probable that migration will grow even more rapidly during the coming months as it is stimulated by the marked intensification of the war effort, by the absorption of the resident labor supply in certain "hot" areas, and by rapidly growing priorities unemployment. During the first year of the war, migration should exceed by a considerable margin the volume during the pre-war period.

It is very pleasing to report that defense migration thus far has been strikingly successful on the whole.

The CHAIRMAN. You mean in securing jobs?

Mr. MYERS. Yes.

¹ See charts 5-10, pp. 10324E-10324J.

The CHAIRMAN. That was in contrast to what happened before the war. Isn't that true?

SHARP CONTRAST BETWEEN PRESENT AND PAST MIGRATIONS

Mr. MYERS. There is a sharp contrast between the migration of the depression period and the present movement, both in the types of persons moving and their success in getting jobs, and in the public reaction to the move.

The CHAIRMAN. Let me interrupt, Mr. Myers. In other words, you don't find now the attempts to keep them out like they did before. The gates are open now, are they not?

Mr. MYERS. Quite. Instead of the border controls and restrictive legislation of the depression period, we now have situations in many areas where migration is being actively encouraged both through advertising, through various types of local efforts and in a sense through the defense-housing and community-facilities program, as well as the clearance activities of the United States Employment Service.

There has been a marked shift in public reaction as the war demands for labor have grown.

In half of the areas we surveyed the unemployment rate for all migrant workers is 7 percent or less; in one-fourth of the areas it is 4 percent or less.

The second chart shows the unemployment rates for each of the surveyed cities.¹

Important war-industry towns fall at both ends of this array of cities. The most striking factor is the relatively small proportion of unemployment in all cities, shown by the dark sections on the chart. The light sections represent the number of migrants that have jobs. The highest unemployment is shown for Fort Smith, Ark., where large numbers of workers came in in anticipation of the start of work on a new Army camp. Very high unemployment was found in Long Beach, Calif., and Wichita, Kans.

TIME OF MAKING SURVEY DISCUSSED

Mr. CURTIS. Wouldn't the day you happened to take your survey make a big difference on that?

Mr. MYERS. It would make some difference. For example, in Fort Smith the contract had been let for the Army camp; work had not yet started in any considerable volume; but workers informed that work was beginning had gone in in advance of the start of the construction.

Mr. CURTIS. Intending to get there ahead of time?

Mr. MYERS. Intending to get there ahead of time and hoping to get jobs.

Particularly in the case of these construction towns does the unemployment rate depend on the time at which the survey is taken. The list here contains illustrations of both types of situations. Some we got just before work started and some at the peak of the construction activities, and a few after the construction activity was mostly over.

¹ See chart 2, p. 10324B.

In San Francisco, San Diego, Seattle, and Corpus Christi unemployment was relatively high, although those towns are very active defense centers, indicating that workers were coming in faster than they could be absorbed, but in Bristol, Burlington, Washington, D. C., Baltimore, South Bend, Ravenna, and Bridgeport, migrant unemployment was exceptionally low.

Not only have the great majority of migrants got jobs but large numbers have better jobs than they held before they migrated.

Mr. CURTIS. What do you mean by "better jobs"?

Mr. MYERS. More continuous employment, a higher occupational skill or higher wages.

Mr. CURTIS. But they are paying more for living expenses, are they not?

Mr. MYERS. In most cases I am sure they are.

We have no accurate figures on that, but the data we have on rentals and other items indicate that they undoubtedly are paying more.

The CHAIRMAN. Mr. Myers, this committee, as you probably know, has traveled about 50,000 miles throughout the United States, and, of course, we came in contact with the dilapidated means of transportation of migrants, all of them practically broke and penniless.

I suppose with this war program they can finance their transportation better than they did before the war.

Mr. MYERS. Yes, sir; I think that is true on the average.

The CHAIRMAN. They have jobs in sight.

COST OF MIGRATING

Mr. MYERS. It still leaves a serious problem, Congressman.

Take an example of an unemployed worker migrating to a defense town. A good deal of the expense involved in migration has to be met, of course, before or during the time he makes the move. I think the problem is one of getting money to make the move, to travel by train or automobile or what not to the new town and to support himself, or himself and his family, for a period until a job is secured.

The CHAIRMAN. I take it the majority travel by automobile, don't they?

Mr. MYERS. I think that is the most common method of transportation.

The CHAIRMAN. The rubber shortage and tire shortage will be quite a problem, won't it?

Mr. MYERS. It will make it an extremely serious problem. The rubber shortage will affect migration in still another way. As tires get scarce and wear out, the commuters who have been working in towns like Ravenna and driving 30 to 50 miles a day, will be unable to commute. That will probably mean that some workers will have to move into the area and thus increase congestion over the present amount.

As tires get short, migration will have to be substituted for commuting to a considerable extent.

Mr. SPARKMAN. Mr. Myers, I know of one instance in which a recommendation has been made by the State O. P. M. office that commuters' cars such as you mentioned before, be given the right to

purchase tires provided they carry as many as six persons to the car. It seems to me that might be worked out in such a way as to give some relief to the problem that you anticipate.

Mr. MYERS. I think it is clear that the supplying of tires to commuting defense workers is an important need.

I gather also that the supply of rubber is extremely short and the question of the extent to which rubber can be supplied for commuting to the defense industries is questionable.

Some groups have fared better than others in this migration. Young, white, skilled and semiskilled males have been most successful. Women, Negroes, unskilled workers, inexperienced workers and workers over 45 have been least successful.

NEGRO MIGRANTS

As shown by chart 3, Negroes make up a very small proportion of the migrants in most areas.¹ In Macon, Ga., the area into which the largest proportion of Negroes moved, only 20 percent of the migrants were Negroes. Augusta and Atlanta, both southern towns, naturally rank high.

As you will note, in a majority of towns considerably less than 1 percent of the migrants are Negroes, and in many towns the proportion is practically negligible.

Mr. CURTIS. In Macon, Ga., do they get 20 percent of the jobs?

Mr. MYERS. Negroes are one of the least successful among migrant groups in terms of getting jobs. If the unemployment among whites is 5 percent, it may be 10, 15, or 20 percent or more among Negroes.

The situation here is in marked contrast to that developed during the last World War. I think it is probable that, as the demands for labor grow, this picture will change and a much larger number of Negroes will migrate.

Chart 4 indicates that, contrary to popular impression, relatively small proportions of the migrants are coming from agriculture.² The highest proportion is in Detroit, about 20 percent.

In most cases the proportion coming from agriculture is 10 percent or less.

Mr. CURTIS. By that do you mean "actual farmers?"

Mr. MYERS. Actual farmers and farm workers. The proportion coming from the open country is about the same, as you would expect.

Mr. CURTIS. What do you mean by "open country?"

Mr. MYERS. Those coming from outside of the villages, towns, or cities.

Mr. CURTIS. Well, have you got a chart on a small country town of 5,000 or less?

Mr. MYERS. No; I don't have. The movement here is mostly a city movement—towns of over 5,000.

We find that the village and open-country people who migrate come mostly from the villages and to a relatively small extent from farm houses and open country. The smallness of this movement is rather surprising in view of our large agricultural labor reserve, and it is probable it also will grow as the demand for labor increases.

¹ See chart 3, p. 10324c.

² See chart 4, p. 10324d.

DISTANCES TRAVELED BY MIGRANTS

Few of the migrants have traveled very far. In most centers the average distance is less than 125 miles. In California cities there are outstanding exceptions to the general rule.

In order to illustrate some of the movements I have had charts made of movements to six of these towns which illustrate the types of situations that arise.¹ These four maps that I have out on Bridgeport, Philadelphia, Oklahoma City, and St. Louis illustrate the short distance traveled by most migrants. Each dot or cross represents a migrant in the sample. A dot means a migrant from an urban area and a cross means a migrant from a rural area. For example, Philadelphia migrants moved predominantly from New York City, Scranton, and Wilkes-Barre.

Mr. CURTIS. Each dot or cross is a migrant?

Mr. MYERS. Yes. You see, the sample was 270. That would be a small proportion of the total migrants but the distribution of all migrants would show the same picture as the sample, of course.

Bridgeport migrants came very largely from the same areas, with a few migrants scattered around New England. Notice the large proportions coming from Scranton and Wilkes-Barre and the city of New York.

Mr. CURTIS. Is that Pennsylvania migration from the abandoned mine area?

Mr. MYERS. It is, yes. And one of the interesting points about these first two maps is the extent to which migration is coming from the depressed mining area.

Both towns, Scranton and Wilkes-Barre, which are in the depressed coal area of Pennsylvania, are heavily represented by these migrants.

In St. Louis most came from southern Illinois and southeastern Missouri. St. Louis, incidentally, is a good example of the rural movement. About 40 percent of the migrants in St. Louis are from rural areas, which is one of the highest proportions we found in any of the cities surveyed.

The CHAIRMAN. But going into California they come from longer distances?

Mr. MYERS. Much longer—1,000 miles in many instances. In these other cases the movement is 125 miles or less.

I have a chart here on Los Angeles which illustrates the movement to west coast cities. In Seattle you will observe a good deal more long-range movement. Most of the migrants, however, still come from within the State, with fairly heavy movements from California, and this very interesting movement through here along the northern border [indicating].

Mr. CURTIS. Doesn't that prove that they follow the railroads and the highways? :

Mr. MYERS. I think that is one of the major reasons. There is a good deal of economic relationship in this northern tier of States, as you know.

¹ See charts 5-10, pp. 10324E-10324F.

MIGRANTS TO LOS ANGELES

Now, in Los Angeles we have one of the few exceptions to the general rule that the migrants have been drawn from the fairly immediate neighborhood. Most of these Los Angeles migrants originated in a strip running from the Twin Cities to Dallas.

The CHAIRMAN. The Mississippi Valley, in other words?

Mr. MYERS. Sioux City; Lincoln, Nebr.; St. Joseph, Mo.; Kansas City, Mo.; St. Louis, Mo.; Oklahoma City and Tulsa, Okla.

The CHAIRMAN. What about Texas?

Mr. MYERS. A considerable number came from Texas, particularly around Dallas.

You find movements from Chicago and New York. Oklahoma, where there was a good deal of migration a few years ago, is not outstanding as compared to the other States in the California movement. That is a marked difference from the depression days.

Mr. SPARKMAN. When we were in Los Angeles the personnel director of one of the great aviation manufacturing companies described to us their methods of recruiting labor. Don't you think that the fact that they shop for their labor and actually send out representatives and work in the Midwest, as he testified, is the cause of the large migration from there? In these other areas, migration was purely voluntary, without any urging or encouragement, whereas in the Los Angeles-San Diego area, particularly the Los Angeles aviation area, the help was pulled in.

Mr. MYERS. I think that is a factor.

The CHAIRMAN. Don't you give the sunshine any credit for it?

Mr. MYERS. I don't know, Mr. Congressman.

Mr. CURTIS. The Mountain States don't have many people. You have to have somebody living in a place before they can leave.

Mr. MYERS. That is true. There have been fewer defense contracts in this area as compared to population, so you have a freer population here than you tend to have in the eastern section of the country.

The CHAIRMAN. Nevada, that large State adjoining California, has only a little over 100,000 people in the State.

Mr. MYERS. Yes, sir.

Mr. CURTIS. Then they are going to California in spite of the climate and not because of it.

Mr. MYERS. I don't know the answer to that one, Congressman.

Now, this Philadelphia-Bridgeport situation illustrates the movement from depressed areas, which I think is quite significant. Of course, the depressed coal area has recently got a new shock through the limitations on the production of silk, which have thrown out a number of silk workers in that same area.

AGE OF MIGRANTS

Finally, the maps show that the great bulk of recent migration has come from the cities, rather than from the rural areas.

Now, as a group, migrants are young, as chart No. 11 shows.¹ In half of the cities the average age of all migrant workers is 29 years or less, and in none of the cities does it rise as high as 35 years.

¹ See chart 11, p. 10324k.

The series of dots shows that the median age in each city sticks in most cases pretty close to 30 years. The shaded portions show the proportion under 20, and the dotted section the proportion over 45. You will see that the great bulk of the migrants are between 20 and 45.

The CHAIRMAN. They are within the draft age, aren't they?

Mr. MYERS. Yes, sir.

Dr. LAMB. On your small chart you show the median age, which seems to run quite low.

Mr. MYERS. Yes; the median age is 29 years or under in half of the 51 cities, and in no city does it rise as high as 35 years.

Mr. CURTIS. Are you referring to men and women?

Mr. MYERS. This covers both men and women.

In most situations the average age of the women is, of course, lower than the men, but in few, if any, towns is the average age of the men appreciably above 35 years.

HOUSING SHORTAGES AND THE MIGRANT WORKER

Large numbers of migrant workers leave their families behind when they move to these war-industry towns. In half of the cities the proportion is 15 percent or more. This, in part, is caused by the serious housing shortages.

Chart 12 shows a striking relationship between the proportion of workers leaving their families behind and the availability of housing.¹

The W. P. A. Division of Research has been making a study of housing of workers in defense towns. In many cases these studies were made at about the same time.

This chart shows the number of vacant rental units in good condition per hundred dwelling units in the city. The proportion runs from about 4½ percent in Oklahoma City and San Francisco, to 1 percent or less in Bristol, Conn.

The other half of the chart shows the percentage of workers who migrated without their families. These are workers who have families but didn't bring them when they moved.

You will notice the strong tendency for the proportion of migrants leaving families behind to rise as the vacancy rate fall. For example, in Bristol the habitable vacancy rate was 0.2 percent and 60 percent of the workers with families had left their families behind.

Now, in Oklahoma City, at the other extreme, where the vacancy rate was 4.5 percent, only 4 percent of the workers had migrated without their families.

There are some exceptions to the general rule but the general tendency, I think, is unmistakable.

The extent of "doubling up" among families, as shown in chart 13, provides a further index of congested housing conditions.² "Doubling up" is common in all areas surveyed, and in half the areas 30 percent of the multiperson families are sharing their homes with other persons, or living in hotels or trailers.

The dark section shows the proportion doubled up and the light section the proportion who have dwelling units in which they live by themselves.

¹ See chart 12, p. 10324L.

² See chart 13, p. 10324M.

The surveys made by W. P. A. show conclusively that considerable population movements have taken place and that migration is growing.

The CHAIRMAN. Do you think it will keep on increasing, Mr. Myers?

Mr. MYERS. I think unquestionably the next year will see a good deal more migration than the last, due to the intensification of war efforts and the shortage of labor supply in some of the very "hot" areas.

INCREASED EMPLOYMENT IN DEFENSE AREAS ANTICIPATED

Mr. CURTIS. I want to ask a question about that. Dr. Davenport told us yesterday that in this calendar year there would be three times as many people employed in defense industries as now, which is a tremendous increase.¹

Mr. MYERS. That is correct.

Mr. CURTIS. In view of the studies you have made over a long period of time, do you have any predictions to make as to where the congestion will be and where these workers are going to come from?

Mr. MYERS. Yes. First, as Dr. Davenport said yesterday, we should expect an increase of 10,000,000 workers in defense industries this year. That means a shift of probably 8,000,000 workers out of nondefense industries, and an increase in total employment of perhaps 2,000,000. That means there is going to be a strong compulsion for people to move. They will be drawn into the areas where production is expanding, and more or less pushed out of the areas where priorities unemployment is severe and production is falling off.

The areas to which they will move, I think, will be primarily the cities along the east coast and the west coast and certain spots in the middle of the country where defense contracts are concentrated.

Mr. CURTIS. Isn't it true the only thing that will lessen the problem of housing facilities and sanitation and all those things, and the only thing that will soften the cruelties of that situation is the extent to which they can decentralize and spread contracts out over the interior of the country, utilizing the small existing establishments?

EFFECT OF DECENTRALIZATION ON MIGRATION

Mr. MYERS. I think it is very important that contracts be decentralized as far as practicable so that the small establishment can be brought into this war effort. That will materially lessen migration, with its attendant problems: housing, lack of community facilities, et cetera—and it should also expedite the war effort.

Mr. CURTIS. Have you made any studies as to the availability of mechanics in these smaller areas where the defense program is not operating?

Mr. MYERS. Yes, sir; we have made some surveys of labor supply. We have not made those on a large enough scale to show the number of mechanics in particular towns or States.

We do know, from the concentration of W. P. A. employment which tends to be in the areas in which there are no defense contracts, and from our other data, that the availability of skilled labor and various types of semiskilled labor is much greater in the areas without defense contracts than in these very "hot" towns.

¹ See p. 10256.

Mr. CURTIS. I think that is all I have.

Dr. LAMB. The papers that you have submitted raise a number of questions and I wonder if you would answer some of these that have not been covered in what you have said so far.

Mr. MYERS. I shall be very pleased to do so.

TOTAL NUMBER OF DEFENSE MIGRANTS

Dr. LAMB. In the first place, you didn't give any round figure for your estimate of the total number of defense migrants during the last year, did you?

Mr. MYERS. Well, I gave the figure of two and a quarter million persons who have moved to cities of 25,000 and over. Some of them are nondefense workers, of course.

Dr. LAMB. Your figure on migrants in the last year is two and a quarter million. What percentage of the population does this cover?

Mr. MYERS. About 40 percent of the total population are in cities of 25,000 and over.

Dr. LAMB. Fifty-odd million at least?

Mr. MYERS. 52,000,000, I think.

Dr. LAMB. Is it your impression that the fact that these people are moving to areas of expansion would mean that this estimate of migrants was approximately complete for the entire country, or do you think that additional numbers should be added to that total of yours?

Mr. MYERS. I think it is clear that the two and a quarter million doesn't represent the total number of migrants for the country. It actually covers only 40 percent of the total population. I don't think I care to estimate the number for the entire country from the data we have.

I think it is true, however, that the greatest movement in the country has been to these larger cities since most of the defense contracts are concentrated there.

Dr. LAMB. It is your impression that the serious drain of workers from rural areas, however, is yet to come?

Mr. MYERS. Yes, I think we will see more of that in the next year than we have in the last.

Dr. LAMB. You have no surveys of cities between 2,500 and 25,000?

Mr. MYERS. Practically none. We covered some satellite cities, a few small places around Los Angeles, and the one or two places, like Ravenna, Ohio.

LADDER OF MOVEMENT FROM COUNTRY TO TOWN

Dr. LAMB. Is it your impression there is something of a ladder of movement from the country to a town of 2,500 or slightly larger, and from there to the larger communities?

Mr. MYERS. There may be such a movement. Our studies wouldn't prove that point one way or the other.

Dr. LAMB. What about previous studies by the W. P. A.?

Mr. MYERS. Some of our earlier studies have suggested that there is such a movement. It is true, however, on the other hand, that relatively few defense contracts have gone to villages and open country, and consequently there would not be the strong stimulus in those areas for in-movement that there is in the larger cities. In cases like Ravenna, as in other towns, we have found a relatively small per-

cent coming from the open country. In Ravenna, I think the figure is 5 percent of the total.

Dr. LAMB. Is that a study of the workers in the powder plants or a study of the workers in the construction period?

Mr. MYERS. That was a study of the workers living in Ravenna and Warren and one or two other neighboring towns.

Dr. LAMB. After production had opened up?

Mr. MYERS. After production had started, yes.

OCCUPATIONAL SHIFTS

Dr. LAMB. Have you any comment to make on the shift of occupations that appears in your tables? A large number of migrant workers appear to have shifted.

Mr. MYERS. Yes; the shift has been largely from agriculture and from the so-called no-job group which did not have jobs at the former residence, and from unskilled workers to manufacturing operatives. There has been some shift from operatives to skilled workers, but it has been smaller. To a considerable extent there has been an upgrading process going on. The unskilled worker graduates to the operative and the operative graduates to the skilled class.

In Bridgeport and Bristol where there has been an extraordinary increase in demand, you find very marked occupational shifts taking place. For example, clerical workers have shifted from offices to operatives in manufacturing establishments.

Dr. LAMB. This would be due in part to the great rise in earning capacity, particularly where overtime exists?

Mr. MYERS. That is true. The earnings would be greater in a situation like that.

Dr. LAMB. To say nothing of the absence of expanding opportunities for the other type of work.

Mr. MYERS. That is right, and that is being stimulated now by priorities which are going to hit white-collar workers, salesmen, and so forth, very hard.

Dr. LAMB. You would expect that a great many of the white-collar workers now being disemployed by the war shut-downs would find their way into the ranks of factory operatives. Have we any records of that in the last World War which would throw light on the subject?

Mr. MYERS. The records of the last World War, of course, are not very complete. I am sure there was some of that movement in the last World War. Offhand, I can't think of any studies made that measure it with any precision.

Dr. LAMB. Of course, the proportionate number of white-collar workers in 1917 and today is greatly in favor of the present time?

Mr. MYERS. That is correct, of course.

Dr. LAMB. With respect to your studies, they are really of migrant workers who have ceased, momentarily, at least, to migrate. They are spot check studies?

DIRECTION OF STUDIES

Mr. MYERS. That is approximately correct. We have not tried to measure the flow of workers through an area, that is, the total number who had been in the area any time, say in the last year.

On the other hand, we do, of course, get somewhere near the proper proportion of the highly mobile group. They have to be somewhere and since we take migrants who came into the area yesterday just as readily and as completely as we do those that came in a year ago, we feel we get about the proper proportion of the group that is merely passing through.

Dr. LAMB. Your records on the number of unemployed would suggest, however, that the unsuccessful migrant to that area, who failed to get a job and moved out, would not be counted, so that the proportion of unemployed, relative to the number of jobs in the area, would not be determined except for the moment, by your studies.

Mr. MYERS. Yes; it may change.

Dr. LAMB. There may be a high turn-over in some places which would not be measured?

Mr. MYERS. Yes; that is correct.

Dr. LAMB. Not turn-over on the job, but turn-over of the migrant, in and out of an area.

Mr. MYERS. Geographic turn-over; yes. Of course, we do get the group that has come in within the last week or 2 or 3 weeks, and there we undoubtedly get those workers who have not yet made an adjustment, not yet got a job. In a situation like Fort Smith, we find a high proportion of unemployment primarily because work has not yet started on the Army camp.

If we made that survey a month or 2 later, we would undoubtedly have found a smaller proportion of unemployment.

Dr. LAMB. You have tabulated the figures on the dates of arrival, so you could make a curve showing the dates of arrival and the proportionate numbers arriving on different dates?

MIGRATION INCREASING

Mr. MYERS. We find that proportion has been increasing.

Dr. LAMB. There is a rise?

Mr. MYERS. A sharp rise. For example, if the in-movement was spread evenly throughout the year we would get 7 or 8 percent each month. We find, in the last months before the survey was taken, that the number of arrivals was more nearly twice that amount, the number running from 12 to 14 percent, and in many cases it is 3 to 4 times the average rate. So the influx in most cities increases as you get nearer to the present date.

Dr. LAMB. In other words, if the rate of movement in the country was small, in the neighborhood of 200,000 per month on the average for the year 1941, toward the end of the year the numbers per month moving in would be approximately 400,000?

Mr. MYERS. In the neighborhood of 400,000. Considerably above the average for the whole period; yes.

Dr. LAMB. Is there any way in your future surveys to check up on the length of time it takes a migrant worker to obtain his job?

Mr. MYERS. We have considered that. It is possible. It does add rather considerably to the cost and complexities of the surveys.

Dr. LAMB. Could you do it on a sample basis in a few places where the numbers coming in are pretty large?

Mr. MYERS. It might be done in a few cases. Of course, the figures we have showing the small volume of unemployment, suggest that in the average situation there isn't a very long time elapsing between the arrival in the area and the securing of a job.

I feel reasonably confident that in the average situation that period is not very long.

It would be quite practicable to get that information. I would, however, be a little hesitant to increase the complexities of the surveys. These 51 communities represented a considerable volume of energy and expenditure.

Dr. LAMB. I appreciate and realize that. I was wondering about a few samples to see how that was working.

Mr. MYERS. That might be done.

EMPLOYMENT OF MIGRANTS

Dr. LAMB. Do you ask how they got jobs? Whether through the employment service or some other way?

Mr. MYERS. Not in the migration surveys. We have asked it in other surveys we have made.

Dr. LAMB. Recently?

Mr. MYERS. Within the last year or year and a half.

Dr. LAMB. What is the result of that inquiry?

Mr. MYERS. We find that a relatively small proportion of the workers secure their jobs through the Employment Service. The surveys I am speaking of are primarily surveys of W. P. A. workers who have got jobs. We know they had a job.

Dr. LAMB. Those would be resident workers for the most part?

Mr. MYERS. Mostly resident workers.

Dr. LAMB. And the practice among employers within a limited area around a community is to hire at the gate? We have found that in our studies around the country.

Mr. MYERS. That is true. As to the migrants, I suspect the situation differs markedly in different areas. I know of areas we have surveyed, for example, in which the employment practice is almost entirely to hire at the gate, and you have to go and stand in line in order to get a job.

In other areas, I am sure a large proportion of the workers are referred through the Employment Service, and my impression is that that practice is growing.

Dr. LAMB. Is it going to be possible for W. P. A. to make additional migration studies during the coming year?

Mr. MYERS. We hope it will be possible. I think it would be an extremely valuable thing to do. The first series of surveys we made coincides almost exactly with the pre-war period. The last surveys were made in the last days of December, and all were made in the 2 or 3 months before war was declared.

There is an opportunity to make a survey showing the situation in the first year of the war.

Dr. LAMB. I hope you will make some in the same communities.

Mr. MYERS. I think we should make a good proportion of them in the same communities. Probably it would be desirable to shift to new communities for some of the surveys.

Whether we can make additional surveys or not depends on the demands on our time for other defense service, and the amount of funds available.

Dr. LAMB. One more question. Have you any check on the stories to the effect that large numbers are leaving California or other west coast States? We have attempted to check that and I have some information on it.

Mr. MYERS. No; the surveys don't provide any information on that point. I have not heard, however, anything indicating that the out-migration there is very large. My own guess would be that certainly there was a very heavy net inflow, but the surveys don't measure out-flow and I have received no reports that indicate that any great amount of that has taken place.

Dr. LAMB. We checked the populations in Farm Security camps and the flow through employment offices and rural areas, and the result seemed to be not material. I wondered what the W. P. A. might have on that.

Mr. MYERS. I don't think we have anything that would provide any conclusive basis for judgment on that.

Dr. LAMB. That is all I have.

Mr. SPARKMAN. Thank you, Mr. Myers. We appreciate the very fine presentation you have given us.

We will take a short recess.

(Short recess.)

Mr. SPARKMAN. Let the committee come to order. Miss Thelma McKelvey of the Labor Division, War Production Board, is next.

TESTIMONY OF THELMA MCKELVEY, LABOR DIVISION, WAR PRODUCTION BOARD, WASHINGTON, D. C.

Mr. SPARKMAN. Our committee has been traveling rather extensively over the country, Miss McKelvey, looking into the labor problem, particularly with reference to its effect on the migration of workers. We have been interested in and concerned with the utilization of the services of women in the war-production effort. Therefore, we are particularly pleased to have you with us this morning to deal with this subject.

I have looked over the prepared statement that you have kindly furnished the committee and I find it of absorbing interest and I want to assure you that it will be incorporated in our record. I want to ask you some questions based upon and prompted by the statement that you have prepared.

(The statement referred to above is as follows:)

STATEMENT BY THELMA MCKELVEY, LABOR DIVISION, WAR PRODUCTION BOARD, WASHINGTON, D. C.

WOMEN IN WAR PRODUCTION

The attack on Pearl Harbor on December 7, 1941, and the formal entrance of the United States into a war of crucial import, not only to this Nation but to the world, precipitated drastic changes in the attitudes of the American people. There is a new unity in the Nation, with all energies and efforts directed toward rapidly increasing production of the essentials to carry on a successful war. A clear-cut recognition now exists of how we must use our resources—materials, manpower, and machines—to supply as quickly as possible to the military services all the material of war, and to insure the proper flow of these implements without delay.

This changed attitude was sharply reflected in planning for the use of reservoirs of labor as yet practically untouched. There was complete agreement by all groups working in the labor supply field that women are an immediate reserve of potential producers which will and must be used as our armed forces are increased and our working forces consequently depleted. In a war period it is imperative that there should be wise use of women in the service fields, in manufacturing, in agriculture, and in government.

The potentialities of women as a source of much needed labor were well established in the United States during World War I. For example, women employed

per 1,000 wage earners in the iron and steel industry rose from 33 (1916) to 95 (after the second draft, 1918), from 85 to 142 in the chemical industry, and from 18 to 114 in the automobile industry. British experience in the present war shows that this trend has been greatly accelerated. Our own Nation is prepared again to demonstrate that women are ready and able to assume their place in industrial production.

Studies indicate that women have been found satisfactory in virtually every type of job ordinarily filled by men. The National Industrial Conference Board, in a report in July 1918, stated: "Experience of employers * * * has clearly demonstrated the practicability of employing women in a large variety of manufacturing operations * * *. Where women were employed in the same work they have equaled or excelled men in respect to output. In some processes their superiority is marked." As demands and inroads on our normal labor resources become more diversified and intense, there will be increased utilization of other labor reserves, of which women are the largest and most acceptable group.

The Federal Government has been in the forefront in promoting increased acceptance of women workers. The President of the United States has on several occasions pointed out the necessity of utilizing fully all of the Nation's labor power, and he particularly emphasized one importance of mobilizing women workers when he referred to "manpower and womanpower" in his telegrams sent on December 19, 1941, to all State Governors, requesting them to merge the State employment services into one national system of public employment offices.

As early as June 1941 the United States Civil Service Commission requested all Government departments to increase their use of women workers to the fullest possible extent by employing women in a greater variety of positions. Moreover, in July 1941, foreseeing great drains on manpower in certain areas, Mr. Sidney Hillman, Associate Director of the Office of Production Management, wrote war contractors urging that more consideration be given to increased use of women workers and outlining the types of work for which women have proved especially adaptable. The War and Navy Departments have pointed out the necessity of using more women workers, not only to increase production, but to release men for service with the armed forces. In January 1942 a variety of positions in Navy shore establishments which had previously been held only by men, were opened to women with scientific or engineering education or with mechanical aptitude.

In a developing program of employment in a national emergency, there appear to be three distinct phases. In the first phase, increased buying power resulting from greater production and employment created an additional demand for workers in occupations traditionally held by women. These include retail sales, clerical and service positions, as well as occupations in consumer manufactures, particularly textiles, food processing, and clothing trades. This condition, starting in the defense centers, became general as the economic effects of defense activities spread through the country. This first phase of increased demand for women workers utilized principally those individuals who normally are a part of the labor market. The country was well into this phase by the spring of 1941.

The second phase was accompanied by a rising wage level and, in highly industrialized areas, an approaching or imminent shortage of qualified male labor. Light mass-production industries, involving relatively simple, high-speed machine operation and assembly work, began to employ women for jobs requiring dexterity, care, and speed with a minimum of strength and craftsmanship. Women have proved very satisfactory, and in some instances superior to men, in such occupations. The United States is well into this phase and in some industries and localities is moving into the third phase.

In the third phase of the cycle, the one in which Great Britain has been since Dunkirk, women enter jobs in trade, services, transportation, and manufacturing that have customarily been held by men. This influx of women into industry releases men for heavier, more exacting factory work, or for service in the armed forces. In this stage, women may even take over factory jobs that traditionally have been considered suitable only for men. Undoubtedly the outbreak of hostilities on December 7 hastened the trend toward this third phase.

The effect of priorities in curtailing civilian production, and the release of the older groups of selectees tended to retard more extensive employment of women in war industries prior to the actual declaration of war, since both measures released large numbers of men for employment. New employment of women was for the most part concentrated in nondefense enterprises, where women took the place of men who migrated to defense jobs or joined the armed forces.

The declaration of war halted the release of older selectees from the armed forces and has accelerated the induction of new age groups and of volunteers. At the same time enormously increased production of supplies is immediately necessary. New construction and the completion of the tooling up and converting process in many industries have made and will make possible the employment of many more workers. All of these activities are depleting the supply of male workers in many areas to such an extent that Government, employers, and organized labor are actively planning for the employment of more women in the near future.

WOMEN AS A RESERVOIR OF LABOR

If we can succeed in using effectively our potentially great force of women workers, we need have no doubt about meeting any labor requirements for war production. Recent 1940 census figures show that of the 50,350,000 women in our population, 14 years of age and over, 12,850,000, or slightly less than one-quarter, were part of the labor force in 1940. This figure included a larger proportion of women in their twenties than of any other age group. Approximately 2,100,000 of the 4,680,000 women in the 21 to 24, inclusive, age group were in the labor force, and the next highest labor force ratio was shown in the 25 to 29 year group, with about 1,992,000 in the labor force out of a population total of 5,174,000.

There were 1,265,538 women 14 and over who reported themselves as "seeking work," of which 950,904 indicated that they were experienced workers. From this number alone can be drawn literally hundreds of thousands for immediate placement in war jobs.

Then there are the 28,551,680 who reported themselves as engaged in their own housework, and another 4,455,971 in school or college. If it becomes necessary to recruit from this group in approximately the same proportion as are now in the labor market, another 8,000,000 could be inducted into a total war effort to meet the service, agricultural and manufacturing needs of our civilian population and the military forces.

In October 1941, 1.3 million women were registered with public employment offices. This represents a decline of about 200,000 or 11.1 percent, from the number of women registered in January 1940. As may be expected, the number of men in the active file declined from 4.6 to 2.9 million or 36.5 percent during the same time, due to the increasing employment opportunities of expanding war production industries. Even though the actual number of women registered declined, women accounted for 32 percent of the file in October 1941 as compared to 25 percent in January 1940.

Number of registrants in the active file as reported by public employment offices, by sex, January 1940 to October 1941

Month	Active file			Percent women of total file
	Total	Men	Women	
1940				
January.....	6,079,495	4,572,897	1,506,598	24.8
February.....	5,920,294	4,473,466	1,446,828	24.4
March.....	5,025,183	3,759,376	1,265,807	25.2
April.....	5,682,447	4,204,205	1,478,242	26.0
May.....	5,724,029	4,165,320	1,558,709	27.2
June.....	5,734,450	4,107,811	1,626,639	28.4
July.....	5,564,671	3,973,273	1,591,398	28.6
August.....	5,210,660	3,749,352	1,461,308	28.0
September.....	4,910,827	3,519,359	1,391,468	28.3
October.....	4,618,504	3,302,807	1,315,697	28.5
November.....	4,568,415	3,269,197	1,299,218	28.4
December.....	4,758,697	3,464,510	1,294,187	27.2
1941				
January.....	5,093,476	3,745,408	1,348,068	26.5
February.....	5,101,417	3,759,783	1,341,634	26.3
March.....	5,170,193	3,819,828	1,350,365	26.1
April.....	5,097,026	3,755,519	1,341,507	26.3
May.....	5,156,288	3,685,144	1,471,144	28.5
June.....	5,126,192	3,567,679	1,558,513	30.4
July.....	4,982,430	3,441,520	1,540,910	30.9
August.....	4,699,020	3,286,989	1,412,031	30.0
September.....	4,355,861	2,788,240	1,567,621	(1)
October.....	4,241,918	2,902,789	1,339,129	31.6

¹ Data not reported for New York.

WOMEN IN MANUFACTURING

According to the 1940 census, 25 out of 100 of over 10,000,000 employed in factories are women. This ratio of employment of women shows almost no difference from the 1939 Census of Manufacturers covering a total of 10,414,000 persons employed in manufacturing establishments of which 2,643,000 were women, distributed as follows:

Industry group	Grand total	Males	Females
All industries	10,414,704	7,770,814	2,643,950
Food and kindred products	1,335,157	982,653	352,504
Tobacco manufacturers	99,418	97,044	62,374
Textile-mill products and other fiber manufacturers	1,237,630	711,266	526,364
Apparel and other finished products made from fabrics and similar materials	925,657	277,651	648,006
Lumber and timber basic products	430,988	422,971	8,017
Furniture and finished lumber products	397,353	322,843	44,510
Paper and allied products	334,651	254,130	81,521
Printing, publishing, and allied industries	556,661	426,203	130,458
Chemicals and allied products	431,336	359,712	71,624
Products of petroleum and coal	146,279	143,799	2,480
Rubber products	159,384	119,761	39,623
Leather and leather products	375,482	226,641	148,841
Stone, clay, and glass products	359,208	315,970	43,238
Iron and steel and their products, except machinery	1,227,390	1,133,654	93,736
Nonferrous metals and their products	307,562	279,488	48,074
Electrical machinery	368,753	249,657	119,096
Machinery (except electrical)	701,359	640,896	60,463
Automobiles and automobile equipment	516,062	471,763	44,299
Transportation equipment except automobiles	205,601	199,849	5,752
Miscellaneous industries	328,833	211,863	116,970

The Bureau of Labor Statistics of the United States Department of Labor estimates that of the 5,000,000 in defense production during the fourth quarter of 1941, 480,000 were women. Although these estimates are unofficial, they show the best distribution by sex available and the figures are listed as indicative of the employment ratio of men and women in plants then on defense production.

Estimated defense employment, fourth quarter, 1941

	Total	Female		Total	Female
Manufacturing:			Manufacturing—Con.		
Iron and steel	750,000	46,000	Chemicals	110,000	16,000
Machinery	1,030,000	54,000	Rubber	55,000	14,000
Aircraft	275,000	3,000	Food	110,000	31,000
Shipbuilding	100,000	1,000	Mining	175,000	—
Automobiles	115,000	8,000	Construction	425,000	—
Railroad cars and locomotives	50,000	—	Transportation and public utilities	300,000	30,000
Nonferrous metals	225,000	31,000	Finance, service, and miscellaneous	50,000	10,000
Lumber	110,000	1,000	Government	750,000	110,000
Stone, clay, and glass	80,000	9,000			
Textiles	220,000	95,000	Total	5,000,000	480,000
Leather	25,000	10,000			
Paper	45,000	11,000			

LABOR REQUIREMENTS FOR 1942

It is estimated that by the end of 1942 the United States will have 15 million workers engaged in war production. This represents a 200-percent increase over the number so employed at the end of the year 1941. The United States Bureau of Labor Statistics has estimated that this increase in the war labor force will require the addition of at least 2 million new workers. This will be accomplished partly by the normal population increase and partly by drawing on groups not normally in the labor market, particularly women, youths, and older men. These will largely offset the 2.2 million men expected to be drafted into military service. Another one and ½ million are estimated as coming from the group previously unemployed; 7.9 million will be converted from production for civilian purposes to war production; 400,000 will come from agricultural pursuits; and another 400,000 from the self-employed group.

There is reason to assume that the 2 million new workers brought into the labor market will be mainly women. Furthermore, a substantial portion (at least 25 percent) of the 1½ million previously unemployed who will be brought into war production will also be women. The fact that approximately 200,000 men a month are expected to be drafted into military service during the next 12 months further substantiates the conclusion that widespread opportunities for employment of women both in the civilian fields and war production plants must follow. If this withdrawal of manpower into the military forces continues during 1943, or is accelerated during 1942, the need for women will be proportionately increased. Even though war production is highly concentrated geographically, and even though women constitute a less mobile labor force than men, through planning and selection there should be no trouble in drawing them into the labor force as needed.

STEPS TOWARD AN ORGANIZED USE OF WOMEN WORKERS IN THIS COUNTRY

Shortly before the United States entered the war, the National Labor Supply Committee (made up of representatives of Government agencies to work with the Deputy Director of Labor Supply and Training in the Labor Division of the Office of Production Management, on the formulation of policies governing labor supply for defense production) appointed a subcommittee to draft a course of action to deal with the necessary increased utilization of women workers during a war period. Miss Mary Anderson, Director of the Women's Bureau, United States Department of Labor; Mrs. Nellie Miles, representing the United States Employment Service of the Federal Security Agency; and Miss Thelma McKelvey, representing the Labor Division of the Office of Production Management, composed the membership of this subcommittee. A program was worked out during the first days of active hostilities and was adopted late in December 1941 as the Labor Division's policy on women workers.

In developing this program, recognition was taken of the President's statement of the need to quicken existing production by working a 24-hour day, 7-day week in every war industry. Under the greatly expanded war program, all labor resources must be utilized to their maximum efficiency. As previously pointed out, increasingly large numbers of women will be called upon to work in the production of war material. To put these women to work rapidly and effectively in their country's service, the following steps have been established:

1. An immediate inventory of women now available for war production. Arrangements have been completed with the United States Employment Service, and that agency is now in the process of analyzing the skills and occupational experience of women who are registered for work with the 1,500 public employment offices operated by that agency. As of October 1941, there were 1,339,129 women registered with the public employment offices in the continental United States, Alaska, and Hawaii. Particular emphasis is being placed on previous experience and production skills which are or can be related to occupations in war industries. These analyses are supplemented by industrial studies available or in process in the Women's Bureau of the United States Department of Labor.

2. A voluntary registration is being planned of women willing to accept work or training for work, not only in the actual manufacture of goods for use by the armed forces, but in raising and processing foodstuffs and in the maintenance of essential civilian services necessary to the war effort. Facilities to register persons in almost every community in the United States within reasonable distance of their homes now exist in the United States Employment Service. There are untold numbers of women who, though not normally a part of the labor force, would and could take a job if this becomes necessary, or who would be willing to train for production work. A recruitment drive is planned to secure a complete, though voluntary, registration of all women willing to take a job to assist in the war effort. The drive will be carried out most vigorously in those areas where labor stringencies already exist and where the withdrawal of men into military service will add an additional strain on the labor available in specific industrial areas. In conducting such a voluntary registration, the cooperation and understanding of the general public, labor, and management, must be secured before the registration is undertaken. It is important that the induction of women into manufacturing plants proceed only after demands on the men of the country take them out of the labor market. In all probability it will not be practical to hold such a registration of women until the registration of manpower, ordered by the recent amendments to the Selective Service Act, is completed.

3. The defense training programs, conducted by public vocational schools, the National Youth Administration work project program, and the training-

within-industry program of the Labor Division, are being geared to include women in the vocational-training courses and plant-training programs. These training programs are preparing to provide specific training to greatly increased numbers of women as rapidly as possible. The subcommittee on the utilization of women workers of the National Labor Supply Committee was clear in its position that women should not be given training separate from men, and that there is no need for establishment of new facilities or new training techniques. In carrying out this program of training, the National Labor Supply Committee will request the United States Employment Service and the Work Projects Administration to give special attention to the referral of women as trainees to preemployment training courses. The National Labor Supply Committee will also request the United States Office of Education to ask the vocational school authorities to accept more women as trainees in anticipation of industrial needs.

4. Creation and development of plans to insure suitable conditions of work, which experience has proven necessary to secure maximum production with women workers. These plans require close cooperation with the Women's Bureau to insure effective employment of women and encompass the following matters:

- (a) Maintaining fair and equitable wage rates and hours;
- (b) Advising and aiding employers in establishment of necessary plant facilities, and adequate health and safety measures for effective employment of women; and
- (c) Advising in connection with problems of housing, dormitories, and living quarters for women workers.

5. The Regional and Industrial Area Labor Supply Committees of the Labor Division will be relied upon to carry out the program for the training and employment of women in war industries, in accordance with local conditions. Steps are being taken through the 12 regional labor supply committees and the industrial area labor supply committees, which operate throughout the country and include management and labor representation, to impress upon employers the advisability of using locally available women workers before recruiting labor from outside areas. The committees also work with organized labor leaders to secure their counsel as to the kinds of work which women can most readily do in a particular plant, and to assist in forwarding training programs. The United States Employment Service will intensify its referral of women to industrial jobs for which they are qualified.

6. As a component part of meeting the exigencies of a long war, consideration will be given to the possible future need for compulsory registration of all women legally qualified to work in industry or perform other essential war services. Compulsory registration of women was instituted in Great Britain in March 1941, a year and a half after the beginning of the war in Europe.

In this country we have not yet felt a need for such registration, nor is a need foreseen in the immediate future. But we are engaged in an all-out war in which all civilians, men and women alike, have important roles. We cannot predict the limits of our future needs and the only wise course is to prepare for every eventuality. The Labor Division is, therefore, studying British and other countries' experience, hoping to profit by their successes and avoid their mistakes. All planning will be coordinated with the War and Navy Departments, the United States Employment Service, and the civilian defense authorities so that if and when a compulsory registration of womanpower is needed to further the war effort, it can be carried out efficiently and with the minimum amount of disturbance or disruption.

BRITISH EXPERIENCE IN USE OF WOMEN WORKERS

British experience has shown that readjustment to war production is not easy, and that the adverse effects fall particularly heavily on women. In September 1939, the month war began, unemployment in Great Britain changed sharply from the preceding month. There were 175,000 more women in the unemployed group, but the number of unemployed men dropped by 99,000. This trend continued throughout the next year. By March 1940 total unemployment dropped below the figure for August 1939, but the unequal absorption between men and women continued during the next year and a half later. It was not until February 1941, just a month before the British Government began a compulsory registration of the supply of women labor, that the number of unemployed women dropped.

Women were particularly affected by the closing of plants under industrial concentration plans, whereby nonessentials were curtailed and the remaining production carried on by full-time "nucleus" or integrated firms. Many of the industries thus curtailed were those in which a large proportion of the workers

were women, as in cotton, hosiery, boots and shoes, and pottery. Eighty percent of the machine operators in this industry were women and from 50 to 60 percent of these were married and consequently largely immobile.

Not until after Dunkirk did the British educational system begin to play a major role in its country's effort. It was then that the British began to use every facility possible for war production, including the schools. Jobs have been broken down into specialized operations sufficiently small to require very little training for each operation. Under this arrangement British industries have utilized what has come to be called the "dilutee." Organized labor in Great Britain has conceded the use of "dilutee" labor for the duration of the war, with the understanding that immediately the conflict ceases these "dilutees" will no longer operate in places requiring skilled craftsmen.

On January 21, 1941, the Minister of Labor and National Service, Mr. Ernest Bevin, announced in the House of Commons that "we have now reached the stage where * * * we shall have to call into service many women who in normal circumstances would not take employment." On March 13, 1941, the Minister of Labor appointed the women's consultative committee to aid in planning the registration. This committee sits under the chairmanship of the Parliamentary secretary to the Ministry of Labor.

The registration for employment order was issued March 17, 1941, under the announced policy that "nothing that a woman can do or can learn to do, however important, should be allowed to absorb a man of military age." The demand for women workers increased as a result of the low number of unemployed plus the completion about this time of many factories built for war production.

Compulsory registration of women began in April with women of 20 and 21 registering first. Excluded were women actively serving in one of the recognized voluntary or technical war services. Interviews by women officers of the Ministry of Labor were conducted with nonemployed women. Those in less important work were taken in first. Women university students studying for certain technical vocations were not required to give up their studies for other work. It was found that from one-fourth to one-third of those interviewed were available for work directly connected with the war effort.

The previous work experience of women accepted for employment in one typical war plant followed roughly this diversified experience background:

Factory, 28 percent.	Laundry workers, 5 percent.
Housemaids, 23 percent.	Barnmaids, 3 percent.
Stores, 17 percent.	Hairdressers, 2 percent.
Warehouse employees, 7 percent.	Dressmakers, 1 percent.
Waitresses, 6 percent.	Miscellaneous, 3 percent.

Women in England are trained for war production jobs in a wide variety of ways. Much of the training is done in the plant and on the job through absorption by watching another individual do some simple operation at the bench or on the machine. In other cases women begin by inspecting simple parts under the direction of another competent individual. Many of the technical schools have taken a significant part in the training of women. The trade and technical schools are making use of every possible facility to meet the need for trained personnel. Ordnance factories have set up their own school in a central area to train women on milling machines, shapers, planers, lathes, drill presses, grinders, and gear cutters. Girls in training are brought from the factory area to the school for the training period, and then returned to the factory area for employment.

Employment of women workers in England's war industries far exceeds developments thus far in the United States. Some aircraft plants in England are 40-percent manned by women with a probability that the proportion will rise to 80 percent. In some munitions plants women make up from 80 to 90 percent of the workers. In the manufacture of anti-aircraft guns about one-sixth are women.

Women's abilities in war industries are mostly used in performing light operations requiring considerable manual dexterity, as for example, the delicate operations requiring great accuracy in an airplane instrument factory, some of which normally take as much as 2 years to learn; riveting; drilling or stamping or pressing small pieces of aluminum; sewing fabrics; painting fuselage; assembling parts and airplane welding; gaging, drilling, turning, assembling, and machining operations to make fuzes in munitions plants; soldering, testing screws; and radio and electrical assembly.

But women's work is by no means limited to these lighter operations. They are also working on heavy presses in the manufacture of trench-mortar bombs; in munition factories they handle large cartridge cases; in the manufacture of

guns they operate large lathes and milling machines; boring and rifling anti-aircraft, field, and naval guns; and many are at work on lathes in tank factories.

Women have replaced men, to a large extent, in food industries and in the Government service. They now largely man London's transport garages, and 10,000 women are taking over all jobs in London's subways except the actual driving of trains.

Each month new reports come from England of women taking over skilled jobs formerly believed to be suitable only for men. Women are handling 180-pound shells; making piston rods for locomotives; flame cutting; working as hammer drivers in railway shops; forging crankshafts; operating 15-ton cranes; acting as electrician's mates; and setting turret and capstan lathes. One machine-tool firm with 170 employees uses women workers almost entirely. Many women, because of their delicate touch, have developed an ability to perform grinding operations to tolerances usually achieved by men only after long experience.

In January of this year, a crew of women pilots were organized for ferry service to fly military planes from factories to bases.

R. W. Hambrook, of the United States Office of Education, recently spent 4 months in England surveying methods of vocational education. He well summed up the position of British women when he stated: "The variety of work done by women is astonishing. They have taken the place of men in sweeping floors, cleaning shops, running cranes, doing messenger work, keeping reports, checking and inspecting, running semiautomatic and automatic machinery, operating lathes, shapers, vertical and horizontal milling machines, surface grinders with magnetic chucks, cylindrical grinders, setting up machines, filing, drilling, assembling, scraping, fitting, etching, making electrical fittings, and other jobs too numerous to catalog * * *. England realizes that at the end of this war she will owe a tremendous debt to the loyal efforts of her women in meeting a situation of significant importance in the present emergency."

DEFENSE VOCATIONAL TRAINING PROGRAM IN THE UNITED STATES

The Federal Government has financed training programs to prepare men and women for war-production work through the public vocational-school facilities in the Nation. This program was started in the summer of 1940 and has contributed to the training or retraining of a total of 2,477,400 persons.

Congress appropriated funds in 1940 and 1941 for the training of defense workers, without regard to sex, color, race, or religion. This training has been given in vocational schools of less than college grade and in institutions of higher learning.

The Office of Production Management approved the list of occupations prepared by the Bureau of Employment Security, in the fields where defense training of less-than-college grade is to be offered. The industries for which the occupations were specified are as follows:

- Aircraft and parts.
- Air transportation (common carrier).
- Air transportation (except common carrier) and air-transportation services.
- Aluminum products (including rolling and drawing).
- Ammunition.
- Automobiles and automobile equipment.
- Communication: Telephone, telegraph, and related services.
- Electrical machinery.
- Firearms.
- Industrial chemicals.
- Iron and steel and their products.
- Machine tools: Lathes, screw machines, etc.
- Models and patterns (except paper patterns).
- Motorcycles, bicycles, and parts.
- Nonferrous-metal foundries (except aluminum).
- Professional and scientific instruments, photographic apparatus, and optical goods.
- Railroad equipment.
- Shipbuilding and ship repairing.
- Utilities: Electric and gas.

Of the almost 2½ million persons who have received specific and general occupational training in the vocational schools, relatively few have been women. The first emphasis was on the training or "refreshing" of unemployed male workers in order that they could go into industry rapidly, and thus relieve the unemployment problem. The general public, organized labor, and management

looked with disfavor on the training of women while there were men available for employment. A specific policy of the Labor division has been that defense training programs should be set up for women workers only where there are existing or anticipated employment opportunities for women in specific defense occupations, and not in industrial areas where great numbers of men were unemployed.

The number of women enrolled in preemployment and supplementary courses from the beginning of the defense training program to November 30, 1941, was 14,202. Of this number 12,018 were enrolled in preemployment and refresher classes, and 2,184 were in supplementary classes. There are 16 States which have enrolled no women in preemployment courses, and 19 for which no women have been reported as enrolled in the supplementary courses for those already employed in industry.

Women have been enrolled in a wide variety of classes, such as airplane fabrication, aircraft electrical assembly, welding, sheet metal inspecting, machine shop practice, blueprint reading, drafting, radio communications, and service.

A comparison of the monthly enrollment of women from June 30 to November 30, 1941, showed a more positive trend in the direction of an acceptance of women in defense training classes, in anticipation of greater outlets of employment. On June 30, 1941, there were only 435 women enrolled in preemployment courses and 334 in supplementary courses. September 30, 1941, showed an increase to 3,173 in preemployment courses and 633 in supplementary courses. By November 30 there were 5,116 in preemployment courses and 717 in supplementary courses. It must be admitted that these figures indicate a decidedly conservative approach to the training of women workers either prior to their entrance into manufacturing establishments or after they become employed in manufacturing processes. The largest volume of this training was in the States of California, Indiana, Massachusetts, Maryland, Minnesota, Missouri, New York, Ohio, Pennsylvania, and Wisconsin.

In the engineering, science, and management training programs, carried on in institutions of higher learning, there were, as of November 30, 1941, 4,436 women enrolled in 124 colleges and universities offering defense courses in these fields. The majority of women were enrolled in the following types of courses:

Engineering.—Mathematics, explosives, engineering drawing, production engineering, safety, mechanical engineering (inspection and testing), analytical chemistry.

Management.—Industrial organization and management, accounting, personnel, administration, and labor problems, employment management, statistics.

The United States Office of Education reports that in these short unit courses, women have studied aeronautical, chemical, civil, electrical, industrial, marine, mechanical, metallurgic and general engineering, inspecting and testing, and that the colleges report no particular difficulty in placing these women at the end of their training period.

Trainees for the preemployment courses have been referred by the public employment offices and the Work Projects Administration. Selection of trainees is accomplished by means of tests and consideration of previous industrial experience. There is a definite attempt to select trainees who are likely to be successful as workers and who will meet the employer specifications as to age, physical condition, and education. The courses vary in length for the individual who can progress as rapidly as his ability will permit. Trainees attend preemployment classes 30 hours a week.

Supplementary classes are attended by workers who desire to learn new operations, or to increase their present skill by additional class training in the theory of their work or by more extensive practice. Trainees usually attend defense supplementary classes 15 hours a week.

Up to this time, women have been taught in segregated classes, although a trend is noted toward mixed classes. Since men and women often work together in the same departments of a factory—and undoubtedly will work together in greater numbers during the war period, there is little logic in separating women from men in the training classes.

Women enrolled in defense training classes are instructed at the same training stations as men, use the same equipment and supplies, and their instruction follows the same teaching outline. Instructors are almost entirely men as few women have the necessary training and experience to qualify as instructors in defense occupations.

The classes for women are held as a rule during the day or in the early evening. A "graveyard" training shift for women is not anticipated, unless in the future they are needed in such numbers by industry as to require late night training.

There is reason to expect that the preemployment and supplementary training program for women will show a decided change during the next few months in certain areas in the country. For example, the entire west coast area is already faced with shortages of qualified workers. The labor force in the aircraft industry is made up chiefly of young men from 21 to 31. The industry is exerting every effort to achieve 24-hour, 7-day-a-week operation, which will call for many thousands of additional workers. As more and more men transfer from production to active military service, the problem of stabilizing the working force will be acute. The aircraft industry is already experiencing the possibilities of employing women in the local area, and the number of women in defense training classes in the west coast area is increasing. A recent report from San Diego states that 500 women have just entered training classes.

A similar situation is found in Connecticut, Maryland, Pennsylvania, Ohio, and New York. In Brooklyn, Dr. Harry W. Reddick, director of the Brooklyn Defense Training Institute, recently announced that a survey of 12 major defense plants in the metropolitan area revealed that executives of all but 1 plant were in favor of giving defense training to women. Applications from women will now be encouraged, where previously they had been accepted but not sought. Up to now, only 10 of the 900 graduates of the institute have been women. This survey also showed that the new draft regulations are already drawing from the area men who were previously exempt. Courses now offered to women will train them for positions as draftsmen, tracers, mathematicians, testers, inspectors, and other posts on a subprofessional engineering level, during a 30-week period. There are recent reports from other areas in New York State of many new registrations of women trainees—2 towns each report 200 recent women enrollees in aircraft and sheet metal.

Courses have been opened in other North Atlantic States as follows:

Rhode Island: Inspection of machine parts and forgings, machine shop.

West Virginia: Power-sewing-machine operations.

Massachusetts: Radio assembly and machine operation.

New Hampshire: Machine shop.

New Jersey: Machine-tool operations.

New courses for women have been approved since December in Texas, Illinois, Kansas, Missouri, and Michigan. All indicate a continued expansion of training for women.

Representative new courses for training of women in the pre-employment program

[Starting in December 1941]

State and city	Course title	Enrollment, Jan. 1, 1942
California: Oceanside	Auto mechanics	1
Illinois: Chicago	Assemblers	6
Kansas: Kansas City	Radio-equipment assembly	16
Maryland:		
Baltimore	Small-parts assembly	51
Elkton	Aircraft sheet-metal riveting	8
Hagerstown	Aircraft sheet metal	46
Massachusetts:		
New Bedford	Related machine	32
Chicopee	Radio	8
Missouri: Joplin	Power sewing	15
	do	16
New Jersey:		
Keansburg	Machine-tool operation	14
Paterson	do	14
Verona	do	2
New York: Elmira	Machine shop	7
Pennsylvania:		
Philadelphia	Sewing machine operation	16
Do	Machine-tool operation	3
Shamokin	Inspection (machine parts and forgings)	20
Rhode Island: Providence	Organized machine shop (blueprint reading and mathematics)	15
Florida: St. Petersburg	Arc and acetylene welding for welders and helpers	1
Michigan:		
Detroit	Blueprint reading	5
Do	do	25
Do	do	14
Do	do	9
Flint	do	8
New Hampshire: Berlin	Machine training	21
Tennessee: Nashville	Electrician (aircraft)	13

NATIONAL YOUTH ADMINISTRATION WORK PROJECTS FOR GIRLS

The out-of-school work program of the National Youth Administration gives concrete evidence that its shop facilities can be used to a much greater extent in training girls between the ages of 17 and 24, inclusive, for industrial employment.

The number of young women employed by the National Youth Administration in shop, mechanical, and production jobs directly related to the needs of war industries has been increasing along with the expansion of employment opportunities for women in these industries. In November 1941, almost 23,400 young women were employed on National Youth Administration projects which furnish experience in machine and metal working, radio and electrical work, automotive and mechanical work, woodworking, and industrial sewing. This is about 10,000 more than were employed on National Youth Administration projects of this type in July 1941. All of these fields are related to war labor requirements. Young women who have worked on these projects may find employment either in private industries having war contracts or in other industrial establishments where they take the places of workers who have gone into the defense industries.

During November 1941, over 7,300 girls were employed on National Youth Administration projects in the electrical, machine and metal working, and automotive and mechanical fields alone. During the same month about 550 girls went from National Youth Administration employment to jobs in plants manufacturing iron and steel products, nonferrous metal products, electrical and metal working machinery and equipment, aircraft part plants, and other manufacturing industries.

In the machine and metal shops, girls perform those operations which involve the use of light machinery and require repetitive skill, finger dexterity, and accuracy. Among these are the operation of small drill presses, punch presses, and bench lathes. In the radio and electrical shops, girls perform all types of assembly work which involve the use of small hand tools and techniques of soldering. Young women are proficient also at light and medium welding and in inspection work of various kinds. The industrial sewing projects prepare girls for employment in industries manufacturing such defense articles as barrack bags, cots, airplane wings, parachutes, canvas bunks, various types of furnishings for forts and cantonments, and clothing for the Army.

The practical value of this experience and training is shown by the fact that during the period July 1941 through November 1941, more than 60,000 young women went from National Youth Administration projects to jobs in private industry.

The National Youth Administration is prepared to train many more unskilled young women for jobs in industry.

TRAINING WITHIN INDUSTRY

Probably the most important and most efficient technique for equipping unskilled and partially skilled persons to do a new job or acquire a new skill, is on-the-job training in industrial plants. This learn-by-doing approach is also used to upgrade workers in order to utilize the best skill of each worker to the maximum of his individual ability. The training-within-industry program of the Labor Division has worked with management and labor groups throughout the country to develop more extensive plant training programs. Over 600 management and labor consultants are contributing their services in this important phase of training.

Women have not been overlooked as an essential part of this work. There are a number of women consultants from industry and education in the training-within-industry's 22 districts. While precise statistics are not available as to the number of workers who have been trained and upgraded through in-plant training programs, it is estimated that more than 2,000 concerns employing some 3,000,000 persons have on-the-job training programs. Women workers have been and are being trained on the job too. In one small plant, for example, 20 girls are at work running gear cutters, turret lathes, engine lathes, milling machines, and drill presses. Nearly all women workers in the aircraft industry are also receiving in-plant training, including metal work, such as riveting and bucking.

The on-the-job training approach will be increasingly relied upon as greater numbers of inexperienced persons are brought into war production. This will be especially true as women replace men, first in simpler operations and later in more complicated and highly skilled processes.

Within the past few months' time over 16,000 foremen and supervisors (both men and women) in about 800 plants have completed a streamlined job instructor

training program—specially designed to help all those who instruct workers on the job. The importance of the entire training-within-industry program cannot be overemphasized in the war effort.

PLACEMENT OF WOMEN THROUGH THE PUBLIC-EMPLOYMENT SERVICES

The total number of women placed by public-employment offices has steadily increased during the last year. However, the rate of increase has not kept pace with the increase in placements of men. In the third quarter of 1941 placements of women numbered 525,000 as compared with 385,000 in the corresponding quarter of 1940, an increase of 36 percent. On the other hand, placements of men increased almost twice as much, from 605,600 to 1,029,100, an increase of 70 percent. In the manufacturing industries, there were 82,500 women placed in the third quarter of 1940, while 109,500 were placed in the third quarter of 1941, an increase of 33 percent. This can be compared with the increase in male placements of 74 percent, from 200,300 to 348,000.

The number of women placed in 20 key defense industries increased from 13,500 in the first quarter to 16,900 in the third quarter of 1941. The largest increases were in the aircraft and parts industry (from 460 to 1,300) and in the chemical products industry (from 400 to 1,000). However, the actual number of women placed in these industries has been very small compared with the number of men.

The most striking increases in women's employment in 1941 were made in the professional and managerial occupations, where placements of women rose from 20 percent to 29 percent of all placements in this group. This gain is attributed to the continuing increase in job opportunities and the growing shortages of highly trained men in this field.

In the last 2 or 3 months of 1941, many more instances were reported of the relaxation of employer specifications which have restricted the employment of women. Many plants unable to obtain sufficient numbers of semiskilled male workers have filled vacancies with women and are making increased requests of public employment offices for women workers. The most encouraging reports received by the public employment service offices come from the aircraft firms.

Anticipating the development of increased employment opportunities for women, the Bureau of Employment Security is preparing an analysis of all jobs in key defense industries in an effort to indicate what jobs might be suitable for women. At present 623 occupations designated as essential to national defense have been analyzed. The latest available information indicates that women are now employed in only 27 of these. An analysis of the duties performed by workers in the remaining occupations indicates that 251 are apparently suitable for women. Of these, 199 have a training period of less than 6 months. Another group of 188 occupations appears to be partially suitable for women. Among these occupations some break-down of the job might be necessary or some rearrangements of the industrial processes might be required in order to employ women. Of the entire list of 623 occupations, only 57 appear to be totally unsuitable for women.

A consideration of the number of hires anticipated by defense employers makes these facts even more striking. For the period September 1941 to February 1942, public employment offices reported 315,000 job openings in the selected list of defense occupations. Of this number less than 20,000 were in occupations in which women are now employed. On the other hand, 115,000 job openings were reported in occupations apparently suitable for women, and 111,000 others in job openings partially suitable for women.

Recent developments and the needs of the victory program should enlarge the number of occupations in which women are currently employed. Even though the use of the reservoir of women workers has only just begun, the fact has been established that there are a great number of jobs which can be performed by them. In conformity with the Labor Division policy, public employment offices throughout the country are encouraging employers to make fuller use of women, in view of the possibility of Nation-wide labor shortages in many occupations during the coming year.

At this time no figures are reported to show a break-down by sex of the placement of defense vocational trainees through the public employment offices. Since these data are not available, a brief analysis has been prepared of women placed in shortage occupations important to war production and in which defense training is simultaneously being conducted.

On the whole, the placement figures currently available in shortage occupations suitable for women do not show any definite trend. There are several occupa-

tions, however, in which reports of placements for women have been received for the first time since the beginning of the defense program. In these, it seems highly probable that most of the persons placed have been defense trainees.

Thirty-seven women were placed as engine lathe operators in October and November. This was the first occasion for such placements. Thirty-three multiple spindle drill press operators were placed in this same period, although placements in this occupation have occasionally been made since May 1941. Women have been hired as floor assemblers (machine shop) since January 1941, and 274 placements were made in this occupation in October and November.

In aircraft occupations, 374 women were placed as detail assemblers in the same 2 months. First placements of women occurred in August and have grown considerably. During this period, 61 women were placed as aircraft riveters, and in November 10 female airplane electricians were placed. In both cases, no earlier reports of such placements had been received.

Women have long been employed as radio chassis assemblers, and now that this has become a national shortage occupation, it is noteworthy that they numbered more than half of total placements—a proportion exceeding that in any other defense shortage occupation. First reports of such placements were received in May and for the October and November period reached 250. It is of interest that 258 women were enrolled in preemployment and refresher courses for the radio industry in the quarter ending September 30, 1941.

Recently women have also been placed in shortage occupations classified as only partially suitable for them. The greatest numbers of such placements in October and November were in the following occupations: 88 machine-shop inspectors; 14 all-around machinists; 98 electrical assemblers (a high proportion of total placements for this occupation); 24 special radio equipment assemblers; and 6 coremakers.

Reports on placements of women by broad occupational groups reveal something of the geographic differences in their placement (and training) opportunities. In the assembly occupations, in which the largest number of women were placed, California, Washington, New York, and Ohio headed the list of placements during September 1941. Placements in machining occupations, the second most important group for women, were most numerous in New York, Michigan, California, and Ohio.

More placements in cold-metal fabricating occupations, and in electrical and related occupations were made in New York and California than in other States. Michigan had the largest number of placements in the hot-metal fabricating occupations.

WOMEN IN PRODUCTION AT THE BEGINNING OF THE WAR

The place of women in our industrial pattern has been well established during the 23 years since the last war. They constitute one-fourth of the workers in manufacturing establishments; they are indispensable in the service, clerical and teaching fields; they have penetrated into the more technical, professional and managerial fields. They are part and parcel of the structure of the work-life in this highly developed country. In analyzing their present or future usefulness to war production, however, the emphasis falls in classifications very different from peacetime. The manufacture of ships, airplanes, tanks, guns, and ammunition have traditionally been men's work. Nevertheless, a number of women are already at work in expanding war industries, such as aircraft, bag and shell loading, munitions, and the Government service.

AIRCRAFT

Last July when Mr. Sidney Hillman, Director of the Labor Division, addressed his letter to primary contractors in stringency areas, requesting them to employ more women, the aircraft industry was a major objective. Prior to this time, women workers in aircraft plants had been limited to clerical employees and a very few fabricating sewers and upholsterers. Today the situation in the aircraft industry is changing sharply. Immediately after the issuance of Mr. Hillman's request, west coast aviation plants began to use women workers in light airplane assembly work on wings, fuselages, and control surfaces, and in riveting, drilling, filing, and removing metal burrs from machined parts. In September this trend had spread to other aircraft plants throughout the country, and by December, almost 4,000 women (less than 2 percent of the total employment) were employed in aircraft plants and almost 600 in airplane engine plants.

In Baltimore an airplane factory first began training girls in September 1941. The starting group numbered 35 girls taking courses of 6 weeks' duration in sheet-metal work, including drilling, dimpling, countersinking, gun and compression

riveting, and the burring and machine finishing of small metal parts. Courses in electrical assemblies and bench work followed. Spot-welding training was given on the job. Now about 300 are employed and another 1,000 are to be added in the next few weeks. Estimates are that at least 5,000 women workers will be hired in aircraft plants in the Baltimore area in the coming 4 or 5 months.

Last fall another aircraft plant in Maryland requested that women be trained for work in cutting, filing burring, hammering, stretching, drilling, and riveting aluminum alloys. This training also included blueprint reading. The first trainees consisted mostly of married women and girls who had some work experience. Twenty of the twenty-one women who enrolled in the courses completed it and were found satisfactory. Now 400 are being trained in sheet metal, wood-work, machine shop, and welding work. Plans at this plant are moving toward a faster employment rate of women workers.

In October another California aircraft firm reported that their experiments with women workers had been so successful that they considered women workers as having a permanent place in their shops. According to the company: "So well did they perform their duties that the project rapidly passed from the experimental stage to a point where women have become a permanent fixture in our personnel program. It is possible that they will handle a large percentage of total shop work should the emergency sharply curtail the available supply of men." Of the women employed by this firm, which has continued to be the leader among aircraft plants in utilizing women, the vast majority have had some previous factory experience. Their average wage was found to be 44½ cents an hour in their old jobs, while they now receive an average of 70½ cents—the same rate as men for comparable work. About two-thirds of the women are, or have been, married; and for the most part lived within commuting distance of the factory before they were employed.

Another airplane plant in St. Louis announced in January that, at the request of Army authorities, they were rushing plans to train women production workers, including riveters, inspectors, and electrical assembly workers, to meet a threatened shortage of skilled men workers and to release men for military service. This plant is already employing women to sort and distribute blueprints and to control the flow of parts to the assembly line. This company has stated: "There may come a time when we can't get any men of military age and have to depend on men above that age or men of military age unable, for some reason, to serve. That means we must fill in with women." This plant has also found many women already satisfactorily trained, especially in small assembly work, because of previous factory experience. Most of the women employed at this plant are between 18 and 30, but no age limitation has been set.

One aircraft firm was employing 270 women in their southern factory at the end of 1941 in the following departments and occupational classifications:

Sheet metal department:	Cover and trim department—Con.
Punch press operator	Coverer beginner
Trim saw operator	Trimmer
Band saw operator	Paint department:
Libert shear operator	Spray doper
Sheet metal bench beginner	Brush doper
Engraving machine operator	Layer-out and masker
Metal preparation beginner	Prime sprayer beginner
Farnham rolls operator beginner	Wings-outer department:
Processing department:	Beginner general aircraft assem-
Beginner anodizer	blyman
Beginner cadmium plater	Riveter
Beginner dural heat treater	Miscellaneous department:
Final assembly department: Final as-	Beginner electrical and radio as-
semblyman beginner	sembly.
Cover and trim department:	Parts stamper
Sewing machine operator (power)	Production clerks
first class	Beginner general aircraft assembly
Sewing machine operator (power)	Subassembly department: Beginner gen-
second class	eral aircraft subassembly
Coverer	

This firm has an established policy of promotion as the individual's skill warrants and has announced that there will be no discrimination against women in these promotions. The company is actively recruiting women workers for the following jobs but finds applicants with the necessary training and technical background to be scarce: Certified aluminum welder; welder (arc); welder (acetylene); engine lathe operator, beginner; turret lathe operator; milling machine

operator, beginner; erect machine operator, beginner; bench machinist, beginner; pattern maker plaster, beginner; woodworker jig and mock-up, beginner.

The company has found from a study of their occupations that there are a few aircraft jobs for which women are not generally suitable because of physical requirements. These jobs are: Drop hammer operator, power hammer operator, hydraulic press operator, sand blaster, steel heat treater, router operator, shaper operator, floor molder apprentice die castings, power break operator.

Some aircraft jobs require a background of experience which few, if any, women possess, and the training period required for these jobs makes general utilization of women workers impractical. These jobs are: Wood patternmaker; sheet metal lay-out; tool and die maker; jig builder; automatic screw machine operator.

It can be seen from the above statements that there are few jobs in aircraft manufacturing from which women are barred because of physical requirements or experience and training requirements. Aside from actual work experience, the major deficiency in women's qualifications for skilled jobs is usually a lack of mathematics and manual training. A long-range solution to this problem would be to encourage girl high-school students to take courses in plane geometry, trigonometry, physics, and chemistry to better equip themselves for skilled jobs. The immediate expedient is to refer more women to preemployment courses in the defense training program.

Surveys are in process to determine to what extent and in what occupations women can perform satisfactorily in aircraft production. This information is not yet available, but unofficial estimates place the figure at 30 to 50 percent of the total aircraft employment. In the manufacture of airplane engines and propellers, there is less certainty as to the occupations which can be satisfactorily filled by women.

BAG- AND SHELL-LOADING PLANTS

The loading of artillery bags and shells provides employment possibilities for substantial numbers of women. The processes, for the most part, are simple loading and assembly jobs. They require relatively short training periods, and the exercise of great caution in handling the explosives. It has been found that women are more suitable than men for many of the required occupations in this industry.

A study of an operating bag-loading plant revealed that more than half of the employees were engaged in sewing powder bags, and more than a fifth were ammunition assembly laborers. In nearly all cases, both of these occupations were filled by women.

In another study of the occupations involved in the loading and assembly of 37-mm. shells, 28 percent of the employees were found to be women. Again, in the loading and assembly of detonating fuzes, another study indicated that 72 percent of the workers were women. The same proportion in the assembly of nose-bomb fuzes was 68 percent.

In general, the suitability of women for shell- and fuze-loading and assembly operations varies considerably. In some cases the proportion of women is less than one-third, in other cases it may range as high as 100 percent. In this connection, the United States Department of Labor estimated that at least 40 percent of the workers in bag-loading plants, and between 30 and 40 percent in shell- and bomb-loading plants, are or will be women.

SMALL-ARMS AMMUNITION (CALIBER .30 AND .50 AMMUNITION)

In the small-arms ammunition plant in which source data for this study were obtained, women represent approximately 32 percent of all workers in occupations directly concerned with the manufacture of small-arms ammunition, and they constitute about 80 percent of all workers employed in the 22 occupations that are open to women or to both men and women. In addition to these 22 occupations in which women are actually employed, there are 37 other occupations apparently suited to the employment of women. If women exclusively were employed in these 37 occupations, their total employment would be increased from approximately 32 percent to approximately 60 percent.

There are certain characteristics common to all occupations in which women are actually employed—they involve the manipulation of small and light materials, require relatively brief training periods, and are repetitive. Examples are occupations concerned with primer inversion, packing, and inspection work, the latter being performed almost entirely by women. Machine tending and machine feeding are likewise engaged in extensively by women. Although women are not at present employed in occupations requiring any great degree of strength, it is the opinion of management, in the establishment in which source data for this

study were gathered, that the strength factor may be minimized if the supply of male workers diminishes seriously. It is known that women were employed as tenders of heavy draw presses during the emergency of 1914-18, even though they had not previously been, and are not now, so employed. It is likewise indicated that in case of necessity women could be employed in occupations involving the tending of a battery of machines even though they are unable to tend as many machines in one battery as men can.

Following are the previously mentioned 22 occupations in which women are now employed in the establishment surveyed, with indications of the percentage employment of women in each occupation and the percentage total employment represented by each occupation:

Title	Percentage of women to total workers in the occupation	Percentage of total workers in the occupation to total workers in the process
Anvil plate filler ¹	100.00	0.52
Bullet assembly press operator ¹	68.18	3.25
Charging machine operator ¹	28.57	2.60
Do.....	28.57	2.60
Charwoman.....	100.00	.52
Clip assembly machine feeder.....	100.00	.75
Clipping machine operator ¹	100.00	1.18
Cup plate filler ¹	100.00	1.03
Flame annealing machine operator ¹	80.00	.52
Foiling machine operator ¹	100.00	.52
Forming press operator, automatic.....	100.00	.89
Gage and weigh machine operator ¹	100.00	1.77
Head turn machine operator ¹	100.00	.74
Inspector ¹	100.00	7.54
Loading machine operator ¹	100.00	2.15
Packer (ammunition).....	77.11	6.15
Primer inverting machine operator ¹	100.00	.67
Do.....	100.00	1.33
Production clerk.....	84.21	1.70
Screw machine operator, automatic.....	27.78	1.88
Shellacker ¹	100.00	.22
Trim machine operator ¹	82.61	1.71

¹ Denotes occupations partially suitable for women.

Following are the occupations in which women apparently could be employed but in which they are not presently employed in the plants surveyed:

Title	Percentage of total workers in the occupation to total workers in the process	Title	Percentage of total workers in the occupation to total workers in the process
Brake operator, hand.....	0.15	Painter, spray.....	0.37
Cannelure and finish machine operator ¹.....	.22	Punch press operator, automatic.....	.60
Centerless grinding machine operator.....	.07	Receiving clerk.....	.15
Chamfering machine operator ¹.....	.07	Rotary surface grinder operator.....	.07
Chest cover sealers ¹.....	.45	Screw machine operator, semiautomatic.....	1.10
Clerk-typist.....	.37	Shear operator, hand.....	.15
Cup fillers ¹.....	.52	Solderer.....	1.93
Cylindrical grinder operator.....	.44	Stamper.....	.15
Draw press operator.....	3.22	Stenciler.....	.37
Elevator operator, freight.....	2.68	Stock clerk.....	.07
Flame annealing machine operator ¹.....	.52	Surface grinder operator.....	.74
Gaging machine operator ¹.....	.15	Swaging machine operator.....	.37
Guide, factory.....	.07	Tester.....	.22
Head turn machine adjuster ¹.....	.44	Toggle press operator, hand.....	.52
Heading press operator ¹	2.45	Tool clerk.....	1.19
Internal grinder operator.....	.30	Tool grinder operator.....	.07
Inventory clerk.....	.44	Trim machine adjuster ¹.....	.88
Mercury cracking tester ¹.....	.15	Universal grinder operator.....	.30
Oil extractor.....	.07		

¹ Denotes occupations partially suitable for women.

FEDERAL DEFENSE ACTIVITIES

Mrs. Lucille Foster McMillin, United States Civil Service Commissioner, recently issued a Study of Women's Participation in Federal Defense Activities, entitled "The First Year." In this study Mrs. McMillin pointed out that on June 30, 1940, "The civil service employment in the executive branch of the United States Government had reached a total of 1,002,820 individuals. Of this number 816,610 were men and 186,210 were women. * * * By June 30, 1941, 238,509 additional placements brought Federal service employment to a grand total of 1,358,150 employees—1,091,743 men and 263,407 women."

To illustrate the extent and variety of the kinds of jobs women are holding under the Federal Government, the following is quoted from Mrs. McMillin's study:

"They (women) were occupied in research work in the Bureau of Home Economics of the Department of Agriculture, and in the Children's Bureau of the Department of Labor.

"They were found in positions involving work in law, medicine, public administration, illustrating, editing, and writing.

"In almost every department and independent establishment of the Government, women were holding good jobs and were rendering outstanding service.

"By far the greatest number of women were in the clerical, stenographic, and typist positions—a particular source from which the most women proceed to bigger jobs, better pay, and a successful career in the Federal ranks. * * *

"On June 30, 1940, there were 2,844 women civil employees in the Ordnance Department at large, outside the District of Columbia. By the end of June 1941 their number had increased to a total of nearly 10,000 women civil employees, of whom more than 6,000, or approximately two-thirds, were employed in Government-operated arsenals of the Nation, as follows:

Picatinny Arsenal, Dover, N. J.-----	2, 349
Watervliet Arsenal, Watervliet, N. Y.-----	185
Watertown Arsenal, Watertown, Mass.-----	251
Frankford Arsenal, Philadelphia, Pa.-----	3, 223
Springfield Armory, Springfield, Mass.-----	279
Rock Island Arsenal, Rock Island, Ill.-----	511
Total, women employees-----	6, 798

"* * * While the number of women presently engaged in work in defense activities is small in comparison with the estimated number which ultimately will find employment therein, they are found in jobs which are picturesque and unique in character, and which include tasks not usually performed by women.

"From many sources reports are received of their continuous placement on the production line in establishments of the War Department—the arsenals, the ordnance depots, the proving grounds, the munition factories, the quartermaster depots, the air fields, the Engineer Department at large, and the Medical Corps; in the navy yards and air stations of the Navy Department; in the armament industries vital to defense; and in the multitudinous activities of those other departments and independent establishments of the Government which have been designated as defense agencies.

"In the Picatinny Arsenal at Dover, N. J., more than 1,000 women are working as classified laborers, and more than 400 are employed there as explosives operators in the operation of machines and presses incident to the loading of munitions.

"At the Edgewood (Md.) Arsenal, women's nimble fingers are used on the assembly line in the manufacture of gas masks. Every 24 hours more than 2,000 women work in 3 shifts, 6 days a week, handling highly confidential processes, operating heavy-duty high-speed electric sewing machines, using pliers, soldering irons, and presses, and performing skilled handwork in the assembly of incomplete parts of gas masks. Final inspection of the finished product is made by women. Patience and care are indispensable as a single leak or defective piece might be disastrous in some future battle. Women from this arsenal are sent to private companies engaged in the manufacture and assembly of gas-mask parts to act as instructors of the employees of the private firms. At the arsenal, women toxicologists and pharmacologists perform research work in testing the efficacy of chemical-warfare materials. They test the value of defensive gases developed to counteract the known chemical-warfare gases of other countries. Before the national emergency, Edgewood Arsenal had 181 women employees, as compared with 2,513 on April 1, 1941.

"At the Frankford Arsenal, Philadelphia, women hold the majority of positions in the fuze shop. Girls with a high-school education, but having little or no experience in the work, are accepted for training in this important job in one of the country's largest arsenals. Here, on the production line, women assist in the manufacture, in the inspection, in the testing, and in the intricate subassembly of parts for mechanical time fuzes used in artillery shells. Here women are machine-tool operators and precision optical workers, performing duties which correspond with those required in the finest type of watchmaking. Tiny, delicate parts, cumbersome to the heavy hands of men, are handled easily and efficiently by the quick fingers of women. Here women are munition inspectors. Here their quality of patience, their temperament, their dexterity, their devotion to duty are vitally essential as their deft hands turn out the missiles of defense.

"At the Philadelphia Quartermaster Depot the majority of positions in the clothing factory are filled by women. The factory manufactures uniforms and clothing equipment for the soldiers. It is the only factory operated by the War Department for this purpose. Many women occupy supervisory positions there.

"In the Marine Corps Supply Depot at Philadelphia—the only clothing factory depot operated by the Marine Corps—women manufacture marine uniforms.
* * *

"In the Chemical Warfare Service at Cincinnati, Ohio, 250 women have been appointed to jobs as arsenal learners, gas-mask inspectors, process inspectors, and laboratory aides in connection with the manufacture of gas masks. In the Engineer Department at large, women occupy the position of engineering aide. One woman is a junior architect. In the Ordnance Department at large, women are serving as under inspectors of ordnance.

"At the Fairfield Air Depot, Patterson Field, Fairfield, Ohio, women apply radio-active luminous material to various dials used on aircraft instruments.

"In the St. Louis, Mo., Ordnance District Office women work as inspectors of ammunition parts and small-arms ammunition and in the recording of intricate drawings and specifications of ordnance-material items.

"At the San Antonio, Tex., Arsenal women are used in cleaning and grinding lenses in the optical section. * * *

"The laboratories of the National Advisory Committee for Aeronautics at Moffett Field, Calif., employ women with majors in mathematics, physics, or chemistry to make computations on wind-tunnel tests. * * *

"At the Philadelphia Navy Yard women operators are employed in the Naval Aircraft Factory in the manufacture of parachutes and related equipment used by the Navy.

"The inspector of naval aircraft at San Diego, Calif., employs women as inspectors of engineering material. * * *

"In the military camps of the country, in the hospitals, in defense agencies, in the field activities of the Government, women are employed as nurses, hospital attendants, hostesses, librarians, receptionists, mess attendants, laundry operatives, surgeon's assistants, dental hygienists, dietitians, inspectors of textiles, elevator operators, cooks, welfare workers, and technicians of all kinds. * * *

"In other Government agencies women are studying ways of improving bread for the military forces. They are developing new recipes with the aim of making bread more nutritious. They are conducting experiments in the preservation of foodstuffs, such as potatoes, eggs, milk, and other staples. They are engaged in nutrition studies which are a part of a national-nutrition program. They serve as inspectors of supplies sent to England. They are employed in the testing of textiles to determine resistance to mildew and other deteriorating elements, for the betterment of military clothing and equipment. They design work outfits for women employed in farm, home, and factory occupations—outfits stripped of hazardous ties and frills, and provided with comfort and safety. * * *

"Women are occupying positions such as director of personnel, liaison officer, food consultant, director of nutrition, associate administrator, executive assistant, nurse consultant, chief of public information, and chief of press relations.
* * *

"Thus, at the end of the first year of the emergency, we are able to see something of women's participation in the national defense program on the governmental front. However long the narrative may continue, it is certain that he who writes the final chapter will find in the complete story a record of courage, fortitude, and heroism displayed by women workers in defense who engaged themselves in uncommon duties which they performed faithfully and well."

PRESENT SOCIAL FACTORS INFLUENCING GREATER EMPLOYMENT OF WOMEN

In a total war effort, we must utilize our labor power as wisely as we use our military strength. Many factors must be taken into consideration in advocating large-scale employment of women in industry. A short-sighted or too hasty approach would result in an unsettled and unbalanced labor market.

One of the first considerations must be the curtailment or complete closing down of vast portions of our civilian industry as materials essential to war production are withdrawn from manufacturers of civilian goods. The curtailment of the automobile and rubber industries alone will cause a temporary lay-off of five or six hundred thousand workers, of whom approximately 80 percent will be men. In the field of durable consumer goods (refrigerators, washing machines, and other household appliances), many have been disemployed. In the silk industry, 40,000 have been displaced. This, of course, does not count the thousands who are similarly, though indirectly, affected by such curtailments.

It is vitally important to succeed in our war effort that we make use of these idle plant facilities and this idle manpower for the production of war goods. Since the majority of displaced workers are men, they will be given the first chance to enter into war occupations. Moreover, the reemployment of women normally employed in these industries must come before new women workers are brought into the labor force in any great numbers.

In 26 States, the District of Columbia, and Puerto Rico there are laws regulating the working hours of women in manufacturing establishments. Sixteen States, the District of Columbia, and Puerto Rico prohibit night work in certain industries. In some instances these laws have worked against the employment of women, although until the time of the war this presented no serious problem.

In some instances, employers and organized labor have hesitated to open job opportunities for women, because of necessary readjustments in plant facilities to provide rest rooms and health and safety precautions for women workers.

If there are sufficient men in an area to meet the labor requirements, organized labor is resistant to the employment of women because they are usually employed at a lower rate than men. Industry must recognize the importance of employing women at an equal rate of pay for equal work, to prevent a lowering of wage standards.

War production is highly concentrated in certain geographical areas. Inasmuch as women constitute a less mobile labor force than men, employers must recognize the importance of recruiting women in accordance with established labor supply policy of use of local labor supply.

It is especially important that post-war readjustment be considered in bringing about a large influx of women into the war labor force. There is little doubt that women will be required to leave their jobs at the end of the war, to permit the return of men to their jobs as they are released from the armed forces.

Shortly after the United States entered into war against the Axis Powers, representatives of Federal agencies and State labor commissioners were called together by the Secretary of Labor to prepare a statement of war labor supply policy which would permit temporary modification in accepted standards of employment and hours of work, but which would preserve State labor laws protecting the efficiency of the workers. This statement of war labor policy has been issued by the War and Navy Departments and the United States Department of Labor, from which the following is quoted:

"This all-out program of production requires the employment of all labor in accordance with those practices which will result in the maximum continued output of every individual. The sole test of labor standards must be the effect on the efficiency of the individual to insure top war production. Based on this test the State laws and regulations embracing the following principles should be preserved, except where temporary modification may be necessary during the war period to assure maximum production.

(1) A maximum 48-hour week for the individual worker, since weekly hours in excess of this standard have been demonstrated to result in decreased rather than increased production when continued for any extended period of time.

(2) A maximum 8-hour day for the individual work or the daily hours customarily worked in the particular establishment, industry, or community.

(3) One day of rest in seven, because experience has shown that this interlude has a revitalizing effect on the worker and a consequent beneficial effect on the total output.

(4) Adaptation of the hours of labor and working conditions to the age and sex of the worker and the nature of the occupation.

(5) Proper safeguards for health and safety go hand in hand with production efficiency and, therefore, greater care must be exercised in making plant conditions safe and healthful.

(6) Provision should be made for adequate meal and rest periods from continuous work in order to preserve health and efficiency.

(7) Wage rates for women should be the same as for men, including the entrance rate.

"These standards must be relaxed if and when necessary for total war production. There must be no relaxation of standards governing employment of minors under the age of 16. At the same time there must be vigilance to prevent any unnecessary abrogation or suspension of labor laws and regulations. There is no occasion to engage in a blanket suspension of labor standards. It would be unwise to sacrifice, where sacrifice is not required, the safeguards with which the country has sought to protect labor. Social gains, not inconsistent with war needs, must be conserved."

With all of these factors constantly before us, the Labor Division will vigorously pursue its policy that "there must be an extension of the scope of employment of women in increasing numbers of occupations and areas and that this will be facilitated to meet the needs of the war program, particularly in areas where shortages of male workers are occurring."

The loyalty and patriotism of the women of America are unquestioned. When they are needed they will do their share in turning out the essentials of war. There is no question that they are capable of meeting the demands which will be made of them in the turbulent months to come.

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TABLE 1.—Cumulative total number of women enrolled in preemployment and supplementary courses to Nov. 30, 1941

Type of training	July 1, 1940, to Nov. 30, 1941	July 1, to Nov. 30, 1941
Preemployment.....	13,567	¹ 12,018
Supplementary.....	3,453	² 2,184

¹ Includes 334 trainees actively enrolled on June 30, 1941.

² Includes 435 trainees actively enrolled on June 30, 1941.

TABLE II.— *Pre-employment and refresher courses ending net enrollment for Women by State, June 30, Sept. 30, Oct. 31, Nov. 30, 1941*

State or Territory (1)	Ending net enrollment for women			
	June 30, 1941 (2)	Sept. 30, 1941 (3)	Oct. 31, 1941 (4)	Nov. 30, 1941, (5)
Total	435	3,173	4,600	5,116
Alabama	0	0	0	0
Arizona		7	6	7
Arkansas	0	0	0	0
California	33	705	899	735
Colorado			5	12
Connecticut	24	193	180	188
Delaware	0	0	0	0
Florida		15	33	12
Georgia	159	172	118	70
Idaho			12	11
Illinois	19	82	350	170
Indiana	1	105	139	238
Iowa	0	0	0	0
Kansas		3	9	13
Kentucky		13	86	114
Louisiana	0	0	0	0
Maine	0	0	0	0
Maryland	0	69	218	240
Massachusetts	79	25	159	433
Michigan		54	41	4
Minnesota		216	347	259
Mississippi	0	0	0	0
Missouri		109	96	210
Montana	0	0	0	0
Nebraska			7	66
New Hampshire	0	0	0	0
New Jersey	37	73	147	98
New Mexico		1	1	
New York	53	377	595	623
North Carolina	0	0	0	0
North Dakota	0	0	0	0
Ohio		127	213	354
Oklahoma	19		23	27
Oregon	1	20	42	25
Pennsylvania		479	514	751
Rhode Island	0	0	0	0
South Carolina			9	
South Dakota		0	0	0
Tennessee	5	4	3	26
Texas		13	15	30
Utah			9	5
Vermont	0	0	0	0
Virginia	0	0	0	0
Washington				54
West Virginia				125
Wisconsin	4	116	128	183
Wyoming	1	180	183	198
District of Columbia		2	2	3
Hawaii		13	11	15
Puerto Rico	0	0	0	0
	0	0	0	0

TABLE III.—*Supplementary courses ending net enrollment for women, by State, June 30, Sept. 30, Oct. 31, Nov. 30, 1941*

State or Territory (1)	Ending net enrollment for women			
	June 30, 1941 (2)	Sept. 30, 1941 (3)	Oct. 31, 1941 (4)	Nov. 30, 1941 (5)
Total.....	334	633	520	717
Alabama.....	0	0	0	0
Arizona.....	0	0	0	0
Arkansas.....	0	0	0	0
California.....	50	11	46	128
Colorado.....			25	
Connecticut.....	124	40	42	47
Delaware.....	0	0	0	0
Florida.....	11	23	26	
Georgia.....	5			5
Idaho.....	0	0	0	0
Illinois.....		180	53	77
Indiana.....		1	2	2
Iowa.....			2	1
Kansas.....				2
Kentucky.....	0	0	0	0
Louisiana.....	0	0	0	0
Maine.....	0	0	0	0
Maryland.....	0	39	10	7
Massachusetts.....	1	13	15	45
Michigan.....	2	66	13	27
Minnesota.....	0	0	0	0
Mississippi.....	2			
Missouri.....		10	9	8
Montana.....		2		16
Nebraska.....		8		
Nevada.....	0	0	0	0
New Hampshire.....	0	0	0	0
New Jersey.....	25			1
New Mexico.....	2	1		
New York.....	42	194	169	204
North Carolina.....	0	0	0	0
North Dakota.....	0	0	0	0
Ohio.....	1			3
Oklahoma.....	4			
Oregon.....	6	7	16	24
Pennsylvania.....	3	20	27	31
Rhode Island.....	0	0	0	0
South Carolina.....			11	
South Dakota.....	0	0		0
Tennessee.....		12	3	7
Texas.....	46	2	7	24
Utah.....	0	0	0	0
Vermont.....	0	0	0	0
Virginia.....			29	30
Washington.....	6			13
West Virginia.....	0	0	0	0
Wisconsin.....	1	2	2	2
Wyoming.....	0	0	0	0
District of Columbia.....	0	0	0	0
Hawaii.....	3	2	13	13
Puerto Rico.....	0	0	0	0

TABLE IV.—Enrollment of women in Vocational courses cumulative enrollment from July 1 to Nov. 30, 1941, and ending net enrollment as of Nov. 30, 1941, by State

State or territory (1)	Preemployment- refresher courses		Supplementary courses	
	Cumulative enrollment from July 1, 1941, to Nov. 30, 1941 ¹ (2)	Ending net enrollment as of Nov. 30, 1941 (3)	Cumulative enrollment from July 1, 1941, to Nov. 30, 1941 (4)	Ending net enrollment as of Nov. 30, 1941 (5)
Total	12,018	5,116	2,134	717
Alabama				
Arizona	28	7	0	0
Arkansas				
California	2,146	735	172	128
Colorado	13	12	25	3
Connecticut	557	188	219	47
Delaware				
Florida	16	12	77	0
Georgia	629	70	5	5
Idaho	11	11	0	0
Idaho	416	170	227	77
Illinois	228	238	7	2
Indiana	0	0	2	1
Iowa	33	13	7	2
Kansas				
Kentucky	159	114	0	0
Louisiana				
Maine				
Maryland	718	240	73	7
Massachusetts	582	433	79	45
Michigan	488	4	337	27
Minnesota	517	259	0	0
Mississippi	0	0	2	0
Missouri	229	210	8	8
Montana	0	0	16	16
Nebraska	66	66	0	0
Nevada				
New Hampshire				
New Jersey	607	98	70	1
New Mexico	0	0	2	0
New York	1,351	423	439	204
North Carolina				
North Dakota				
Ohio	529	354	5	3
Oklahoma	73	27	4	0
Oregon	43	25	38	24
Pennsylvania	1,543	751	85	31
Rhode Island	57	0	0	0
South Carolina	0	0	11	0
South Dakota				
Tennessee	41	26	7	7
Texas	46	39	109	24
Utah	12	5	0	0
Vermont				
Virginia	0	0	32	30
Washington	54	54	48	13
West Virginia	223	125	0	0
Wisconsin	491	198	65	2
Wyoming	4	3	0	0
District of Columbia	34	15	0	0
Hawaii	0	0	13	13
Puerto Rico				

¹ Includes trainees rejected subsequent to enrollment as unsuited for training and dropouts.

TABLE V.—List of courses training women for defense occupations, by principal training centers, as of Nov. 30, 1941—Preemployment courses

Location and course title	Enroll- ment Nov. 30, 1941	Location and course title	Enroll- ment Nov. 30, 1941
CALIFORNIA		OHIO	
Alameda:		Akron:	
Airplane coverer fabric.....	14	Machine shop.....	29
Airplane fabrication.....	14	Radio.....	17
Machine shop.....	1	Sheet metal.....	67
Alhambra:		Auto mechanics.....	7
Aircraft sheet metal.....	6	Cincinnati:	
Installation mech. III.....	1	Sheet metal and welding.....	13
Downey: Aircraft riveting and assembly.....	22	Radio operation and repair.....	3
El Monte:		Gas and arc welding.....	5
Electric wiring.....	17	Machine shop.....	2
Machine shop II.....	17	Sheet metal.....	16
Escondido:		Machine shop and welding.....	2
Sheet metal.....	1	Cleveland:	
Welding.....	2	General machine shop.....	20
La Verne:		Sheet metal work.....	13
Airplane sheet metal.....	15	Columbus:	
Sheet metal riveting.....	3	Machine shop.....	14
Long Beach:		Wood pattern making.....	28
Aircraft installation and radio.....	25	Portsmouth: Radio repair and construction theory.....	1
Aviation assembly and installation, mech.....	1	Toledo:	
Aviation metal.....	50	Auto mechanics.....	2
Welding.....	17	Machine shop.....	27
Los Angeles: Power sewing.....	180	Radio shop.....	11
Ontario: Aircraft sheet metal.....	21	Sheet metal.....	31
San Diego:		Welding.....	3
Electric assembly.....	28	Woodworking.....	4
Electric installation for assembly.....	11		
Inspection aircraft.....	38	PENNSYLVANIA	
Plaster pattern.....	10	Altoona:	
Sheet metal aircraft.....	143	Radio assembly and repair.....	5
Tube bending.....	10	Radio construction and communication.....	13
Aircraft covering.....	18	Mount Carmel: Radio repair and maintenance.....	18
Fabric work aircraft.....	13	Philadelphia:	
MARYLAND		Detailing mechanical.....	1
Baltimore:		Detailing and tracing.....	17
Assembly small parts.....	107	Electrical maintenance.....	1
Airplane riveting.....	167	Instrument inspection.....	12
Hagerstown:		Sheet metal.....	6
Acetylene welding.....	13	Welding acetylene.....	1
Aircraft sheet metal.....	24	Detailing and tracing.....	53
MASSACHUSETTS		Embroidery work.....	10
Chicopee: Machine operation for women.....	32	Light manufacturing.....	79
Holyoke: Machine shop practice bench.....	44	Sewing machine operation.....	446
Newtonville: National defense training.....	14	Pittsburgh:	
Springfield: Machine shop.....	66	Machine tool.....	8
Waltham: Industrial jewel making.....	7	Sheet metal.....	9
NEW YORK		Scranton:	
Bay Shore, L. I.: Aircraft fabrication and related subjects.....	3	Sheet metal.....	6
Buffalo: Lens grinding.....	30	Welding.....	16
Elmira: Inspection.....	8	Machine tool operation.....	16
Hornell: Welding.....	1	Williamsport: Aviation instruction and repair.....	1
New York City: Radio communication and service.....	16	CONNECTICUT	
Pearl River: Inspection course.....	6	Bridgeport: General machine.....	2
Richfield Springs: Machine shop.....	1	Hartford:	
Rochester:		General machine.....	11
Light assembly.....	368	Shop training for women.....	15
Army ordnance inspector.....	8	Middletown: Gun belt making.....	5
Machine shop.....	46	New Britain:	
Syracuse:		Foundry practice.....	13
Blueprint reading.....	21	General machine.....	2
Shop mathematics.....	48	New Haven:	
Utica:		Power sewing.....	61
Machine shop practice.....	4	Machine shop.....	18
Machine shop practice.....	4	Norwich: Machine.....	15
Sheet metal pr. division.....	19	Stamford:	
Sheet metal shop practice.....	46	Power sewing.....	36
		Shop training machine.....	2
		Shop training and sheet metal work.....	1

TABLE V.—List of courses training women for defense occupations, by principal training centers, as of Nov. 30, 1941.—Preemployment courses—Continued

Location and course title	Enrollment Nov. 30, 1941	Location and course title	Enrollment Nov. 30, 1941
CONNECTICUT—continued		WEST VIRGINIA	
Waterbury:		Charleston: Drafting.....	3
General machine	14	Clarksburg:	
Sheet metal	5	Auto mechanics	57
ILLINOIS		Combination welding	9
Chicago:		Martinsburg: Aircraft sheet metal	9
Radio service	1	South Charleston:	
Machine tool operator	2	Arc welding	5
Marion:		Machine tool operation	8
Machine tool operation	12	Wheeling: Related sheet metal	34
Sheet metal	32	WISCONSIN	
Metropolis: Machine tool operation	9	Cudahy: Machine shop.....	5
Sycamore: Radio assembly	38	Fort Atkinson: Sheet metal.....	4
INDIANA		Kaukauna:	
Hammond:		Machine shop.....	1
Power sewing machine.....	19	Sheet metal	11
Industrial sewing	19	Madison: Machine shop.....	1
Gary:		Milwaukee:	
Machine shop	17	Electricity	12
Related instruction	17	Foundry	3
Indianapolis:		Machine shop	1
Radio	22	Power sewing	49
Sheet metal	28	Welding	2
Welding	19	Oshkosh:	
Muncie: N. Y. A. machine shop	67	Communications.....	3
KENTUCKY		Machine shop	5
Covington: Electricity	36	Stoughton: Machine shop.....	2
Louisville: Power machine operation.....	64	Superior: Radio and telegraphy	17
MINNESOTA		Watertown: Machine shop and welding.....	6
Minneapolis: Power machine operation.....	72	Waukesha: Welding	1
St. Paul: Power machine sewing	231	Wausau: Electricity	9
MISSOURI		West Allis:	
Kansas City: Machine shop.....	4	Auto mechanics	8
Louisiana:		Electricity	11
Cold metal	19	Machine shop	6
Machine shop	29	Molding and coremaking.....	7
Metal inspection	33	Sheet metal	11
St. Louis:		Welding	2
Machine shop.....	16		
Welding	4		
Sheet metal	8		

TABLE VI.—List of courses training women for defense occupations by principal training centers, as of Nov. 30, 1941—Supplementary courses—Continued

Location and course title	Enrollment Nov. 30, 1941	Location and course title	Enrollment Nov. 30, 1941
CALIFORNIA		NEW YORK—continued	
Alameda:		Herkimer: Inspection.....	11
Airplane fabrications.....	1	Ilion: Drafting and blueprint reading.....	12
Airplane mechanic gas engine.....	3	New York: Radio communications and service.....	4
Burbank:		Niagara Falls:	
Aircraft and electric assembly.....	3	Blueprint reading.....	1
Navigation and meteorology.....	3	Chemistry industrial.....	2
Airplane and its components.....	28	Nyack: Welding.....	5
Sheet metal fabrications.....	1	Richfield Springs: Blueprint reading.....	3
Steel welding.....	1	Rochester: Machine shop practice.....	2
Downey:		Schenectady:	
Aircraft acetylene welding (ad- vanced).....	3	Blueprint reading.....	12
Aircraft acetylene welding (begin- ners).....	3	Radio assembly.....	19
Aircraft electric assembly.....	12	Radio blueprint reading.....	18
Sheet metal inspection.....	2	Scotland: Applied engineer mathematics.....	1
Assembly inspection.....	2	Syracuse:	
Glendale: Tool planning.....	1	Blueprint reading.....	1
Inglewood: Machine shop practice.....	4	Elementary machine tool.....	1
Long Beach: Blueprint reading.....	10	Troy:	
National City:		Elementary metallurgy.....	2
Aircraft blueprint reading.....	2	Foremanship and supervision.....	3
Sheet metal fabrications.....	1	Mathematics for machine II.....	1
Sheet metal fabrications and rivet- ing.....	1	Tracing.....	7
San Francisco:		OHIO	
Aircraft structural.....	1	Cincinnati: Electrical motor repair.....	3
Metal parts inspection.....	20	PENNSYLVANIA	
MARYLAND		Ardmore: Advanced mechanical draft- ing.....	1
Elkton: Blueprint reading and measure.....	4	Philadelphia:	
Hagerstown: Aircraft blueprint reading.....	3	Related instruction (metal trades).....	6
MASSACHUSETTS		Blueprint reading.....	1
Chicopee: Radio.....	10	Drafting, mechanical.....	4
East Boston: Machine inspection for ordnance.....	28	Drafting, electrical.....	11
Pittsfield: Blueprint reading for as- sembly.....	2	Rankin: Blueprint reading.....	2
Waltham: Blueprint reading.....	2	CONNECTICUT	
NEW YORK		Derby: Blueprint reading.....	1
Amsterdam: Blueprint reading.....	7	Rockville: General machine.....	6
Binghamton:		ILLINOIS	
Acetylene welding.....	1	Metropolis: Welding.....	15
Applied mathematics.....	1	MISSOURI	
Blueprint reading.....	1	St. Louis: Welding gas.....	8
Buffalo:		WISCONSIN	
Blueprint reading and sketching.....	8	Milwaukee:	
Industrial chemistry.....	8	Blueprint reading.....	1
Machine shop.....	23	Sheet metal.....	1
Mechanical drawing and sketching.....	14	Welding.....	1
Precision measure.....	34		
Cortland: Blueprint reading.....	1		
Elmira: Blueprint reading.....	1		

TABLE VII.—*Engineering, science, and management defense training, female enrollment in educational defense training and engineering, science, and management defense training courses by State and institution, from Oct. 9, 1940, to Nov. 30, 1941*

[Based on monthly enrollment reports]

State and institution (1)	Oct. 9, 1940, to June 30, 1941 ¹ (2)	July 1 to 30, 1941 (3)	Oct. 9, 1940, to Nov. 30, 1941 (4)
United States, total.....	776	3,660	4,436
Alabama:			
Alabama Polytechnic Institute.....	90	132	222
University of Alabama.....	0	308	308
Total.....	90	440	530
Arizona: University of Arizona.....	0	1	1
Arkansas: University of Arkansas.....	6	3	9
California:			
California Institute of Technology.....	5	5	10
Stanford University.....	3	6	9
University of California.....	20	63	83
University of Santa Clara.....	0	3	3
University of South California.....	12	25	37
Total.....	40	102	142
Colorado:			
Colorado School of Mines.....	1	3	4
Colorado State College.....	0	1	1
Regis College.....	0	3	3
University of Colorado.....	7	6	13
University of Denver.....	12	41	53
Total.....	20	54	74
Connecticut:			
University of Connecticut.....	21	36	57
Yale University.....	8	20	28
Total.....	29	56	85
Delaware: University of Delaware.....	1	4	5
Florida: University of Florida.....	1	50	51
Georgia: Georgia School of Technology.....	0	1	1
Illinois:			
Bradley Polytechnic Institute.....	1	3	4
Illinois Institute of Technology.....	7	28	35
Northwestern University.....	1	3	4
University of Chicago.....	0	1	1
University of Illinois.....	0	32	32
Total.....	9	67	76
Indiana:			
Butler University.....	0	3	3
Indiana University.....	0	93	93
Purdue University.....	3	8	11
Rose Polytechnic Institute.....	2	3	5
University of Notre Dame.....	0	9	9
Total.....	5	116	121
Iowa:			
Iowa State College.....	4	12	16
State University of Iowa.....	3	0	3
Total.....	7	12	19
Kansas:			
Kansas State College.....	8	5	13
University of Kansas.....	16	88	104
Total.....	24	93	117
Kentucky: University of Louisville.....	25	4	29
Louisiana:			
Louisiana State University.....	0	25	25
Southwestern Louisiana Institute.....	0	91	91
Tulane University of Louisiana.....	6	4	10
Total.....	6	120	126
Maine: University of Maine.....	8	18	26
Maryland: University of Maryland.....	1	11	12
Massachusetts:			
Boston College.....	0	5	5
Boston University.....	0	7	7
Harvard University.....	3	0	3
Massachusetts Institute of Technology.....	5	6	11

¹ Instruction began in the first educational defense training course on Dec. 9, 1940.

TABLE VII.—Engineering, science, and management defense training, female enrollment in educational defense training and engineering, science, and management defense training courses by State and institution, from Oct. 9, 1940, to Nov. 30, 1941—Continued

[Based on monthly enrollment reports]

State and institution (1)	Oct. 9, 1940, to June 30, 1941 (2)	July 1 to 30, 1941 (3)	Oct. 9, 1940, to Nov. 30, 1941 (4)
Massachusetts—Continued.			
Massachusetts State College.....	0	4	4
Northeastern University.....	2	19	21
Tufts College.....	0	7	7
Total.....	10	48	58
Michigan:			
Lawrence Institute of Technology.....	0	2	2
Michigan College of Mining and Technology.....	1	0	1
Michigan State College.....	8	2	10
University of Detroit.....	2	2	4
University of Michigan.....	13	25	38
Wayne University.....	5	4	9
Total.....	29	35	64
Mississippi: Mississippi State College.....	0	113	113
Missouri: Washington University.....	0	19	19
Nebraska: University of Nebraska.....	2	1	3
New Hampshire:			
Dartmouth College.....	1	12	13
University of New Hampshire.....	4	32	36
Total.....	5	44	49
New Jersey:			
Newark College of Engineering.....	5	5	10
Princeton University.....	0	3	3
Rutgers University.....	1	16	17
Stevens Institute of Technology.....	0	1	1
Total.....	6	25	31
New Mexico: University of New Mexico.....	2	9	11
New York:			
Clarkson College of Technology.....	0	5	5
College of the City of New York.....	7	16	23
Cornell University.....	3	22	25
Defense Training Institute.....	1	12	13
Long Island University.....	0	4	4
Manhattan College.....	2	0	2
New York University.....	3	42	45
Polytechnic Institute of Brooklyn.....	0	1	1
Pratt Institute.....	1	0	1
Rensselaer Polytechnic Institute.....	3	3	6
Syracuse University.....	0	3	3
Union College.....	63	69	132
University of Buffalo.....	0	19	19
University of Rochester.....	0	4	4
Total.....	83	200	283
North Carolina:			
Duke University.....	2	39	41
North Carolina State College.....	0	9	9
University of North Carolina.....	0	29	29
Total.....	2	77	79
Ohio:			
Case School of Applied Science.....	3	19	22
Fenn College.....	0	43	43
Miami University.....	0	37	37
Ohio Northern University.....	4	5	9
Ohio State University.....	18	37	55
Ohio University.....	22	57	79
University of Akron.....	3	0	3
University of Cincinnati.....	0	45	45
University of Dayton.....	4	1	5
University of Toledo.....	0	17	17
Western Reserve University.....	0	7	7
Youngstown College.....	0	2	2
Total.....	54	270	324

TABLE VII.—*Engineering, science, and management defense training, female enrollment in educational defense training and engineering, science, and management defense training courses by State and institution, from Oct. 9, 1940, to Nov. 30, 1941* (Continued)

[Based on monthly enrollment reports]

State and institution (1)	Oct. 9, 1940, to June 30, 1941 (2)	July 1 to 30, 1941 (3)	Oct. 9, 1940, to Nov. 30, 1941 (4)
Oklahoma:			
University of Oklahoma	2	2	4
University of Tulsa	8	1	9
Total	10	3	13
Oregon: Oregon State College	0	1	1
Pennsylvania:			
Bucknell University	4	1	5
Carnegie Institute of Technology	42	69	111
Drexel Institute of Technology	6	21	27
Haverford College	0	2	2
Lafayette College	0	1	1
Pennsylvania State College	96	1,154	1,250
Swarthmore College	0	1	1
University of Pennsylvania	5	63	68
University of Pittsburgh	12	99	111
Villanova College	0	2	2
Total	165	1,413	1,578
Rhode Island:			
Brown University	2	2	4
Rhode Island State College	2	10	12
Total	4	12	16
South Carolina:			
The Citadel	0	4	4
Clemson Agricultural College	4	19	23
University of South Carolina	4	15	19
Total	8	38	46
South Dakota: South Dakota State College	2	0	2
Tennessee:			
University of Tennessee	0	26	26
Vanderbilt University	5	5	10
Total	5	31	36
Texas:			
Agricultural and Mechanical College of Texas	0	12	12
Southern Methodist University	10	5	15
Texas Christian University	0	12	12
University of Texas	1	38	39
Total	11	67	78
Utah: University of Utah	2	0	2
Vermont: University of Vermont	1	0	1
Virginia:			
Virginia Polytechnic Institute	1	1	2
University of Virginia	10	13	23
Total	11	14	25
Washington:			
State College of Washington	0	1	1
University of Washington	1	38	39
Total	1	39	40
District of Columbia:			
Catholic University of America	3	10	13
George Washington University	70	25	95
Howard University	18	14	32
Total	91	49	140

TABLE VIII.—Number of girls employed in selected types of work activities by month, out-of-school work programs, fiscal year 1942—machine and metal-working shops¹

Region and State	Number of girls				
	July	August	September	October	November
Grand total.....	1,869	4,243	5,410	6,359	5,916
Region I:					
Connecticut.....	203	205	159	108	116
Maine.....					
Massachusetts.....	156	150	413	325	362
New Hampshire.....	9	11	11	18	27
New York City and Long Island.....	3	4	2		1
New York (excluding New York City and Long Island).....	423	1,056	987	1,222	1,163
Rhode Island.....		74	97	106	60
Vermont.....		1	1	1	
Total.....	794	1,501	1,670	1,780	1,729
Region II:					
Delaware.....					
District of Columbia.....		116	106	89	81
Illinois.....	171	710	887	855	880
Indiana.....	218	380	567	574	548
Kentucky.....	2	2	3	1	1
Maryland.....	83	255	336	349	86
Michigan.....	145	205	298	857	565
New Jersey.....	27	57	118	52	27
Ohio.....	106	204	347	400	341
Pennsylvania.....	66	101	92	248	367
West Virginia.....	42	40	88	82	94
Wisconsin.....	27	188	256	254	305
Total.....	887	2,258	3,098	3,761	3,295
Region III:					
Alabama.....		16			
Arkansas.....		2	2		2
Florida.....	42	35	16	17	13
Georgia.....		1		1	1
Louisiana.....					
Mississippi.....	1		6	1	
North Carolina.....					
South Carolina.....					
Tennessee.....					
Texas.....	1				1
Virginia.....					
Total.....	44	54	24	19	17
Region IV:					
Colorado.....		4			
Iowa.....	37	65	211	326	303
Kansas.....		8	14	15	18
Minnesota.....	1		12	24	29
Missouri.....		45	104	173	177
Montana.....					
Nebraska.....	27	75	76	54	69
New Mexico.....		6	1	1	2
North Dakota.....					
Oklahoma.....				27	73
South Dakota.....					
Wyoming.....	10	14	14	17	18
Total.....	75	217	432	637	689
Region V:					
Arizona.....					
California.....	68	213	182	143	172
Idaho.....			3	2	10
Nevada.....					
Oregon.....				1	1
Utah.....				16	3
Washington.....	1		1		
Total.....	69	213	186	162	186

¹ Includes machine, sheet metal, welding, foundry, forge, and blacksmith shops.

TABLE IX.—Number of girls employed in selected types of work activities by month out-of-school work programs, fiscal year 1942—Radio and electrical

Region and State	Number of girls				
	July	August	September	October	November
Grand total.....	547	690	953	1,093	1,201
Region I:					
Connecticut.....	16	21	10		
Maine.....					
Massachusetts.....	13	19	15	61	41
New Hampshire.....				21	23
New York City and Long Island.....	10	33	49	34	47
New York (excluding New York City and Long Island).....	135	96	116	117	108
Rhode Island.....			6		11
Vermont.....					
Total.....	174	169	211	233	230
Region II:					
Delaware.....	3	4	31	36	32
District of Columbia.....			2		
Illinois.....	50	74	59	68	157
Indiana.....	46	42	42	54	68
Kentucky.....	20	39	26	19	15
Maryland.....	12	4	3	3	2
Michigan.....	4		3	42	10
New Jersey.....					
Ohio.....	55	57	72	71	88
Pennsylvania.....	26	16	31	114	79
West Virginia.....		15			
Wisconsin.....	29	65	157	130	183
Total.....	245	318	426	634	634
Region III:					
Alabama.....		2	15	5	5
Arkansas.....		8	17	11	17
Florida.....	6	40	28	30	37
Georgia.....	20	12	28	22	12
Louisiana.....		2	1		2
Mississippi.....			6	9	7
North Carolina.....					
South Carolina.....					
Tennessee.....					
Texas.....	9	11	27	26	27
Virginia.....					
Total.....	35	75	122	103	107
Region IV:					
Colorado.....		1			
Iowa.....	9	28	35	30	41
Kansas.....		6	11	10	10
Minnesota.....					
Missouri.....	31		33	67	48
Montana.....			7	18	18
Nebraska.....	21	22	10	3	3
New Mexico.....					7
North Dakota.....					
Oklahoma.....	4	16	1	17	10
South Dakota.....					
Wyoming.....					
Total.....	65	71	100	142	137
Region V:					
Arizona.....					
California.....	10	43	70	51	54
Idaho.....			8	8	7
Nevada.....					
Oregon.....	7	9	21	22	23
Utah.....					7
Washington.....	1	5			1
Total.....	27	57	99	79	92
Territories:					
Alaska.....	1				
Puerto Rico.....				2	1
Total.....	1			2	1

TABLE X.—Number of girls employed in selected types of work activities by month out-of-school work programs fiscal year 1942, woodworking

Region and State	Number of girls				
	July	August	September	October	November ¹
Grand total	3,192	4,864	4,691	3,755	2,401
Region I:					
Connecticut.....	113	91	58	34	7
Maine.....	—	—	—	—	—
Massachusetts.....	85	105	66	20	25
New Hampshire.....	36	27	40	25	18
New York City and Long Island.....	1	8	3	4	1
New York (excluding New York City and Long Island).....	638	681	530	570	572
Rhode Island.....	—	—	—	—	—
Vermont.....	—	—	—	—	—
Total.....	874	912	697	653	623
Region II:					
Delaware.....	—	—	—	—	—
District of Columbia.....	—	—	—	—	—
Illinois.....	464	1,017	678	492	62
Indiana.....	172	228	167	59	54
Kentucky.....	24	1	80	14	23
Maryland.....	5	31	20	—	16
Michigan.....	24	36	15	13	10
New Jersey.....	—	1	16	5	—
Ohio.....	286	357	346	220	25
Pennsylvania.....	409	460	535	397	241
West Virginia.....	24	83	59	72	57
Wisconsin.....	37	151	198	73	6
Total.....	1,445	2,368	2,114	1,375	485
Region III:					
Alabama.....	5	20	76	37	20
Arkansas.....	88	129	169	105	—
Florida.....	7	55	42	47	25
Georgia.....	1	10	14	18	30
Louisiana.....	10	36	35	37	39
Mississippi.....	—	—	—	—	—
North Carolina.....	36	105	114	128	215
South Carolina.....	—	2	2	1	1
Tennessee.....	26	60	54	59	85
Texas.....	62	44	19	16	10
Virginia.....	—	9	51	36	8
Total.....	235	470	576	484	433
Region IV:					
Colorado.....	1	11	68	49	5
Iowa.....	116	263	177	187	148
Kansas.....	—	—	6	14	—
Minnesota.....	28	20	24	47	36
Missouri.....	125	65	58	44	27
Montana.....	21	24	12	13	12
Nebraska.....	37	112	168	71	37
New Mexico.....	29	122	154	253	254
North Dakota.....	6	16	27	30	22
Oklahoma.....	7	9	16	—	1
South Dakota.....	6	—	58	46	53
Wyoming.....	90	104	112	78	106
Total.....	466	746	880	832	701
Region V:					
Arizona.....	—	—	—	10	41
California.....	118	234	267	177	—
Idaho.....	—	—	—	2	5
Nevada.....	1	23	19	1	1
Oregon.....	—	7	12	2	1
Utah.....	—	3	6	1	16
Washington.....	53	101	123	105	95
Total.....	172	368	427	298	159
Territories: Virgin Islands.....	—	—	—	113	—

¹ Employment on regular program only, girls no longer assigned to woodworking shops operated under the defense program. Statistics Section, Division of Finance and Statistics Jan. 21, 1942.

TABLE XI—Number of girls employed in selected types of work activities by month, out-of-school work programs, fiscal year 1942, automotive and mechanical

Region and State	Number of girls				
	July	August	September	October	November
Grand total.....	62	154	155	231	242
Region I:					
Connecticut.....		24			
Maine.....					
Massachusetts.....					
New Hampshire.....					
New York City and Long Island.....					
New York (exclusive of New York City and Long Island).....					
Rhode Island.....		1	1		
Vermont.....					
Total.....		25	1		
Region II:					
Delaware.....					
District of Columbia.....					
Illinois.....		5			4
Indiana.....					
Kentucky.....		25	1	2	2
Maryland.....		8	23	52	20
Michigan.....				8	3
New Jersey.....					
Ohio.....	8	10	10	28	20
Pennsylvania.....	10	14	23	14	31
West Virginia.....	5	12	32	50	58
Wisconsin.....	2	1	5	1	2
Total.....	25	75	94	155	140
Region III:					
Alabama.....		18	18		
Arkansas.....	5	5	5	7	4
Florida.....	17				1
Georgia.....		9	2	1	
Louisiana.....					
Mississippi.....			1	1	1
North Carolina.....				1	1
South Carolina.....					
Tennessee.....					
Texas.....	7	9	5	6	8
Virginia.....					
Total.....	29	41	31	16	15
Region IV:					
Colorado.....					
Iowa.....		2	20	28	39
Kansas.....					
Minnesota.....					1
Missouri.....	2		2	18	19
Montana.....					
Nebraska.....					2
New Mexico.....					
North Dakota.....					
Oklahoma.....		2	1	1	5
South Dakota.....					
Wyoming.....					
Total.....	2	4	23	47	66
Region V:					
Arizona.....					
California.....	6	9	6		
Idaho.....					
Nevada.....					
Oregon.....				13	21
Utah.....					
Washington.....					
Total.....	6	9	6	13	21

Statistics Section, Division of Finance and Statistics, Jan. 21, 1942.

TABLE XII.—Number of girls leaving National Youth Administration projects to accept jobs in private industry—Out-of-school-work program, month of November 1941

Type of industry	Number of girls
Total ¹	9,672
Manufacturing industries, total	2,002
Food and kindred products, and tobacco.....	307
Textile and textile products.....	612
Lumber, furniture, and finished lumber products.....	71
Paper and allied products.....	58
Printing, publishing, and allied industries.....	122
Rayon and allied products.....	12
Chemical products (excluding rayon and allied products).....	28
Petroleum and coal products.....	17
Rubber products.....	28
Leather and leather products.....	126
Stone, clay, and glass products.....	57
Iron and steel and their products (excluding machinery).....	65
Nonferrous metals and their products (excluding machinery).....	43
Electrical machinery and equipment.....	98
Agricultural machinery and equipment.....	7
Metalworking machinery and equipment.....	11
Other machinery and equipment.....	41
Aircraft and parts.....	17
Automobiles and automobile equipment.....	39
Ship and boat building and repairing.....	5
Railroad and other transportation equipment.....	3
Other manufacturing industries.....	235
Nonmanufacturing industries, total	4,633
Agriculture, forestry (excluding logging), and fishing.....	41
Mining, quarrying, and petroleum production.....	7
Construction.....	36
Air transportation and service.....	2
Railroads (interstate).....	10
Other transportation and services.....	28
Telephone, telegraph, and related services.....	143
Electric, gas, and other local public utilities.....	36
Wholesale and retail trades.....	1,996
Finance, insurance, and real estate.....	323
Service industries (excluding domestic service).....	1,030
Domestic service.....	634
Other nonmanufacturing industries.....	347
Unknown industry	3,037

¹ Includes one-half of the youth whose reasons for leaving were not reported.

TABLE XIII.—Number of youth leaving N. Y. A. projects to accept jobs in private industry—out-of-school work program, July through November 1941

Type of industry	Number of youth		
	Total	Male	Female
Total ¹	170,635	110,463	60,172
Manufacturing industries, total.....	39,237	25,660	13,577
Food and kindred products, and tobacco.....	4,955	2,755	2,200
Textile and textile products.....	5,869	1,795	4,074
Lumber, furniture, and finished-lumber products.....	2,429	2,027	402
Paper and allied products.....	967	566	401
Printing, publishing, and allied industries.....	1,389	679	710
Rayon and allied products.....	291	119	172
Chemical products (excluding rayon and allied products).....	874	520	354
Petroleum and coal products.....	476	392	84
Rubber products.....	465	277	188
Leather and leather products.....	1,483	697	786
Stone, clay, and glass products.....	981	658	323
Iron and steel and their products (excluding machinery).....	3,090	2,617	473
Nonferrous metals and their products (excluding machinery).....	1,077	788	289
Electrical machinery and equipment.....	1,815	1,180	635
Agricultural machinery and equipment.....	322	279	43
Metalworking machinery and equipment.....	1,360	1,255	105
Other machinery and equipment.....	1,513	1,242	271
Aircraft and parts.....	3,866	3,581	285
Automobiles and automobile equipment.....	1,032	829	203
Ship and boat building and repairing.....	1,025	971	54
Railroad and other transportation equipment.....	389	363	26
Other manufacturing industries.....	3,569	2,070	1,499
Nonmanufacturing industries, total.....	60,097	34,951	25,146
Agriculture, forestry (excluding logging), and fishing.....	10,217	9,717	500
Mining, quarrying, and petroleum production.....	994	962	32
Construction.....	4,389	4,175	214
Air transportation and service.....	259	243	16
Railroads (interstate).....	1,422	1,364	58
Other transportation and services.....	1,430	1,241	189
Telephone, telegraph, and related services.....	1,568	559	1,009
Electric, gas, and other local public utilities.....	929	624	305
Wholesale and retail trade.....	17,292	8,203	9,089
Finance, insurance, and real estate.....	2,303	426	1,877
Service industries (excluding domestic service).....	11,621	5,135	6,486
Domestic service.....	4,135	489	3,646
Other nonmanufacturing industries.....	3,538	1,813	1,725
Unknown industry.....	71,301	49,852	21,449

¹ Includes one-half of the youth whose reasons for leaving were not reported.

TESTIMONY OF THELMA McKELVEY—Resumed

Mr. SPARKMAN. The first question I want to ask you is, how many additional workers do you estimate will be needed for war production during the year 1942?

Miss McKELVEY. The best estimate we have now is that increased employment in war production will be from 5,000,000 as of the last quarter in 1941 to 15,000,000 by the end of 1942.

Mr. Davenport, I think, gave the full statistics in this connection yesterday. This will represent a 200-percent increase in the number actually in war production, during the next year.

Mr. SPARKMAN. Or a net increase of 10,000,000 workers?

Miss McKELVEY. That is right.

Mr. SPARKMAN. How many of these new workers will be women?

Miss McKELVEY. That is an estimate, of course, because we have not yet any actual basis to anticipate the number who will go into the war-production industries.

However, as I recall, there will be approximately 2,000,000 new workers coming into war production. There will be at least 2,200,000 withdrawn into the Army, all of which will be manpower and concentrated mostly in the group 20 to 35 years of age.

The demand should take one and one-half million of the unemployed group. Almost 8,000,000 will be shifted from civilian-production industry to war industry, and 500,000 to 1,000,000 from agriculture and self-employment groups.

NUMBER OF WOMEN WORKERS REQUIRED

It seems to me it is reasonable to expect that the 2,000,000 new workers, possibly 1,000,000 or one and one-fourth million, will be women, and from the unemployed group 25 percent will be women, which would make a total of between one and a half to two million women coming into war production enterprises who had not previously been a part of the labor market.

About 25 percent of the women who will be inducted into war production will come from civilian production, making a large number of women in war-production plants.

Mr. SPARKMAN. Are there any occupations which women are unable to fill?

Miss McKELVEY. Yes; there are, and I think individuals will disagree as to what they are.

Our studies have indicated that the physical requirements are about the only deterring factor for women in various occupations. We can think of many occupations in steel, for instance, where you have the weight-lifting factor, and some hazardous occupations, where it is inadvisable to use women.

However, in England it has been demonstrated they can do almost anything a man can do outside of that one factor.

Mr. SPARKMAN. Where physical strength is required?

Miss McKELVEY. The physical strength is the only deterring factor.

I might add that there are the highly skilled occupations requiring long years of training; naturally women have had no background or experience in those fields and we might not have time to train them or equip the plant on a break-down process to employ them.

Mr. SPARKMAN. Such as making precision instruments?

Miss McKELVEY. Machine tools, tool and die sinking, and that type of skilled occupation.

Mr. SPARKMAN. How many women are engaged in war production now?

Miss McKELVEY. The estimate is that about half a million out of the 5,000,000 in war production in the last quarter of 1941 were women.

Mr. SPARKMAN. I wonder if you can break that down into its component parts of skilled, semiskilled, and unskilled?

Miss McKELVEY. I can't do that. In the first place, there are no statistics available as to the placement of workers in those three categories. From the type of work that women are doing now, I have observed that most come in the semiskilled groups.

Another indication is that in checking on the placements through the Bureau of Employment Security and local employment offices, we find that between 50 and 60 percent of their placements of women

were in the semiskilled groups, not over 5 or 6 percent in the skilled groups.

Mr. SPARKMAN. I believe it is the task of the Labor Division, is it not, to look after the training of women workers?

Miss McKELVEY. We develop policies in connection with training.

Mr. SPARKMAN. How many women have been trained to date?

NUMBER OF WOMEN GIVEN VOCATIONAL TRAINING

Miss McKELVEY. I am embarrassed to say because the number has been so few. Around the first of December about 14,000 out of two and a half million were women who had been trained in the vocational schools of the country.

I can give you an indication as to the type of training they had.

Mr. SPARKMAN. I was going to ask you for what occupations they had been trained.

Miss McKELVEY. There were in the preemployment classes at that time around 10,000. That is the training before they are inducted into industry; there are about 1,200 in the supplementary training classes, which is a supplement to work in plants, and they attend voluntarily; and around 4,400 in the technical and engineering schools of the country.

That has changed, however. I am glad to say that during December in preemployment training there were 15,000 women actually enrolled in training classes at that time, which is a marked increase.

EMPHASIS IN TRAINING

Furthermore, the women who have been employed in war-production plants have been trained on the job. They feel they can induct them into a job and they are productive in a short period of time with job training in the plant, so you have that offsetting factor.

Furthermore, I think the emphasis in training will be on the job in the plant; doing a specific operation, or being upgraded from one operation to another.

Mr. SPARKMAN. For what particular jobs are these women trained? Do you train them for particular jobs or just more or less generally?

Miss McKELVEY. The attempt is to train them for particular jobs in classes which lead into a specific production operation. They are trained in electrical assembly, they have been given some light welding and light riveting, subassembly, reading of blueprints, and tracing.

In preemployment they frequently are given a general use of machine tools or tools of one kind and another, and they also are trained in safety precautions and general background preemployment training which will make it easier for them to go into a factory and assume their place. I am sure there will be a marked increase in that type of training during 1942.

Mr. SPARKMAN. I was particularly interested in a little item I saw in the paper the other day relating to a war-production plant in my home town, Huntsville, Ala. There are a couple of large defense or war-production plants down there. I noticed that one which is to open very soon will be operated almost completely by women. It was stated that originally they had been planning to use a high percentage

of men, but due to the shortage of manpower they were changing over and were going to use women almost completely. Will those women be trained prior to being employed?

Miss McKELVEY. I don't know what the plant is producing.

Mr. SPARKMAN. It is an ordnance plant.

Miss McKELVEY. I think they will be trained right on the job.

Mr. SPARKMAN. Has this training program been pretty well scattered over the United States?

Miss McKELVEY. For women?

Mr. SPARKMAN. Yes.

Miss McKELVEY. Fairly well.

Mr. SPARKMAN. Of course, you can't scatter 14,000 very far, can you?

Miss McKELVEY. No. If you will check through the list of tables you will find 107, 25, and so forth; very few States have had over 300 or 400 or 500 enrolled. The first demand was to employ men first. There was no drive for the employment of women. We had a great reserve of manpower wanting work and trained for work in occupations in which they had experience, and they wanted to get back into those occupations. So you had no impetus or no reason to use a large number of women in war plants and most of them are traditionally the type where women had not been employed, such as ordnance, shipbuilding, and aircraft.

NEGRO WOMEN TRAINEES

Mr. SPARKMAN. To what extent have Negro women been trained?

Miss McKELVEY. Not to any great extent. We don't have a break-down by race on training, but from spot checks I have made I don't think more than 1,000 Negro women have been in training classes. Most of this training has been in heavy power-machine operations for quartermaster depots, bag-loading plants, and so on.

Mr. SPARKMAN. Of the 14,000?

Miss McKELVEY. That would be my estimate. I also checked that with our minority section in labor supply and that was their estimate.

Mr. SPARKMAN. Could you tell me if that is disproportionate to their numbers?

Miss McKELVEY. Not greatly.

Mr. SPARKMAN. So after all, in as small a program as you have had, it has not been greatly disproportionate?

Miss McKELVEY. No.

ADAPTABILITY OF WOMEN TO MECHANICAL WORK

Mr. CURTIS. Have you made any check on the adaptability of women to mechanical work, as to their previous work or profession?

Miss McKELVEY. The only check on that recently has been through the surveys of the Employment Service which has been requested from time to time to check on women available and seeking work and registered with the Employment Service. A great many of the women in the country have had factory experience and they are readily trainable for employment in war plants.

Furthermore, there have been tests in schools of the manipulative ability of women, which has been high, and the whole experience has shown that women are capable of doing factory jobs of many different types and kinds.

We find they have been perfectly satisfactory in a few plants in aircraft, where they have done light welding and light riveting. Their efficiency is as high as the men on the same job.

Mr. SPARKMAN. Have these women who have been trained been able to find jobs?

Miss McKELVEY. Almost all of them, and the reason for that is that the definite policy is again to only train women where there are available job openings in the area.

We kept a fairly even balance between job outlets for women and the number of women trained.

Mr. SPARKMAN. The natural assumption then would be that you are going to expand your program greatly in order to take care of the increased demands.

Miss McKELVEY. We should expand it perhaps faster than the demands, because there is no assurance yet or recognition throughout the country as to the extent of the withdrawal of men between the ages of 20 to 35 in the military service. We should anticipate such withdrawals in congested areas particularly, such as Los Angeles and the eastern seaboard and certain parts of the Middle West.

ATTITUDES TOWARD HIRING OF WOMEN

Mr. SPARKMAN. Have employers been reluctant to hire women?

Miss McKELVEY. Yes.

Mr. SPARKMAN. What are their reasons?

Miss McKELVEY. Chiefly because it requires special planning for the hiring of women in large numbers. State laws govern hours of work; they cannot work at night, and they have to have special rest rooms and medical facilities. There has been a natural lag in anticipating that or doing anything about it when we have had available manpower to go into a plant under varying types of plant conditions.

Mr. SPARKMAN. Are there further discriminations or objections against hiring married women?

Miss McKELVEY. Interestingly enough, the first trend in this period has been to take married women. I think that has been largely due to a fear or hesitancy in acknowledging how long this is going to last, that you might have a collapse of your war program and it would be easier for women who are the wives of the men in the plant to be dismissed first, which would create less disturbance. I expect that to change rapidly.

Mr. SPARKMAN. Have unions interposed any objections to the employment of women?

Miss McKELVEY. In general, no; locally, yes. They have not taken any specific national position on it.

They fear the lowering of labor wage rates, a break-down of the job operation, which would naturally require less wage payment, and that wage differential is one of the chief fears that the unions have, I am sure.

However, the labor policy committee of the Labor Division has gone on record that it recognizes the need for extended employment

to women in war industries. The expanded employment of women should take place in an orderly fashion so there won't be an unnecessary dislocation of employed men prior to their induction.

Mr. SPARKMAN. Has any particular craft or any union objected to the use of women in any particular industry?

Miss McKELVEY. No; but there is a general resistance to it under normal conditions.

Mr. SPARKMAN. Not any more than you would normally expect, however?

Miss McKELVEY. No.

LABOR DIVISION'S PART IN UTILIZATION OF WOMEN WORKERS

Mr. SPARKMAN. Has the Labor Division conducted any campaign to induce women into the labor force in aircraft, arsenals, ammunition plants, small-arms plants, and other industries?

Miss McKELVEY. Yes; we have. Our first effort was last summer in surveying local labor-market situations in certain areas. With particular reference to the aviation industry, Mr. Hillman wrote primary contractors in certain areas where we anticipated labor market stringencies, asking them to make preparations to take women into their plants, to plan and survey the types of operations they could do, as there was the indication that they would run into increased difficulties in securing male labor in those areas.

This request was made by employers in California; Wichita, Kans.; Connecticut; and Maryland.

Furthermore, since the war, we have made a definite effort through the labor-supply committees in the industrial areas to promote the employment of women where withdrawals of manpower are anticipated.

WAGES PAID

Mr. SPARKMAN. Let me ask you some questions about protective measures for women workers. Do they receive the same wages as men?

Miss McKELVEY. No; they do not. They have not. Payment of women workers frequently—I don't know the average—is 10 to 15 cents an hour lower than men. The whole policy of the Federal Government, United States Department of Labor, and the War and Navy Departments is that women should be paid the same as men for the same type of work and every effort will be made to carry out that policy.

Mr. SPARKMAN. When you say they are paid a lower wage generally, is that the over-all payment regardless of the type of work done, or do you mean that women who are put on in a plant doing welding, replacing men who have been doing that same job, are paid less than the men they replaced?

Miss McKELVEY. The aircraft industry is paying women the same rate as men. However, in the past women have been doing work which is usually assigned to women. It is accepted as a woman's job and there is a definite wage differential.

Mr. SPARKMAN. That is what I wanted to be sure that we understood. I wanted to distinguish that. Is a woman who is doing the work that has been done by a man paid the same wage as the man?

Miss McKELVEY. The trend now is that she will be.

HOURS OF LABOR

Mr. SPARKMAN. Have laws prohibiting night work for women been suspended in any case?

Miss McKELVEY. None of the laws have been suspended. Several of the States which did not have the authority under the State law to make exemptions have amended their law to provide an exemption privilege to plants on war production in order that they may employ women 24 hours a day on a shift basis.

Mr. SPARKMAN. You do not anticipate difficulty in that connection?

Miss McKELVEY. I hope not.

Mr. SPARKMAN. Have any laws, limiting the number of hours women may work, been suspended?

Miss McKELVEY. No. The exemption may apply there in a few States.

Many of the States have an 8-hour law, 48 hours per week maximum for women. On the other hand, a few States allow 54 to 56 hours a week. None of those laws have been changed yet, although exemptions to individual plants have been granted.

DAY CARE OF CHILDREN

Mr. SPARKMAN. Has the Labor Division attempted to obtain Federal funds to provide day nurseries for working mothers?

Miss McKELVEY. No; we have not attempted to.

Mr. SPARKMAN. Do you plan to do so?

Miss McKELVEY. Frankly, I wouldn't know. I am sure that we would want to support any such program.

Up to this time the responsibility for day care of children has rested with the Office of Defense, Health, and Welfare Services. The Women's Bureau, United States Office of Education, cooperating with the W. P. A. and Farm Security, have participated in planning this program. Insofar as I know, no specific funds have been appropriated for the expansion of the program.

Mr. SPARKMAN. Do you see how it would be possible to draw any great number of women into the war production effort without being concerned with the day nursery problem?

Miss McKELVEY. No; I don't see how it would be. I think it is very necessary that this be a part of the planning of any program where we expect women to be employed in large numbers.

Mr. SPARKMAN. Do these same agencies you mentioned a few minutes ago look after the care of school children after school?

Miss McKELVEY. The United States Office of Education is particularly charged with that responsibility through the local schools, supplying the necessary personnel to take care of children after school if the mothers are working. That is not too advanced yet.

Mr. SPARKMAN. In connection with the training program of the women, has any provision been made to take care of their children?

Miss McKELVEY. It has not been necessary. There would be no distinction made between women in training and the working mother. We must be very careful to see that this doesn't happen.

Mr. SPARKMAN. Miss McKelvey, there seems to be a general overall labor shortage pending for this year. This shortage will require,

as you pointed out, the use of all types of labor devices, including a large number of women.

QUESTION OF STIMULATING EMPLOYMENT OF WOMEN

Rather than wait upon the voluntary agreement of employers to employ women, would it be a better policy to require all defense employers to hire a certain percentage of women?

Miss McKELVEY. That is a very fundamental kind of policy question which I think has many problems, administratively, and I would hesitate to even make a conclusive statement. I do think this: That employers are going to, and already are, as a matter of fact, changing their specifications and plans to use women.

Whether or not they should use a certain percentage of women, regardless of what the conditions are in the locality, I would hesitate to say. I don't think we should require a percentage at this time.

Mr. SPARKMAN. Do you believe that it is a problem, but one that will probably take care of itself as it develops?

Miss McKELVEY. I think certain measures, certain steps, may have to be taken to stimulate the employment of women. After all, we have proceeded, and we should proceed, on the basis of using the local labor supply to produce during a war period. If we have all women left in a locality, or 75 percent women, you are going to have a much easier job of getting women in that locality into the war production. They will be forced into it by the needs of the situation.

The same will be true of the Negroes. We have to use the Negro where he is available and where he can do a job.

Mr. SPARKMAN. The same would be true of the over-age and perhaps the partially handicapped?

Miss McKELVEY. Yes. A trend is beginning to develop on the part of the employers in changing their specifications for labor. They have been very obdurate in some of their points as to the kind of labor they will use, but when a scarcity of labor develops you will have a change in specifications on physical standards, race, age, and sex.

Mr. SPARKMAN. Miss McKelvey, sometimes we get almost lost in the great maze of agencies and institutions that seek to do these various jobs. That is true to some extent with the various agencies that are working on the labor end of it.

Are you familiar with the set-up of the Ministry of Labor in Great Britain?

Miss McKELVEY. Yes.

Mr. SPARKMAN. I wonder what your comment would be on the advisability of some such set-up as that in this country.

Miss McKELVEY. I feel that we have already the beginning of a collaboration of agency activities and a direction of that activity in our War Production Board, and in the Labor Division, which has been bringing together the work of all the agencies in the labor-market situation.

We have a national labor-supply committee made up of agency representatives working in the field of labor supply in every instance, and they are cooperating in working out their programs and operations with policies that have been developed. That is all on a voluntary policy-formation basis, but it is working and it is developing.

MANAGEMENT AND LABOR COOPERATION REQUIRED

Mr. SPARKMAN. If we come to the point where it becomes necessary to exercise some kind of compulsory control over the composition of labor force used in our war-production program, do you think that management and labor should have a voice in making the decisions?

Miss McKELVEY. I think there should be the closest cooperation with management and labor. The Government can't come to conclusions without the help of both management and labor.

Mr. SPARKMAN. I believe General Hershey, in discussing this same problem yesterday, said he thought the two groups to be kept in mind all the time were the users and procurers of labor. Are you of the same opinion?

Miss McKELVEY. Yes, sir. You have to keep those two groups in mind.

Mr. SPARKMAN. That is all I have.

Mr. CURTIS. Do a great many women contact your office expressing a desire to do war work—production work?

Miss McKELVEY. No. Only to a certain extent.

Mr. CURTIS. Do you have any evidence of a desire on the part of many women to have the type of work that would be available?

Miss McKELVEY. Yes; we have a definite indication.

Mr. CURTIS. What seems to be the urge for it? Is it economic?

Miss McKELVEY. Most of it is economic. They feel that in this period they should have an equal opportunity for jobs where they can earn good wages, where they feel they can be productive, or for which they can be trained. There is no doubt in my mind that the women are anxious to do a job.

WOMEN'S AUXILIARY ARMY CORPS

Mr. CURTIS. Have you studied the Rogers bill for an auxiliary army?

Miss McKELVEY. I read it through.

Mr. CURTIS. Do you recommend its passage?

Miss McKELVEY. I would rather not say, sir.

Mr. CURTIS. They are going to call the roll on that in a little while and I have to make up my mind.

Miss McKELVEY. I think it will be necessary to know how to use the women in a service way. If women want to join the Army and be part of the military services, I feel they should have that opportunity.

Mr. CURTIS. Do you have any evidence that part of the women who are expressing a desire to serve do so with the mistaken idea that it is something glamorous and quite exciting to get greasy in a shop and work hard?

Miss McKELVEY. I don't kid myself to that extent; no. I think they realize life is a very serious business and there has been enough visual evidence of the physical requirements of production. They know what it means in terms of grease and long hours and hard work.

I would hesitate to glamorize it. I think it would be the wrong approach to securing, in the labor market, women who are prepared to go in and do a hard job on production.

Mr. CURTIS. One of the leading airplane manufacturers in the country told me it cost him \$500 to take a good-looking lady through the plant—that all the boys stopped to look.

Miss MCKELVEY. I have heard that, too. I think he must have a prejudice against women.

Mr. SPARKMAN. A great many women look upon this as an opportunity to do something they would be glad to do at any time. Isn't that true?

Miss MCKELVEY. That is true. Women have had a great desire to work in this country.

Mr. SPARKMAN. And a great many of these women would have been working at this same job before had they been able to get these jobs?

Miss MCKELVEY. That is right.

Mr. SPARKMAN. Dr. Lamb?

REGISTRATION OF WOMEN

Dr. LAMB. I gather from your paper that the immediate inventory of women is now going on.

Miss MCKELVEY. That is true.

Dr. LAMB. That is true as to the records of some 300,000 registered with the U. S. Employment Service or being classified and analyzed?

Miss MCKELVEY. With particular attention to factory experience and other experience which would make them available and trainable for war production.

Dr. LAMB. I would like to have your opinion on this. I imagine that the numbers registered who are qualified by previous experience for such jobs is not very high out of a total of 300,000 domestic workers and restaurant workers and so on.

Miss MCKELVEY. That is correct.

Dr. LAMB. You say a voluntary registration is being planned of women willing to accept work. Who will conduct this voluntary registration?

Miss MCKELVEY. The plan will be worked out, in collaboration with the agencies on labor supply, chiefly the Women's Bureau and the Employment Service, with the assistance of the War and Navy Departments. A voluntary registration is planned because you want to become informed in a preliminary way as to where the potential reserve of women is who could be brought into war production plants. It would be a measure of the potential women-power who could go into factories.

Dr. LAMB. You would like to have this volunteer registration as complete as possible, I take it?

Miss MCKELVEY. Yes; for agriculture as well as war-production plants.

WOMEN'S LAND ARMY

Dr. LAMB. With respect to agriculture, this committee has previously taken the position that hitherto there were no very serious shortages except in very restricted areas, and I would like to have your opinion with respect to the immediate need for a so-called women's land army.

Miss MCKELVEY. I don't think there is any immediate need for that type of army. I think the farm placement offices of the United

States Employment Service, 600 of them, are equipped to handle farm labor recruitment in cooperation with the United States Department of Agriculture.

If we made a drive to recruit the available women in a locality when needed and paid the standard wage for their work, the situation should be met.

Dr. LAMB. I don't think this committee would even object to volunteer workers, provided their placement took place in an orderly manner through the United States Employment Service if they were not placed where they would depress the existing wages, which in many areas have certainly been too low, or otherwise interfere with the orderly operations of the agricultural labor market.

Miss McKELVEY. I think it would be very inadvisable, and create problems we would not like to meet, if we set up a competing agency for the placing of women regardless of the need or what is available for agriculture.

Dr. LAMB. And it should be done through farm placement service throughout?

Miss McKELVEY. That is right.

Dr. LAMB. The paper you have submitted discusses the need for maintenance of suitable conditions, and it says that these conditions may be maintained through close cooperation with the Woman's Bureau and the Labor Supply Division. Those organizations are already at work, I take it. You have a continuing committee?

Miss McKELVEY. Yes, sir.

Dr. LAMB. Of which you are a member, I believe.

Miss McKELVEY. Yes.

Dr. LAMB. As you know, Miss Mary Anderson will be the next witness, and she will undoubtedly talk at more length about that, so I won't question you further about it.

MAY NEED COMPULSORY REGISTRATION OF WOMEN

You envisage the policy that we may have to have compulsory registration of women in this country as Great Britain has had since March 1941. That is, perhaps, a couple of years off, in your estimation.

Miss McKELVEY. I should say at least a year. If we go into a very concentrated, offensive war, by 1943, we might find it imperative to know the resources of our total labor market.

Dr. LAMB. The Labor Department is studying the British experience?

Miss McKELVEY. Yes.

Dr. LAMB. Your impression is that the British experience has been a satisfactory one?

Miss McKELVEY. There have been certain weaknesses, but as they have gone along they have improved and corrected certain defects that have existed.

Dr. LAMB. What have been the principal defects, would you say?

Miss McKELVEY. They had a limited registration in the first place.

Dr. LAMB. By age?

Miss McKELVEY. Yes; and they had a system of voluntary help in factories, which created a problem.

Dr. LAMB. You would say probably the bottleneck in all of this is the training program?

Miss McKELVEY. I think it is.

Dr. LAMB. And a successful training program would do more to put the war production program on its feet, and particularly to put women into essential jobs?

Miss McKELVEY. I think training is the key to our production effort at this time.

Dr. LAMB. And that is the direct responsibility of the Labor Division of the War Production Board?

Miss McKELVEY. That is right.

INTERDEPARTMENTAL LABOR COMMITTEE

Dr. LAMB. Yesterday Mr. Corson answered a question with respect to policy forming and determining set-up, a somewhat similar question to the one Mr. Sparkman directed to you. I will read the question and answer to you. [Reading:]

So you would say that a policy forming or determining committee of a joint character between, say, the Federal Security Agency and the War Production Board and Labor Department and Selective Service Administration was more needed than the placing of the administration of a consolidated labor supply and training office in any one of those agencies?

And he said: "I would."

As I understand it, there is at the present time a joint committee which coordinates the work of those and other agencies. Is that correct?

Miss McKELVEY. It is not exactly a joint committee. There is an interdepartmental committee on policy and the formation and development of policy as it affects operations of the various agencies and as they contribute to a developing labor-market situation. Then, naturally the Labor Division is attempting and succeeding very well through the operating agencies, in getting results throughout the country and with employers and labor, by direct contact, discussion, meetings and agreement on ways to meet labor requirements.

Dr. LAMB. The Government apparatus and the employers in the field?

Miss McKELVEY. That is right. It represents the kind of positive leadership in a war effort that is very desirable and necessary.

Dr. LAMB. That committee as it stands is merely an interdepartmental committee of representatives who are not necessarily the heads, but people to maintain contact. Is that correct?

Miss McKELVEY. They have been designated as the responsible officers in labor supply. If any question arises that affects operating policy, it is referred back and cleared, naturally.

Dr. LAMB. I raised this question because after Mr. Corson testified we heard later in the day that some plans were on foot for a much more comprehensive set-up than now exists. I don't know whether you are in a position to speak about it or informed and able to speak about it, but it is characterized as a "Manpower Board."

Do you know anything about that or would you prefer not to speak about it?

Miss McKELVEY. I have not been authorized to express an opinion, and I prefer not to answer this question.

Mr. SPARKMAN. Thank you very much, Miss McKelvey. We appreciate your appearance here and the fine representation you have given us.

Our next witness is Miss Anderson.

TESTIMONY OF MISS MARY ANDERSON, DIRECTOR, WOMEN'S BUREAU, DEPARTMENT OF LABOR, WASHINGTON, D. C.

Mr. SPARKMAN. Miss Mary Anderson, Director, Women's Bureau, Department of Labor—is that right, Miss Anderson?

Miss ANDERSON. That is right.

Mr. SPARKMAN. Miss Anderson, at our meetings throughout the country since last April, this committee has been very much interested in the matter of labor supply. We have seen much unnecessary migration to defense centers because of the failure to utilize local labor reserves such as women.

We are interested in whatever measures may be taken to reduce this unnecessary migration to these defense areas. We are particularly pleased to have you with us this morning.

You have submitted a statement to us. I have not yet had the privilege of seeing it, but I can assure you it will be incorporated in the record.

(The statement referred to above is as follows:)

STATEMENT BY MARY ANDERSON, DIRECTOR, WOMEN'S BUREAU, UNITED STATES DEPARTMENT OF LABOR, WASHINGTON, D. C.¹

WOMEN WORKERS AND WAR PRODUCTION

Woman has always been a vital part of American industry. She became a part of it at its birth, prospered with its prosperity, suffered with its adversity, equally in war and peace. The needs of a growing country brought about the transfer of home production to factory production and turned the part-time work of many women over to a comparatively few wage-earning women devoting full time to production. As each invention took hold on the life of the Nation, it has changed the kind of work to be done and transferred much that was traditionally woman's work in the home and in early factories to men. After factory work was established as a man's or a woman's job, it required a great shortage of workers of one sex and an abundance of workers of the other sex existing at the time of improvements in methods of production or created by immigration or by wars to effect extensive transfers of factory tasks from men to women or vice versa. The mounting volume of production and the ever-extending areas of distribution up to 1930 were achieved by employment of a larger and larger proportion of women, while children and men, 65 years old and older, decreased materially and the proportion of adult men workers remained the same. In 1940 over one-fourth of all women were in the labor force.

WAR LABOR REQUIREMENTS AND AVAILABLE LABOR SUPPLY

War production for 1942 is planned at more than double that of 1941; in 1943 the President asks us to double the 1942 output. This war program is estimated to require 15 to 21 million workers in the technical, administrative, office, mechanical, and factory personnel of war factories. Even though it be possible to curtail civilian production to one-half present needs, over 5,000,000 workers would still be necessary for civilian health and welfare. Or from 20 to 26 million factory workers are required for both war and consumer production. At the end of 1941, we were estimated to have 15,000,000 persons in manufacture and 3,000,000 unemployed; 1,000,000 of the latter were women. Even if all unemployed could be used in production, there would still be from 2 to 8 million workers

¹ Supplementary exhibits submitted with the above statement are held in committee files.

required. The largest proportion of this number must come from the ranks of women.

There are sources from which women can be drawn for the war needs without disrupting the family life. About 900,000 girls finish school each year. In agricultural and Mountain States there are large numbers of rural girls who have no opportunity for gainful employment in their own communities but would gladly welcome such employment. These girls are an excellent reservoir upon which to draw for the war-production program. In urban communities 31 percent of the women work; in rural farm areas 12.7 percent. A third source of woman labor will be found among women who worked prior to marriage and who are now homemakers without young children. As there is normally an increase in numbers of gainfully employed women after 45 years of age, the possibilities of employment of the mature woman with earlier factory experience are worth while.

CAN WOMEN BE USED IN WAR INDUSTRIES

Past experience.—About 2½ million women were employed in manufacture in 1940, an increase of 9 percent over 1930. Women formed almost three-fourths the wage earners in the wearing-apparel industries; they have taken over, therefore, most of the manufacture of clothing for soldiers and sailors, the powder-bag sewing for explosives, the sewing of parachutes and canvas covers for every airplane engine, the fabric work on ailerons and other small airplane parts, the making of tarpaulins, slipcovers, and mattress covers for the Navy. Many women are employed in the food industry. The last war led to a material increase in women in meat packing, bakeries, and other food establishments and a similar increase can be expected today, for our soldier needs three times as much food as a civilian.

Women formed over one-third of the employees in the manufacture of electrical equipment and apparatus in 1939, numbering almost 90,000. In this industry, they wind armatures and coils, assemble small armatures and motors, mold small electrical parts and assemble switchboards, wiring supplies, batteries and electrical instruments. They have been employed in machine shops, in the sheet-metal departments and in the wiring departments of large electric factories. Their success in this industry demonstrated for over 20 years leaves no doubt that women could take over the manufacture of electrical parts and the assembly of instrument boards, switch box and other parts on airplanes and for ships.

Woman's success in hardware and cutlery, in the manufacture of office and store machinery, in the stamped and pressed metal industries is also valuable as a guide to what she can do in war industries. Women operate punch presses in many industries; there is no reason whatsoever why they should not be operating the light presses used to blank, form, and pierce winders, bulk heads, gussets, etc. Women operate drill presses in many consumer-goods factories; they can do similar work in war factories. Milling machine operations, light turret lathe operations, grinding, assembly of small parts, and inspection are done by thousands of women today and can be done in new factories.

The last war.—During the last war, many of the labor-saving devices of today, the beautiful factories of today, the vocational training of today, were non-existent. Women went into the iron and steel foundries and machine shops and learned on the job, often under most adverse conditions. Yet the record of achievement shows that in about every vital industry women set up their own lathes, millers, drills, grinders and presses. Metal work is emphasized because almost half the firms reporting replacement of men by women employed women on metal work. These firms produced high explosives and shrapnel shells, cartridges, machine guns and rifles, cannon and cannon mounts, airplanes and seaplanes, grenades, automobiles and tanks, tools, and many other war products. About 83 percent of the firms, comparing the work done by women on metals with that done by men, stated they considered the product of the former as satisfactory as, or better than, that of men.

More than half the workers in bag-loading and shell-loading plants were women. Great credit has been given these workers by the War Department. In airplane manufacture, women formed one-fourth of the workers. The work women did and the extent of their successes or failures is recorded in a volume published by the Women's Bureau and titled, "The New Position of Women in American Industry."

Occupations which women can fill in present war industries.—Early in 1941 the Women's Bureau began a series of occupational analyses of the important war industries to determine the work women could do in such plants more effectively

than men. Until December 7 there was so much opposition to women's employment, that our recommendations of the occupations women could fill had to be most conservative. If we eliminate opposition to women's employment on the part of fellow men workers, of lead men, and foremen, and factory superintendents, women's limitations as productive workers in war industries may be classed under three categories:

1. A known limitation in lifting strength of about one-half the average man's lifting strength; and a known limitation in pulling strength of about two-thirds that of the average man's.

2. Greater susceptibility to dermatitis and other health hazards in the presence of specific chemicals.

3. A lack of basic mechanical knowledge, of familiarity in the handling of tools and metals.

The first two factors are constant. The third could have been eliminated had our vocational schools started to give women background work when women asked the Office of Education to do so in November 1940. While some local schools have given the training, the attitude of national officials has not been encouraging. So on December 7 only a relatively few thousand women had been rendered more useful by schools to the war industries. In this connection we wish to commend the National Youth Administration for they have given invaluable experience to about 700 girls in machine shop, sheet metal, welding, radio and electrical work.

The industries studied by the Women's Bureau to date are aircraft assembly, small-arms ammunition, artillery ammunition, and instrument manufacture. I should like to sketch briefly the type of occupations we are recommending.

Aircraft.—Aircraft assembly is essentially a field for women workers. Because the material of which airplanes are built is light in weight, because the structure is built up out of thousands of small pieces (a bomber has 20,000 parts exclusive of the engine), there is no department in which women may not be employed. The pressing or forming of the metal, the making of it into exact shape, putting it together by riveting or welding, the assembling of all the many minor parts and the assembly or building up of the wings, control surfaces, cowling, fairing, tank and fuselage, and then the final painting, all have numerous occupations that women can do. We are glad to report that two aircraft plants agree with us about women's suitability for this industry and have adopted a program for use of women throughout their plant. Neither plant is large, but they furnish an example of what can be done when management is favorable to women's employment.

The Vultee Aircraft Co. of California began the introduction of women into the plant in April of 1941 when 15 girls were hired. They have added on gradually until there were 536 or about one-tenth of the total in production. The number is not large but the girls are distributed throughout the shop. The girls are assigned to simple jobs first—such as filing burrs off parts. The foremen do the shop training. They are admitted to supplemental courses carried on 24 hours of the day. These courses are in machine shop operations, sheet metal, riveting, blueprint, inspection techniques. Today women are not only in the machine shop, on precision bench assembly, subassembly, in the electrical and radio departments, in the tooling division, the painting division, but are assembling all parts of the fuselage until it is ready for the engine. The fuselage or body of this plane is made of tubular steel. This is carried in jigs on a slow-moving conveyer. The girls slide under it on a low movable bench and work on platforms for top parts. They install the power lines, electrical systems, pedals, control parts, and fittings. As the engine is heavy men mount it but girls help in putting on baffles, connecting oil lines, wiring parts, and putting on accessories. The plane is then ready to have its metal skin riveted on by men. Girls, however, have riveted together the empennage or various types of control surfaces as ailerons, stabilizers, devices, etc. These are small parts and small girls are regarded as especially suitable. The girls begin at the same rates as men, 60 cents an hour. One girl riveter has reached \$1.15 an hour which is about \$190 a month.

The second plant whose attitude toward women's employment is excellent is the Cessna plant at Wichita, Kans. This makes trainer planes which have wings and control surfaces of wood. Women saw the wood, sand it, nail it, and glue together all the small sections. Where wooden structure is used, it is covered by fabric. In the fabric division, women cut, operate sewing machines, stretch the fabric over the parts to be covered, and then stitch the ribs and edges by hand. They also do the doping. In metal plants women do the electrical work and do the installation of the entire instrument board, the installing of the radio. Here, too, the beginning rate for men and women is 60 cents an hour.

From these two descriptions, it is evident that work in aircraft plants is varied and far more interesting than much work in offices and other factories. Plants are noisy for sheet metal resounds.

Instrument.—Another war-developed industry that we believe holds a real future for women is instrument manufacture. Aircraft, fire-control, surgical, and dental instruments are important to defense. Instruments for indicating, measuring, recording, or controlling the flight and navigation of an airplane, the optical instruments, such as panoceanic sights, gun sights, periscopes, telescopes and binoculars used for controlling the aiming and firing of guns, torpedoes, and bombs, while all very different in structure, are made up of many small parts requiring painstaking care.

For many years instrument manufacture was done by all around skilled instrument workers. But with increased production, jobs are broken down. In Great Britain special training courses have been offered to women in the making and fitting of instruments. In this country only one plant admits girls to its formal training program. Women given basic instruction in schools and upgrading training in factories can become skilled instrument workers. Today's trend in the United States to make them unskilled workers should be stopped. We look to our Navy officials for help, just as the Army is helping in aircraft. The Navy has asked for many copies of our occupational analysis.

Shipbuilding, too, may demand women's services. As yet the Bureau has not been able to study it although we have had two requests to do so.

Ammunition.—Manufacturers of ammunition for small arms have modernized their old plants in the East and are operating or will operate five new plants in Missouri, Minnesota, Colorado, and Utah. The Frankford Arsenal has doubled its personnel in small-arms ammunition several times recently. Since the small-arms ammunition industry has a small product, a standardized one as to operations and machinery, and one which requires considerable care and attention to detail, women have been used extensively and as the new plants get in production many more women will be employed. The Frankford Arsenal now employs about half women in this production whereas a plant in Wales has 80 percent women.

Ammunition for artillery weapons can be broken down into many separate component parts and assemblies which lend themselves to wide distribution among many contractors. Cases, shell forgings, fuzes, and other parts are being manufactured by widely scattered contractors and subcontractors. The parts are brought together for final assembly and loading at Government owned plants. Large new plants for shell and bag loading are, or soon will be, in operation in rural areas in Alabama, Mississippi, Louisiana, Kansas, Ohio, Indiana, Illinois, Iowa, Tennessee, Texas, and Virginia. These plants, located in rural, nonindustrial areas, should draw upon unemployed rural women, for well over half of the operations in the plant can be carried on by women. Training is on the job.

Rifle and gun production.—The Bureau has not as yet made its study in this country of the ordnance that fires this ammunition. At the invitation of the Ministry of Munitions in Canada, it visited such plants in Toronto and Hamilton. Whether it is rifle manufacture in which there is mass production or antiaircraft gun manufacture in which each machine must be used to fashion many parts, Canadian women are expected to carry the bulk of production work. This work is largely machine shop work, that is, the gradual fashioning of many metal castings into parts of the gun, and the final assembly of the gun. It is precise work. Girls are reading blueprints, getting their tools and fixtures, setting up their machines and operating them, some to no tolerance. The management expects the girls to operate all but the heavier machines and to set them up; the girls are doing it. There is no thought, even in mass production shops, of teaching a girl only one process on one machine. Girls will be machine specialists, and if the war lasts several years they will be machinists.

The Canadian experience demonstrated to us that if the Government, the management and the foreman want women to become valuable machine-shop workers, women become so very easily and in short time. I want to say also, that in no shop we visited was the work as hard as sewing-machine operation or textile-machinery tending. It takes time to cut metal.

TRANSFER OF EXPERIENCED FACTORY WOMEN WORKERS FROM CONSUMER GOODS TO WAR INDUSTRIES

The withdrawal of vital materials from nondefense production, beginning in August 1941, has resulted in dislocations of women who have been employed in this type of production. As women factory workers are employed primarily in

consumer goods industries, their readjustments following rationing of industrial raw materials and finished products must be planned. Woman-employing industries already affected are: Aluminum cooking utensils, silk throwing mills, silk narrow fabric mills, silk broad fabric mills, hosiery, costume jewelry, silverware, tires, drug sundries and other rubber articles, cork and asbestos using industries, phenol using industries, automobile passenger cars, batteries, clocks and watches, cutlery, hardware, games and toys, lighting fixtures, radios, refrigerators, sewing machines, washing machines, vacuum cleaners, and stoves and ranges.

The difficulty in shifting disemployed women workers to war industries varies with the volume and character of war contracts in the specific area where disemployment occurs. A study of each situation and numerous sympathetic conferences with the women themselves need to be held before these workers can be rendered useful to the war effort and are established on a self-supporting basis. The following situations already existing illustrate the kinds of problems arising through the curtailment of consumer production.

The ending of the silk throwing industry, in the anthracite area of Pennsylvania, has caused untold hardship to many families whose women worked in these mills. In Luzerne and Lackawanna Counties, in November, it was estimated that there were 10,000 unemployed women from silk mills and clothing factories. While men's pants and shirt factories have profited by war orders, women's dress and underwear suffer from lack of supplies. Organized labor has objected to the Labor Supply Committee suggestion to retrain throwsters for sewing machine operations. Nor is the character of work done by women in throwing mills similar to sewing machine operating. Out-migration of women was suggested by the Employment Service. However, only one-eighth of a sample group interviewed were without dependents and these girls lived with their families and were not eager to move to new localities. As this area has suffered through decreased employment in anthracite mining, new industries are badly needed. The unemployed silk throwsters could be employed on artillery ammunition component parts for the war period.

Women are also hard hit by the cutting off of metal for costume jewelry in Rhode Island. But here there is a possibility of their employment by firms manufacturing tools and small-arms ammunition. The Women's Bureau is working with the Employment Service to effect such transfer.

The ending of automobile passenger car manufacture presents a serious problem for women for they were employed chiefly in the office and in the upholstery departments and had acquired skills not called for in munitions industries. Retraining is essential. The Women's Bureau has worked on the problem of reemployment of women automobile workers in Michigan with some success; but much more attention must be given the situation.

* * * * *

Women displaced from consumer goods industries should be the first to be reemployed in war industries; their reemployment requires study of their past occupations in relation to war demands, as well as study of local and nearby demands before a retraining program can be instituted.

Women from rural areas should be used extensively in rural plants being erected for bag loading, shell loading, and in the production of small-arms ammunition in the Rocky Mountain area. Their employment calls for the erection of suitable places where they can live and eat as well as sleep, and for the satisfactory operation of these homes.

Young women from school require preemployment training to equip them with the fundamentals for useful war industry employment in their communities. Older women may require refresher courses before they can be reabsorbed. Both groups should receive training within the plant, so that much needed lead women and forewomen can be developed from their ranks.

Women workers can fill our war industry needs, but their effective use requires planning and careful supervision.

STATE LAWS GOVERNING THE EMPLOYMENT OF WOMEN

A generation or two ago women worked in factories in this country for 11 and 12 and 13 hours a day. There was nothing to prevent this. Trade unions were in their infancy. Moreover women did not belong. Before 1879 there was no enforceable hour law for women in the United States. Gradually the public awoke to what these long hours were doing to the health of women workers, to their homes, and to their children. State legislatures began to feel the pressure

of aroused public opinion. Slowly State after State, beginning with Massachusetts in 1879, passed some kind of legislation limiting the hours that women may be employed. Today there remain only five States, Alabama, Florida, Indiana, Iowa, and West Virginia, that have not restricted the employment of women for unlimited hours.

Experience and scientific research have shown that, over any extended period of employment, the 48-hour week for women workers yields the greatest maximum production. In 1918 only one State and the District of Columbia had limited the employment of women to 48 hours a week in some branch of manufacture. Our own and the British experience in the World War taught us much. Scientific studies that were made at that time gave us factual evidence of things many of us had known a very long time before. These studies showed that when men and women are overworked, when hours are long and rest periods are infrequent, sickness rates increase, accidents are more numerous, and workers are much more frequently absent from their jobs. These ill effects are more pronounced among women workers than among men. The lesson to be drawn from this experience by us today is the effect of long hours upon production. Accidents, absenteeism and sickness interrupt the productive process. Output falls off as these industrial ills increase.

The experience of the World War impressed itself upon the legislators of this country. Since 1918 the number of States that limit the weekly hours for which women may be employed in manufacturing¹ to 48 or less has increased from 1 to 21.²

The legal number of hours for which women may be employed in manufacturing is more than 48 in the following States:

49½ hours: Kansas; 50 hours: Vermont and Wisconsin; 54 hours: Arkansas, Louisiana (6,000 or less population), Maine, Michigan, Minnesota, Missouri, Nebraska, New Jersey, Oklahoma, South Dakota, and Texas; 55 hours: Delaware, South Carolina (hosiery), North Carolina (firms with 8 or fewer); 57 hours: Tennessee; 60 hours: Georgia (cotton or woolen mills—all employees), Maryland, Mississippi, and Kentucky; no limitation: Alabama, Florida, Indiana, Iowa, and West Virginia; Colorado, 8-hour day—no weekly limit; Idaho, 9-hour day—no weekly limit; and Montana, 8-hour day—no weekly limit.

Today³ 20 States require that women employed in manufacturing⁴ shall be given 1 day of rest in 7. Short rest or lunch periods are required by law for women working in factories in 21⁵ States.

Not all of the legal regulations governing the employment of women are inflexible. In 9⁶ of the 21 State laws limiting to 48 or less the number of hours for which women may be employed in manufacturing, authority is given to permit longer hours during periods of emergency.

Ten⁷ of the twenty laws requiring 1 day of rest in 7 for women employed in manufacturing permit 7 days employment in serious emergencies.

¹ Not including canning.

² (1) Arizona, (2) California, (3) Connecticut, (4) Illinois, (5) Louisiana, (6) Massachusetts, (7) Nevada, (8) New Hampshire, (9) New Mexico, (10) New York, (11) North Carolina, (12) North Dakota, (13) Ohio (45 hours), (14) Oregon (44 hours), (15) Pennsylvania (44 hours), (16) Rhode Island, (17) South Carolina (40 hour, applies to textile only), (18) Utah, (19) Virginia, (20) Washington, (21) Wyoming, and the District of Columbia.

³ (1) Arizona, women; (2) Arkansas, women; (3) California, women (industrial welfare order) and women and men (law); (4) Connecticut, women and men; (5) Delaware, women; (6) Illinois, women and men; (7) Kansas, women (commission of labor and industry order); (8) Louisiana, women; (9) Massachusetts, women and men; (10) New Hampshire, women and men; (11) New Jersey, women; (12) New York, women and men (day-of-rest law), women (hour law); (13) North Carolina, women; (14) North Dakota, women; (15) Ohio, women; (16) Oregon, women (industrial welfare order); (17) Pennsylvania, women (5½ days a week); (18) South Carolina, (a) women (Sunday work illegal in manufacturing), (b) women and men (5 days a week in cotton, silk, rayon, woolen textile mills), (c) women and men (Sunday work illegal in textile manufacturing except in emergency, when time and a half must be paid); (19) Washington, women; (20) Wisconsin, women and men; and the District of Columbia, women.

⁴ Not including canning.

⁵ (1) Arkansas, (2) California, (3) Delaware, (4) Indiana, (5) Kansas, (6) Kentucky, (7) Louisiana, (8) Maine, (9) Maryland, (10) Massachusetts, (11) Nebraska, (12) Nevada, (13) New Jersey, (14) New Mexico, (15) New York, (16) North Dakota, (17) Ohio, (18) Oregon, (19) Pennsylvania, (20) Utah, (21) Wisconsin, and the District of Columbia.

⁶ (1) Connecticut, (2) Massachusetts (extraordinary emergencies in businesses requiring shifts), (3) Nevada (if time and one-half is paid), (4) New Hampshire, (5) New Mexico (2 hours weekly if time and one-half is paid), (6) Oregon (overtime, if time and one-half is paid for hours in excess of 44), (7) Pennsylvania (if time and one-half is paid for hours over 44), (8) Utah, (9) Wyoming (overtime, if time and one-half is paid).

⁷ (1) Arizona; women working 6 hours or less a day may be employed 7 days; (2) California; women and men; (3) Connecticut; women and men; (4) Massachusetts; women and men; (5) New Hampshire; women and men; (6) Oregon; women; (7) Pennsylvania; women; (8) South Carolina; women and men; (9) Wisconsin; women and men; (10) North Dakota; women (10 hours a day, 7 days a week allowed in emergency if 48 hours a week is not exceeded).

Of the 28 States not listed above, all but Idaho, Montana, Nevada, and Wyoming have legislation on their books prohibiting Sunday labor in general. Most of these laws have their origin in the old Puritan blue laws, and provide for exceptions under various circumstances.

At the time the United States declared war on the Axis Powers, 12⁸ States prohibited the employment of women in manufacturing during some hours of the night. In some cases these prohibitions were provided for by statute, in others by administrative regulations. Since the declaration of war, steps have been taken by all of the 12 States, except Delaware and Ohio, to relax the night work regulations.

The United States was plunged suddenly into war. The President on December 10 called for all-out war production. Enormously increased plant activity, of course, was the result. Many processes in war-production industries are performed by women. But during the defense period few women were trained for the time when they would be needed in a vastly expanded production program. Consequently many requests came from employers for the relaxation of State laws governing the employment of women. The Women's Bureau and State labor departments realize that in view of this great national emergency temporary adjustments may have to be made. Knowing as we do that production will suffer if labor standards are lowered for any extended period of employment, we are recommending that relaxation when permitted by law be limited to temporary emergency periods; that every application for relaxation be thoroughly investigated by State labor commissioners to assure that relaxation is actually necessary; that permission be given to individual firms and not to entire industries; and that permits be withheld unless the employer makes satisfactory arrangements to train or secure trained workers within a reasonable time. We hope that by this careful procedure necessary adjustments can be made, and labor standards and all-out production can be maintained.

I. TRENDS IN EMPLOYMENT OF WOMEN IN BRITISH WAR INDUSTRIES DURING WORLD WAR I

During World War I there was an increase of about 3.4 percent in the total number of women employed in Great Britain (from July 1914 to July 1918), according to the report of the War Cabinet Committee on Women in Industry. However, the women in manufacturing had increased about 36 percent. The force of women in the chemical industries in 1918 was more than one and one-half times that of 1914, and in the metal industries was nearly two and one-half times as great as in 1914.¹

INCREASES HAVE CONTINUED SINCE WORLD WAR I

Though the war increases represented a mushroom growth, after a period of some stabilization there still was a long-time gradual increase in woman employment in the groups of industries referred to. Census data for 1921 and 1931 show an increase of 11 percent in the number of women in total employment, of 13 percent in the number of women in metal manufacturing, and of 17 percent in the number of women in the chemical industries. Reports as to insured persons (aged 16 to 64) show that from 1931 to 1937 (after which domestic workers were covered) the total number of insured women had increased 4 percent. From 1931 to 1939 (the latest date of publication) the number of insured women in the metal and in the chemical industries each had risen 14 percent. The Ministry of Labor points out that in the period from 1923 to 1935 "the industries that have expanded include a much greater proportion of operations on which women can be employed."²

ENGINEERING INDUSTRIES

Especially significant in war production are the engineering industries, which include all operations in the manufacture, assembly, and repair of metal articles involving the use of machine tools, whether the principal work of the firm or merely subsidiary (as in a maintenance department).³

⁸ (1) California, (2) Connecticut, (3) Delaware, (4) Indiana, (5) Kansas, (6) Massachusetts, (7) Nebraska, (8) New Jersey, (9) New York, (10) Ohio (applies only to girls between the ages of 18 and 21), (11) Pennsylvania, (12) Wisconsin.

¹ For comparative data for this country: In a large group of war implement and war industry firms in the United States surveyed by the Women's Bureau, the woman labor force had increased roughly 40 percent from 1916 to 1919, and much of this increase was in new work in the plants rather than in replacement of men.

² Ministry of Labor Gazette, December 1935, p. 457.

³ See Gazette, cit., July 1940, p. 185.

Engineering trades in Great Britain long have been highly organized, but the trade unions were in the main entirely barred to women, so that women were less than 2 percent of the membership. Yet more women were employed than generally is realized and the number grew rapidly in pre-war years. Women were in the electrical trades, making of sewing machines (where they outnumbered men), of telephones, typewriters, cycles and motors, and so forth. As in this country they did inspection and much bench work, and the assembly of small parts.

The numbers of women in engineering industries increased rapidly in the years before the present war. They had advanced 15 percent from 1914 to 1924; from 1930 to 1935 (which is about the time of the beginning of rearmament on a major scale) when men's employment increased 7 percent, women's went up 27 percent. From 1935 to 1939 there was almost a 20-percent increase, and by 1939 the pre-war Ministry of Labor reported 300,000 women in the engineering trades, 98,000 more than in 1924.

INCREASED EMPLOYMENT OF WOMEN IN WAR INDUSTRIES OF THE PRESENT

As to the present war period, it is of course not possible to get complete data as yet, but there are many scattered indications of the enormous extent to which women are carrying on the work of war production, and the processes, many of them unusual to women, in which women now are engaged.

1. For occupations performed by women in British factories in metal work and other industries, see the long list attached to the Women's Bureau mimeograph *Women in War Industries in Great Britain*.

2. As to extent to which women constitute the labor force in British war factories, the following important instances give significant indication:

DATA ON PROPORTIONS OF WOMEN IN BRITISH WAR INDUSTRIES, 1941 AIRCRAFT

The aircraft industry is already staffed 30 percent by women, and there is room for an increase up to 70 percent.¹

Forty percent of the workers in a large British Spitfire plant are women and the proportion is expected to rise to 80 percent in a short time. (The Christian Science Monitor. Behind British Airplanes. May 3, 1941.)

A firm in the North Midlands region, which repairs Hurricanes and Tiger Moth Trainers, had, at the end of June, over 400 employees, of whom 28 percent were women. The intake of new labor agreed by the management will be approximately 75 percent women.²

ORDNANCE AND AMMUNITION

At a new Royal Ordnance factory in Wales, 80 percent of the workers are girls. (London Times. May 11, 1941.)

An outstanding example of dilution by women is to be found in the Wales region, where in a Royal Ordnance Factory there are 1,200 females out of a total of 1,850 employees. This means there is woman dilution of 65 percent on expert gun work * * *²

In a fuze factory in the Midlands 90 percent of the work is done by women. (Scott, Peggy. *British Women in War*. London, Hutchinson & Co., Ltd., 1940., p. 152.)

The northeastern region has a factory where 3-inch shells are manufactured, and 90 percent dilution by women has been achieved * * *²

In a plant which began producing anti-aircraft guns in March 1940, about one-sixth of the workpeople were women in the following March. (The Manchester Guardian. *Women's Aid on Making Guns*. March 29, 1941.)

Now female labor accounts for 40 percent of the total employed in the tank industry.¹

¹ The British Library of Information. *Women Welcome Stimulus of Conscriptioin*. Bulletins from Britain. No. 67. December 10, 1941. p. 13.

² Ministry of Labor and National Service. *Round the Region. Women on War Work Here, There and Everywhere*. Engineering Bulletin No. 7. December 1941.

Percent increase in employment of women in Great Britain

	1914-18 ¹	1921-31 ²	1931-39 ³
Total employment.....	3	11	45
Manufacturing.....	36		2
Metal manufacturing.....	249	13	14
Chemical.....	160	17	17

¹ From report of the War Cabinet Committee on Women in Industry, 1919, pp. 80, 81.

² From census data (women and girls).

³ From estimates of number of insured persons 16 to 64, in Great Britain and Northern Ireland, Ministry of Labor Gazette, December 1931, p. 476, and December 1939, p. 418.

⁴ Increase from 1931 to 1937. In 1938 domestic workers were added to insurance coverage, and due to this the numbers of women increased still more in 1938. Workers under the agricultural scheme, covered in 1936, are excluded in computing the increase.

⁵ Includes machinery.

⁶ For the most part, primary metal processing rather than metal products.

II. BRITISH EXPERIENCE SHOWS METHODS EFFECTIVE IN THE EMPLOYMENT OF WOMEN IN WAR INDUSTRIES

The Women's Bureau early began an examination of British experience to see what assistance it could offer to efforts in this country for the effective utilization of womanpower. Efforts were then begun to profit by this experience.

British officials closely in touch with the situation believe that essential fundamentals for the best employment of women include the following:

1. The Government must keep close and constant touch with women's organizations, for example, trade-union women, business and professional women, and others—and make use of the advice offered by their experience with women's work. These women have practical experience to offer, and in addition the effect of assuring them that their work is necessary in a national emergency goes a long way in creating the high morale essential for the greatest efficiency.

The Women's Consultative Committee to the Ministry of Labour and National Service was not organized immediately, but since its formation it has been very active in formulating policies for utilizing the services of women and also has kept in constant touch with the women's organizations. These particular activities are similar to the work done in this country by the Women's Bureau in the Department of Labor. The Women's Consultative Committee in Great Britain, though nominally an advisory body, actually is responsible for policies relating to women's work in war industries. The committee's advice is never disregarded or overlooked. It acts directly through the Minister of Labour on the one hand and it obtains advice and assistance from women's groups on the other.

2. Government training facilities must be freely opened to women on a much larger scale than has yet been achieved in this country. In Great Britain, lacking at first Government facilities, women supervisors were trained by the Women's Engineering Society on its own initiative, beginning in May 1939. Later, the Government took over this society's training school, and in December 1940 courses in the Government training centers were opened to women. The British Ministry of Labour and National Service has a woman as special adviser on women's training. In this country, training opportunities in the Government-sponsored defense courses have developed very slowly for women. After many months of operation, only about 500 women had been included among the trainees. By the autumn of 1941 the numbers were increasing rapidly, and some 20,000 were reported, but this still is small compared to the growing needs for women.

3. Thorough studies must be made of the jobs women can do in defense industries and attention of employers urgently called to the work women can do in their particular plants. In this country the Women's Bureau has been making such studies and has in hand material to advise plants as to the work women are doing and can do in making aircraft, small-arms ammunition, artillery ammunition, and various needed types of instruments. The Bureau has available for distribution reports showing jobs suitable for women in each of these industries. A multitude of the actual jobs done by women in war industries in Great Britain are listed in a Women's Bureau mimeograph of October 1941: Women in War Industries in Great Britain.

4. A prime necessity in proper location of the woman labor supply is a sufficient number of employment exchanges, including their location in smaller as well as

larger centers, and their staffing with personnel well informed as to jobs women can fill. In Great Britain, the Ministry of Labour and National Service issued last June a restriction-of-engagement order which required employers to obtain their workers through the national labor exchanges.

5. In the formulation of policies affecting women, women competent to advise should be consulted at every stage of the process. The Women's Consultative Committee and the special adviser on women's training have already been mentioned. In Great Britain women also did the interviewing of women. This was done by the supervisory force of women in the Ministry of Labour, composed of some 1,400 women. Furthermore, special panels were organized in connection with local labor exchanges to hear cases of women requesting to be reallocated in the defense program; women serve on these panels.

6. Careful planning for the introduction of women should include agreements as to wage scales that provide for the same rate of pay for women as men on the same jobs. This has been done on a considerable scale in Great Britain. It tends toward a sound wage structure based on rates varying to suit the job, and allays fears that new women workers will serve to undercut an established wage scale. The agreement in the engineering industries, made in May 1940, is an important example of such action, which also has been taken in the electrical supply, boot and shoe, transport, and other industries.

III. STEPS IN INTEGRATING WOMEN INTO BRITISH WAR INDUSTRIES

1. Under the Emergency Defense Powers Act the Minister of Labour and National Service has power to control and direct labor. (First passed in August 1939, this act was strengthened for immediate effective operation in May 1940 when the present government came into power.)

2. The British system of employment exchanges has long been highly organized, managing placement and unemployment insurance. During the war, it has had entire charge of placement in industry, registration of men for military service, and registration of women.

In June 1940 the Ministry of Labour and National Service issued what was known as the "Restriction of Engagement Order," which required that all engineering labor (the chief type used in war industries) must be engaged through the employment offices.

3. The Ministry of Labour and National Service operates through (1) The employment exchanges, just discussed; (2) the regular factory inspectors; (3) a new organization (created June 1940), the welfare officers, who cooperate with local agencies on matters relating to workers, but outside the factory, e. g., board or lodging, transport, reception of workers; and (4) (also new), special national service officers with emergency powers. They transfer skilled workers, supervise replacement of men, plan for dilution and upgrading and for training; (5) labor-supply committees, advisory in character, working with employment exchanges; (6) special local appeals boards to hear appeals in cases of women who think the work classifications to which they are allotted should be changed (women serve on these committees).

4. Special plans for placing women:

May 22, 1940: An agreement was made between trade unions and employers for the introduction of women into the engineering industries, that is, even in jobs formerly held only by men. This agreement included provisions as to wage rates. Such agreements since made in other industries have greatly facilitated entrance of women and allayed fears that their introduction would be disadvantageous to established trade-union wage rates.

January 21, 1941: A year and a half after British involvement in war, Mr. Bevin announced in Commons that it was necessary to call on woman labor. (This was but one step in a continuing program of shifting workers from nonwar to war industries and expanding the labor force.)

March 13, 1941: The Ministry of Labour appointed the Women's Consultative Committee (eight members).

March 15, 1941: An order was issued requiring the registration of women (as well as men). At this time the program for concentrating labor in war industries was progressing rapidly; the earlier stages of this had thrown many women out of jobs in nonwar industries.

April-December 1941: Women 20-30 were registered, classified, and interviewed (by women officers of Ministry of Labour in supervisory and managerial grades, of

whom there were 1,400). Under this registration, women could be directed into industry, but not at that time into the uniformed auxiliary forces.

December 18, 1941 (following the Prime Minister's speech of December 2, 1941): A Royal proclamation made single women 20-30, of whom there were 1,620,000, liable to be called up for the armed forces. (See exhibit 12.) They were needed primarily in the Auxiliary Territorial Service. (See exhibit 9.) In the Auxiliary Territorial Service women are needed in army camps for clerical work, cooking, cleaning, telephone operating, and so forth. Some of the new registrants also will operate anti-aircraft guns, though Mr. Bevin expressly stated that this would be a service chosen voluntarily.

Women liable for military service may state preference for civil defense jobs or work in industry. Preferences in industry are limited to (1) filling shells, (2) jobs in small-arms and airplane-engine plants, (3) domestic workers in hospitals, (4) Women's Land Army, (5) government and emergency training centers.

5. Employment of women is handled by women, in the following capacities:

A. The Women's Consultative Committee, created March 13, 1941, determines policies in relation to woman employment.

B. The Ministry of Labour and National Service has a special woman adviser on women's training.

C. Registered women are interviewed by women interviewers.

D. Special advisory committees to local employment exchanges handle cases of women's appeals. Women serve on these.

TESTIMONY OF MISS MARY ANDERSON—Resumed

Mr. SPARKMAN. Dr. Lamb has gone over the statement and I am going to ask him to interrogate you.

Dr. LAMB. The first question I would like to ask you is, What was the experience on utilization of women during the first World War when, as we understand it, the Women's Bureau was created?

Miss ANDERSON. The first experience was the fact that women already were employed in a great many war industries before we went to war. As men were drawn from the industries to the Army, women were being employed in the industries. It was, of course, not an awfully long time so they didn't penetrate into the industries as far as they may do at the present time.

They showed that they could do the work with some little training and upgrading and they did it very well and some of the work for which they were specially fitted they did even better than the men had done.

If I may, I will read a paragraph from my statement (reading):

During the last war, many of the labor-saving devices of today, the beautiful factories of today, the vocational training of today, were nonexistent. Women went into the iron and steel foundries and machine shops and learned on the job, often under most adverse conditions. Yet the record of achievement shows that in about every vital industry women set up their own lathes, millers, drills, grinders, and presses. Metal work is emphasized because almost half of the firms reporting replacement of men by women employed women on metal work. These firms produced high explosives and shrapnel shells, cartridges, machine guns, rifles, cannon and cannon mounts, airplanes and seaplanes, grenades, automobiles, tanks, tools, and many other war products. About 83 percent of the firms, comparing the work done by women on metals with that done by men, stated they considered the product of the former as satisfactory as, or better than, that of men.

EMPLOYMENT OF WOMEN IN ENGLAND'S WAR INDUSTRIES

Dr. LAMB. Could you tell the committee briefly what the experience of England has been in this war with the employment of women in war industries? We understand women were registered there last March.

Miss ANDERSON. Yes.

Dr. LAMB. That is, women between the ages of 20 and 30.

Miss ANDERSON. Yes. England's experience with women, of course, has been very satisfactory. First, they registered. When they began to think about employing women, they had two voluntary registrations; they stimulated an interest in registering by radio publicity and by holding meetings. The women registered very gratefully.

Because at that time they were not ready to employ them, there was a great deal of dissatisfaction throughout the country in regard to those registrations. So much so that when they could begin to employ the women, they had to have, not voluntary registration, but enforced registration of women between 18 and 30.

Now, they again have a compulsory registration of women between 35 and 45. Women are being employed in all of the war industries. In some of them women represent 30 percent, and in some 40, and in some to as high as 80 percent, and they are going in more and more as men are being drawn away from the industries.

According to Miss Haslett, who was over here, and who is an engineer and the special woman adviser on women's training, they are engaged in almost all kinds of industrial occupations. They are tool makers and they set up the machines. So there is practically no place in the war machine, in the war industries, where women are not being employed in England today.

Dr. LAMB. What about the wages paid?

Miss ANDERSON. Wages paid in most of the places are the same as the men received. There are, of course, some places where women do get less than the men got when they were on the job. I understand that is a great contention in England today.

Dr. LAMB. Would that be true in the industries where the number of women is largest, would you say?

Miss ANDERSON. I think it is; yes.

Dr. LAMB. Have you an estimate as to how many women workers will be needed by industry within the next year?

Miss ANDERSON. We have no authoritative figures. Our estimated figure is that over a million additional women workers will be asked to come in next year. It may be even higher than that.

POTENTIAL EMPLOYMENT OPPORTUNITIES FOR WOMEN

Dr. LAMB. I would like to ask you as to the occupations in which women are now finding increasing opportunities?

Miss ANDERSON. Women are being employed with increasing rapidity in airplane factories. Women were not employed in airplane factories before the war or before the emergency. But they are now being taken in fairly rapidly in a great many occupations, and they are doing welding, working in the fuselage department and, of course, they do the assembly and all of those smaller jobs. In other industries, such as small arms, women have always been working to a certain extent. Fuze-making is also a job women have done. There is great expansion in the work.

We made an investigation in the four areas where women were employed to a certain extent and where they could be used with the idea that women should have a chance to make good if they were

inducted into the industries. We made the survey in the aircraft production program, and we went in and worked with the foremen and discussed what jobs women could be inducted into, and we have issued those reports.

Besides the small-arms ammunition there is the manufacture of artillery ammunition; and there are others that should have our attention.

One place women can be used a great deal is in the instrument field, and also in photography. Photography is a very important job these days when you have to do so much of it in the airplane, particularly, and in the detecting field where women are so largely employed in England and where, of course, through Mrs. Rogers' bill, the War Department wants to employ women here.

Dr. LAMB. I was interested in a reference in your prepared statement to the effect that in 1940 there were about two and a half million employed, which represents an increase of 9 percent over 1930.

Miss ANDERSON. That is from the Census figures.

Dr. LAMB. Of course, we all expect women will find ready employment in the wearing-apparel industries, but it is interesting to observe that over one-third of the employees in the manufacture of electrical equipment and apparatus in 1939 were women.

Miss ANDERSON. That is right.

Dr. LAMB. Winding armatures, coils, and in assembly work and like operations.

Miss ANDERSON. Yes.

Dr. LAMB. And also in the machine shops and sheet-metal shops.

Miss ANDERSON. Yes. The electrical industry has always been one we might call a woman-employing industry because there are so many small articles on which they do much better work and which they handle much better than men.

Dr. LAMB. Particularly on the side of assembly and precision work?

Miss ANDERSON. Yes. It is something like making fuzes. A time fuze is a very small object. There are many intricate parts in a time fuze, some very small, about the size of a pin. Women's hands are much better fitted to assemble that fuze than are men's hands, so women are employed entirely.

OPPORTUNITIES IN PUBLIC SERVICE

Dr. LAMB. What about other occupations, such as telegraph operators, messengers, taxicab drivers, streetcar conductors, elevator operators, and similar occupations?

Miss ANDERSON. They are beginning to come in to those occupations now.

Dr. LAMB. You expect they will expand considerably?

Miss ANDERSON. They will expand, of course.

Dr. LAMB. The W. P. A., as you know, has done about 50 migration studies, and they indicate that unemployment among women migrants is anywhere from 5 to 10 times as high as among men migrants. Do you think this reflects discrimination by employers against women workers?

Miss ANDERSON. To some extent. You are talking about agricultural labor there?

Dr. LAMB. No; not migrant agricultural workers; but migrant defense workers.

Miss ANDERSON. Yes. Of course, there is some discrimination but not much at the present time.

Powder-loading plants, for example, are in the country and they have to build housing so as to house the workers. Even so, some of them come from within the radius of, say, 50 miles. They do come that far sometimes, into those plants.

Dr. LAMB. In other words, you would say that the housing of unattached women workers is a problem?

Miss ANDERSON. Yes. They have built dormitories and it has been done in a great hurry and, like most things done in a hurry, they are not very well done.

I realize it is a temporary situation, but in those dormitories there is not afforded any way of getting food. Sometimes the dormitories are located about 3 miles from the nearest restaurant or any place that food can be obtained other than that which can be procured within the plants.

PROBLEM OF HOUSING

But the dormitories have to be built quite a little way from the plant, because the plant is a hazardous industry.

It is necessary to have facilities for food; there should be recreation; there should be other conveniences for the women, not only because necessary for the women themselves, but because necessary for real production. If the women live very badly, they won't stay and there will be a very high turn-over, which is always hard on production.

So it is important to have good living conditions as well as good working conditions.

ATTITUDE OF EMPLOYERS AND UNIONS

Dr. LAMB. With respect to employer discrimination, what is your bureau doing today to break down any prejudices that exist against the women workers?

Miss ANDERSON. We cooperate, that is to say we visit the employers, sometimes at their request and sometimes without a request, and find out whether they are employing women, what the conditions of employment are if they are employing women, and what the conditions should be.

One very large plant, very important in the war production, did not want to employ either women or Negroes. We visited them twice and they were adamant. The Office of Production Management wanted women employed and so did the War Department, and they wanted them to expand and train women so as to be ready to employ them. About 2 weeks after we had been there one of the men called me in a hurry and said, "For heaven's sake, come over and help us employ these women." So it works both ways. When they wanted us, they knew where to find us.

There are, of course, several reasons for opposition to employment of women. Some are valid and some are not. For instance, an employer, a foreman particularly, says, "I don't want women in here. I can't cuss them out like I can cuss the men out. We couldn't have women in here."

And it goes much farther than that. That is a trivial thing. He doesn't want to employ women. He doesn't know why. He has never done it and he feels that it is impossible for him to do it now.

Then, of course, we have the labor organizations who don't want women employed because in the past women have been used very greatly to lower the conditions of employment. They have been paid less and employers have actually exploited women as a potential labor supply as against men, and that is what men are afraid of all the time.

PROTECTION OF WORKING STANDARDS OF WOMEN

Dr. LAMB. Your Bureau is directly charged with responsibility for protecting the working standards of women, is it not?

Miss ANDERSON. Yes. It was created by Congress for that purpose. More than a year ago we published a pamphlet on standards for the employment of women in war production, the first of a series of defense bulletins. We followed it with one on the lifting of heavy weights and one on safety clothing, the last named of great importance in machine operations. A report on women's washroom and other service facilities is in preparation.

SUSPENSION OF STATE LAWS REGULATING EMPLOYMENT OF WOMEN

Dr. LAMB. Have any State laws regulating night work or hours of work by women been suspended?

Miss ANDERSON. Yes. Twelve States prohibit the employment of women in manufacturing during some hours of the night. In some cases the prohibitions were provided by statute, in others by administrative regulation. We asked them, where it was necessary—where the three-shift system came in—to waive that restriction and practically no State had to amend its law; the Governor or the labor commissioner took steps to suspend that regulation for a certain time. They are doing that where they want to employ women on three shifts, but they make very careful investigation in regard to whether it is necessary and require that it shall be only for the duration.

Dr. LAMB. Do you think these laws are adequately safeguarded?

Miss ANDERSON. I think so, yes. That is being done in regard to the 8-hour day and 48-hour week for women.

Dr. LAMB. Does the Women's Bureau in any way supervise the vocational training of women?

Miss ANDERSON. No; we do not.

Dr. LAMB. What have you been doing to increase the training of women workers?

Miss ANDERSON. Well, we have been working with the old O. P. M. organization in the training within industry and the upgrading within industry. We worked very long and very arduously and didn't get very far, but I think the situation is altogether different now.

I feel that vocational training should only be used for the women who have never been inside of a factory and don't know anything about factory work. When women are used to the factory, you might say "factory broke," the best thing to do is to put them right in on production and train them there.

Dr. LAMB. Miss McKelvey testified earlier that 14,000 women had been trained in the training programs.

Miss ANDERSON. Is that vocational education?

Dr. LAMB. That covered, I believe, all the Federal training programs. I would be interested to know what you think the needs are for speeding up the training of women for war work. What needs to be done?

Miss ANDERSON. I think the Employment Service should register these women and they should be referred to training classes.

Dr. LAMB. Has the Bureau been active in attempts to obtain training facilities for Negro women?

Miss ANDERSON. Yes. We do that in the same way as we do the other. We don't separate them at all.

OPINION ON COMPULSORY HIRING

Dr. LAMB. What would be your opinion of a requirement that all defense employers should hire a certain percentage of women in view of the impending shortage of workers for war jobs?

Miss ANDERSON. Well, I don't know that that would be very helpful. I think they will hire women just as they need them and in some places the percentage would be higher than in others.

I think in the aircraft plants it will be very high.

Dr. LAMB. Through a combination of the skill which the women develop and the shortage of men?

Miss ANDERSON. Yes. I understand that the airplane factories took in and trained a great number of young men and that they did that with the idea that they would have to take them out sometime in the combat area. What they need so badly along with the fighters of the Army is mechanics. If the actual people in the Army had that mechanical skill, it would be much more important in the combat field, so they expect to withdraw nearly all of these young men from the airplane factories. They want to bring in the women. We have worked very closely with the War Department on that situation.

Dr. LAMB. Are you familiar with the set-up and the operations of the British Ministry of Labor?

Miss ANDERSON. Yes.

Dr. LAMB. Would you think that a consolidation of the present large number of agencies in this country having to do with the labor market, into a department similar to that in England, would be desirable here at the present time?

Miss ANDERSON. I believe strongly that the various labor agencies and all those relating to labor matters should be in the Department of Labor. That is what the Department was created for, and obviously it should be done. I understand such a system has worked out very well in England.

SAFEGUARDING COMPULSORY CONTROLS OF LABOR FORCE

Dr. LAMB. The witnesses yesterday indicated a certain trend toward compulsory controls over the labor force or, particularly perhaps, the organization of placement for certain types of skills, a limited number of which are becoming scarce.

What would your opinion be with respect to the need for safeguarding such compulsory controls by letting management and labor have a voice in these decisions?

Miss ANDERSON. I think management and labor should always have a voice in important decisions that affect labor.

Dr. LAMB. Is there any advisory committee connected with the Women's Bureau, for example?

Miss ANDERSON. Yes. We have an advisory committee of the leading women's organizations, and we have an advisory committee of the leading labor organizations in the war industries.

Dr. LAMB. Are women being hired on the same basis as men as to pay and seniority?

Miss ANDERSON. To a large extent. I do get some information occasionally that they are not, but as a whole the women are hired for the same wage that men are, and in up-grading in industry they get the same pay.

Dr. LAMB. Do you know whether the Army and Navy have made any use of women doctors and psychologists?

Miss ANDERSON. I don't think they have. My information is that they have not so far done that.

Dr. LAMB. Do you happen to know what the basis of the ruling is that bars married nurses from the Army and Navy? I believe that is a correct statement.

Miss ANDERSON. No, I do not; but I know such a ruling existed for a long time.

Dr. LAMB. Those are all the questions that I have, Mr. Chairman.

Mr. SPARKMAN. Miss Anderson, we appreciate very much your coming to us and the fine way in which you have presented this subject matter to us.

If there is nothing else, the committee will stand adjourned until next Wednesday at 9:30 a. m.

(Whereupon, at 12 noon, the committee adjourned until Wednesday, February 11, 1942, at 9:30 a. m.)

NATIONAL DEFENSE MIGRATION

WEDNESDAY, FEBRUARY 11, 1942

MORNING SESSION

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE INVESTIGATING
NATIONAL DEFENSE MIGRATION,
Washington, D. C.

The committee met, pursuant to adjournment, at 9:30 a. m. in room 1536, New House Office Building, Washington, D. C., Hon. John H. Tolan (chairman), presiding.

Present: Representatives John H. Tolan of California, chairman; John J. Sparkman of Alabama, Carl T. Curtis of Nebraska, and Laurence F. Arnold of Illinois.

Also present: Dr. Robert K. Lamb, staff director of the committee. The CHAIRMAN. The committee will please come to order.

STATEMENT OF NOEL SARGENT, SECRETARY, NATIONAL ASSOCIATION OF MANUFACTURERS

The CHAIRMAN. Mr. Sargent, the committee recalls with pleasure your appearance before it last July, and it found your statement of that date to be very valuable.

In the past 2 weeks we have been interested primarily in receiving testimony on the national labor market demands for next year, and what national policies will be necessary to permit us to meet the wartime demand for labor.

We are hopeful policies can be developed to make our labor program more orderly.

The members of the committee have some questions to ask. I understand that your statement arrived this morning and some of the questions and answers will need amplification. Your statement will be inserted in the record at this point.

(The statement referred to follows:)

STATEMENT BY NOEL SARGENT, SECRETARY, NATIONAL ASSOCIATION OF MANUFACTURERS, NEW YORK, N. Y.

UTILIZATION OF THE NATION'S LABOR SUPPLY

I have been requested by the chairman to appear before your committee today to discuss the broad subject of full utilization of America's labor supply, and have, in addition, been given nine specific questions upon which judgment is desired.

Before attempting to answer the specific questions referred to, it is, I believe, necessary to consider the broad background involved, especially insofar as it involves the determination of our labor supply and the wartime employment trend.

With this in mind, Mr. Chairman, I present the following statistical observations, including at this point answer to your question No. 3:

"What deficiencies are there in current statistical data on the labor market? What suggestions for improvement can you make?"

(1) When the United States defense effort started in July 1940, there were 10,850,000 people employed in manufacturing and estimated unemployment of 7,789,000. I wish to point out, however, that there is not necessarily any direct relationship between the volume of manufacturing employment and total unemployment; in fact, during a considerable part of the 1930's manufacturing employment increased while total unemployment either increased or stayed about the same. In other words, other fields of economic life than manufacturing may hold the key to the volume of unemployment.

(2) In December 1941, manufacturing employment totaled 14,000,000 (including both factory and nonfactory workers); estimated unemployment in all branches of industry was 3,675,000.

Employment in December showed a drop, but we estimate that in January 1942, factory employment reached a new high; employment in five exclusively war-production industries is calculated at 49 percent above last July, and 8 percent above December.

While over-all employment figures for manufacturing are quite good, the figures for other branches of industry are not as reliable, representing newer series based on less complete reports.

Unemployment figures, however, are not so good. The inaccuracy is due to failure in some cases to require employment service registrants to re-register; failure in some cases to require employment service registrants to register at all; payment of unemployment compensation to some people who have really left employment; and self-evaluation by applicants. Until these things are changed—if they can be—thoroughly reliable unemployment statistics, at least in any detail, are impossible.

(3) We estimate that in December 1941 about 30 percent of all manufacturing production was defense production. On this basis the 14,000,000 manufacturing employees at the end of 1941 may be roughly divided into 4,200,000 in defense production, and 9,800,000 in civilian production. (There might be some question as to whether 30 percent defense production would require more or less than 30 percent of the manufacturing employees. I have assumed that the two figures would be equal. It is true that some of the new defense workers are still only semitrained, and that they may lack the average efficiency of mechanics in civilian industries; on the other hand, they are working on the newest and best machines, permitting high per capita output, and are also working in industries in which machinery plays a large part in the output volume; it is believed that these would, during 1941, about offset each other.)

It is difficult to draw a rigid line between defense and nondefense industries; for example, the factory worker who makes the cloth that is made into the work shirt that is bought by the worker in an airplane factory is really engaged in defense work. But, in order to conform more nearly to popular understanding of defense or war production, we consider in our present statistical analysis that only 20 major manufacturing divisions are producing war goods.

(4) We cannot make a detailed break-down of current trends in defense and nondefense employment. This is because the Government last November ceased publication of detailed industrial group employment, pay roll, and man-hour statistics. The Government does, however, publish valuable series in these fields covering over-all manufacturing, durable and nondurable goods. These series fail, however, to enable us to trace the exact picture of employment shifts in war and civilian production, including the extent of priorities unemployment.

I do not believe, however, that we should criticize the Government policy in this respect, assuming that information of value to the enemy might be disclosed as to volume of production of different war goods if detailed pay roll and man-hour figures were published.

But, on the other hand, industry itself knows that further increases in the manufacture of war products will require a great shift of labor and replacement of labor called into military service.

I therefore suggest that the Government might continue to publish only over-all manufacturing, durable and nondurable, figures covering employment, pay rolls and man-hours. It might, however, resume publication of employment figures for specific industries, since these do not indicate actual production volume; but not resume publication of individual industry pay roll and man-hour figures. If this suggestion is considered impractical under existing conditions, the United

States Bureau of Labor Statistics could construct an index of defense and war production employment, and pass on this index to a small group of responsible persons which in turn could advise the various branches of our defense and war industry.

Another reason for this suggestion is the fact that man-hours conversion factors for war production are not known to outsiders and that furthermore employment in itself would be no accurate basis to derive man-hours and finally output.

(5) We estimate that total industrial production on the F. R. B. index in December 1941 was approximately 170 (that is 70 percent above the 1935-39 base), of which mining constituted about 21 points of the total. We estimated that total industrial production in December 1942 will be approximately 180, with virtually all the increase representing manufacturing. Thus manufacturing will increase from 149 to 159 points, or 7 percent. This would represent in more normal times an approximately similar employment increase, that is to 14,980,000 in December 1942 as compared to 14,000,000 last December.

(6) We further estimate that 50 percent of all manufacturing production in December 1942 will be war production; this compares with 30 percent in December, 1941.

(7) We can, therefore, start with a basic estimate of an even distribution of manufacturing employment in December 1942 between war and nonwar industries.

(8) This would give us 7,490,000 employed in civilian industries, as compared with 9,800,000 at the end of 1941; a decline of 2,310,000, or nearly 24 percent.

(9) But in the war industries we would have 7,490,000; an increase of 3,290,000 or 78 percent above the 4,200,000 at the end of 1941.

(10) As a matter of fact the employment increase in the war industries will, in all probability, be substantially greater. In the first place, much of the 1942 expansion of war production will involve conversion of plants not highly adapted to war production and the utilization of older machinery; it will also be more difficult to obtain as skilled supervisory personnel; it will likewise be necessary to train large numbers of new workers, many with lower physical qualifications, with a reduction in the average efficiency per war worker in 1942 as compared with 1941. No exact measurement of these factors is possible, but I estimate that probably about one-third more new workers will be required in the war-production industries than the bare statistics would reveal. This would mean an additional 1,097,000 employees—a total increase of 4,387,000 or somewhat more than 100 percent above the total number of defense workers in December 1941.

(11) On this basis, total manufacturing employment in December 1942 would compare as follows with total manufacturing employment in December 1941:

	Number of employees	
	1941	1942
War production.....	4,200,000	8,587,000
Civilian production.....	9,800,000	7,490,000
Total.....	14,000,000	16,077,000

This would involve a net increase of 2,077,000, or nearly 15 percent in the number of manufacturing employees during the present year.

(12) But it would not be correct to assume that this net increase will not also be accompanied by severe unemployment in some cases. First, not all of the 2,310,000 displaced workers in the civilian industries will be absorbed by the selective service system. Second, not all of them will be suitable for employment on war work. Third, many of them will be located in communities far distant from any war-work possibilities. A substantial number can and will be employed on war production; a substantial number will enter the armed forces; the remainder will represent war unemployment in a period of increased effort to secure workers.

(13) The net increase of 2,077,000 will represent transferences from civilian production to war production, plus additions to the working force drawn particularly from formerly unemployed; grade- and high-school graduates; retired employees; women not formerly seeking employment; and many other groups.

SPECIFIC QUESTIONS

I turn now, Mr. Chairman, to observations upon the several questions you submitted to me in advance, with the exception that I shall give no further comment on question III.

Question I:

"Do you recommend Federal assistance for the transfer of workers from civilian to war work? If so, what kind of assistance?"

I do recommend Federal assistance for the transfer of workers from civilian to war work.

It should be pointed out that such assistance will be needed for two quite different groups, namely:

- (a) Individuals who have worked in factories producing civilian goods and who face priorities unemployment; and
- (b) Individuals who have been connected with retail and appliance sales and have no factory-work background.

Those in the first group will probably try to obtain employment within a reasonable distance of their present residence and will try to avoid moving their families in the hope that some war work may be assigned to their former employer, and that they may be called back to that plant.

Members of the second group present a more serious problem, since they are not accustomed to manual work, and it will be difficult to employ them at rates of pay which will equal their former earnings.

The primary assistance given will be of two kinds:

- (1) Through the operation of the State unemployment compensation laws, designed to furnish individual aid in unemployment;
- (2) Through the Federal employment bureaus in industrial areas, and by close cooperation with State, municipal, and private employment agencies.

Additional Federal assistance should be so handled as to minimize the possibility and severity of abuses.

Subject to this limitation, Federal assistance might take the following forms:

- (1) A plant training program designed to further develop and make of value the dexterity, flexibility, and experience of the individual when he has taken a job opportunity available in war production.

Such training should be limited to a definite period, with perhaps a 6 months' maximum. This would be a sort of "earn while you learn" training, with the actual net costs borne by the employer and reimbursed by the Government.

This would be primarily an extension of the Government's present training-within-industry program.

- (2) Extension of free training courses such as are now being administered through various educational organizations.

- (3) Where an employer engaged in war production is unable to find qualified personnel in his own area and locates it elsewhere, and pays the traveling expenses of such new personnel, and probably of their families, from their old homes to the new places of employment, the Government should accept such expenses as legitimate costs of production.

Question II:

"Do you recommend that the Federal Government render financial assistance to workers who must migrate to obtain jobs in war production? If so, how should such assistance be given?"

The general answer to this question is, No.

This answer is given for the following reasons:

- (1) If there is sufficient cooperation between Federal, State, municipal, and private employment agencies indiscriminate traveling in search of jobs will be unnecessary.
- (2) If existing agencies put an individual in touch with a job, and the employer pays his traveling expenses, as previously advocated, there is no real need for Government travel assistance.
- (3) If an individual does not have a job, or a mighty good prospect of one, in another locality he will usually be better off staying in his own area.
- (4) Itinerant job seekers will create many special problems of housing, sanitation, etc., in other communities; if they go to rapidly expanding industrial areas they will simply augment existing community difficulties.
- (5) Such assistance, if given without a definite location on a new job, would increase the difficulties of the Selective Service System, as men might be wandering from one community to another.

(6) Such assistance might increase the difficulties of conversion of local plants to war work by unnecessary removal of workers from the community.

(7) If such assistance were given freely it might lead to unnecessary and wasteful job shifting.

Question IV:

"What current hiring practices hinder the full utilization of our labor force in the most efficient manner? What proposals can you offer for their elimination?"

In answer to this question I list the following practices, with suggestions for their correction:

1. Practice of employment agencies in sending to employer applicants who do not really possess the particular abilities the employer has requested. But as long as reliance must be placed on the use of self-evaluation by registrants this probably cannot be fully eliminated.

It might be reduced, however, by the utilization by employment agencies of interviewers who could, in personal conversation, probe into the actual knowledge possessed by applicants.

Moreover, greater familiarity by employment agency representatives would facilitate full employment. Here is one illustration which came to us just a few days ago:

"The Labor Department people did not realize that the employees of X who were without work, due to a shut-down in that plant, were not trained to take their place in the machine tool industry. As far as we could tell, they saw a great number of employees who had been working, had been let off, and should be employed by us. Apparently they had no conception of the difference between operating and feeding presses, or even body work such as X is doing, and the precision and training necessary to turn out high grade aircraft products. In addition to the above, the labor bureau people apparently had no appreciation of the difference in temperament and tools that a man must have, as between these two types of work."

2. Practice of many State and Federal employment agencies in repeatedly referring the same applicants to vacancies. In a short time an applicant may be sent out to several different prospects. Where he has not found a job this is all right, but where he is a "floater" who is able or wants to work only a short time in any one place it is detrimental. It encourages jobbing around for a "soft snap" job; increases turn-over; increases unemployment compensation costs in experience-rating States, and promotes dissatisfaction in the working forces where they frequently spend a short time.

3. Indiscriminate hiring, which may result in the diversion of, or pirating from, defense industries of individuals with skills and aptitudes urgently needed in such industries. A practical solution of this problem might be worked out on the basis of voluntary local cooperation through local organizations or the office of the War Production Board.

4. Indiscriminate advertising for skilled help. For example, aircraft companies in some sections of the country in their highly laudable effort to increase war production are advertising for skilled help in defense centers throughout the country. The defense program gains little if skilled men are taken off one war-work job to work on another. Here, again, the labor section of the War Production Board could act to discourage such activities.

5. Indiscriminate competition by Government ordnance plants in hiring away workers from other war production, even from aviation plants.

6. Immediate absorption of doubtful or submarginal workers into labor unions. Usually these people cannot be discharged without lengthy meetings between management and union representatives, because, if discharged, they may be sources of difficulty with the Labor Board.

All this is very wasteful of management time and effort. If it were possible to employ such doubtful people on the basis that the union would not take them in and represent them, during a period of a 6-month trial, many people who do not represent a good labor risk could be given a try-out. Many union agreements contain such a provision; the practice should be extended. With the thought in mind that production for defense is first, companies frequently cannot take the risk of employing doubtful or submarginal workers today without some "weeding out" protection.

7. The severity of some State workmen's compensation laws in making the employer fully liable in case of the aggravation of physical conditions which existed prior to employment. This makes an employer extremely careful as to the physical status of new employees. It would seem that in such States a

temporary relaxation of these laws in the case of war production might be advisable, perhaps by permitting waivers to be obtained covering the employment of handicapped persons.

8. Continuance by many companies of pre-war rigid physical standards. With the need for vast numbers of additional workers, caused by expanded production and by the draft, companies which are doing, or expect to do, war work should promptly review their health requirements to see if at least temporary relaxation of such standards would not be helpful.

9. Similarly, some companies might properly consider relaxation of restrictions against employment of either women in general, or of married women.

10. The Federal Wages and Hours Act, which prevents companies from hiring submarginal workers at wages commensurate with their ability. There is no remedy for this, except amendment of the Act to permit the wage-hour law administrator to approve such employment under appropriate protective restrictions against abuse.

11. Refusal by some employers to employ aliens. Similarly, refusal by some branches of the Government, by some unions, and by some employers to permit employment of certain minority-group members. We have urged that there be no arbitrary restrictions of this kind, but there can probably be no fully satisfactory solution to this problem until human nature changes.

12. The practice of many employers in requiring that applicants for employment shall either belong to or join a labor union. Employers on war work should be able to hire the most competent workers they can find, and such arbitrary restrictions necessarily interfere with war-production efficiency.

The solution is to amend the Wagner Act so that, in addition to protecting the employee against discrimination because he belongs to a union, it will also protect him against discrimination if he voluntarily decides he does not want to belong to a union.

The worker should be allowed to decide for himself that he wants to belong to a union or that he does not want to do so; the employer has no basic right to coerce him in this matter.

13. The practice of many unions in demanding that only union members shall be, or remain, employed. This results in employer inability to hire people who are competent to do a day's work, and thus prevents maximum utilization of the available labor force.

The solution is to do as President Gompers agreed in World War I and freeze the existing closed- and open-shop status "for the duration."

Question V:

"Do you think that there is duplication of effort and/or lack of coordination among the different Government agencies dealing with problems of labor supply?"

The answer is "Yes"—but is not to be considered as highly critical.

We are faced with a complicated problem, which must be solved in the minimum length of time. This necessity for haste, and our traditional Government set-up, probably make inevitable a certain amount of duplication of effort and lack of coordination.

Question VI:

"Do you think that the defense training program has suffered from lack of uniform policies and single administrative direction?"

We have surveyed a large number of industrialists on this question. In general, their combined judgment seems to be as follows:

(a) There has been lack of uniform policies and single administrative direction of the defense training program; there is a possibility that recent moves to coordinate labor supply and training may be helpful.

(b) Probably some of this—but not all—has been necessary because of the haste involved and the wide variety of training needs.

(c) The defense training program would have been more efficient if there had been clear-cut policies and a sound plan of organization to carry them out.

(d) So far, the defense program has suffered but not severely from this lack of policy and organization.

(e) This is largely because the Training Within Industry Division of the former O. P. M. although only a part of the broad defense training program has done a very good job under all the circumstances.

Question VII:

"In your opinion, is a consolidation of agencies needed at this time to effectuate a national labor market policy?"

It is impossible to answer this question very well without knowing just what is meant or contemplated by the phrase "national labor market policy."

It would surely be helpful to have a sound national policy regarding wages and their relation to inflation, wages and their relation to prices, demands for more closed shops in industry—but Congress has refused to act on these vital matters. Certainly these problems have a definite bearing on indiscriminate labor competition and efficient utilization of the Nation's labor supply.

It does, however, seem inconsistent to promote a War Production Board, with responsibility for war production; to set up a training division within that Board; to have Federal Employment offices under the Social Security Administrator; and labor supply services under the Social Security Administrator, but with some sort of tie-in to the W. P. B.

It would seem that a more definite wartime consolidation of these divisions under the W. P. B. would be a constructive step.

Question VIII:

"Do you think it desirable to establish a department of labor supply and national service similar to the English Ministry of Labor Supply and National Service? Conceivably, such a Ministry of Labor Supply would include some or all of the following agencies: the Selective Service Administration, the Department of Labor, the training and supply work of the Labor Division, the Employment Service, parts of the Work Projects Administration, the Civil Service Commission, parts of the Office of Education and the farm labor work of the Department of Agriculture."

If by this is meant a new Department or Cabinet rank, the answer is "No." We have a permanent Department of Labor now.

Today there are three main labor problems:

- (1) How to get labor for the military forces.
- (2) How to get labor for the war production.
- (3) How to find jobs for the priority-unemployed.

There should be only two main wartime labor supply divisions, and these should cooperate very closely:

(a) The Selective Service Administration.

(b) The Labor Supply Division within the War Production Board. The latter should have full control over all Federal Government agencies of recruitment, placement, and training of labor on war and civilian production; it should not control other functions of the Department of Labor, the Office of Education, etc.

The Selective Service Administrator and the Labor Supply Director of the War Production Board should cooperate in setting up rules for the handling of labor supply from the standpoint of the combined needs of the armed forces and those producing the goods they need. This would lead to a more efficient utilization of labor supply.

It seems unnecessary, at this time, to go further and establish regimentation which would compel labor to work in particular plants, industries, or communities. Control over priorities will itself compel shifting and readjusting labor supply without regimentation over the individual.

Question IX.

"Should such a Department of Labor Supply be a civilian agency?"

In answer to question VIII I answered the basic question as to whether there should be such a department.

I assume the present question asks whether if such a department were created it should be civilian.

The answer is affirmative—but it should cooperate closely with military authorities. They have too many other problems to take over the whole labor situation.

TESTIMONY OF NOEL SARGENT—Resumed

The CHAIRMAN. Congressman Curtis will first question you.

Mr. CURTIS. I am very happy you could be here, Mr. Sargent.

We were told in our hearings last week that while we employ about 5,000,000 people in defense industries now, before the calendar year of 1942 is over it would be 15,000,000, and I am very glad to have your ideas with reference to this labor situation.

We recall your paper submitted last summer and your appearance before the committee, and at that time you recommended that employers should utilize the local labor reserves before recruiting labor from outside areas.

UTILIZATION OF LOCAL LABOR RESERVES

The committee has received some evidence to indicate that that practice has not been carried out very well. What is your idea or observation on that?

Mr. SARGENT. Well, I would say that, in general, it has been well carried out, but I would say also there are notable exceptions, both on the part of private industry and the Government, with respect to recruiting labor from other areas than those in which plants are located.

Mr. CURTIS. In other words, when everything else was equal, they did take local labor?

Mr. SARGENT. Yes, sir. It is naturally better for the employer to take local labor, because it doesn't create transportation and housing and other problems.

Mr. CURTIS. Do they take the local labor if the local labor is old men or colored workers? Are they taking those classes of labor rather than receiving the labor from some distant point if it is of the age they want and white male labor?

Mr. SARGENT. I would say there has been some relaxation on the part of employers in hiring qualifications of all kinds, with respect to physical standards and sex and other qualifications that formerly existed. I think that, however, there will be many future changes in hiring standards on the part of employers, and further necessary relaxations will be forced by the outright demand for labor on the one hand, and by the withdrawal of present employees on the other hand.

Mr. CURTIS. And that will affect the employment of colored people in a like manner?

Mr. SARGENT. Yes, sir.

Mr. CURTIS. Realizing that some people who are now employed in war industries will be drafted into the Army, it is entirely possible that ten or twelve million workers will have to be recruited this year for industry. Do you think that the policies which manufacturers have followed in the past year in recruiting labor will enable us to meet the demands for the coming year?

ESTIMATED LABOR REQUIREMENTS

Mr. SARGENT. Let me say at the start, Mr. Curtis, that I have observed on a great many reports statements of 10,000,000, 15,000,000, or 20,000,000 increase in labor on war production.

Now, that is possible if you include construction labor and all other types of labor which must be included, but if you include only manufacturing labor, I do not believe there is any such increase in sight.

Nevertheless, there will be a substantial increase, and I think employers will have to reconsider and relax former hiring standards, in order to obtain that labor.

Mr. CURTIS. The Director of the United States Employment Service, Mr. John J. Corson, told us a week ago that in the near future the Employment Service would assume control of all hiring where shortages of skilled labor have developed. Apparently as shortages develop, the Employment Service plans to take control of those workers.

Do you think such control is desirable or necessary?

OPPOSES CONTROL OF HIRING BY EMPLOYMENT SERVICE

Mr. SARGENT. I think there should be, in the War Production Board, through its Labor Supply Division, a centralization of Government activities, with respect both to hiring and training of workers during the war period.

If Mr. Corson's statement meant that if the employer wishes to obtain a civilian draftsman he could not go to a plant or another company in the same community to get the draftsman, but would have to go to a Federal service, that would be going too far. However, if he wishes to employ labor through the Employment Service, there should be a coordination of all Government agencies, and it seems to me it would be proper for the Federal agency to try to coordinate that employment activity.

Mr. CURTIS. What criticisms, if any, would your organization wish to make of the United States Employment Service, or maybe I should say suggestions or comment that you wish to make, in reference to our United States Employment Service?

Mr. SARGENT. We have no general criticisms to make of the United States Employment Service. I do, in my paper, which has been incorporated in the record, make some suggestions as to inadequacies. I do not know that they are the fault of the Employment Service particularly.

For example, sometimes a man will be sent out repeatedly to a dozen jobs in 6 months. It is evident he is not successful and able to make a go of it, and sending that man out repeatedly is not very conducive to getting satisfactory results.

Another thing which I assume is not the fault of the Employment Service, is that when men register as seeking jobs, it is a self-evaluation proposition. They tell how skilled they are and what they can do. It is a tendency of human nature for a person to rank himself a little higher than he actually is. It is a psychological proposition.

Mr. CURTIS. It is true of Congressmen, I think.

Mr. SARGENT. I wouldn't say, sir.

NEED OF SKILLED INTERVIEWERS OF APPLICANTS

When a man does that, unless the Employment Service has very skilled interviewers of applicants, men who can by questioning determine whether they actually possess the qualifications they say they have, very often men are sent out without the qualifications an employer wants.

Mr. CURTIS. And whenever that happens, that hurts the Employment Service, because all parties are disappointed if the employment does not carry through?

Mr. SARGENT. Yes, sir.

Mr. CURTIS. I think your suggestion that the interviewers of the Employment Service be people who can, in a measure, detect something about the applicant's ability by questioning him and learning about his background and experience, is good.

Assuming that the Employment Service does take control of the hiring of certain limited skills, would it not be possible for the Employment Service to require employers to hire all local available labor reserves first before bringing workers in from the outside?

Mr. SARGENT. I should think so.

Mr. CURTIS. If it all had to go through the Employment Service, do you think it might help in making use of the local reserves first?

Mr. SARGENT. Yes.

We must bear in mind that while many of us have advocated the employment of local labor where available, that local labor sometimes does not possess the required skills, so you often find local labor is not available with the particular skill needed for precision work, and things of that sort.

The CHAIRMAN. Granted that they are, you are firm in your belief that local labor should be used?

Mr. SARGENT. Yes. They should be given first chance of employment if they are available in the area.

QUESTIONS DEFINITE ALLOCATION OF CLASSES OF LABOR

Mr. CURTIS. Could the Employment Service do a better job by allocating a certain amount of employment to women and a certain amount to colored people?

Mr. SARGENT. I don't know whether it is feasible to make a rigid allocation and say that employers must employ a certain percentage of this class and a certain percentage of that class. If you start that you get into saying that John Jones should work in this factory and cannot work in the other, and that Tom Brown must move 20 miles away while the other fellow stays here. I don't know whether it is a desirable thing to get into that extreme regimentation of what the individual should do.

Mr. CURTIS. I am very much interested in the decentralization of defense work insofar as possible. Now, none of us want to hurt the defense program or to retard it. It is my belief that in the interior of the country there are quite a few resources in the way of able mechanics and small shops that have not been fully utilized. Do you have any suggestions to make on how further decentralization of our war efforts might be carried out?

Mr. SARGENT. No further than we have suggested in other statements before this and other committees.

We believe as you do that the primary job is to get the war effort done. Within that limit, both of skill and increase in the supply of available facilities, of course both elements must be taken into account and we believe the distribution of contracts is a desirable thing.

That applies to the distribution of prime contracts, where that is possible, and to the distribution of subcontracts.

On the prime contracts it is obvious if orders are extremely big and there can't be any coordination of smaller plants for the purpose of taking a large order, then the order must be given initially to plants which are capable of taking the entire order. They, in turn, will

probably be overloaded and will be forced to look for other plants to take certain parts of the work.

BELIEVES DECENTRALIZATION WILL INCREASE

I believe as the contracts let under the appropriations made by Congress increase, a larger and larger amount of decentralization and distribution is inevitable, because it will be physically impossible to get work done unless it does take place.

Mr. CURTIS. Does your organization take any part in the formation of pools?

Mr. SARGENT. No; we do not take any part ourselves in the formation of pools, but we have through the National Industrial Council, which is an organization of some 35 State associations and 200 local associations, endeavored to impress upon them the necessity of organization in their own communities of pools of various plants, and have given them information about the York plan and other plans followed in different parts of the country, so that they will be able to study that and do it better.

Mr. CURTIS. Do you have any suggestions in reference to how the Government could improve its procurement service in order to help manufacturers, and to help the program generally?

Mr. SARGENT. We have some ideas and suggestions concerning that, sir, but in view of the fact that the W. P. B. is now trying to work out a reorganization along that line and is dealing with it, as you know, I think the general interest might be better served if we endeavored first to try to work that out through the W. P. B., rather than present suggestions for congressional action.

Mr. CURTIS. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Sargent, you feel, as I take it from your answers, that sooner or later—we hope sooner—the small manufacturing plants in the United States will be utilized in the defense program?

Mr. SARGENT. That is, those which are capable of being used.

The CHAIRMAN. And looking toward that, the pooling idea has been created?

Mr. SARGENT. Yes, sir.

The CHAIRMAN. When you think, Mr. Sargent, of approximately 160,000 manufacturing plants and factories in the United States, large and small, 97 percent of them employing less than 200 men, that gives you quite a picture and, if those 97 percent have to go out of business, or a great proportion of them, it will be very critical indeed unless something is done about it.

Mr. SARGENT. Yes, sir. We have a committee on civilian industry production which is endeavoring to make suggestions as to the best means of keeping alive, if possible, the small companies, and the chairman testified only recently before Mr. Patman's committee of the House, dealing with that subject.

ATTITUDE OF MANUFACTURERS TOWARD WOMEN

Mr. ARNOLD. I have some questions, Mr. Sargent, dealing with women in industry. What have been the objections of manufacturers in the past employing women?

Mr. SARGENT. Well, I don't know that I can say that manufacturers generally, I mean as an over-all proposition, have had objections to employing women, in view of the fact that a large number of them have employed women for a number of years. It is true that there have been companies and industries in which the employment of women has been negligible. That has been due to a variety of factors.

In some industries it is due to the heavy nature of the work, where women are not suitable, for physical reasons, and that is offset by the large number of places where the manual dexterity of women makes them more valuable than men.

Some employers have had objections to employment of married women, some employers have had objections to employing more than one member of a family because they wanted to spread employment through the community as much as possible.

Those situations have all existed in different places. There has been no general industrial policy, but individual companies may have had such policies.

In addition to that, some employers have felt that the turn-over among women employees was much greater than among male employees, and since the cost of training an employee in a skilled occupation is very high, that was a justifiable reason for not employing women to as large an extent as men.

Mr. ARNOLD. I notice women are being employed now in certain industries, certain types of workers, and it is reported that they can do some types of work better than men.

Mr. SARGENT. There are certain types of assembly work in making airplanes, for example, that women can do as well as men—I wouldn't say better—but where it has been customary in the past for the companies to employ men. But they are finding that women do the work as satisfactorily.

Mr. ARNOLD. And you would assign the reasons for not employing them heretofore to the fact that the manufacturers recognized there was larger turn-over in employing women and also that they wanted to employ only one in a family?

Mr. SARGENT. And there are some occupations, such as foundry work, where women are not physically able to do the work. Possibly the feeling that employment should be confined to one in a family is especially common in rural communities. There have been big campaigns in many rural parts of the country as to whether the local school board should employ married teachers.

Mr. SPARKMAN. Federal Government had that until a couple of years ago.

Mr. SARGENT. So I understand.

Mr. ARNOLD. Do you know whether manufacturers expect to use women workers extensively next year?

Mr. SARGENT. I believe there will be a substantial increase in the employment of women next year, due to the need for increase in labor demand and due to the withdrawals of physically fit males for the Army.

Mr. ARNOLD. And with the war on and all the young men going to war, the turn-over probably won't be as great as it would be in peacetime.

Mr. SARGENT. It should not be. Whether it will be or not will depend to some extent on whether we have a national labor policy that

seems to encourage people to think that the pasture across in another State is a little greener, and, of course, if higher wages are paid to induce people to change their jobs. We could have quite a substantial turn-over both among men and women if that situation develops very strongly.

SUSPENSION OF RESTRICTIONS ON EMPLOYMENT OF WOMEN

Mr. ARNOLD. Do you believe the specific limitations which have been placed on the employment of women such as the restriction against night work and limitations of hours, should be suspended at this time?

Mr. SARGENT. I would not advocate a general suspension because, generally speaking, while some of the laws may have gone to extremes, there has been a social justification for many such laws. As distinct from a general suspension, I would say that the State labor department, or whoever may be delegated responsibility, should see that, as there is a shortage of particular classes of labor for war work, there should be a suspension to permit such employment in those occupations.

Mr. ARNOLD. That is all I have.

Mr. SPARKMAN. Mr. Sargent, we have been concerned, from time to time, at least we have been giving some thought to the idea, whether or not there should be a consolidation of all Federal agencies which are concerned with some aspect of the labor market. Would you recommend such a consolidation?

Mr. SARGENT. If that is meant, as was indicated in questions 8 and 9 submitted to me by the chairman, some over-all ministry of supply, to take over all functions of labor, including civil service, training and employment, I should think not. I don't believe that is necessary or desirable.

I think there should be two main labor divisions during the war period, the Selective Service on the one hand and the Labor Supply Division of the War Production Board on the other, and under the Labor Supply Division the labor recruiting and training work of all Government agencies should be placed. For example, the other functions of the Department of Labor and the Social Security Board should not be taken over.

Then, there should be the closest coordination between Selective Service and the Labor Supply Division, but not, I would say, complete amalgamation.

Mr. SPARKMAN. If there should be developed later a single agency to handle labor supply and training, how would you think that the functions of management and labor should be divided? In other words, should management and labor both participate in such an agency?

Mr. SARGENT. I should think it would be quite proper to have advisory committees, consulting committees, with any such Board, but that seems to me that all that would be necessary in that respect.

Mr. SPARKMAN. Referring again to the paper you submitted to us—last July 19, I believe it was—in that paper you emphasized the necessity for intensive within-industry training programs. As a matter of fact, approximately two-thirds of your paper was concerned with the need for such training.

Do you think that the size of the within-industry training programs has been adequate?

Mr. SARGENT. I should say that it has been very successful and has done a good job. It has not been 100 percent, but I think it has done a good job and should be expanded rather than curtailed.

Mr. SPARKMAN. I really referred to the extent of the program and you say it should be expanded?

Mr. SARGENT. Yes, sir.

Mr. SPARKMAN. Do you know whether employers are planning to expand this within-industry training or not?

Mr. SARGENT. I know many of them are, those which are employing large additional forces.

Mr. SPARKMAN. Do you think the Federal Government ought to subsidize such training?

SUBSIDIZED TRAINING

Mr. SARGENT. I think, sir—and I will elaborate on the answer to one of the questions submitted—that when the employer provides such training that the net cost to him—and I emphasize net cost rather than gross cost—should be recognized as a cost of production by the Federal Government. It should be deductible as a cost of production, under the tax laws, and recognized as a cost of production which should be recognized by the Federal Government in the price it pays for its defense goods.

Mr. SPARKMAN. It is, isn't it?

Mr. SARGENT. Generally speaking, but I don't think there should be any question about it. For example, if a company already has an existing contract and expands the operation of its force considerably, there might be a question as to whether that additional cost would be recognized as a cost under that contract.

Under the Presidential order of December 27, readjustment of contract prices are permitted in certain cases, and I think such a condition should be one of those recognized as proper for that purpose.

Mr. SPARKMAN. In the event an adequate agency for labor supply and training should be set up by the Government, or even in the event that your suggestion is carried out, that is, the Selective Service coordinated with the Labor Supply Division of the War Production Board, in either case do you think that such agency should have the power to require employers to set up this within-industry training program?

Mr. SARGENT. I shouldn't think so, because it may not be suitable for the particular case. It might be that local trade schools could do a better job in a particular case, or local educational institutions. It seems to me it would not be sound policy to require some particular method to be followed, without knowledge of what was necessary.

If an employer has a contract and wants to complete it he wants the skilled labor, and if he thinks it feasible to put in a within-industry training program he will do it. If he can get the skilled labor without doing that, he should not be required to do it.

It may be that he would be able to get from civilian industries which were closed down a sufficient supply of skilled labor to do the work.

While these workers might need some training, I don't think it is possible to say in advance how much training would be needed or what supply of skilled labor would be available.

Mr. SPARKMAN. In other words, do you think the need would force the employer to resort to the program anyway?

Mr. SARGENT. It would either force the employer or the community, through its local educational system or trade schools, or something of that sort, to do it.

Mr. SPARKMAN. We notice in your paper of July 19, you emphasize the desirability of rotating workers who have received intensive short-term training, in order that such employees should not be restricted to single operations. Do you know of any companies which have a program of rotating the workers from one job to another?

Mr. SARGENT. Yes, sir. I believe more should do it; I know some are doing it.

TRANSFER OF WORKERS TO DEFENSE INDUSTRIES

Mr. SPARKMAN. As you know, one of the critical problems of labor supply in the next year will be the transfer of some 8,000,000 workers—I believe that has been testified—from nondefense industries into war industries. Has your association given consideration to this problem?

Mr. SARGENT. In my prepared statement, I gave you some information upon that. As far as manufacturing is concerned, I do not believe the figure is anything like 8,000,000. There may be shifts in other forms of work, such as retailing and construction, and so forth. As far as manufacturing is concerned, I estimate there will be a decline in civilian employment of 2,300,000.

Dr. LAMB. We have reference to testimony Mr. Davenport,¹ of the Bureau of Labor Statistics, gave last week, and his figures must have included nonmanufacturing, because I understood there are 10,000,000 workers.

Mr. SARGENT. Fourteen million are now employed in manufacturing industry, of which 10,500,000 are factory employees. It is ridiculous to expect 10,000,000 will be forced to shift.

Mr. SPARKMAN. I know we had a chart that presented it rather graphically, and my recollection is that the 8,000,000 consisted of several different components, and probably included women.

Mr. SARGENT. My estimate is confined to manufacturing and my suggestions as to what should be done are confined to manufacturing employment.

Mr. SPARKMAN. And you say how many from manufacturing?

Mr. SARGENT. Two million three hundred and twelve thousand from December 1941 to December 1942.

UNEMPLOYMENT COMPENSATION

Mr. SPARKMAN. What are your views in regard to the bill pending before the Congress for \$300,000,000 to increase unemployment compensation payments to those who have been thrown out of employment because of conversion of industry or because of working of priorities?

¹ See p. 10256 et. seq.

Mr. SARGENT. I met a member of the Ways and Means Committee on my way up here this morning, who said they are holding hearings on two different bills that have been introduced on that subject. I have not seen either one, and I prefer not to comment on them for that reason.

Mr. SPARKMAN. I wonder if you might state to us generally if you believe that the Federal Government should help out in that problem?

Mr. SARGENT. I think the social security or the unemployment compensation laws which were enacted to take care of cases of distress generally, should be given a chance to operate before we consider that they won't operate successfully, perhaps before they are even tried.

In addition to that, I have suggested in my answer to the prepared questions and have given some observations concerning the obligation of the Federal Government in the case of migration of labor, to which generally I am opposed.

Unless a man has an actual job in sight, to give him money to go somewhere and look for a job will create more housing, transportation, and other problems in other communities. If the employer pays the traveling expenses and was reimbursed, you would not need a Federal grant to the individual.

Mr. SPARKMAN. That really is a subsequent question that I was going to ask you. As I understand it, the \$300,000,000 proposal relates to unemployment brought about by reason of the conversion of civilian production plants to war production and is tied in with a retraining program. Now, the other question I was going to ask you, the one that you have already touched on, was about the moving of people. As I understand, you would be willing to give assistance to workers, provided they had definite assurance of a job at the other end of the line?

REIMBURSEMENT FOR EXPENSES OF TRANSFER

Mr. SARGENT. I think that if through private sources or the coordinated Employment Service activities, the man gets assurance of a job at the other end of the line, the best means would be to have the employer pay the man's traveling expenses and possibly those of his family, and be reimbursed for that cost. If the Federal Government were to go into the business of simply giving a man money when he did lose a job to go some place else to find a job, you would be creating more problems than you would be solving.

Dr. LAMB. May I say that this question was based upon the testimony which was received by the committee earlier, with respect to the English experience since the war began?

Mr. Eric Biddle, of the American Public Welfare Association, was in England and, as you know, has published a pamphlet on the subject of the Ministry of Labor and National Service Operations.

He testified that the transfer of men to actual jobs by agreement with the employer that these men with this skill were needed, was subsidized by the British Government, so the movement was not haphazard, nor was the man moving without full knowledge that a job existed. That was the intention of the question.

Mr. SARGENT. The question didn't make it clear.

Mr. SPARKMAN. In your last appearance before the committee you urged the elimination of discrimination in defense hiring against minority groups. Have you in your direct contacts with employers or unions observed any tendency to such discrimination?

Mr. SARGENT. It has been decreased; not eliminated.

Mr. SPARKMAN. You necessarily believe the transfer and training of defense workers should be without discrimination against any group of workers?

Mr. SARGENT. It should be based on the ability of a man or woman to do a job.

Mr. SPARKMAN. And his condition of employment?

Mr. SARGENT. Well, if you mean by that that a less capable man who has been unemployed longer should be given a job, I am not sure I agree to that.

Mr. SPARKMAN. I don't mean that, but naturally you don't want to recruit a laborer out of a going concern to carry him over to some other place?

Mr. SARGENT. No, we do not.

Mr. SPARKMAN. I believe that is all, Mr. Chairman.

DISTRIBUTION OF LABOR

Dr. LAMB. I would like for the record to clarify the question, and your reply to it, Mr. Sargent, where you say, in answer to the question: "In your opinion is a consolidation of agencies needed at this time to effectuate a national labor market policy?"—Your answer is: "It is impossible to answer this question very well without knowing just what is meant or contemplated by the phrase 'national labor market policy.'"

This is used as the Employment Service would use it, with respect to the policy described by Mr. Corson last week, of having to declare certain skills critically short and hence to control the market for those skills by directing people with such skills to specific jobs. That would involve a national labor market policy with respect to that skill.

Mr. SARGENT. Would that mean a compulsory shifting of people?

Dr. LAMB. Dr. Corson advocated such a compulsory shifting of people.

Mr. SARGENT. If the priority system works properly the companies which need people, either defense or civilian, will be able to operate, and the others will be unable to get materials, and their workers will be compelled to look for new sources of employment, and it seems to me that that is much better than a regimentation which directs and compels the movement of people.

Dr. LAMB. I think his assumption had something like this in mind. Let us suppose two employers in separate parts of the country received contracts, that both of them are expanding and that one of them has an expected need for certain of his workers, but not for others; that the other has an expected need for the workers whom he doesn't possess. The nature of the contracts are such that he can work his existing workers, with the exception of these few, considerably more.

Under those circumstances, the need for transfer would be based upon the nature of the contracts let. I do not believe this is a completely hypothetical case and Mr. Corson assumes that under those

circumstances some intervention by the employment service to direct the men to the new jobs will be necessary.

The employer under the second instance would not know of the existence of the men in the first plant, and it would be only through the clearing system of the Employment Service that the men might be directed to their plant.

Mr. SARGENT. I think the idea of a clearing system to determine where shortages in particular skills exist, and where supplies exist, is a desirable and natural function of an employment service.

QUESTIONS USE OF COMPULSORY SHIFTING

I think further that the Employment Service should endeavor through every means short of compulsion, to encourage the shifting in such cases.

But I question whether it should go, certainly as yet, to the limits of compulsion. I can visualize the situation where compulsion might become necessary, but I don't believe it is yet.

Dr. LAMB. Shortages have not arrived at any such stage?

Mr. SARGENT. I don't believe they are at that stage yet, no.

Dr. LAMB. That is what was meant here by the use of the phrase "national labor market policy."

Mr. SARGENT. I couldn't tell very well.

Dr. LAMB. Of course, the employment service operates on the basis of the ever-widening circle, and this particular type of problem is ordinarily not included in their considerations, because the local market comes first with them and the movement of people long distances is not ordinarily a feature of their work.

The CHAIRMAN. Mr. Sargent, I want to say to you that you accepted a former engagement here and then it was called off, and we were to have Mr. Green of the A. F. of L. and Mr. Murray of the C. I. O. here this morning. Day before yesterday we were informed that Mr. Green was called out of town suddenly and Mr. Murray was to be at a War Production Board meeting this morning. Therefore, we did not have the heart to notify you not to come.

We appreciate very much your coming and your paper will be a very valuable contribution to our committee.

We thank you very much.

The committee will stand in recess until tomorrow morning at 9:30.

(Whereupon, at 10:25 a. m. the hearing was recessed until Thursday, February 12, 1942, at 9:30 a. m.)

(The following testimony was taken on March 18, 1942, at the offices of the committee and approved for insertion in the record, because of its interest to the committee.)

As told in his testimony, this witness came to Washington to tell his story, because of unsatisfactory employment conditions in the several States he had visited as a migrant construction worker. He came at his own expense, on borrowed funds, from Freeport, Tex., to Washington, D. C.

TESTIMONY OF RAYMOND GRIFFIN McDONALD

Mr. FRANCIS X. RILEY (investigator for the committee). Will you state your name for the record?

Mr. McDONALD. Raymond Griffin McDonald.

Mr. RILEY. And your age?

Mr. McDONALD. Twenty-nine.

Mr. RILEY. Are you married?

Mr. McDONALD. Yes, sir.

Mr. RILEY. Do you have any children?

Mr. McDONALD. One boy 11 years old.

Mr. RILEY. What is your present address?

Mr. McDONALD. 721 West Fifth, Freeport, Tex.

Mr. RILEY. How long have you lived there?

Mr. McDONALD. Nine weeks.

Mr. RILEY. What sort of accommodations do you have there?

Mr. McDONALD. I have my own trailer house.

Mr. RILEY. Do they have a regular camp in Freeport?

Mr. McDONALD. Well, they have, to the best of my knowledge, two trailer camps there.

Mr. RILEY. Do you live in either of them?

Mr. McDONALD. No, sir; I rent trailer space at a residence, so my family can have better sanitation facilities.

Mr. RILEY. Are the sanitation facilities of the house available to your family?

Mr. McDONALD. Yes, sir; for \$2.50 per week.

Mr. RILEY. Do you have running water in the trailer?

Mr. McDONALD. No, sir; just outside the door.

Mr. RILEY. Where were you born?

Mr. McDONALD. I was born in Oakland, Ark., July 16, 1912.

Mr. RILEY. Where were you educated?

Mr. McDONALD. I was educated in the grade schools of Flippin, Ark., and Tulsa, Okla.

Mr. RILEY. Do you have any high-school education?

Mr. McDONALD. I finished high school at the John E. Brown School in Siloam Springs, Ark.

Mr. RILEY. Did you get a degree or learn a trade at that school?

Mr. McDONALD. Well, you are taught to work 4 hours a day there, every day, and the first year you are there you have to work where the school places you, and after the first year you are allowed to choose your occupation.

Mr. RILEY. What occupation did you choose?

Mr. McDONALD. The first year I was on the waiters' force. The second year I worked in the president's home helping take care of his boy and the yard and house. The third year that was what I did also.

Mr. RILEY. Did you get out with any particular trade or occupation?

Mr. McDONALD. No, sir; I didn't get out with a particular one. I studied electrical engineering and radio in my classes as my occupation.

Mr. RILEY. Have you worked at either of those trades?

Mr. McDONALD. No, sir; the depression terminated my vocational studies, and I left school.

Mr. RILEY. When you got out of school did you go to work?

Mr. McDONALD. Yes, sir.

Mr. RILEY. Where?

Mr. McDONALD. I went to work in Tulsa, Okla., at the Union Transportation Co.

Mr. RILEY. What were you doing?

Mr. McDONALD. I went to work as assistant parts manager.

Mr. RILEY. And after that job where did you work?

Mr. McDONALD. After that job I went to work for myself in the retail ice business.

Mr. RILEY. In Tulsa?

Mr. McDONALD. Yes, sir.

Mr. RILEY. And you stayed in that business?

Mr. McDONALD. From 1930 to 1932.

Mr. RILEY. Now, in 1932 what did you do?

Mr. McDONALD. I went to work with the Golden Goose Hamburger Systems.

Mr. RILEY. Were you married at that time?

Mr. McDONALD. Yes, sir. In fact, I was married all of this time. I married 4 or 5 months after I finished school. I was married in April 1930.

Mr. RILEY. Then after the hamburger job?

Mr. McDONALD. I worked as driver-salesman for the Carnation Milk Co.—Quality Milk Co. They teach you there. You have to go through an extensive course on retail sales, and so forth.

Mr. RILEY. What did you do after that?

Mr. McDONALD. I drove a cab a year and a half.

Mr. RILEY. Where?

Mr. McDONALD. Tulsa, Okla.

Mr. RILEY. That brings it up to what year?

Mr. McDONALD. 1936.

Mr. RILEY. What did you do then?

Mr. McDONALD. I moved to Houston, Tex. I went to work for the Volcano Burner Co.

Mr. RILEY. Doing what?

Mr. McDONALD. In Tulsa, while I was doing this cab driving, Jack Mitchell, a friend, asked me to come to Houston, Tex., and go to work for him, so we could continue with our boat racing.

Mr. RILEY. What business was Jack Mitchell in?

Mr. McDONALD. He was in a burner business for the oil-field boilers.

Mr. RILEY. How long did you work for him?

Mr. McDONALD. I think I only worked there for something like 7 months before the shut-down in the oil business came down there.

Mr. RILEY. What year was that?

Mr. McDONALD. That was still during the year 1936, for I went there in January.

Mr. RILEY. What after that?

Mr. McDONALD. I went to work for the Sanitary Farm Dairy, as driver-salesman.

Mr. RILEY. In Houston?

Mr. McDONALD. Yes. It was here I first started getting carpenter work. As you know, the outboard motors have to be the most precise built boats that we have.

Mr. RILEY. That is where you got your carpentering?

Mr. McDONALD. I began to get my tools and learned to do finishing work. I went from the Sanitary Farm Dairy to the Port Houston Laundry.

Mr. RILEY. How long did you drive the laundry truck?

Mr. McDONALD. About a year.

Mr. RILEY. Where did you go from there?

Mr. McDONALD. I went to Port Neches. I owned my own dump truck there and did some carpentering work, whatever I could pick up; to do. I did work with my truck and when I couldn't I worked with different types of construction. I was there 1 year and 2 months.

Mr. RILEY. What date was that?

Mr. McDONALD. I left that business October 5, 1940.

Mr. RILEY. Now, in October 1940 did you go to work?

Mr. McDONALD. Yes; I went to work at Camp Hulen, Tex.

Mr. RILEY. What were you doing there?

Mr. McDONALD. Carpentering.

Mr. RILEY. How long did you work there?

Mr. McDONALD. I was there 4 months and 2 weeks.

FEES AND DUES PAID TO UNION

Mr. RILEY. Did you have to join a union to get the job?

Mr. McDONALD. Yes, sir.

Mr. RILEY. What union did you join?

Mr. McDONALD. I joined the A. F. of L., Local 213, Houston, Tex.

Mr. RILEY. How much did it cost you to join?

Mr. McDONALD. \$50.

Mr. RILEY. How much were the dues?

Mr. McDONALD. At that time, \$2 a month.

Mr. RILEY. Are the dues the same now?

Mr. McDONALD. \$1.75, and the initial dues have been advanced to \$75 in place of \$50.

Mr. RILEY. Are you behind in those dues?

Mr. McDONALD. I have transferred into another local. I am now in the Galveston local.

Mr. RILEY. And your dues are all paid up?

Mr. McDONALD. Yes, sir. I paid foreign dues and also sent in the dues to Houston for close to 1 year. I paid dues where I was working and sent dues in to Houston.

Mr. RILEY. How long did you work at Camp Hulen?

Mr. McDONALD. Four months and two weeks.

Mr. RILEY. And why did you leave that job?

Mr. McDONALD. The job finished for the hospital area for which I was working, and for about 75 percent of the other areas.

Mr. RILEY. Where did you go from there?

Mr. McDONALD. From Camp Hulen I went to Abilene, Tex., as that was the best information we could get, that there was a job just starting at Abilene. When I got to Abilene I found that the job was something like 60 percent completed, there was in the neighborhood of about 3,000 men standing in a big fairgrounds, in a bull pen, out of work. They had heard the same thing as I had. I had to travel back to Mineral Wells, Tex.

Mr. RILEY. How far is that?

Mr. McDONALD. One hundred and thirty miles, and I had already driven in the neighborhood of 600 miles to get to Abilene.

Mr. RILEY. Where do most of these men come from, both at Camp Hulen and at Abilene?

Mr. McDONALD. Naturally, as the Hulen job and those at Mineral Wells and Abilene were Texas jobs, a large percentage of those men were Texas men, but there were men from every State in the Union. On every job you go to you run onto men from every State.

Mr. RILEY. Did any men on the Camp Hulen job go to Abilene?

Mr. McDONALD. Yes. Of course I couldn't know all the men I worked with personally, but out of the crew I worked with about 45 percent wound up finally at Mineral Wells.

Mr. RILEY. Did they go to Abilene first and then Mineral Wells with you?

Mr. McDONALD. They didn't go in my car, they went in their cars.

LIVING CONDITIONS IN CONSTRUCTION AREA

Mr. RILEY. How are living conditions in Camp Hulen?

Mr. McDONALD. Camp Hulen is a small town; I think the population before we moved in was something like 2,000. They moved 6,000 workers in there and I have seen workers sleep out for weeks. I have seen them sleep in their cars for weeks, and there was no housing project in Camp Hulen at all. The chamber of commerce there did try to find rooms to the best of their ability, but there were no rooms to be found, and men were driving anywhere from 5 miles, I would say, to 75 miles a day, round trip, to places they could find to live that were decent; and men that didn't have cars and couldn't afford transportation stayed right there and slept on open ground, in the back of a truck or back of a car, or anything they could get.

Mr. RILEY. What kind of weather was it at this time?

Mr. McDONALD. All of Texas, that is on the Gulf coast, only varies 1.6 inches in rainfall in any given 3-month period. The land there is like a sponge. You can step on it here, and 4 or 5 feet over there water will seep up. I saw that land from Camp Hulen, Tex., to Port Neches, which is a trip of 220 miles. I have seen every field along the highway with water up to the highway during the time that this job was going on.

Mr. RILEY. Were any families sleeping in cars or in the open?

Mr. McDONALD. Yes, sir.

Mr. RILEY. Any small children?

Mr. McDONALD. Yes, sir.

Mr. RILEY. Were there any deaths on the job, other than construction deaths, while you were there?

Mr. McDONALD. When you ask about deaths, a person doesn't have to die to be sick with flu or malaria and yet continue to work.

Mr. RILEY. Suppose you start with the health conditions.

Mr. McDONALD. The Army came in there and tried to get a little sanitation in that camp. Of course they were bucked by every little businessman. He didn't want to put in a sewer because he didn't want to spend money. I don't think they put in any sewers or anything like that while we were there. I didn't see any city sewage,

but cafeterias were made to disinfect their dishes and cooking utensils. They were required to do this by the Government. Now that is a big help, and it has failed to be done on quite a few of the jobs since then. But they ran up against opposition from the people who couldn't realize they were in a war and they were crying about how much it would cost them to make these sanitation facilities available for these people.

Mr. RILEY. How about the health rate? Was there much sickness or epidemic at Camp Hulen?

Mr. McDONALD. To the best of my knowledge, at one time there was in the neighborhood of 40 percent on the job with malaria or flu—either down in bed, or just dragging on the job.

Mr. RILEY. How long were you on the Mineral Wells job?

Mr. McDONALD. The Mineral Wells job was fairly well completed when I got there, but I was there 9 weeks.

Mr. RILEY. What kind of living conditions did they have there?

LIVING CONDITIONS AT MINERAL WELLS

Mr. McDONALD. The living conditions in Mineral Wells were just as bad, if not worse, as the living conditions in Camp Hulen because of the fact that the city ordinance made us people with the trailers get off—we had to get in these restricted areas and the State highway parking on the highways coming in to Mineral Wells had “no parking” signs. Since you couldn't put your trailers there, and in a small town it takes space for a trailer and the space wasn't there, so people were living up and down the highways there, on any kind of a dry place they could get on, living in the ditches and living anywhere they could live. I paid \$3.50 a week to park my trailer on the side of a road so I could get my boy and wife into where they could get a shower—not a bath—just a shower.

Mr. RILEY. Did your boy go to school?

Mr. McDONALD. He went to school in Mineral Wells, and Palacios (Camp Hulen), Tex.

Mr. RILEY. What grade is the boy in?

Mr. McDONALD. My boy now is in 5-A.

Mr. RILEY. Did he lose any time because of this shifting?

Mr. McDONALD. He is bound to lose whatever time I lose. Naturally, the boy has to lose the time with me when I move.

Mr. RILEY. Does he lose any grades?

Mr. McDONALD. He doesn't lose any grades, but you know yourself if I was out of work 3 or 4 weeks of the school period, hunting work, you know any boy is going to lose 3 or 4 weeks of school—that is, if you are moving.

Mr. RILEY. But if there was information about jobs it wouldn't be necessary for you to move in search of work?

Mr. McDONALD. No. If there was a plan of some sort worked out so when we were winding up on one job we could be transferred to another job, or informed of when we could go to work on another job, right where we could go to work, and within, say, a week of the time we could go to work—we could let them have a week to get in the material, let things go wrong in their material set-up—then our

children could stay in school until time to go there. Maybe we could pick up a few days' work, or a part-time job, instead of just spending it running around all over the country.

Mr. RILEY. Where did you go from Mineral Wells?

Mr. McDONALD. From Mineral Wells I heard, still through the best information that could be had, and what I mean by "best that could be had" our union men could tell us of no job to go to work on, and all they had in the way of information was that "We hear that job over there is a good job" and that's the best information we could get. And the employment bureau had no information where we could go to work, but through letters and information from men that had gone out we heard that the Albuquerque job was a good job, and when we got to Albuquerque for some reason (I don't know what it was—I still don't know, if you don't find out then you never find it out), they gave information that the job was just like Abilene, 60 or 65 percent complete. There was another job—130 miles—just starting at Gallup, N. Mex. We drove on over there, and when I got over there I noticed that they were picketing. The teamsters and chauffeurs were having a misunderstanding with one of the contractors. There was only one of these different contractors that was having a misunderstanding with union labor, but through this argument none of the working house labor could go over a recognized picket line, but we could go and find out if we could go to work and when. So we went in and talked to the superintendent of carpenters and were told we could go to work and our names taken and all. We had 3 days' or a week's work left where we were so we informed by the man that as soon as this strike was over we would be right on up and we drove back to Mineral Wells. The next day after we got back to Mineral Wells, the Albuquerque, N. Mex., paper stated that the strike was over, that they had come to an agreement and that everything was going to be all right, so we hooked our trailers and took our children out of school, Louis, and all these boys I know. Eighty percent of us defense workers have children one age or another; nearly all of us are married and have children. We went back to Gallup, N. Mex., pulled the trailers through a snowstorm, rain, and everything else, to get there. When we drove into Gallup there stood our pickets just as big as day. They never had moved—the strike hadn't been settled. So we went up to this business agent of the union there in Gallup. We were informed by him there was a man coming in from Washington, D. C., the next day and he was sure the strike would be settled because it really wasn't a very bad disagreement, but we sat there 7 days waiting for the Government man to get there and waiting for the strike to get settled and spending what few dollars we did have—very few, you know, with 9 weeks' work and all that traveling. I busted two casings and got stuck \$9.50 for a casing, so I didn't have much money left. I had to make payments on the trailer and all those things. Naturally you have to pay your bills and you can't afford to just sit and be out of work. We couldn't get any information at all after sitting there. We said, "Do you know is there any work in California or any place that you know of?". He said, "To the best information I can get there isn't any at all and I advise you boys to sit down here and wait for this job to get started for we are going to

need men here. It's a 9 months' job." Well, I couldn't see myself sitting down. I had sat a week, ruined the casings and spent all that money, and we got some information from back in Houston that there was an \$80,000,000 job starting at Orange and things were going to be pretty good in the next few days. Being as I was from Houston originally and had people there, and that if the worst came to worst I could borrow a dollar, and as it was, I was a thousand miles from anybody I knew. I drove back there and when I got down there, there was only 700 carpenters to be used on this big \$80,000,000 job. One hundred and seventy miles away there was a big cantonment job started at Leesville, La.

Mr. RILEY. Did you go to work there?

Mr. McDONALD. I went over there and drove out in the country a couple of miles. I paid 25 cents for a parking lot out there a couple of miles in the country to go in and ask a union I had already paid into, as a member, if I could get a job. They didn't have any more information in Leesville, La., at the union headquarters than if I had been in Los Angeles, Calif., and the same situation came up, and to the best of my knowledge the Government didn't investigate the amount of permit men, new permits that were used on the Leesville job when so many of us fellows were already out of work and trying to go in there and go to work.

Mr. RILEY. How many carpenters were used?

Mr. McDONALD. I can't make an exact estimate but from the size of the camp I would imagine 9,000 carpenters were used.

Mr. RILEY. Did you go to work at all?

Mr. McDONALD. No, sir. I couldn't go to work at all or get information at all as to when I might. It was the same old story—lack of material, the union tells you Government doesn't cooperate, and the Government tells you the union doesn't cooperate, and business tells you neither cooperate. You couldn't get to the gate. You were hired by the union before you could get to the guard.

Mr. RILEY. Where did you go from Leesville?

Mr. McDONALD. I went back to Port Neches, Tex., where my wife was staying with her people and told her that under the present conditions all of the defense work from as far east as Childersburg, Ala., and as far west as Gallup, N. Mex., that I didn't see any chance of getting any work for quite some time here in this district but at Mountain Home, Ark., they were starting a 5-year job at \$40 a week. We could buy a home up there for \$500. If I could make \$40 a week for 5 years and keep our boy in one school and quit wasting our money trying to run all over the country to find these defense jobs, I believed in the long run we would come out two or three thousand dollars ahead in a 5-year period.

COST OF UNDIRECTED JOB SEARCH

Mr. RILEY. If possible, I would like to have you give a comparison of costs to a family that has to wander around looking for jobs, and one that moves to a job through regular channels, and a family that is permanently settled.

Mr. McDONALD. All defense workers are asking themselves that question and this is the answer. If we could get steady employment at \$40 a week that we would make in the neighborhood of \$500 a year more money, save a \$75 a year expense repair bill on our automobiles, be a citizen of a community and have all the advantages offered by being a citizen of a community, which would be very much of an improvement over the way we have faced conditions in the last 18 months trying to be a help to our country and be a defense worker.

Mr. RILEY. Do you believe that this undirected migration is affecting the morale of the working man and affecting the defense program?

Mr. McDONALD. When a man has to work out in all kinds of weather conditions and face all kinds of unsanitary conditions and live under all kinds of conditions and pay the price that we have to pay in these boom towns for everything we get, and then, when we pick up every newspaper, read that we are being un-American, I believe that it would undermine anybody's morale after a year to 18 months of it.

Mr. RILEY. Did you run into any shortage of skilled labor on any of these jobs?

Mr. McDONALD. I can say truthfully that I don't believe there is a shortage of skilled labor, but there is a shortage of a way to let these skilled laborers know where they can go to work; that they are sitting at home broke or out on the road from job to job that they have heard about. Man, the man-hours lost from misinformation would be sufficient to man all the jobs. The man-hours lost from misinformation and no information is by far greater than the man-hours ever lost by any strike in the trade I am in. I know that the man-hours lost would make the strike hours look like a drop in the bucket.

Mr. RILEY. Do you know about how many skilled laborers there are in this country?

Mr. McDONALD. I don't know how many skilled laborers there are but I do know of a common sense, concrete plan to find out how many skilled or semiskilled there are.

Mr. RILEY. Do you know of any agency or organization that can inform you as to the number of skilled laborers there are in this country?

Mr. McDONALD. To the best of my knowledge, there is no organization or place of information of any sort where this can be found out.

Mr. RILEY. Do you believe that there is any plan which could be formulated whereby the numbers and location of skilled laborers could be determined?

SUGGESTIONS FOR IMPROVEMENT OF EMPLOYMENT PRACTICES

Mr. McDONALD. Yes, there is a plan that can not only do this but it can be done with very little expense to the Government right at this time. I am speaking of the employment bureaus. The taxpayers have already paid in millions of dollars in taxes into these bureaus for just this type of information. The offices are already set up, their stenographic force is already there, the equipment—everything that is needed for just this job—has already been in effect for nearly ever since the New Deal, a matter of 9 or 10 years, I think.

Now, the only thing that has to be brought up is that you have got to set up an agency that will inform the people by radio and local newspapers and then furnish your local post offices with blanks for all types of labor to fill out, the types of work they can do best. For instance, a farmer might have at one time been a very good bricklayer or a carpenter, or vice versa, a carpenter might have been a good farmer, but what we need to know for total all-out production is just what labor can produce. People wouldn't have to go before the employment bureau, but could fill these out at home and send them in to their closest employment bureau, and within 30 to 60 days we would know accurately how many man-hours of labor that we could produce in every type of skilled craft in this country.

Mr. RILEY. Would it be necessary under this plan for them to list their means of transportation?

Mr. McDONALD. Well, it would be a good point to bring out but if we need, as our Government instructs us, 15,000,000 workers in an all-out total war-production program, instead of letting the worker furnish his transportation of any type he has been able to procure, there should be some means of transportation worked out for the defense worker as well as our soldiers within our borders.

Mr. RILEY. Do you believe that there should be one universal system of identification cards so that once having been admitted to a defense job it should be an admittance to all other defense jobs?

Mr. McDONALD. That's right. That's absolutely correct. If a man or woman has shown good faith on any one Government job, then they should be just as good on the next Government job in a total all-out war-production job.

Mr. RILEY. Do you have any idea how much time is lost in the duplication of these identification cards?

Mr. McDONALD. Well, it is not just a matter of time. Say I lost 2 days or 2 weeks at \$10 or \$15 a day. It is hard to draw that idea, but the thing is, as well as my losing time, it is costing the taxpayers dollars. Every time they have to pay for that it takes money to pay the men that take my picture, and the machinery to take my picture. All of that has to be taken into consideration.

Mr. RILEY. Was the union there at Mountain Home, Ark., at all?

Mr. McDONALD. Not at that time. There were three or four unions bidding for the job but right at the time I landed—

Mr. RILEY. What do you mean "bidding for the job"?

Mr. McDONALD. In other words, the different unions trying to get in there. I don't know—I can't understand why one job here will pay \$1 an hour for cutting a 2 by 4, while 100 miles away you can get \$1.50 an hour and another 100 miles \$1.60. Taking it as a whole in the North you have the winter that knocks you out of working so much and that's why they say living conditions are high, but in the South it's rain, rain, rain. It just knocks you out of as many dollars as snow and sleet in the winter.

Mr. RILEY. Were they doing any hiring at the gate in Arkansas?

"BULL PEN" HIRING

Mr. McDONALD. They didn't hire at the gate. The first day I saw the job I would say there were 300 or 400 men lying on a hillside

around the employment bureau. You had to go in there and give them all of the information about where you were born and raised, and so forth—you have to do this on any job you go to work on. They were using at that time, I think, in the neighborhood of 120 carpenters working for them but they were just building officials' houses down inside. They fenced it all right, so the workers couldn't see the job, and the officials' houses were inside of that. For the actual construction of the dam they were using dump trucks on the preliminary work, and they claimed they were waiting on machinery and they couldn't get their railroad tracks laid in, and that they were short of material and this was tied up and that was tied up, but this superintendent of carpenters told Mr. Johnson and I that he thinks within the next week at the most they will have the track finished and everything will be all right. So I went out there and sat down. I was broke. I couldn't do anything else but sit down. And I sat for a week and that week ran into 10 weeks. It happened I could buy a few groceries on credit. We were unemployed for those 10 weeks. For 10 weeks you could get absolutely no information from the employment bureaus there or from the union officials.

Mr. RILEY. Did you ask the employment bureau if there were any other jobs?

Mr. McDONALD. If they had any listed anywhere or could get that information—the way they explained it to me there was a lack of cooperation among interstate employment bureaus, that there wasn't cooperation, that big business didn't wholly cooperate and that the unions didn't try to help the employment bureaus. So in the meantime the union officials had come in from the Batesville (Arkansas) Local. I couldn't get any information at all out of them. They knew there was no work going in Springfield, Mo.—that was the closest job of any kind—that the Rolla job was closing up, 26,000 men being let off and that all he knew of was if I had heard from Louisville, Ky., that they were needing men, that I better go on up there. He didn't know when that job at Mountain Home would go forward so I borrowed the money to drive my car to Louisville. I borrowed money and sold my watch for \$3.

Mr. RILEY. Did you go to work?

Mr. McDONALD. Yes, I went to work. There were over 300 union jobs. They were crying for men and were only 500 miles from where I had sat 10 weeks.

Mr. RILEY. How long had they been needing those men?

Mr. McDONALD. They had been needing men in Louisville for something in the neighborhood of 7 months.

Mr. RILEY. Do you know whether they had made any attempts to get men or not?

Mr. McDONALD. There were no bull pens there. Every man had to go through the union. The company ordering the men through the union, they could guarantee a job, so quite a few men came up from Nashville, Tenn. Outside of that I don't know of any other States that they called men from, but if they did I am fairly certain that these union men in these other States or localities was not given that information.

Mr. RILEY. How long did you work in Louisville?

Mr. McDONALD. I worked in Louisville for 10 weeks.

Mr. RILEY. Did you work with any of the men you had worked with on previous jobs?

Mr. McDONALD. Yes, sir. I ran into seven men that I had worked with on the Mineral Wells job, but there was something like 300 Texas cars on the company lots.

Mr. RILEY. Did they lose the same amount of time you did?

Mr. McDONALD. Some of these men had lost time just like I had and I am sure from the information that I could get from them that other men that was in the crew had lost time, too, because we got letters from men that were in Houston and had "set" there and were still out of work.

Mr. RILEY. Where did you go from Louisville?

Mr. McDONALD. I went to Neosho, Mo., as that was the closest place I could go to work. I went through St. Louis but I couldn't line up any work in St. Louis.

Mr. RILEY. How did you happen to go through St. Louis?

Mr. McDONALD. There are two routes to go to Neosho, but on account of road conditions I took the St. Louis one. There are bridges where you have to pay every time you cross. So far the union workers have paid thousands of dollars across the Illinois bridge going to the job every day. On one route, in other words, I would have to go through northern Arkansas and the roads were not as good on trailers and cars as the route through St. Louis. I also had heard there was work in St. Louis, and you can't miss a chance to go to work when you are out of work, so I went by the way of St. Louis. I had been informed at St. Louis that it would be a couple of weeks until the Neosho job was any good.

Mr. RILEY. Did you work in Neosho?

Mr. McDONALD. Yes, sir. I "set" there 9 days and they finally had a couple of Senators, to the best of my knowledge, investigating why that job hadn't started a month before, and after 9 days I finally got to go to work.

Mr. RILEY. How long did you work there?

Mr. McDONALD. In Neosho I worked in the neighborhood of 3 months, but out of it I never got over 60 days' work.

Mr. RILEY. Was that because of weather or working conditions?

Mr. McDONALD. Well, that's a hard thing to ask a man, that can't get proof, what he thinks, but I would say that weather conditions had a lot to do with it, and then there was some shortage of material, but there wasn't a whole lot of days of lack of material shortage mentioned on this job because there was so much bad weather they had time to get material in on it, so they couldn't give us that old story again.

Mr. RILEY. Did you have any money left when that job was completed?

Mr. McDONALD. I had \$107 because I had paid off the money that I had had to borrow during the 10 weeks I was out of work in Arkansas; my groceries and expenses there, and the gasoline bills I naturally run up trying to get that job. By the time I had paid all of this and had this bad weather to contend with I had \$107, after making fairly good money on the job. Then I made the 80-mile trip, trying to cut down on the thousand-mile trip for a change.

Mr. RILEY. Where did you go then?

Mr. McDONALD. Choteau, Okla., at the \$50,000,000 du Pont plant.
Mr. RILEY. What did you do there?

Mr. McDONALD. I went in to the union headquarters and they told me there was about 2,000 carpenters in line, that there was that many carpenters from all over the country that was setting there waiting for that job to start.

Mr. RILEY. How many were they going to hire?

Mr. McDONALD. There would have been in the neighborhood of 10,000 carpenters hired when the weather permitted; by this time we were having the subzero weather that hits that part of the country. I had already worked at a powder plant and I have recommendations here that I am good at form work.

Mr. RILEY. How long did you work at Choteau?

Mr. McDONALD. I didn't get to work at Choteau, Okla. I went out to the du Pont gates and the only information that I could get was to fill out the information blank, my past experience, if I was an American, etc. I showed this guard that I had these recommendations that I had worked these other jobs. He says that it's just rules—rules, that's all he knows. So I took the information blank and went back to the union hall and asked the man there. I said "Now, my friend, I am not trying to argue but can't you get us fellows over here—there are about 13,000 waiting on the job—can't you give us some more information? Doesn't the du Pont Co. rely on you enough to tell you approximately just when we men can be used?" And he said "I couldn't tell you within a month of when you will go to work, but I will put you to work as soon as I can."

Mr. RILEY. Did you ever work for the same contractor twice in any of these travels?

Mr. McDONALD. Hubbard, that I worked for once before, was at this Norfolk Dam job. He has several jobs all over the United States, and when we finished this job at Louisville we were informed this company would use the men at Texarkana. The information was that they didn't give the boys who went down there any better chance than the men who came in from somewhere else.

Mr. RILEY. Where did you go from Oklahoma?

Mr. McDONALD. I drove over there to Neosho and I set there 9 days waiting for the weather to break, for my trailer to thaw out. My water tank was frozen solid. I had bought \$17 worth of heating equipment to keep that trailer warm enough to live in and you could get it just as warm as you wanted inside and the ice would freeze on the outside it was so cold. Rivers were frozen over solid from bank to bank, to give you an idea how cold it was, and they wanted us to get out on the outside of those buildings and put on siding, and on the job at Neosho we wasn't allowed a fire to warm our feet by; so I told my father: "I'm going to go to Choteau, and if Choteau can't give me any information, why I think that I will go down to Freeport, Tex., as I hear they are starting this big plant there right in the line of work I have been doing. I can't get any information from anywhere else."

Mr. RILEY. Did you find any work at Choteau?

Mr. McDONALD. No work at all. There was the same conditions there.

Mr. RILEY. How long were you there?

INFORMATION ON OTHER JOBS NOT AVAILABLE

Mr. McDONALD. Ten days. They finally told us they are winding up this job at Neosho. There was a job at Parsons, Kans., just 35 miles away. We couldn't get any information on it. There was another job at Riverton, Kans. Three jobs within 80 miles, that we couldn't get any information on. We were told "Fellows, this job is winding up. They are supposed to double it some day but when that day will be we don't know." In reality they are doubling it now, but we didn't find that out when we were there. So I didn't get any more information, as I have said, than I got the first time, so worrying about this lack of information and everything else, I got packed and I went to Texas. I thought maybe things would go better down there. At least, it would be warm, where my boy could go to school without freezing to death. So when I got down there I found they had a bull pen at Freeport. A bull pen is where a bunch of people come and stand like a bunch of cattle and look hungry and are hungry. They stay from sunup till sundown, trying to get a man to put them on.

Mr. RILEY. Is that what is called "hiring at the gate"?

Mr. McDONALD. That's a bull pen. It is a disgrace to the American people. It's a disgrace to have a man sit up from sunup to sundown in a bull pen when we are short of labor. So we asked the union heads. The two unions out of Houston were hiring through a steward. I made him pretty mad when I told him a bull pen was a disgrace. He said the companies had the right to demand a bull pen, that it was the company's wish. I said, "Well, it looks to me that if the company knew that there is in the neighborhood of 3,000 men sitting in Houston and Galveston out of work, waiting for that job to get going and that we can be there within 2 hours after they order us, that it's a disgrace for a man to sit there in that weather all day long."

Mr. RILEY. Did you go to work in Freeport?

Mr. McDONALD. Yes; after making this union man mad, I went down and stood in the bull pen because I was broke, and I went to work.

Mr. RILEY. Were there any of the usual work stoppages on the Freeport job, that is, weather, lack of material, and so forth?

TRANSPORTATION DIFFICULTIES FACED BY WORKER

Mr. McDONALD. Yes. After 18 months' experience our different management has had in a way of production, we run into one of the worst that I have seen in Freeport. In the first place, they built the old Dow Chemical plant and they knew previously what the rainfall was in this section of the country, that all the roads that were there were cheap asphalt roads with no reinforcing steel in them and that there was no bottom to that country; yet, with 5 months to prepare for this situation, when workers were brought in they had a one-way bridge for us to cross over in competition with the railroad train and busses and town traffic, when by putting in one-half a mile of road we could have avoided the going through the Freeport traffic, across this one-way bridge and through the city of Velasco's worn-out streets and saved about a mile and one-half of completely worn-out roads—and I mean worn out. There is absolutely no drainage to the road system

there. Mud and water will stand on them for days after a rain and the holes are so deep that your bumpers will drag when you fall into them and there is no way to keep from falling off in them, and there are no curbs. There are no drainage pipes at all and Velasco after 2 weeks of dry weather--those holes still haven't had a shovelful of shale thrown in them. Then when you get to the job at the new Dow magnesium plant you had another one-way bridge to carry all of the defense traffic. It was 8 weeks after the job started before they drove piling to make a two-way bridge, yet they had driven thousands of pilings for buildings, down inside of the plant where the men hadn't yet gone to work. Now they had one road that you could go a mile and a half around and come into the plant, but this last half a mile, in the plant proper, the road was made of 2 by 6 lumber laid on flat ground with no drainage ditches and after 2 days of rain you couldn't even find these two by sixes. They ran dump trucks with 3 yards of shale continuously over these inadequate roads and by the next morning when the time came for the defense workers to go to work he couldn't get through without a "cat" to pull him. They brought in this Government equipment, that sometimes was as much as 20 tons, over a road that couldn't even hold up under passenger traffic. Naturally, through this cause, we lost many days of work. Now as far as sanitation in Velasco and Freeport for the defense workers, there is no modern drainage and what ditches they had are incomplete. In other words, they will drain a ditch for maybe 2 blocks and then it will be filled up at one end where they have to put in a new road or someone has built a house and their driveway has filled this in and this water has stood 7 weeks that I know of in these ditches. In one place in particular the Freeport laundry dumps their water out into these ditches. It is backed up around about a 6-square-block area with the dogs and animals of the town drinking out of these ditches and with all these chemicals that go into laundering clothes as well as the filth and disease from mosquitoes that are bred in it. In Velasco you have, in your trailer parking, no modern sanitation at all. The people are having to boil their water because of their old out-houses. Velasco also holds this dampness and filth for weeks. The people are living in tin houses and living in cars and they are crawling in under houses and sleeping on newspapers to get out of the rain. They are sleeping 20 and 30 in an old shack, just on cots and on the floor. Houses there have as high as 17 and 18 people using one bathroom. As far as I know, these trailer parks don't even have a shower in them.

Mr. RILEY. Do they have an ordinance regulating trailer camps?

Mr. McDONALD. As far as I know they don't have, for I know a number of the men in the trailer camps. I know they have children and families in there with them and I don't believe now that there is an ordinance of any type pertaining to the sanitation. How could they? They haven't any sanitation.

DISCRIMINATION AGAINST TRAILER CAMPERS

Mr. RILEY. Do you find any discrimination in Texas, Arkansas, Missouri, Tennessee, or Kentucky against people living in trailer camps?

Mr. McDONALD. Well, there seems to be a misconceived idea that the people that live in trailer houses are just about the same class of people as a cab driver and everybody knows what people think of cab drivers—that they are white trash, tramps, floaters, that we have to put up with. I have heard that over and over. That's another thing that tears down the morale.

Mr. RILEY. Have you ever lived in a town in a trailer camp and participated in any of the community activities?

Mr. McDONALD. Well, as you know, or as I have already explained, we are kind of outlawed when we light in these towns and the nearest I ever came to participating—I did meet one prince of a fellow, in all this traveling, in Neosho, Mo. He is a deputy sheriff and undertaker there. He had one of the nicest trailer parks you could run into. It was behind his private home. He had picnic grounds, and he did put in facilities for 12 of our trailers and we were treated like white people by him and his family, but that was just one trailer park out of dozens of them. That's the nearest I ever got to being treated like a white man.

Mr. RILEY. Did your boy go to school in Freeport?

Mr. McDONALD. Yes; he is already enrolled in the Freeport schools.

Mr. RILEY. How far does he have to travel to get to school?

Mr. McDONALD. My boy has to travel, to get to school, only about 8 blocks. They are slightly overcrowded in their schools, naturally, but due to the fact they have already had the plant a year they have built one new school that has relieved this.

Mr. RILEY. Are there many children of construction workers in the schools?

Mr. McDONALD. I have said before, I believe 80 percent of us have children of varying ages but I believe it is safe to say that 40 percent of us have school-age children, because when you go into crafts you go into the older type of man as a rule. Our children run anywhere from the age of 8 up to 16.

Mr. RILEY. Did your boy experience any difficulty in the schools in Freeport?

Mr. McDONALD. I can't say that he did, because Texas has a pretty good school system. They furnish books for the school children there, by the State, and the teachers themselves there seem to take great interest in these children. They realize that we have had to miss work and our children have had to miss school. The principal of the school there is on the Chamber of Commerce and he knows the things they have had to face.

Mr. RILEY. Was your boy ever discriminated against in any of the schools?

Mr. McDONALD. I can truthfully say I don't believe my boy has been discriminated against in any of the schools in any of the States I have been in.

Mr. RILEY. How long did you work in Freeport?

Mr. McDONALD. I got to work 3 weeks as a pile driver. Now I will have to explain that to you. The carpenters are allowed to work with pile drivers if there is a shortage. Right at that time there was a shortage of pile drivers so at the end of 3 weeks enough pile drivers had come in from the neighboring territories that we carpenters weren't

needed, 15 of us. I wasn't fired and I went up to the superintendent of carpenters and told him the situation, that Mr. Whitney, the contractor himself would tell him that I was as good a man as he had ever hired, but I was a carpenter on a carpenter's card and that the pile drivers didn't feel like it was necessary to keep carpenters on when there was pile drivers wanting a job, but that he would personally recommend these 15 carpenters to go to work for the Austin Co. This brings up the same subject. I was working on the same ground within a hundred feet of where I would have worked if I had been an Austin Co. carpenter, yet I had to be completely released just like I had never worked on the job. This superintendent of carpenters told me, "McDonald, I don't know what the trouble is right now, we've got to take pictures and there is this road and that road." There were no roads. I then asked the superintendent, "Now will it be all right to leave my tools in Tobin & Whitney's office?" There was no use carrying a heavy box of carpenter's tools and the superintendent of carpenters admitted it was all right to leave it in there. In the meantime, that same day they layed off 75 percent of all skilled craft on this job.

Mr. RILEY. What was the reason for that?

Mr. McDONALD. Well, the reason for that—I believe the boys would give a thousand dollars if you could find out why they missed the 2 or 3 weeks' work. When I left they still hadn't given us a decent reason why we weren't working.

Mr. RILEY. Have they replaced those men?

Mr. McDONALD. Not entirely. Here is one thing—the picture situation, the taking of fingerprints, and information asked as to your nationality. They claim they could only take 125 a day on a \$50,000,000 job. Now, as I say, 75 percent of these men were layed off and 50 percent of them never had their pictures taken, and never filled out questionnaires and yet they were in there working.

Mr. RILEY. Even after the lay-off?

Mr. McDONALD. Yes. They were taking pictures, 125 a day. There was in the neighborhood, I think, of 5,000 men working when we got that 75 percent lay-off. They hired them back at the rate of 125 a day. There was no roads in there at all yet. They done all hiring and tearing up of these roads. It would take you an hour and a half to go 3 miles down there—I mean literally an hour and a half. And there was one little short cut there would have saved 1 hour and 15 minutes if they would have put it through. Instead, they were putting a concrete road out in the middle of the job which didn't do anybody any good. After missing all this work on account of working conditions, when they got pretty weather they laid off 75 percent of the skilled craft. I am still trying to get on that job right now.

Mr. RILEY. Are your tools still in Whitney's office?

NOT ALLOWED TO RECOVER TOOLS

Mr. McDONALD. The steward told me, "We have a housing project over here and you can go to work and get a few days' work." I said, "Fine. I need it. I have missed so much work on account of weather and this lay-off that I need it." I said, "My tools are in Whitney's office, and you will have to get my tools, get me a permit or send one of the guards down." He said, "I can't do that, they haven't given us a permit for you fellows who have worked inside to get your tools

out of there." And I said, "Are they scared we are going to leave?" He said, "I don't know about that. All I know is I can't get you your tools." I said, "I have my birth certificate, I have a Government pass from the job I was on. I have my union papers on me, and I'd like to get my tools to make my family a living with them."

Mr. RILEY. What did he say?

Mr. McDONALD. He said he'd see about it. He'd see the superintendent of carpenters. So the following Wednesday after standing in the bull pen, he said, "I have a job you can go to work on over at the old plant." I said, "That's just fine. How are things coming here on the new job?" He said, "I believe they will straighten out in a week or 10 days." I got my work order and I said, "Say, Steve, that's fine—where are my tools?" He said, "Give me that work order back. I can't get you the tools." I said, "Now, Steve (the union steward), I don't want to cause any trouble or anything like that. These other boys don't want to cause trouble. Now, tell me, man to man, why can't we get our tools?" He said, "I can't."

Mr. RILEY. Are your tools still there?

Mr. McDONALD. My tools are still there in Tobin & Whitney's office. They are subcontractors from Austin.

Mr. RILEY. Did you make any other attempt to get your tools?

Mr. McDONALD. You see, you can't get past the guards. You can't get through the door to see the big boys because you have to show this picture and button to get by to see any big men. But if a union man has any rights at all, or if an American has any rights at all—I have a birth certificate—to get in a door to see if I could get my tools, but I didn't get to go to see him, and the other boys didn't get to go to see him.

Mr. RILEY. Did you make any other attempt to get your tools?

Mr. McDONALD. I don't want to be called a trouble maker nor a Communist nor any of these "isms" so I didn't want to start any trouble or cause any trouble on a Government job. I happened to run across the president of the chamber of commerce and he told me how well pleased they were with the report I had made before them, on the conditions of us craftsmen that are following these defense jobs all over the country.

Mr. RILEY. That's the report you are attaching?

Mr. McDONALD. Yes; that's the report. And he says, "As long as you can't get your tools and you can't find out why you can't get your tools, why don't you work on this job of trying to find out if you can get any further information, for all we can do for you is to send copies of it to Washington."

Mr. RILEY. What steps did they take to see that you got this report here?

Mr. McDONALD. They were going to send in copies of the report to the Senators from Texas, Lee O'Daniel and Tom Connally, and also to Donald Nelson, head of production, as the chamber of commerce felt that I had proven to them the point or points of the problem facing us was not only hurting us defense workers but was hurting our Nation as a whole, due to the tire situation and the rapid spread of disease, if diseases should start in these defense jobs and just as one American person to another.

Mr. RILEY. Did they suggest your coming to Washington with this report?

Mr. McDONALD. Now, that's a funny thing. Everyone seemed to think I ought to get a lot of newspaper publicity; that is, the chamber

of commerce had that idea and also various people that I talked to. Small businessmen and skilled craftsmen don't seem to think that I can come to Washington, D. C., and get much done, but I knew that Mr. Jesse Jones here of the Federal Loan Agency was affiliated with the Houston Chronicle, so I went there, to the defense reporter of the Houston Chronicle and told him the set-up, and I strictly did not want, at that time, publicity of any kind, but if he could just find out if I could see anyone with authority, that I would borrow my own money and come on my own up here and see what I could do.

Mr. RILEY. Did you borrow money and come on your own?

Mr. McDONALD. Yes, sir; I borrowed \$150 on my car and trailer, second mortgage.

Mr. RILEY. Did you drive here or come by train?

Mr. McDONALD. I came by train. I couldn't drive; I didn't have tires on my car.

Mr. RILEY. Have you any idea how many miles you have driven since you started on defense work?

Mr. McDONALD. I know I would be safe in saying that I drove between 25,000 and 30,000 miles.

MILEAGE WASTED SEEKING WORK

Mr. RILEY. How many of those miles would you consider wasted miles because you didn't get jobs at the end of them?

Mr. McDONALD. 20,000 miles, or safely 15,000 miles, a good 50 percent of them is wasted miles.

Mr. RILEY. Do you believe that it would be cheaper to build housing near projects, rather than have men commute distances?

Mr. McDONALD. Due to the tire situation right now and due to what is known as the lack of material situation in prefabricated housing, which is largely used in these housing projects, and due to the way that we have trailers setting in trailer lots all over the country, it looks to me that the Government was making a much safer investment putting trailers at these different jobs and letting men either rent those trailers or, if their credit is good, buy those trailers. A trailer is a pretty decent thing to live in. If you have trailer spaces made modern, they are a nice thing and it costs lots less to put in a few shower houses and sanitation facilities in a trailer camp than miles of plumbing and the actual materials needed in a housing project, yet they have over-supplied numerous districts with housing projects and other jobs have no housing projects at all on them.

Mr. RILEY. To get back to this idea of traveling and wasted miles, what was the most reliable source of job information you had in all of these travels?

Mr. McDONALD. There wasn't but one source, and that was if some friend of yours was actually at a job.

Mr. RILEY. That is known as the grapevine?

Mr. McDONALD. The grapevine is the only system you can rely on or you can start to rely on. You couldn't rely on a newspaper. The architects and engineers put out a book that tells how big a job is going to be and where and when it will probably start. If we could have bought information we would have bought it.

Mr. RILEY. Did you ever try the State employment service?

Mr. McDONALD. We had them at every job. When we went to work they got the credit for putting us to work.

Mr. RILEY. But you actually had to find the jobs? How about the unions; did they direct you to any jobs?

Mr. McDONALD. The unions didn't. I can't say they ever told me of a job that I could have gone to work on, that they absolutely knew. They should have absolutely known if I could have gone to work there. You could wire business representatives all over the United States, and they would write back "Maybe you can go to work; maybe you can't." We had already run all over the country; we had lost confidence in the union.

Mr. RILEY. What about the contractors themselves?

Mr. McDONALD. The contractors themselves, so far as I know, made absolutely no endeavor outside of a few of their keymen—

Mr. RILEY. That is, officials and straw bosses?

Mr. McDONALD. Yes; so far as I know, outside of a few keymen, they made no endeavor. In fact, most of the contractors have so many jobs, their keymen are so well scattered, you can hardly call an organization an organization any more.

Mr. RILEY. Since October 5, 1940, what is the cheapest wage you have ever worked for?

Mr. McDONALD. \$1 an hour.

Mr. RILEY. And the highest?

Mr. McDONALD. \$1.375 an hour, with 50 cents a day transportation.

Mr. RILEY. What percent of your pay of last year would you say was in overtime?

Mr. McDONALD. Between one-fourth and one-fifth; just about the amount of money that I spent on looking for jobs, is what I got out of time and a half.

Mr. RILEY. Was that time and a half, or in double time?

Mr. McDONALD. That was both up to August 1941. Since that time all of the A. F. of L. carpenters and all the other skilled craft that I know in the A. F. of L. only get time and a half for any overtime over 40 hours a week.

Mr. RILEY. Would you be able to maintain your family without overtime and still get to each job?

Mr. McDONALD. Well, as I told you just a minute ago, that time and a half is what has enabled me to save up the two or three hundred dollars I have had to spend getting to a new job. If this plan of transferring us was put into effect, to where we could work 70 hours a week at a dollar an hour straight time, then we would be better off than we are now under the present conditions of time and a half.

Mr. RILEY. Can you substantiate those figures on the basis of your experience?

Mr. McDONALD. Yes, sir; I can. We will take the Neosho job when it wound up, as an example. I couldn't say where all 22 men who were in my crew went to, but there are 5 I do know where they went; 1 of them is in Los Angeles, Calif.; another 1 and his wife and 4 children are in Texarkana, Ark.; 3 of them, after going everywhere they could to find work, are sitting now, waiting for this job to open up, 20 miles out of Austin, Tex.; and myself, I am in Freeport. Now the least miles any one of us travel to find a job would be 350 miles, and I think the boy that went to California went 2,200 miles and that

the 3 boys out of Austin have traveled about 1,000 miles apiece and I traveled in the neighborhood of 800 miles—when every one of us, if we could have gotten the proper information, could have sat right in Neosho, Mo., now that the camp is doubling, and spent less money and have saved these thousands of miles on our cars, on our trailers, and the money we spent for gasoline and oil.

Mr. RILEY. Have you been able to save money out of that?

Mr. McDONALD. Well, I had \$12 before I borrowed that \$150.

Mr. RILEY. Do you own any Defense bonds?

Mr. McDONALD. I haven't been able to buy any Defense bonds or stamps. My wife and boy have got a few stamps they have saved up.

Mr. RILEY. Do you believe that with the money you could have saved from work information that you would have been able to buy Defense bonds now?

MONEY AND TIME LOST SEEKING WORK

Mr. McDONALD. It looks fairly reasonable to me to believe that if I spent in the neighborhood of \$400 of money I had already made looking for work, and that just say at \$30 a week on weeks I lost, I would have made \$600 more money; there is \$1,000 that it has cost me through lack of this information, and that I could have bought easy \$800 worth of Defense bonds for my boy that will be 21 years old when these Defense bonds mature. As an addition to this I could have saved 75 percent of this money that I have spent in automobile repair and not count the depreciation on my trailer worth a dollar, and it's depreciated in the neighborhood of \$200 being pulled into these States I have had to. These trailers weren't made to be pulled into every one of these United States of America.

Mr. RILEY. Did you have to pay an income tax last year?

Mr. McDONALD. I made \$2,000, a little less, and by the time the "ducts" were taken I didn't have to pay any. I wish I could have.

Mr. RILEY. Have you any idea how much time you lost last year needlessly?

Mr. McDONALD. I lost in the neighborhood of 17 weeks traveling, that I can plainly recall.

Mr. RILEY. That, exclusive of loss of time through weather?

Mr. McDONALD. Yes; that exclusive of the weather man. That's our enemy, too, and lack of material. And then that loss I had down here—that 2 weeks I couldn't prove what was the fault of that—it wasn't the weather down there, and it wasn't, as far as we could find, lack of material.

Mr. RILEY. When do you expect to go back to work there?

Mr. McDONALD. I'm going back to work there. The union steward said that it would be totalitarianism if I showed that [the attached report] to anyone before I went to Mr. Green and showed it to him. I told him that I had been an American so much longer than I had been a union man, I could hardly see eye to eye on that.

Mr. RILEY. Have you made any attempt to get in touch with Mr. Hutchison of the carpenters' union?

Mr. McDONALD. No; I feel sure that if Mr. Green was tied right down to it, he knows that this situation does exist, because the business agents know they exist, and if he is the head of the organization he should know that they exist.

Mr. RILEY. Have you made any attempt to see any other Government agencies since you've been here?

Mr. McDONALD. I've made no attempt to see any other Government agencies.

Mr. RILEY. Who is the first person you saw?

WANTS ACCURATE EMPLOYMENT INFORMATION

Mr. McDONALD. I saw Mr. Timmons, special correspondent, Houston Chronicle. Now, the reason I did that, I am not a politician, I don't know the first thing about politics, and I didn't know anyone to come to; but there was a defense editor in Houston told me this man had been here a number of years and could recommend someone that would be vitally interested in it to me. I don't know how to get in there that I don't want anybody to think that we workers out here—there are thousands of them that know and believe these things that I've told you. We are not Communists, 85 percent of us never belonged to the union before this defense started. I don't think it is radical for a man to make a decent living and buy a few Defense bonds, so we wouldn't be called radicals; and we haven't got any tires to continue to run all over the country, and we are burning a lot of gasoline now, that you are starting rationing it.

Mr. RILEY. At the end of this job where will you go?

Mr. McDONALD. If I get the work here on this job, I don't have no more idea than a crippled 'coon, where I am going.

Mr. RILEY. How about your tires?

Mr. McDONALD. I haven't got enough tires to pull my trailer now. I wouldn't feel safe pulling it 25 miles. That's the reason I set there during all this misunderstanding that went on on the job. I have come to the point where I can't go any further with these tires. Now you take in Neosho, when the first tire rationing came out there was 13,000 workers and 17 tires issued for that county, and your ministers and your police department, and your funeral homes came out before defense workers have a tire. So how much chance did the defense worker have? Some of those fellows traveled 200 miles a day to and from work, and there are men right here on this job traveling from Houston every day through the lack of the remedying of these causes I have brought out here. That's 130 miles a day—and us out of tires. It is enough to make you sit up nights and lose sleep, because I have done it and I know it is not right. Let me ask you a simple question: We already have equipment and employment bureaus and that was what they were originally started for, was to get jobs, to acquire job information for us men that were out of work. Now, if that set-up is already there, and Mr. Green and the unions and the Government heads that are responsible for defense workers' getting these jobs finished in as quick a time as possible, wouldn't that have been a reasonable solution, to have transferred us from one job to the other through these employment bureaus? The taxpayers are paying taxes for that reason right there. I want to show you a little thing that we workers know and a lot of people are coming to realize—I have had this picture made, I have had my fingerprints made, I have had physical examinations, I have filled out where I was from on every governmental job. Now, if we had been transferred from one job, how

many thousands of dollars would have been saved just taking those pictures? If they could only take 125 a day on the job I was on, some of those pictures cost them \$30, although some of those men have already had their pictures taken on a previous job. Why should we have a waste of that time? Why should we stay out of work? \$15 a day I missed because we had to take more pictures.

Mr. RILEY. What outfit in Houston wrote the mortgage on your car?

Mr. McDONALD. I made the mortgage on my car to a personal friend that I worked for in the Paramount Laundry. I borrowed the money from the bank with his signature. The bank was the San Jacinto National Bank of Houston, at Houston, Tex. The note was dated March 13, 1942, and is for \$150. Dewey F. Hollingsworth, who owns the Paramount Laundry and Dry Cleaning System in Houston, Tex., went with me to the bank and they loaned me \$150 on his signature.

Mr. RILEY. How many construction workers are in Freeport now?

Mr. McDONALD. Well, there are not nearly as many construction workers in Freeport now as there have been. As I explained to you, because of lack of cooperation from our production chiefs and our union officials and due to lack of weather and unsanitary conditions, there have been two or three thousand men gone home sick and tired of it. They can't get work when the sun shines.

Mr. RILEY. About how many are left?

Mr. McDONALD. When I left there last Friday I believe there was only in the neighborhood of 3,000 men working on that vital defense job.

Mr. RILEY. Do you know how many tires have been rationed for this month in Freeport?

Mr. McDONALD. I am not sure, but I believe they issued 11 tires for Freeport, and they informed us through a Government-sanctioned newspaper that if we defense workers could get an order for retread on a tire that it would be between 60 and 90 days before we could get that retread job done. Now that was in Houston.

Mr. RILEY. What effect do you believe this rationing order will have upon men in your circumstances?

Mr. McDONALD. It will just stop it, that's all. If they don't change this rationing system that we are now under, right now there are thousands of us that can't go anyplace. We have just got to take the best we can, the closest place we can find and stay with that. We can't continue on defense jobs.

Mr. RILEY. Do you believe that discrimination you have met before in strange communities will manifest itself in this tire-rationing proposition?

Mr. McDONALD. That's the proof of human nature. You know it's human nature to take care of people that you have known for years quicker than you would an outsider or a transient—that's just human nature.

Mr. RILEY. Now, let us summarize your experience and recommendations.

Mr. McDONALD. For the purpose of the record, I would like to summarize the various points I have tried to bring out in my testimony to you people.

1. The overcrowding of most of our skilled crafts in our migratory defense jobs, how this is going to hurt the morale of this group, and the number of unemployed it will dump on the war effort in from 12 to 18 months.

2. I want them to realize and to think of the amount of bonds that could be paid for by this group if they had a transfer system, the amount of rubber and petroleum products that not only could have been saved but that can yet be saved, and how vitally important they are to the total war effort.

3. The thousands of workers that are skilled and semiskilled, but through their misinformation that most of our jobs are only 40-hour weeks, they haven't wanted to become defense workers. Yet if there is a shortage of skilled labor these men are needed just as much as any qualified union skilled laborer. The only way in the past that the employment bureaus have had of finding out where there was skilled or semiskilled labor was that a man would have to become broke and apply for unemployment compensation—have been out of work—and yet we have millions of men even yet, in this country that haven't become unemployed, applied for compensation and consequently have not been classified as skilled or semiskilled.

(The above witness submitted the following statement to the committee, written before he left Freeport, Tex., for Washington, D. C.):

STATEMENT OF RAYMOND GRIFFIN McDONALD, FREEPORT, TEX.

MARCH 1, 1942.

I am writing about a problem that is facing the Nation as a whole (the problem of labor on defense projects in all localities).

I have talked to two National Labor Relations Board members concerning this, and they advised me to take up this matter with the chamber of commerce and through them take it up with the higher Government officials. The Government officials that I have talked to as well as several union officials were interested in a few simple solutions I have worked out pertaining to this problem.

There are three separate problems I wish to take up. The first and foremost is the seeming shortage of trained men in different parts of the Nation. I do not believe that we are short of skilled labor, but so far we have been short of a plan to pool our labor and to classify it into separate groups, and to find out just where we really do stand when it comes to man-hours of production in the field of defense plants and cantonments.

Out of all of these men they would find that a large percentage of them would like to transfer from one job to another. This would save them hundreds of dollars in traveling expenses and make them hundreds of dollars more money by working steady the year around. When we take into consideration the present rubber situation and our great need for buying more defense bonds it is easy to understand that every mile saved and every extra dollar made is not just a help to an individual but to the Nation as a whole.

As an example I was finishing up on a cantonment project and only 80 miles from there they were starting a \$50,000,000 powder plant and all of the information that could be had when I went over there was that I was about No. 2,000 in line and to fill out an information blank and I would be put to work as soon as possible. Mind you, at the time I had already worked satisfactorily on four other Government projects and had personal recommendations from foremen and superintendents I had worked for. So due to this I drove my car and trailer house 700 miles to find a job where I could get some information. In the meantime, I lost 3 weeks' work.

As another example I would like to use the Orange shipyards job. This was advertised as an \$80,000,000 job in all the newspapers, but nothing was said about only 500 carpenters going to be used. As a result somewhere in the neighborhood of 12,000 men tried to clear into the Orange carpenter's local, and some of these men traveled 1,000 miles to do so. I was out of work for 10 weeks and only 500 miles from where I was they were drastically short of men. Now the responsibility for this condition does not rest upon the shoulders of any one group of men. But it does rest upon the shoulders of our union heads, unemployment bureaus,

local political factions, and our governmental bodies responsible for the completion of our defense plants.

Let us recall for just a moment how many times you have picked up your daily newspaper and read about how many man-labor hours were being lost due to strikes, but did these same newspapers report to you that most all of the different crafts of the A. F. of L. had signed an agreement with the President of the United States not to strike on any defense project? And that is a reason why a great part of all of this hollering might be a smoke screen to keep the public from knowing just how much muddling and incompetency was going on behind the scenes in production.

Now that we are on wartime and we have 16 months of experience behind us it looks fairly reasonable that if we men were transferred from one job to the next it would speed up production easily 20 percent if not more. As an example, let us say we are completing a plant here and 300 miles away we are starting another one. On this new job we will need 25,000 men altogether, that through our unemployment bureaus, chamber of commerce, and by putting notices in local newspapers we have registered only 5,000 men in this locality that can be classed as neighborhood talent that wish to work on this new job. Now doesn't it look logical that we should also inform the men on the job that is winding up of this situation and transfer those who wish to be transferred? Thereby we would have at least 80 percent experienced men on a job which would naturally step up production as well as give the local men a better chance to hold their jobs. This would also have a tendency to stop so much wasted gasoline and thousands of dollars worth of tires.

The second most important problem facing defense workers is the housing and proper sanitation conditions in the different localities wherever they may be called to work. Now that the public as a whole has finally begun to realize that we are in a war and that these defense workers are necessary to the welfare of the Nation as a whole, it is going to simplify this problem immensely. Previously they would sit at home in all of their smug complacency with from 1 to 20 rooms unused and the defense workers that—through the lack of these same rooms—had to live in their cars, tin shacks, and sleep 20 and 30 in a house just to get in out of the rain and weather are called white trash.

Now, gentlemen, how many of you could do a decent day's work after sleeping in a car for 1 month? Well, many of these workers did, and not for 1 month but for several.

It looks fairly plausible to me that the Government officials could show the chamber of commerce proof of these conditions in other localities and the sanitation problems they had to face. Then by pooling the resources of your many ladies' aid societies, community chest workers, and your Boy Scouts, and with help from your local newspapers, a lot of these conditions could be remedied before the workers moved in.

By starting early on this problem people could be advised of just how many workers to expect. They could have their rooms ready and listed with the chamber of commerce and the amount of rent they expected to receive for them. Their driveways could be made or repaired to accommodate the workers' cars thereby saving a world of traffic congestion, not only for the workers but their neighbors and townspeople as well. Also the different means of sewage disposal could be enlarged to accommodate the extra load to be put on it. Parking problems worked out in advance and the thousand other little problems that always go with trebling a town's population.

The third, and yet one of the most essential problems, is the problem of adequate roads to and from the project in the least possible time, so the workers can get to work without throwing any extra hardships on the regular traffic. The incoming State highways are the first to take into consideration as most of them are not built to accommodate the type of loads that will be hauled over them; nor the continuous stream of passenger cars coming over them. There is untold delay to vital defense materials when these roads get bad and in many instances men have to be laid off for a number of days during a little bad spell of weather. With the proper planning and action in the months it takes to get one of these large plants under construction, all of these problems could have been taken care of with one-third of the trouble it takes after all of the defense workers have moved in.

As President Roosevelt said—one day may mean the difference between life and death in the future history of the world; then we must not miss days of man-hours of production through these causes. In the past week we have lost 5 consecutive days of work here directly caused by the above causes—something must be done.

EXHIBITS

EXHIBIT I.—SURVEYS ON DEFENSE MIGRATION

Migration surveys were made by the Division of Social Research of the Work Projects Administration, during 1941, in urban centers with population of 25,000 and over. These surveys covered the first year of the defense effort and present the best factual material of defense migration yet collected. The reports on the 52 surveys so made follow in alphabetical order, and cover the following cities: Akron, Ohio; Appleton, Wis.; Atlanta, Ga.; Augusta, Ga.; Baltimore, Md.; Battle Creek, Mich.; Bloomfield, N. J.; Bridgeport, Conn.; Bristol, Conn.; Brockton, Mass.; Burlington, Iowa; Chicago, Ill.; Corpus Christi, Tex.; Dayton, Ohio; Des Moines, Iowa; Detroit, Mich.; Fort Smith, Ark.; Fort Wayne, Ind.; Glendale, Calif. (see Los Angeles); Greenville, S. C.; Hackensack, N. J.; Hampton Roads area, Virginia; Houston, Tex.; Indianapolis, Ind.; Johnstown, Pa.; Kalamazoo, Mich.; La Fayette, Ind.; Long Beach, Calif. (see Los Angeles); Los Angeles, Calif.; Macon, Ga.; Marion, Ohio; Muskogee, Okla.; Nashville, Tenn.; Newburgh, N. Y.; Newport News, Va.; Norfolk, Va.; Oakland, Calif.; Oklahoma City, Okla.; Philadelphia, Pa.; Pittsburgh, Pa.; Portland, Maine; Portsmouth, Va.; Quincy, Ill.; Saginaw, Mich.; St. Louis, Mo.; San Diego, Calif.; San Francisco, Calif.; Seattle, Wash.; South Bend, Ind.; Terre Haute, Ind.; Warren, Ohio; Washington, D. C.; Washington, Pa.; Wichita, Kans.; Wichita Falls, Tex.

APRIL 23, 1941.

RECENT MIGRATION INTO AKRON, OHIO

A survey of migration into Akron, Ohio, together with the adjoining cities of Barberton and Cuyahoga Falls, was conducted by the Work Projects Administration, Division of Research, during the first week of April 1941. The survey covered workers and their families who had moved into the three cities from places outside of Summit County after October 1, 1940. Every thirteenth dwelling and every second low-priced hotel in the three cities were sampled in the survey. Tourist camps were a negligible factor in Akron and therefore were excluded.

INDUSTRIAL ACTIVITY

Although the Akron area was enjoying a rapid expansion of industrial activity during the first week of April 1941, its local unemployment problem was far from being solved. The Akron rubber factories were working a 4-shift day; plant expansion for the production of rubber-metal aircraft parts was in process; the chemical plant at Barberton was active; and the area had received some benefit from the huge construction job at the Ravenna arsenal, 23 miles away. Yet the backlog of workers laid off in the 1937 recession had not yet been exhausted, even at the rubber factories, where the management has agreed to rehire former employees ahead of other workers.

A brief survey of the Akron area labor market indicated that there were, by and large, very few opportunities for outside workers during the 6-month period covered by the survey. Former rubber workers who had left Akron during the late 1930's stood a fair chance of reemployment in the rubber factories; and some

Akron-area migrants were able to secure work at Ravenna. These two groups were the only exception to the prevailing situation. Akron thus provides one test for the hypothesis that "tens of thousands" of workers are migrating into northern industrial centers without regard to employment opportunities.

NUMBER OF MIGRANTS

Approximately 1,200 families living in the Akron area during the first week of April 1941 had moved into Summit County after October 1, 1940. These families contained 2,300 persons. Migrants thus made up a group equal to 0.8 percent of the 1940 population of the Akron area. Their contribution to the Akron labor force was somewhat greater, however, since the migrant group contained a considerably higher proportion of workers than would be expected in a settled urban population.

EMPLOYMENT

Migrant workers had been generally successful in finding jobs. Nine-tenths of the migrant workers were employed during the week of the survey, and one-tenth were unemployed. To a considerable extent the high proportion of employment obtained by migrants was the result of previous experience in the Akron rubber factories.

INDUSTRY BEFORE AND AFTER MIGRATION

The industrial distribution of workers at their last place of residence and on jobs held in the Akron area is as follows:

	Percent distribution	
	Before migration	In the Akron area
Agriculture.....	12	1
Mining.....	5	1
Building construction.....	12	22
Manufacturing:		
Rubber.....	4	19
Aircraft.....	9	6
Other.....	19	22
Transportation.....	4	6
Trade.....	20	16
Professional and governmental services.....	7	1
Domestic and personal services.....	8	6
Total.....	100	100

These distributions show a sharp increase in workers attached to building construction, representing principally the workers employed on construction at the Ravenna arsenal, and in the rubber industry. About one-sixth of the workers had been engaged in either agriculture or mining before migration.

AGE

The Akron-area migrants were exceptionally young, even for a migrant group. The average age of all migrant workers was 28.9 years, which is 7 or 8 years under the average expected of a settled urban labor force. Only 1 migrant worker in 4 was more than 35 years of age. The average age of 1-person families was 25.3 years; and the average for the heads of multiperson families was 32.3 years.

ORIGINS

The Akron-area migrants had come from relatively long distances. The distribution of workers according to their place or origin was as follows:

Place of origin:	Percent
Adjoining counties.....	20
Elsewhere in Ohio.....	28
Adjoining States.....	33
Other States.....	19
Total.....	100

Interstate migrants were actually more numerous in the Akron area than intrastate migrants.

When traced upon a map, the origins of the migrants are shown to be concentrated in two types of areas:

(a) Nearby industrial centers, particularly Cleveland and Pittsburgh.

(b) Depressed industrial and agricultural areas, particularly the southern Ohio and Pennsylvania coal fields, central West Virginia, and the southern Appalachians.

The migrants came predominantly from urban places (2,500 or more population); 71 percent last lived in urban places and 29 percent in rural places.

LIVING ARRANGEMENTS IN AKRON

The Akron-area migrant families were made up of two groups of almost equal size: The 1-person families (49 percent) and the multi-person families (51 percent). The 1-person families were distributed through the city as follows:

Living arrangements:	Percent
Low-priced hotels.....	29
Rooms in homes and rooming houses.....	71
Total (1-person families).....	100

The multiperson families were found in the following circumstances:

Living arrangements:	Percent
Doubled up with other families.....	17
In a separate dwelling.....	83
Total (multiperson families).....	100

These figures will suggest the relationship between a given influx of new workers and the occupation of vacant dwelling units.

SUMMARY

It should be noted that the experimental survey of migration into the Akron area cannot support broad and final inferences about defense migration because of the impossibility of generalizing from a single situation. The survey does, however, suggest tentative conclusions which should not be overlooked.

Recent migration into the Akron area appears to have been neither excessive nor ill-advised. Only 1 worker in approximately every 100 in the Akron area was found to have arrived during the 6 months preceding the survey. The net gain to Akron, however, was somewhat less than 1 in 100 since some out-migration has undoubtedly taken place. The migration to Akron was apparently not even sufficient to cancel the withdrawal of Akron-area workers into the armed forces of the United States. It is important, too, that most of the migrants had found jobs.

FEBRUARY 12, 1942.

RECENT MIGRATION INTO APPLETON, WIS.

A survey of migration into Appleton, Wis., was conducted by the Work Projects Administration, Division of Research, during November 1941. The survey was concerned with civilians who moved to Appleton from places outside Outagamie County after October 1, 1940, and who were still living there at the time of this survey. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within the corporate limits of Appleton. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Appleton is not an important center of direct defense activity. Between June 1940 and October 1941, Outagamie County received direct defense contracts valued at only about \$600,000. The general increase in industrial activity was reflected in Appleton, however. During the period between October 1940 and October 1941, an estimated 500 new jobs were created in the city.

NUMBER OF MIGRANTS

Approximately 500 families living in Appleton at the time of this survey had moved to the city after October 1, 1940. The families contained 500 workers and a total of 1,150 persons. Migrants made up a group equal to 4 percent of the city's 1940 population.

ORIGINS

Three-fourths (75 percent) of the migrants had moved from within Wisconsin. Michigan and Illinois were the second most important sources, contributing 6 percent each. Four percent came from Minnesota. The average distance traveled by the migrants was 75 miles; only 6 percent had traveled 500 miles or more.

Rural places were the origin of 30 percent of the migrants; i. e., 5 percent came from open country and 25 percent from rural villages. Towns (2,500 to 25,000 population) contributed 39 percent; small cities, 14 percent; and cities of over 100,000 population, 17 percent.

About one-fourth (24 percent) of the migrants had formerly lived in Appleton. About half of the former residents had been absent from the city for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Appleton was 29.3 years. In one-person families the average age was 25.0 years, and for heads of multiperson families, 35.5 years. Fourteen percent of the workers were under 20 years, and 14 percent were 45 years and over.

Woman workers made up 23 percent of the total migrant labor force in Appleton. The average age of females was 26.3 years, as compared with 29.9 years for males.

Race.—All of the migrants in Appleton were white persons.

Size of family.—Migrant families in Appleton averaged 2.3 persons per family. Nearly half consisted of only one person when interviewed:

Size of family:	Percent distribution
1 person.....	46
2 persons.....	16
3 and 4 persons.....	30
5 persons and over.....	8
Total.....	100

Most of these families were complete when interviewed; only 7 percent of the 1-person families and 6 percent of the multiperson families had left a spouse or dependent children behind when migrating to Appleton: Before migration, the families had contained 1,200 persons. Of these, 96 percent had migrated and 4 percent had stayed behind.

Month of arrival.—About half of the migrants had arrived in Appleton during June or earlier:

Month of arrival:	Percent distribution
October 1940 to March 1941.....	21
April to May 1941.....	21
June to July 1941.....	12
August to September 1941.....	25
October 1941.....	12
November 1941.....	9
Total.....	100

INDUSTRY AND OCCUPATION

Appleton migrants came principally from manufacturing, trade, and "other" services, or held no jobs at their last residence. Relatively few came from agriculture. In Appleton, manufacturing was the chief employer of migrant workers, with particularly large numbers employed in paper and food industries. A sizable proportion of the migrants found jobs in trade and "other" service industries.

The industrial attachment of the workers on their last full-time jobs before migration and on their jobs in Appleton was as follows:

Industry	Percent distribution	
	At last residence	In Appleton
No job at last residence ¹	16	7
Unemployed in Appleton.....		7
Agriculture, forestry, fishing.....	7	(2)
Mining.....	(-)	(2)
Construction.....	6	5
Manufacturing:		
Food.....	7	10
Paper and allied products.....	9	16
Other.....	10	12
Transportation, communication, and utilities.....	6	8
Trade.....	16	17
Personal service.....	5	6
Other services.....	18	19
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 8 percent; housewives, 2 percent; unemployed, 4 percent; and others, 2 percent.

² Less than 0.5 percent.

White-collar workers made up the largest single occupational group among the migrants, accounting for 41 percent of the total before migration and 42 percent in Appleton. The proportion engaged in skilled and semi-skilled occupations increased sharply from 23 percent before migration to 32 percent in Appleton. A relatively large proportion of the workers held unskilled jobs in Appleton.

The occupations of the workers before and after migration follow:

Occupation	Percent distribution	
	At last residence	In Appleton
No job at last residence.....	16	7
Unemployed in Appleton.....		7
Professional and semiprofessional.....	11	11
Proprietors, managers, and officials.....	9	8
Clerical and kindred workers.....	21	23
Craftsmen and kindred workers.....	10	14
Operatives and kindred workers.....	13	18
Domestic service workers.....	3	3
Other service workers.....	4	5
Farm owners, tenants, and laborers.....	7	(1)
Laborers, except farm.....	6	11
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 500 migrant workers in Appleton, an estimated 35 workers, or 7 percent, were unemployed and seeking work during the week preceding the survey.

Unemployment by sex.—Both males and females in Appleton reported an unemployment rate of 7 percent.

Unemployment by age.—Unemployment was highest among workers under 20 years of age. Unemployment among workers of 45 years of age and over was only slightly above average.

Age of worker:	Percent distribution
Total.....	7
Under 20 years.....	20
20 to 24 years.....	12
25 to 44 years.....	2
45 years and over.....	8

Unemployment by month of arrival.—Workers who arrived in Appleton during the month in which the survey was conducted and during the month preceding, reported exceptionally high unemployment rates:

Month of arrival:	Percent unemployed
Total.....	7
October 1940 to July 1941.....	3
August to September 1941.....	3
October 1941.....	19
November 1941.....	25

Unemployment by industry and occupation.—The lowest unemployment rate was reported by manufacturing workers; the highest by workers who held no job at their last residence. Rates by industry follow:

Industry at last residence:	Percent unemployed in Appleton
Total.....	7
No job.....	14
Agriculture, forestry, and fishing.....	10
Mining.....	(¹)
Construction.....	(¹)
Manufacturing.....	2
Transportation, communication, and utilities.....	(¹)
Trade.....	10
Personal service.....	(¹)
Other services.....	9

¹ Base too small for computation.

In terms of occupations, the lowest unemployment rates were reported by skilled workers and nonfarm laborers. The group showing well above average unemployment were workers who had no jobs before migration. Rates by occupation follow:

Occupation at last residence:	Percent unemployed in Appleton
No job.....	14
Professional and semiprofessional.....	5
Proprietors, managers, and officials.....	6
Clerical and kindred workers.....	8
Craftsmen and kindred workers.....	(¹)
Operatives and kindred workers.....	4
Domestic and other service workers.....	9
Farm operatives, tenants, and laborers.....	10
Laborers, except farm.....	(¹)
Total.....	7

¹ Less than 0.5 percent.

HOUSING

The majority of the migrant* families in Appleton were occupying a separate dwelling unit when enumerated. About two-fifths had doubled up with other persons and a small proportion lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	52	7	91
Sharing a dwelling with others.....	39	74	9
In hotels.....	9	19	(¹)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The volume of recent migration into Appleton was relatively small during the first year of the defense program. Among the 51 cities covered in these surveys, only 18 reported a lower migrant rate than Appleton. Appleton migrants did report, however, about average success in finding work after migration.

JANUARY 14, 1942.

RECENT MIGRATION INTO ATLANTA, GA.

A survey of migration into Atlanta, Ga., was completed by the Work Projects Administration Division of Research during the early part of November 1941. The survey was concerned with civilians who moved to Atlanta from places outside of Fulton and De Kalb Counties after October 1, 1940, and who were still living in Atlanta at the time of the survey. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within Atlanta's corporate limits. Higher-priced hotels were not surveyed, and no attempt was made to secure information about persons who left the city during the period covered by the survey.

INDUSTRIAL ACTIVITY

Atlanta was not an important defense-production center during the first year of the defense program. Between June 1940 and October 1941, Fulton and De Kalb Counties received direct defense contracts valued at about \$26,000,000, equal to only about one-eighth the 1937 product value of manufactures in the two counties. Between October 1940 and October 1941 employment in Atlanta's manufacturing industries increased 15.3 percent, placing Atlanta in only sixtieth rank among the 84 largest American cities. According to local reports, the migration into Atlanta during the period covered by this survey was accompanied by considerable out-migration, particularly among skilled workers.

NUMBER OF MIGRANTS

An estimated 4,100 families living in Atlanta in November 1941 had moved to the city after October 1, 1940. These families contained 4,450 workers and a total of 10,250 persons. Migrants made up a group equal to 3.4 percent of Atlanta's 1940 population.

ORIGINS

Georgia was the principal source of Atlanta migrants, contributing 62 percent of the total. Alabama was second contributor, with 9 percent; Florida third, with 7 percent; and Tennessee fourth, with 4 percent. The average distance traveled by the migrants was 90 miles, and only 12 percent had traveled upward of 500 miles.

Rural places were the origin of nearly one-third of the migrants; i. e., 10 percent came from the open country and 20 percent from rural villages. Towns (2,500 to 25,000 population) contributed 36 percent; small cities, 15 percent; and cities of over 100,000 population, 19 percent.

More than one-fourth (28 percent) of the migrant families had formerly lived in Atlanta. Half of these families had been absent about 4 years before their return.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Atlanta was 28.8 years. In one-person families, the average age was 24.6 years, and for heads of multi-person families, 32.4 years; 12 percent of the workers were under 20 years, but only 9 percent were 45 years and over.

More than one-fourth (28 percent) of the migrant workers were females. The average age of the female workers was 24 years, as compared with 30.6 years for males.

Race.—Negroes made up 16 percent of the Atlanta migrants. The migrant rate for nonwhite persons (based on 1940 population) was 1.5 percent, as compared with 4.4 percent for white persons.

Size of family.—When interviewed, Atlanta migrant families averaged 2.5 persons per family, and were relatively large in comparison with migrant families in other cities. Two-fifths consisted of only one person.

Size of family in Atlanta:	Percent distribution
1 person.....	39
2 persons.....	20
3 and 4 persons.....	31
5 persons and over.....	10
Total.....	100

Most of these families were complete when interviewed. However, 33 percent of the 1-person families and 11 percent of the multiperson families had left a spouse or dependent children behind when migrating to Atlanta. Before migration, the families had contained 11,700 persons. Of these, 87 percent had migrated and 13 percent had remained behind.

Month of arrival.—About half of the migrants arrived in Atlanta before July 1941.

Month of arrival:	Percent distribution
October 1940–February 1941.....	19
March–April 1941.....	12
May–June 1941.....	18
July 1941.....	13
August 1941.....	13
September 1941.....	17
October–November 1941.....	8
Total.....	100

INDUSTRY AND OCCUPATION

The three most important sources of Atlanta migrants were new workers and workers in manufacturing and trade, but each contributed no more than one-sixth of the migrants. There was a substantial representation, also, of farm workers and "other" service workers, and the number of personal service workers was greater than usual. In Atlanta the proportion engaged in both manufacturing (especially textile manufacturing) and trade increased appreciably and absorbed nearly half of the workers.

The following table shows the industries of the migrants on their last full-time jobs at their last residence, and on their jobs when interviewed in Atlanta.

Industry	Percent distribution	
	At last residence	In Atlanta
No job at last residence ¹	17	.....
Unemployed in Atlanta.....	.....	14
Agriculture, forestry, and fishing.....	14	.....
Mining.....	1	.....
Construction.....	6	8
Manufacturing:		
Textiles.....	9	14
Other.....	8	10
Transportation, communication, and utilities.....	6	10
Trade.....	17	23
Personal services.....	9	7
Other services.....	13	14
Total.....	100	100

¹ The status of these workers at last residence was: Students, 9 percent; housewives, 5 percent; unemployed, 2 percent; others, 1 percent.

No one occupational group predominated among Atlanta migrants before migration. Because of occupational shifts, however, the proportion engaged in clerical and operative's jobs increased markedly after migration to Atlanta. Relatively small proportions of migrant workers engaged in craftsmen's and laborer's jobs in Atlanta.

The following table shows the occupational distribution of migrant workers before and after migration.

Occupation	Percent distribution	
	At last residence	In Atlanta
No job at last residence	17	.....
Unemployed in Atlanta .....	.....	14
Professional and semiprofessional	9	8
Proprietors, managers, and officials	6	4
Clerical and kindred workers	14	22
Craftsmen and kindred workers	11	13
Operatives and kindred workers	16	23
Domestic service workers	7	1
Other service workers	3	5
Farm owners, tenants, and laborers	14	.....
Laborers, except farm	3	7
Total.....	100	100

UNEMPLOYMENT

Unemployment among Atlanta migrants was high. Out of 4,450 workers, an estimated 620 workers, or 14 percent, were unemployed and seeking work during the entire calendar week preceding interview. In other recently surveyed cities, migrant unemployment has ranged from 2 to 17 percent.

Unemployment by sex.—Female migrant workers reported more than four times the unemployment rate of male migrants. Among females, 32 percent were unemployed, and among males, 7 percent. Two-thirds of the unemployed workers were females.

Unemployment by race.—Negroes reported about nine times the unemployment rate of white workers. Among Negroes, 43 percent were unemployed, as compared with 5 percent for white migrants.

Unemployment by age.—Migrant workers under 25 years of age reported high unemployment rates, but older migrant workers were more successful.

Age of worker:	Percent unemployed
Total	14
Under 20 years	26
20 to 24 years	26
25 to 44 years	7
45 years and over	9

Unemployment by month of arrival.—Migrants who arrived in Atlanta during the months just preceding the present survey showed the highest unemployment rates:

Month of arrival:	Percent unemployed
Total	14
October 1940–April 1941	7
May–June 1941	10
July–August 1941	18
September 1941	22
October–November 1941	29

Unemployment by industry and occupation.—The most successful Atlanta migrants were those engaged in construction, manufacturing, and transportation. Farm workers reported about average unemployment, and new workers were well above average. Unemployment among personal service workers was extremely high. The following table shows unemployment rates by industry at last residence.

Industry at last residence:	Percent
Total	14
No job	17
Agriculture, forestry, and fishing	15
Mining	(1)
Construction	4
Manufacturing	5
Transportation, communication, and utilities	4
Trade	10
Personal service	63
Other services	8

¹ Base too small for computation.

In terms of occupations, the white-collar workers, craftsmen, and operatives showed least unemployment in Atlanta. Nonfarm laborers reported a high unemployment rate, but the highest rate was among domestics. Unemployment rates by occupation follow:

<i>Unemployed in Atlanta</i>	
Occupation at last residence:	Percent
Total.....	14
No job.....	17
Professional and proprietary.....	3
Clerical and kindred workers.....	6
Craftsmen and kindred workers.....	5
Operatives and kindred workers.....	5
Domestic and other service workers.....	57
Farm owners, tenants, and laborers.....	15
Laborers, except farm.....	20

HOUSING

The majority of the Atlanta migrants were sharing a dwelling with other persons when interviewed, and considerably less than half occupied separate living quarters.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	44	5	70
Sharing a dwelling with others.....	53	87	30
In hotels.....	3	8	(1)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The volume of recent migration into Atlanta has been moderately large. Atlanta's migrant rate (based on 1940 population) is about equal to the rate found in Baltimore, but Baltimore has many times more defense contracts than Atlanta. In view of the high unemployment rate among Atlanta migrants, it seems clear that migrants have recently been attracted to Atlanta a great deal more rapidly than they could be absorbed into local industries.

DECEMBER 18, 1941.

RECENT MIGRATION INTO AUGUSTA, GA.

A survey of migration into Augusta, Ga., was completed by the Work Projects Administration, Division of Research, in the middle of October 1941. The survey was concerned with persons who moved to Augusta from places outside of Richmond County after October 1, 1940, and who were still living there in October 1941. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within the city limits of Augusta. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left the city during the year covered by the survey.

INDUSTRIAL ACTIVITY

Between June 1940 and August 1941, Richmond County received direct defense contracts valued at about \$6,000,000, principally for the construction of Army facilities. Defense activity in or near Augusta has included the erection of the Triangle Division camp, which employed 9,000 construction workers at the time of this survey; work at the Augusta arsenal; and expansion of Daniel Field, the municipal airport, for military use. During the past year, also, indirect defense orders were responsible for a general increase in the activity of Augusta's cotton-textile mills.

This activity had attracted a large number of migrant workers to Augusta.

NUMBER OF MIGRANTS

Approximately 2,200 families, containing 2,400 workers and a total of 4,600 persons, moved to Augusta from places outside of Richmond County after October 1, 1940, and were still living there in October 1941. The total number of migrants was equal to 7 percent of the 1940 population of the city.

ORIGINS

The largest group of migrants, 42 percent, come from Georgia. South Carolina was the second most important source of migrant workers, contributing 36 percent; North Carolina was third, with 6 percent; and Mississippi fourth with 3 percent. The average distance traveled by migrant workers was 100 miles; and only a very few, 4 percent, had traveled 500 miles or more.

Rural places were the origin of over one-third of the migrants; 9 percent came from open country and 25 percent from rural villages. Towns (2,500 to 25,000 population) were the origin of 31 percent; about one-fifth (22 percent) came from small cities; and 13 percent came from cities of 100,000 population and over.

Previous residence in Augusta was reported by 18 percent of the migrant families. Among these former residents, about one-half had been absent for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers was 30.1 years. The average age of family heads was 33.1 and of the unattached, 28.7 years. Only 10 percent of the migrant workers were under 20 years of age, but 17 percent were 45 years of age or over.

Women workers constituted 17 percent of all workers in the migrant labor force. The average age of women workers was 24.5 years as against 31.7 years for men.

Race.—A relatively large proportion, 17 percent, of the migrants are Negroes. (The proportion of Negroes migrating to other southern survey cities ranged from 20 percent in Macon, Ga., to 1 percent in Fort Smith, Ark.) However, since close to half of Augusta's population consists of Negroes, the migrant rate for Negroes was much lower than that for white persons.

Size of family.—Almost half of the families, when interviewed in Augusta, were composed of one person.

	Percent distrib- ution
Size of family in Augusta:	
1 person.....	45
2 persons.....	26
3 and 4 persons.....	21
5 persons and over.....	8
Total.....	100

Many of these families were not complete when interviewed; 23 percent of the one-person families and 15 percent of the multiperson families had left a family member behind when they moved to Augusta. Before migration these families contained 6,600 persons, of whom 29 percent stayed behind and 71 percent migrated to Augusta. In the recently surveyed cities only the migrant families in Bridgeport, Conn., had left so high a percentage of family members at their former residences.

Month of arrival.—About half of the migrants had come to Augusta within 2 months of the time of the migration survey. The distribution of the migrants by the date of their arrival follows:

	Percent distrib- ution
Month of arrival:	
October 1940 to February 1941.....	9
March to April 1941.....	9
May to June 1941.....	9
July 1941.....	11
August 1941.....	14
September 1941.....	36
October 1941 ¹	12
Total.....	100

¹ The survey was conducted during October; hence this figure does not represent the total in-migration during the month.

INDUSTRY AND OCCUPATION

Both before and after migration Augusta migrants were predominantly engaged in construction. Manufacturing contributed only 11 percent of the migrants. Another 11 percent were former agricultural workers. The most significant industrial shift in the movement of workers to Augusta involved former agricultural workers and those who had no jobs at their former residence. Agricultural workers and formerly unemployed workers were employed largely in construction work at Augusta, and former students were principally engaged in trade.

A distribution of migrants by the industry of their last job at their former residences and the industry in which they were employed in Augusta follows:

Industry	Percent distribution	
	At last residence	In Augusta
No job at last residence ¹	13	
Unemployed in Augusta.....		6
Agriculture, forestry, and fishing.....	11	(2)
Mining.....	(2)	(2)
Construction.....	40	47
Manufacturing:		
Textile mill products.....	6	7
Other.....	5	7
Transportation, communication, and utilities.....	5	5
Trade.....	8	9
Personal services.....	4	5
Other services.....	8	14
Total.....	100	100

¹ The status of these workers at last residence was: Students, 5 percent; housewives, 3 percent; unemployed, 3 percent; and others, 2 percent.

² Less than 0.5 percent.

Augusta migrants were to a large extent craftsmen at their last residence. Clerical and kindred workers, and farm workers of all types each accounted for 11 percent of the migrants at their former residence. Semiskilled workers were relatively few. In Augusta the ranks of skilled workers were augmented largely by former farm workers and operatives.

Occupation	Percent distribution	
	At last residence	In Augusta
No job at last residence.....	13	
Unemployed in Augusta.....	(1)	6
Professional and semiprofessional.....	5	6
Proprietors, managers, and officials.....	5	5
Clerical and kindred workers.....	11	13
Craftsmen and kindred workers.....	34	41
Operatives and kindred workers.....	12	15
Domestic service workers.....	2	3
Other service workers.....	1	3
Farm owners, tenants, and laborers.....	11	(1)
Laborers, except farm.....	6	8
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Of the 2,400 migrants workers in Augusta, about 150, or 6 percent, were unemployed and seeking work at the time of the migration survey.

Unemployment by sex.—Unemployment among women was about seven times higher than among men. Among women migrant workers 22 percent were unemployed, but only 3 percent of the male migrants were unemployed.

Unemployment by race.—Negroes reported twice the unemployment rate of white workers. Among the Negro workers 10 percent were unemployed, as compared with 5 percent for white workers.

Unemployment by age.—The highest unemployment rate was reported by workers under 20 years of age. The unemployment rates of workers by age was as follows:

Age of workers:	Percent unemployed
Total.....	6
Under 20 years.....	13
20 to 24 years.....	3
25 to 44 years.....	5
45 years and over.....	8

Unemployment by month of arrival.—The heaviest unemployment was reported by the migrants who arrived in Augusta between March and May.

Month of arrival:	Percent unemployed
Total.....	6
October 1940 to February 1941.....	5
March to April 1941.....	10
May to June 1941.....	5
July to August 1941.....	3
September 1941.....	8
October 1941.....	7

Unemployment by size of place of origin.—Unemployment rates were consistently lower for workers from larger communities. Those from the open country reported almost twice the average unemployment rate.

Size of place of origin:	Percent unemployed
Total.....	6
Open country.....	10
Rural villages (less than 2,500).....	6
Towns (2,500 to 25,000).....	7
Small cities (25,000 to 100,000).....	3
Large cities (over 100,000).....	3

Unemployment by industry and occupation.—Practically all construction workers found employment in Augusta. About 1 in 7 of those who had no job at their last place of residence were unemployed in Augusta at the time of the survey, and above-average rates were reported by workers from manufacturing and trade. Rates by industry follow:

Industry at last residence:	Percent unemployed in Augusta
Total.....	6
No job.....	14
Agriculture, forestry, and fishing.....	6
Mining.....	(¹)
Construction.....	1
Manufacturing.....	11
Transportation, communication, and utilities.....	(¹)
Trade.....	11
Personal service.....	12
Other services.....	6

¹ Based too small for computation.

Skilled workmen and white-collar workers had the lowest unemployment rates in Augusta. There were comparatively large numbers of unemployed migrant semiskilled workmen.

Occupation at last residence:	Percent unemployed in Augusta
Total.....	6
No job.....	14
Professional, proprietary, and clerical.....	3
Craftsmen and kindred workers.....	(1)
Operatives and kindred workers.....	15
Personal service workers.....	(2)
Other service workers.....	(2)
Farm owners, tenants, and laborers.....	4
Laborers, except farm.....	7

¹ Less than 0.5 percent.

² Base too small for computation.

HOUSING

A relatively large number of families were sharing a dwelling unit with other persons. The distribution of families according to their living arrangements follows.

Living arrangements	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	35	2	61
Sharing a dwelling with others.....	64	95	39
In hotels.....	1	3	.....
Total.....	100	100	100

CONCLUSIONS

Recent migration into Augusta has been heavy. In terms of its population, Augusta has attracted about the same volume of migration as Bridgeport, Conn., and Macon, Ga., two other small cities in which defense activity has been particularly great. Unlike the other two cities, however, a very large part of Augusta's migrants consisted of construction workers who were not expected to remain in the city after the completion of the new army facilities. The rest of the migrants, (i. e., the nonconstruction workers) had not been particularly successful in finding work in Augusta.

NOVEMBER 14, 1941.

RECENT MIGRATION INTO BALTIMORE, MD.

A survey of migration into Baltimore, Md., was completed by the W. P. A. Division of Research during the early part of September 1941. The survey was concerned with persons who moved to Baltimore from places outside of Baltimore City and Baltimore County after October 1, 1940, and who were still living in the survey area in September 1941. The survey was confined to the city of Baltimore and to the Glenn L. Martin camp, which is located northeast of the Baltimore city limits. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left Baltimore during the survey period.

INDUSTRIAL ACTIVITY

Baltimore is one of the more important American defense centers. Between June 1940 and August 1941 the city received prime defense contracts amounting to nearly half a billion dollars, principally for aircraft manufacturing and ship building. Direct defense activity alone has absorbed about 23,000 workers since October 1, 1940, according to local reports, and several thousand more new jobs are reported in subsidiary and service industries. Between July 1940 and July 1941, Baltimore manufacturing employment rose 32.9 percent; and Baltimore ranked thirty-sixth among the 93 cities of over 100,000 population in the proportionate increase in manufacturing employment during the period.

Many months ago Baltimore reported acute shortages of several types of craftsmen, particularly those needed in the shipbuilding industry. At the time of this survey, however, no shortage of local unskilled workers had developed, except in the aircraft industry, where severe age and race employment restrictions have prevented the full use of locally available labor.

NUMBER OF MIGRANTS

Approximately 15,700 families living in the city of Baltimore in early September 1941 had moved from outside of Baltimore County after October 1, 1940. These families contained 16,600 workers. The total number of persons contained in the migrant families was 30,500, equal to 3.6 percent of Baltimore's 1940 population. At the Glenn L. Martin camp outside the Baltimore city limits, the survey found an additional group of 160 migrant families containing 450 persons.

ORIGINS

The principal origins of the Baltimore migrants were Philadelphia, New York City, and rural places in Maryland, Virginia, West Virginia, and North Carolina. The State of Pennsylvania contributed 23 percent of the workers; Maryland, 15 percent; New York and Virginia, 10 percent each; West Virginia 8 percent; and North Carolina, 7 percent. The average distance traveled was 170 miles. One worker in 8 had traveled more than 500 miles; and 1 in 200 had come from a foreign country.

Rural places, that is, places of less than 2,500 population, were the source of 32 percent of the Baltimore migrants; 7 percent had come from the open country and 25 percent from rural villages. Towns (2,500 to 25,000 population) contributed 25 percent; small cities, 18 percent, and 25 percent came from cities of over 100,000 population.

An exceptionally large proportion of the migrants had come to Baltimore for the first time; 92 percent reported no prior residence in Baltimore, and 8 percent reported having lived in Baltimore before. Among the former Baltimore residents, about half had been absent for 6 years or more.

CHARACTERISTICS

Age and sex.—The average age of all migrant workers was 27.5 years. In one-person families, the average age was 24.6 years; and for heads of multi-person families, 32.6 years. One migrant worker in 9 was 45 years of age or over.

Women workers constituted 10 percent of all workers in the migrant families. (Comparative figures for other survey cities are: Detroit, 16 percent; Greenville, S. C., 28 percent; and Philadelphia, 22 percent.)

Race.—Negroes constituted 11 percent of the migrant workers. Negro migrants made up a group equal to 2.2 percent of Baltimore's 1940 Negro population, considerably less than for white migrants, who equalled 3.9 percent of the 1940 white population.

Size of family.—When interviewed in Baltimore, the majority of the migrant families contained only one person:

Size of family in Baltimore:	Percent distribution
1 person.....	56
2 persons.....	19
3 and 4 persons.....	18
5 persons and over.....	7
Total.....	100

In a large number of instances, however, these families were not complete. Nearly half of the one-person families, and one-tenth of the multi-person families, had left their spouse or dependent children behind when they moved to Baltimore. Before migration, the families had contained 42,300 persons. Of these, 30,500 had migrated but 11,800 had remained at the migrant's place of origin.

Months lived in county.—The tempo of migration into Baltimore has shown a substantial increase in recent months. At the end of 1940, about 600 migrant workers were being added to the Baltimore labor supply each month. Early in 1941, the influx reached 1,000 workers a month; and since May it has averaged 2,500 workers a month.¹

¹ These figures assume little or no "turnover" among the migrants.

Month of arrival:	Percent of Baltimore migrants	
	At last residence	In Baltimore
October-December 1940.....	12	
January-February 1941.....	12	
March-April 1941.....	12	
May-June 1941.....	33	
July 1941.....	15	
August 1941 ¹	16	
Total		100

¹ Includes the first week of September 1941.

INDUSTRY AND OCCUPATION

The industrial distribution of Baltimore migrant workers on their last full-time jobs at their last places of residence, and on their jobs in Baltimore, was as follows:

Industry	Percent distribution	
	At last residence	In Baltimore
No job at last residence ¹	18	.....
Unemployed in Baltimore.....	.....	3
Agriculture, forestry and fishing.....	15	(3)
Mining.....	5	(2)
Construction.....	12	8
Manufacturing:		
Transportation equipment.....	5	39
Iron and steel.....	2	7
Other.....	9	12
Transportation, communication, and utilities.....	7	6
Trade.....	15	12
Personal services.....	2	2
Other services.....	10	11
Total	100	100

¹ The status at last residence of these workers was: Students, 7 percent; housewives, 2 percent; unemployed, 7 percent; others, 2 percent.

² Less than 0.5 percent.

This table reveals an extremely sharp industrial shift among the migrants. Baltimore manufacturing industries, particularly the shipyards and aircraft factories, had attracted only a few migrant workers formerly engaged in manufacturing, but had attracted thousands of migrant farmers, miners, construction workers, students, unemployed workers, and even tradespeople.

The occupational distribution of the migrant workers before and after migration was as follows:

Occupation	Percent distribution	
	At last residence	In Baltimore
No job at last residence.....	18	.....
Unemployed in Baltimore.....	.....	3
Professional and semiprofessional.....	3	3
Proprietors, managers, and officials.....	5	3
Clerical, sales, and kindred workers.....	10	16
Craftsmen, foremen, and kindred workers.....	17	28
Operatives and kindred workers.....	17	23
Domestic service workers.....	1	1
Other service workers.....	5	4
Farm owners, tenants, and laborers.....	13	(4)
Laborers, except farm.....	11	19
Total	100	100

¹ Less than 0.5 percent.

Unskilled workers formed a relatively large proportion of Baltimore migrants. Before migration, 30 percent of the workers held unskilled jobs, and 24 percent of the migrants still held unskilled jobs in Baltimore. While the proportion of unskilled workers decreased, however, the proportion of clerical, skilled, and semiskilled workers increased. Only 44 percent of the workers were drawn from these three categories, but 67 percent held jobs in these categories in Baltimore.

UNEMPLOYMENT

Out of the 16,650 migrant workers in Baltimore, 580, or 3 percent, were unemployed and seeking work at the time of the survey. Comparative figures for other survey cities are: Fort Wayne, Ind. (May), 3 percent; Detroit (May), 10 percent; Greenville, S. C. (September), 9 percent; and Philadelphia (September 8 percent).

Unemployment by race.—The rate of unemployment for Negro workers who had migrated to Baltimore was more than five times greater than the rate for white migrant workers. Among Negroes, 11 percent, and among white workers, 2 percent, were unemployed.

Unemployment by sex.—Women migrants to Baltimore had more than six times the unemployment rate of men. Among the women workers, 13 percent were unemployed; among the men, 2 percent.

Unemployment by age.—No single age group among the Baltimore migrants had suffered high unemployment, although the very young and the very old showed a slightly higher-than-average unemployment rate. Under 25 years, 5 percent were unemployed; between 25 and 44, the rate was 2 percent; and among the workers 45 and over, the rate was 4 percent.

Unemployment by distance traveled.—The migrants who traveled the shortest distance reported the lowest unemployment rate. Among the few who came from foreign countries, two-thirds were unemployed.

Distance traveled:	Percent of workers unemployed
Total.....	10
Less than 200 miles.....	2
20 to 499 miles.....	5
500 to 999 miles.....	7
1,000 miles and over.....	5
Foreign.....	66

Unemployment by month of entering county.—Baltimore migrants who had arrived during the month immediately preceding enumeration showed an unemployment rate more than three times higher than the average for all migrants. Among the migrants who had been in the city longest, however, the unemployment rate was only slightly below average.

Month of entering county:	Percent of workers unemployed
Total.....	3
October 1940 to May 1941.....	2
May to June 1941.....	3
July 1941.....	1
August 1941 ¹	10

¹ Includes the first week of September 1941.

Unemployment by industry and occupation.—There was little difference in the unemployment rates of Baltimore migrants according to their industry at last place of residence. Only the workers from personal service industries reported an unemployment rate far above average:

Industry at last residence:	Percent un- employed in Baltimore
Total.....	3
No job.....	5
Agriculture, forestry, and fishing.....	2
Mining.....	4
Construction.....	3
Manufacturing.....	3
Transportation and communication.....	3
Trade.....	3
Personal services.....	10
Other services.....	3

Unemployment rates according to occupation were as follows:

Occupation at last residence:	Percent un- employed in Baltimore
Total.....	3
No job.....	5
Professional, proprietary, and clerical.....	4
Craftsmen, foremen, and kindred workers.....	1
Operatives and kindred workers.....	3
Domestic service workers.....	17
Other service workers.....	5
Farm owners, tenants, and laborers.....	2
Laborers, except farm.....	3

This distribution reveals one notably low rate and one notably high. Baltimore migrants who held skilled jobs at their last residence reported virtually no unemployment, while migrant domestic service workers showed a rate nearly six times higher than average.

HOUSING

Less than one-third of the Baltimore migrant families were occupying a separate dwelling when enumerated; the great majority had doubled up with other families. One percent of the migrants lived in hotels, and 1 percent in trailers.

Living arrangements	Percent distribution		
	Total	1-person families	Multiper- son families
Occupying separate dwelling.....	30	6	58
Sharing dwelling.....	68	92	40
In hotels.....	1	2	1
In trailers.....	1		2
Total.....	100	100	100

CONCLUSIONS

After a slow start late in 1940, migration into Baltimore began increasing in the early spring; and by late summer it had reached significant volume. There is little doubt that Baltimore is now growing more rapidly than at any time since the World War.

Judged in terms of the Baltimore migrants' unemployment rates, this movement has been a successful one, even though several groups of migrants—particularly women workers and Negroes—have not fared as well as others. The rate of migration was consistently lower, however, for the less successful groups than for types of workers most in demand.

FEBRUARY 11, 1942.

RECENT MIGRATION INTO BATTLE CREEK, MICH.

A survey of migration into Battle Creek, Mich., was conducted by the Work Projects Administration, Division of Research, during the latter part of November 1941. The survey was concerned with civilians who moved to Battle Creek from places outside of Calhoun County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis, the survey covered the residential districts and lower priced hotels within the corporate limits of Battle Creek. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and November 1941, Calhoun County received direct defense contracts valued at about \$26,000,000. Nearly half of this sum was allotted for construction work at Fort Custer, which had employed about 1,700 workers at the peak. At the time of this survey, this job was virtually completed, and the majority of the migrant construction workers had departed for other

jobs. Increased activity in steel-goods manufacture during the first year of the defense program created a number of new jobs in the community. According to local reports, however, there were a considerable number of resident unemployed remaining in the city at the time of this survey.

NUMBER OF MIGRANTS

An estimated 1,000 families, containing 1,000 workers and a total of 2,300 persons, living within the corporate limits of Battle Creek at the time of this survey, had moved to the city from places outside of Calhoun County after October 1, 1940. Migrants made up a group equal to 5.4 percent of the 1940 population of the city.

ORIGINS

Michigan was the most important source of the migrants, contributing 51 percent. Illinois was second, with 12 percent, and Tennessee was third with 7 percent. Six percent had come from Wisconsin, 5 percent from Ohio, and 4 percent from Indiana. The average distance traveled by migrants was 125 miles. Only 11 percent of the migrants had traveled 500 miles or more.

Rural places were the origin of nearly a third of the migrant workers; i. e., 9 percent came from open country and 22 percent from rural villages. One-fourth (25 percent) of the migrants came from towns (2,500 to 25,000 population); 21 percent from small cities, and 23 percent came from cities of 100,000 population or over.

More than one-fourth (28 percent) of the migrant families had formerly lived in Battle Creek. About half of these former residents had been away from the city for 5 years or more before their return.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 29.2 years. For one-person families, the average was 24.0 years, and for heads of multi-person families 32.3 years. Workers under 20 years of age comprised 11 percent of the migrant workers and those 45 years or over, 12 percent.

Women workers made up 20 percent of all migrant workers in Battle Creek. The average age of women workers was 25.6 years, as compared with 29.8 years for men.

Race.—Seven percent of the migrant persons in Battle Creek were Negro. White persons made up the remaining 93 percent.

Size of family.—Migrant families averaged 2.3 persons per family when interviewed in Battle Creek.

	<i>Percent distribu- tion</i>
Size of family in Battle Creek:	
1 person.....	42
2 persons.....	21
3 and 4 persons.....	29
5 persons or more.....	8
Total.....	100

Most of the migrant families were complete units when interviewed; however 14 percent of the one-person families and 3 percent of the multiperson families left a spouse or dependent children at their last residences. Before migration the families contained 2,500 persons, of whom 95 percent moved to Battle Creek and 5 percent remained at the migrants' previous residences.

Month of arrival.—Half of the migrants arrived in Battle Creek prior to August 1941. Only a few, 2 percent, came during the month in which they were interviewed.

	<i>Percent distribu- tion</i>
Month of arrival:	
October 1940–March 1941.....	18
April–May 1941.....	12
June–July 1941.....	21
August–September 1941.....	29
October 1941.....	18
November 1941.....	2
Total.....	100

INDUSTRY AND OCCUPATION

No one industry predominated among the migrant workers at their last residences. Manufacturing, trade, and "other" service industries each contributed about one-fifth of the workers. Agricultural workers and those with no jobs at their last residence contributed a relatively large proportion of the migrants. In Battle Creek manufacturing absorbed two-fifths of the migrants. The more important manufacturing industries in which migrants found jobs were iron and steel and machinery. Few migrants were employed in the food industries. One-fifth of the migrants were employed in "other" service industries (finance, insurance, and real estate; business and repair services; amusement, recreation, and related services; Government work, etc.). Trade absorbed nearly one-fifth of the migrants.

The industrial distribution of the migrants on their last full-time jobs at their last residence and on their jobs when interviewed in Battle Creek was as follows:

Industry	Percent distribution	
	At last residence	In Battle Creek
No job at last residence ¹	14	.....
Unemployed in Battle Creek.....	.....	3
Agriculture, forestry, fishing.....	12	(2)
Mining.....	1	(2)
Construction.....	3	4
Manufacturing.....	19	39
Food.....	2	3
Iron and steel.....	2	15
Machinery.....	5	11
Other.....	10	10
Transportation, communication, and utilities.....	5	6
Trade.....	17	18
Personal services.....	13	10
Other services.....	16	20
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 9 percent; housewives 2 percent; unemployed 1 percent; others 2 percent.

² Less than 0.5 percent.

Clerical workers and operatives comprised about one-third of the migrant workers at their last residence, but in Battle Creek nearly half of the workers found employment in these two occupational categories. There were very few craftsmen among the migrant workers.

The occupations of the migrants before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Battle Creek
No job at last residence.....	14	.....
Unemployed in Battle Creek.....	.....	3
Professional and semiprofessional.....	7	9
Proprietors, managers, and officials.....	6	7
Clerical and kindred workers.....	15	15
Craftsmen and kindred workers.....	8	10
Operatives and kindred workers.....	19	28
Domestic service workers.....	5	3
Other service workers.....	10	13
Farm owners, tenants, and laborers.....	11	(1)
Laborers, except farm.....	5	12
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 1,000 migrant workers, an estimated 30, or 3 percent were unemployed and seeking work during the calendar week prior to interview.

Unemployment by sex.—Men and women reported about the same unemployment rate in Battle Creek. Among women workers 4 percent were unemployed and among men 3 percent.

Unemployment by race.—The unemployment rate of Negro workers was 9 percent, as compared with 3 percent for white workers.

Unemployment by age.—Battle Creek migrants reported only small variations in unemployment according to age:

Age of worker:	Percent unemployed in Battle Creek:
Total.....	3
Under 20 years.....	4
20 to 24 years.....	4
25 to 44 years.....	2
45 years and over.....	5

Unemployment by month of arrival.—Unlike the other cities covered in these surveys, Battle Creek migrants who had arrived in the city shortly before interview reported no greater unemployment than those who had been in the city longer.

Month of arrival:	Percent unemployed
Total.....	3
October 1940 to March 1941.....	2
April 1941 to May 1941.....	(¹)
June-July 1941.....	4
August-September 1941.....	4
October-November 1941.....	4

¹ Less than 0.5 percent.

Unemployment by industry and occupation.—Except for workers from other service industries, no industrial group among the migrants reported high unemployment.

Industry at last residence:	Percent unemployed in Battle Creek
Total.....	3
No job.....	2
Agriculture, forestry, and fishing.....	4
Mining.....	(¹)
Construction.....	(¹)
Manufacturing.....	2
Transportation, communication, and utilities.....	(¹)
Trade.....	3
Personal services.....	3
Other services.....	16

¹ Base too small for computation.

Domestic and other service workers and clerical workers reported the highest unemployment rates in Battle Creek. No other occupational group showed any significant proportion of unemployed workers.

Occupation at last residence:

	Percent unemployed in Battle Creek:
Total.....	3
No job.....	2
Professional, semiprofessional, and proprietary.....	(¹)
Clerical and kindred workers.....	6
Craftsmen and kindred workers.....	3
Operatives and kindred workers.....	3
Domestic and other service workers.....	8
Farm owners, tenants, and laborers.....	4
Laborers, except farm.....	(²)

¹ Less than 0.5 percent.

² Base too small for computation.

HOUSING

The majority of the migrant families were sharing their living quarters with other persons in Battle Creek. About two-fifths were occupying a separate dwelling unit, and a few were living in hotels.

Living arrangements	Total	1- person families	Multiperson families
Occupying a separate dwelling.....	38	8	59
Sharing a dwelling with others.....	56	78	41
In hotels.....	6	14	(¹)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

Like many similar midwestern cities—South Bend, Ind.; Dayton, Ohio; and Quincy, Ill., for example—Battle Creek's recent in-migration has been characterized by moderate volume, and by the marked success of migrant workers in obtaining jobs.

FEBRUARY 13, 1942.

RECENT MIGRATION INTO BLOOMFIELD, N. J.

A survey of recent migration into Bloomfield, N. J., was conducted by the Work Projects Administration, Division of Research, during the latter part of November 1941. The survey was concerned with civilians who moved to Bloomfield from places outside Essex County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis, the survey covered the residential districts and lower priced hotels within the corporate limits of Bloomfield. Higher priced hotels were not surveyed and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Bloomfield is a small segment of the northern New Jersey industrial area, one of the principal defense centers in the country. Bloomfield itself has defense contracts valued at \$6,500,000, and the city lies within easy commuting distance of the aircraft plants at Caldwell, Paterson, and Bendix, and the shipyards at Kearny.

NUMBER OF MIGRANTS

An estimated 300 families containing 350 workers and a total of 730 persons, living within the corporate limits of Bloomfield at the time of this survey, had moved to the city after October 1, 1940. Migrants made up a group equal to 1.8 percent of the city's 1940 population.

ORIGINS

New Jersey contributed the highest proportion, 42 percent, of the migrant workers. New York was the second most important source of migrants, contributing 22 percent, and Pennsylvania was third with 21 percent. The average distance traveled by migrants was 64 miles, and only 6 percent had traveled 500 miles or more.

Large cities (100,000 population or over) contributed 33 percent of the migrant workers and small cities (25,000 to 100,000) contributed 18 percent. Twenty-six percent of the migrants came from towns (2,500 to 25,000) and 23 percent came from rural places; i. e., 8 percent came from open country and 15 percent came from rural villages.

Returning Bloomfield residents comprised 15 percent of the migrant families. About half of these families had been absent from the city for less than 2 years.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 29.3 years. In one-person families the average age was 24.0 years and for heads of multiperson

families it was 35.0 years. Workers under 20 years of age comprised 9 percent of the migrants and workers 45 years and over 16 percent.

Women workers constituted 15 percent of the migrant labor force. The average age of women workers was 28.3 years as compared with 29.4 years for men.

Race.—Negroes constituted less than one-half of 1 percent of the migrants.

Size of family.—The average size of migrant families was 2.4 persons. One-third of the families were composed of one person.

Size of family in Bloomfield:	Percent distribution
1 person.....	34
2 persons.....	23
3 and 4 persons.....	35
5 persons or more.....	8
Total.....	100

A few of the families left a spouse or dependent children at their last residences. Among one-person families 16 percent and among multiperson families 3 percent were incomplete when interviewed. The families contained 800 persons before migration of whom 91 percent had migrated and 9 percent had stayed at the migrant's last residences.

MONTH OF ARRIVAL

Over two-fifths of the migrants arrived in Bloomfield 6 months or more prior to the survey.

Month of arrival:	Percent distribution
October 1940 to May 1941.....	45
June-July 1941.....	14
August-September 1941.....	23
October 1941.....	11
November 1941.....	7
Total.....	100

INDUSTRY AND OCCUPATION

Manufacturing and trade contributed the largest proportion of the migrant workers. One-sixth of the workers were either unemployed at their last residence or were new workers just entering the labor market. In Bloomfield, approximately two-thirds of the migrants were employed in manufacturing. Machinery was the principal manufacturing industry. One-sixth were employed in trade. The following table shows the industry of the last full time jobs of migrants at last residence and on their jobs when interviewed in Bloomfield.

Industry	Percent distribution	
	At last residence	In Bloomfield
No job at last residence ¹	17	.....
Unemployed in Bloomfield.....	.....	2
Agriculture, forestry, and fishing.....	4	(?)
Mining.....	2	(?)
Construction.....	1	2
Manufacturing:		
Chemicals and allied products.....	6	7
Machinery.....	10	29
Transportation equipment.....	3	6
Other.....	16	23
Transportation, communication, and utilities.....	4	4
Trade.....	20	12
Personal services.....	5	7
Other services.....	12	8
Total.....	100	100

¹ The status of these workers at their last residence was: students 12 percent; housewives 4 percent; and unemployed 1 percent.

² Less than 0.5 percent.

Clerical, skilled, and semiskilled workers made up half of the workers at their last residence and more than two-thirds in Bloomfield. Only a very few workers were employed as laborers either in Bloomfield or at their last residences. Occupations at last residence and in Bloomfield follow:

Occupation	Percent distribution	
	At last residence	In Bloomfield
No job at last residence.....	17	.....
Unemployed in Bloomfield.....	.....	2
Professional and semiprofessional.....	6	10
Proprietors, managers, and officials.....	10	9
Clerical and kindred workers.....	18	23
Craftsmen, foremen, and kindred workers.....	14	17
Operatives and kindred workers.....	18	28
Domestic service workers.....	1	1
Other service workers.....	8	4
Farm owners, tenants, and laborers.....	3	(¹)
Laborers except farm.....	5	6
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of an estimated 350 workers only 7, or 2 percent, were unemployed during the week preceding interview.

HOUSING

Over half of the migrant families were occupying a separate dwelling unit in Bloomfield. Nearly two-fifths of the families were sharing a dwelling unit with other persons, and a few unattached migrants were living in hotels.

Living arrangements	Total	Percent distribution	
		1-person families	Multi-person families
Occupying a separate dwelling.....	57	9	82
Sharing a dwelling with others.....	39	80	18
In hotels.....	4	11	.....
Total.....	100	100	100

CONCLUSIONS

The volume of recent migration into Bloomfield, N. J. was unusually small during the first year of the defense program. Among the 51 cities covered in these surveys, only 2 showed a lower migrant rate.

There was virtually no unemployment among the Bloomfield migrants.

DECEMBER 5, 1941.

RECENT MIGRATION INTO BRIDGEPORT, CONN.

A survey of migration into Bridgeport, Conn., was completed by the Work Projects Administration Division of Research during the early part of November 1941. The survey was concerned with civilians who moved to Bridgeport from places outside of Fairfield County after October 1, 1940, and who were still living in Bridgeport at the time of this survey. Operating on a sample basis, the survey covered the residential districts, the one occupied defense housing project, and lower-priced hotels within the corporate limits of Bridgeport. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left Bridgeport.

INDUSTRIAL ACTIVITY

Bridgeport is one of the Nation's more important defense centers. Between June 1940 and September 1941 the Bridgeport industrial area received defense contracts valued at \$187,000,000, equal to about half the 1937 value of manufactures in the area. Between September 1940 and September 1941, manufacturing employment in Bridgeport rose 47.3 percent, the seventh largest rate of increase among 84 American cities.

With this activity, the supply of locally available unemployed in the preferred categories was quickly exhausted. As a result, an extensive training program was established to replenish, from local sources, the supply of semiskilled workers; and a large group of commuters were drawn from nearby farms and villages into the Bridgeport labor market. In addition, migrant workers in large numbers moved to Bridgeport for the new job.

NUMBER OF MIGRANTS

Approximately 5,100 families living in Bridgeport at the time of the present survey had moved to the city after October 1, 1940. These families contained 9,900 persons, of whom 6,000 were workers. Migrants made up a group equal to 6.7 percent of Bridgeport's 1940 population.

ORIGINS

The principal source of Bridgeport migrants was the State of Pennsylvania, which contributed 36 percent of the total. New York was second, with 34 percent and Connecticut was third with only 6 percent. Massachusetts contributed 5 percent and Maine 3 percent. The average distance traveled was 115 miles, and 1 migrant in 20 had traveled 500 miles or more.

Rural places (places of less than 2,500 population) were the source of 13 percent of the migrants, i. e., 3 percent came from open country and 10 percent from rural villages. Towns (2,500 to 25,000 population) contributed 32 percent; small cities, 16 percent; and cities of over 100,000 population, 39 percent.

A relatively small proportion of the families (11 percent) had formerly lived in Bridgeport. Half of these families had been absent from the city for 9 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 27.0 years. In one-person families, the average was 24.7 years; and for heads of multiperson families, 31.3 years. Workers under 20 years made up 13 percent of all workers, and 9 percent were over 45 years.

Women workers made up 18 percent of all the migrant workers in Bridgeport. The average age of women workers was 24.0 years, as compared with 27.5 years for males.

Race.—Negroes constituted 1 percent of the Bridgeport migrants.

Size of family.—The majority of the Bridgeport migrant families contained only one person when interviewed at the time of this study:

Size of family in Bridgeport:	<i>Percent distribution</i>
1 person.....	59
2 persons.....	18
3 and 4 persons.....	18
5 persons and over.....	5
Total.....	100

An unusually large proportion of these families were incomplete when interviewed; 54 percent of the 1-person families and 11 percent of the multiperson families had left one or more family members behind when they moved to Bridgeport. Before migration, families had contained 14,900 persons. Of these, 66 percent had migrated and 34 percent had remained at the migrants' places of residence.

Month of arrival.—A distribution of the migrant workers according to the month of their arrival in Bridgeport was as follows:

Month of arrival:	Percent of Bridgeport migrants
October 1940-February 1941.....	20
March-April 1941.....	15
May-June 1941.....	23
July-August 1941.....	22
September 1941.....	14
October 1941.....	6
Total.....	100

INDUSTRY AND OCCUPATION

Before migration only about one-fourth of the Bridgeport migrants were engaged in manufacturing; but in Bridgeport, manufacturing engaged three-fourths of the workers. New recruits for the factories came from all industries, but especially from mining, trade, and, most of all, from workers who held no jobs at their last residence. Agriculture was only a minor contributor.

The following table shows the industry of migrant workers on their last full-time jobs at last residence and on their jobs when interviewed in Bridgeport.

Industry	Percent distribution	
	At last residence	In Bridgeport
No job at last residence.....	21	-----
Unemployed in Bridgeport.....		4
Agriculture, forestry, and fishing.....	4	(2)
Mining.....	9	-----
Construction.....	9	4
Manufacturing.....	23	74
Iron and steel and their products.....	3	22
Nonferrous metals.....	1	7
Machinery.....	4	20
Transportation equipment.....	1	9
Other.....	14	16
Transportation, communication, and utilities.....	3	2
Trade.....	16	9
Personal services.....	6	3
Other services.....	9	4
Total.....	100	100

¹ The status of these workers at their last residence was as follows; students, 11 percent; housewives, 2 percent; unemployed, 7 percent; other, 1 percent.

² Less than 0.5 percent.

The principal occupations for migrants in Bridgeport were skilled and semi-skilled. Before migration, 40 percent of the workers had held skilled and semi-skilled jobs; after migration, the proportion increased to 68 percent. Only a small proportion of the workers held unskilled jobs either before or after migration to Bridgeport.

The occupations of Bridgeport migrants before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Bridgeport
No job at last residence.....	21	-----
Unemployed in Bridgeport.....		4
Professional and semiprofessional.....	3	2
Proprietors, managers, and officials.....	3	2
Clerical and kindred workers.....	13	10
Craftsmen and kindred workers.....	13	17
Operatives and kindred workers.....	27	51
Domestic service workers.....	3	2
Other service workers.....	8	5
Farm owners, tenants, and laborers.....	3	-----
Laborers, except farm.....	6	7
Total.....	100	100

UNEMPLOYMENT

Out of 6,000 migrant workers in Bridgeport, an estimated 220 workers, or 4 percent, were unemployed and seeking work during the week prior to interview. Comparable figures for other recently surveyed cities are: Baltimore, 3 percent; Wichita, 13 percent; Philadelphia, 8 percent; and St. Louis, 16 percent.

Unemployment by sex.—Unemployment among female migrant workers was five times greater than among males. Among the females, 10 percent, and among the males, 2 percent, were unemployed in Bridgeport.

Unemployment by age.—No single age group showed high unemployment in Bridgeport. Very young workers, however, reported an unemployment rate slightly above average.

Age of worker:	Percent unemployed in Bridgeport
Total.....	4
Under 20 years.....	6
20 to 24 years.....	3
25 to 44 years.....	3
45 years and over.....	4

Unemployment by month of arrival.—Migrant workers who had arrived in Bridgeport during the months just preceding the present survey reported the highest unemployment rate.

Month of arrival:	Percent unemployed in Bridgeport
Total.....	4
October 1940 to February 1941.....	3
March to June 1941.....	3
July to August 1941.....	3
September 1941.....	5
October 1941.....	11

Unemployment by industry and occupation.—In terms of industry at last residence, no major differences appear in the unemployment rate of migrants. Workers from agriculture and the personal service industries showed unemployment slightly above average, however; and those from mining and construction were well below average. Rates by industry at last residence follow.

Industry at last residence:	Percent un- employed in Bridgeport
Total.....	4
No job at last residence.....	5
Agriculture, forestry, and fishing.....	6
Mining.....	1
Construction.....	1
Manufacturing.....	2
Transportation, communication, and utilities.....	4
Trade.....	5
Personal services.....	7
Other services.....	2

In terms of occupation at last residence, only the domestic service workers showed a high unemployment rate in Bridgeport. Very little unemployment was reported by skilled workers or nonfarm laborers. Unemployment rates by occupation follow:

Occupation at last residence:	Percent un- employed in Bridgeport
Total.....	4
No job at last residence.....	5
Professional, proprietary, and clerical.....	4
Craftsmen and kindred workers.....	1
Operatives and kindred workers.....	3
Domestic service workers.....	14
Other service workers.....	3
Farm owners, tenants, and laborers.....	7
Laborers, except farm.....	(1)

¹ Less than 0.5 percent.

HOUSING

An exceptionally small proportion of the Bridgeport migrants were occupying a separate dwelling when interviewed. Even among the multiperson families, a majority had doubled up with other persons.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling	22	4	48
Sharing a dwelling with others	70	82	52
In hotels	8	14	(¹)
Total	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of its population, Bridgeport has recently attracted a large number of migrants. Its migrant rate is approximately double the rates reported for Baltimore and Indianapolis, nearly three times greater than the rate for St. Louis, and nearly seven times greater than the rate for Philadelphia. The number of migrants attracted to Bridgeport during the first 13 months of the national defense program is about three times greater than its net population gain during the 20-year period between 1920 and 1940. Judged by the low unemployment rate of Bridgeport migrants, the movement has been a notably successful one for virtually all classes of migrant workers.

JANUARY 10, 1942.

RECENT MIGRATION INTO BRISTOL, CONN.

A survey of migration into Bristol, Conn., was conducted by the Work Projects Administration, Division of Research, during November 1941. The survey was concerned with civilians who moved to Bristol from places outside of Hartford County after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within Bristol's corporate limits. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Bristol, like many other Connecticut cities, enjoyed greatly increased industrial activity during the first year of the defense program. According to local estimates, employment in Bristol's steel- and brass-products factories increased 28 percent between October 1940 and the time of this survey. Meanwhile, similar and often greater increases in employment were taking place in most of the cities within commuting distance—in Hartford, New Britain, Waterbury, New Haven, etc. Under these conditions, Bristol's backlog of unemployed workers was quickly depleted, and numerous migrant workers were attracted to the Bristol factories from neighboring States.

NUMBER OF MIGRANTS

An estimated 1,100 families living in Bristol at the time of this survey had moved to the city from places outside of Hartford County after October 1, 1940. These families contained 1,150 workers and a total of 1,900 persons. Migrants made up a group equal to 6.3 percent of Bristol's 1940 population.

ORIGINS

The principal sources of Bristol migrants were New York, which contributed 30 percent; Maine, which contributed 20 percent; and Vermont, which contributed 18 percent. Massachusetts was the origin of 9 percent; 6 percent came from

Pennsylvania, and 6 percent from New Hampshire. The State of Connecticut contributed only 3 percent of the migrants. The average distance traveled by the migrants was 145 miles, and only 5 percent traveled 500 miles or more.

Rural places were the origin of more than one-third of the migrants; i. e., 1 percent came from the open country and 35 percent from rural villages. Towns (2,500 to 25,000 population) contributed 36 percent; small cities, 10 percent; and cities of over 100,000 population, 18 percent.

Only 5 percent of the families, an exceptionally small proportion, had ever lived in Bristol before their present move. About half of these former Bristol residents had been absent 10 years or more.

CHARACTERISTICS

Age and sex.—Bristol migrant workers were unusually young, averaging 25.2 years. In one-person families, the average was 23.8 years, and for heads of multi-person families, 29.3 years; 16 percent of the workers were under 20 years, but only 6 percent were 45 years and over.

Female workers made up 17 percent of all the migrant workers. The average age of female workers was 23.4 years, as compared with 25.8 years for males.

Race.—Negroes constituted less than one-half of 1 percent of the Bristol migrants.

Size of family.—When interviewed in Bristol, migrant families were small, averaging 1.8 persons per family. Two-thirds of the families contained only one person.

Size of family in Bristol:	Percent distribution
1 person.....	66
2 persons.....	14
3 and 4 persons.....	15
5 persons and over.....	5
Total.....	100

An unusually high proportion of these families, however, were not complete when interviewed; 77 percent of the one-person families and 13 percent of the multiperson families had left a spouse or dependent children behind when they moved to Bristol. Before migration, the families had contained 3,800 persons. Of these, exactly half had moved to Bristol and half had stayed at the migrant's last residence.

Month of arrival.—About half of the migrants arrived in Bristol during June 1941 or earlier, and a very small proportion arrived during the month in which the survey was conducted.

Month of arrival:	Percent distribution
October 1940–March 1941.....	25
April–May 1941.....	20
June–July 1941.....	25
August 1941.....	9
September 1941.....	8
October 1941.....	10
November 1941.....	3
Total.....	100

INDUSTRY AND OCCUPATION

Before migration, only one-fifth of the Bristol migrants were engaged in manufacturing; but in Bristol, manufacturing occupied three-fourths of the migrants. Bristol factory workers were drawn from all industries, but particularly from among farmers and new workers, who supplied more than one-third of all workers

The following table shows the industry of migrant workers on their last full time jobs at their last residence and on their jobs when interviewed in Bristol.

Industry	Percent distribution	
	At last residence	In Bristol
No job at last residence ¹	18	.....
Unemployed in Bristol.....		2
Agriculture, forestry, and fishing.....	16	1
Mining.....	3	.....
Construction.....	11	8
Manufacturing.....	20	75
Iron and steel.....	2	14
Machinery.....	2	47
Non-ferrous metal products.....	1	6
Other.....	15	8
Transportation, communication, and utilities.....	4	1
Trade.....	13	7
Personal service.....	5	4
Other services.....	10	2
Total.....	100	100

¹ The status of these workers at their last residence was as follows: Students, 9 percent; unemployed, 6 percent; housewives, 2 percent; others, 1 percent.

Semiskilled jobs, the principal attraction for Bristol migrant workers, occupied more than half of the workers when interviewed, but only about one-quarter of the workers before migration. Skilled jobs were next in importance, employing about one-sixth of the migrant workers. Unlike many other survey cities, Bristol attracted very few white-collar workers.

The occupations of Bristol migrants before and after migration are shown in the following table:

Occupation	Percent distribution	
	At last residence	In Bristol
No job at last residence.....	18	.....
Unemployed in Bristol.....		2
Professional and semiprofessional.....	2	2
Proprietors, managers, and officials.....	2	1
Clerical and kindred workers.....	8	8
Craftsmen and kindred workers.....	11	17
Operatives and kindred workers.....	26	53
Domestic-service workers.....	3	3
Other service workers.....	6	4
Farm owners, tenants, and laborers.....	15	2
Laborers, except farm.....	9	8
Total.....	100	100

UNEMPLOYMENT

Out of 1,150 migrant workers in Bristol, an estimated 25 workers, or 2 percent, were unemployed and seeking work during the calendar week preceding interview. Bristol shows the lowest unemployment rate of any city covered to date by this survey.

Unemployment by sex.—Among the 25 unemployed workers, 20 were females. Ten percent of all female workers were unemployed, as compared with 1 percent for males. Most of the unemployed females were operatives from the apparel and leather industries.

HOUSING

About two-thirds of the Bristol migrants had doubled up with other families; one-fourth occupied separate living quarters; and the balance lived in hotels and trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	25	5	62
Sharing a dwelling with others.....	66	83	34
In hotels.....	7	11	4
In tourist and trailer camps.....	2	1	4
Total.....	100	100	100

CONCLUSIONS

The volume of recent migration into Bristol, while obviously large, is considerably less than that found in many other war-boom cities. Out of 39 cities for which data are now available, 14 show a higher migrant rate than Bristol. In one sense, it is true, this comparison is somewhat misleading. Bristol migrants more than those in any other survey city, tended to migrate without their families thus reducing the number of migrant persons for a given number of migrant workers, and in turn, the migrant rate, which relates migrant persons to 1940 population.

FEBRUARY 14, 1942.

RECENT MIGRATION INTO BROCKTON, MASS.

A survey of migration into Brockton, Mass., was completed during the early part of November 1941. The survey was concerned with civilians who moved to Brockton from places outside of Plymouth County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis the survey covered the residential districts and lower-priced hotels within the corporate limits of the city. Higher-priced hotels were not covered, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941 Plymouth County received approximately \$18,000,000 in prime defense contracts, equal to nearly one-fourth of the 1937 product value of manufactures in the county. There were, however, no shortages reported in the Brockton labor market at the time of this survey; according to local reports, increases in unemployment due to priorities were expected.

NUMBER OF MIGRANTS

An estimated 450 families, containing 450 workers and a total of 1,200 persons, living within the corporate limits of Brockton at the time of this survey had moved to the city from places outside Plymouth County after October 1, 1940. Migrants made up a group equal to 1.8 percent of the 1940 population of the city.

ORIGINS

Massachusetts contributed by far the largest proportion, 82 percent, of the migrants. Next in importance were Maine, contributing 5 percent, and New Hampshire with 4 percent. The average distance traveled by migrants was 58 miles; and only 1 percent traveled 500 miles or more.

One-fourth of the migrants (25 percent) moved from large cities (100,000 population or over); and one-fifth (19 percent) had come from small cities (25,000-100,000 population). Towns (2,500-25,000) contributed 37 percent of the migrants. Nineteen percent came from rural villages, and less than one-half of 1 percent came from open country.

Former residents of Brockton comprised an unusually large proportion (43 percent) of the migrant families. About half of these returning residents had been absent from the city for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 31.1 years. In one-person families the average was 28.4 years and for heads of multiperson families it was 33.8 years. Less than 1 percent of the workers were under 20 years of age and 24 percent were 45 years of age or older.

Women workers comprised 21 percent of the migrant labor force. The average age of women workers was 29 years, as compared with 31.9 years for men.

Race.—Negroes constituted less than one-half of 1 percent of the migrants.

Size of family.—The average size of the migrant families was 2.6 persons. One-person families comprised only one-fourth of the migrants.

Size of family in Brockton:	Percent distribution
1 person.....	24
2 persons.....	31
3 and 4 persons.....	35
5 persons or more.....	10
Total.....	100

A few of the migrant families were incomplete when interviewed; 22 percent of the 1-person families and 8 percent of the multiperson families had left a spouse or dependent children at their last residences. Before migration the families contained 480 persons, of whom 96 percent had migrated and 4 percent had stayed at the families' last residences.

Month of arrival.—Half of the workers migrated to Brockton during or before June 1941.

Month of arrival:	Percent distribution
October 1940 to March 1941.....	18
April to May 1941.....	11
June to July 1941.....	20
August 1941.....	13
September 1941.....	4
October 1941.....	21
November 1941 ¹	13
Total.....	100

¹ Does not include the entire month.

INDUSTRY AND OCCUPATION

Manufacturing was the largest single industrial group among the migrants and trade was second, both before migration and in Brockton. Very few migrants had been engaged in agriculture at their last residence, and unlike migrants in the other cities surveyed, relatively few workers engaged in personal and other services.

The industrial distribution of the migrants on their last full-time jobs at last residence and on their jobs in Brockton was as follows:

Industry	Percent distribution	
	At last residence	In Brockton
No job at last residence ¹	10	-----
Unemployed in Brockton.....	-----	3
Agriculture, forestry, and fishing.....	2	2
Mining.....	(²)	(²)
Construction.....	5	6
Manufacturing:		
Leather and leather products.....	13	16
Iron and steel.....	1	8
Other.....	22	26
Transportation, communication and utilities.....	5	4
Trade.....	30	28
Personal services.....	5	2
Other services.....	7	5
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 4 percent; housewives, 3 percent; unemployed, 3 percent.

² Less than 0.5 percent.

As in the other cities surveyed, white-collar workers had a large representation among the migrants. There were also a large number of operatives, particularly after migration. Unskilled workers made up only a very small proportion of the workers.

The occupations of migrant workers at their last residence and in Brockton are shown below:

Occupation	Percent distribution	
	At last residence	In Brockton
No job at last residence.....	10	3
Unemployed in Brockton.....	7	6
Professional and semiprofessional.....	6	7
Proprietors, managers and officials.....	18	18
Clerical and kindred workers.....	17	17
Craftsmen, foremen, and kindred workers.....	24	33
Operatives and kindred workers.....	2	1
Domestic service workers.....	7	6
Other service workers.....	2	3
Farm owners, tenants, and laborers.....	7	6
Laborers, except farm.....	100	100
Total.....		

UNEMPLOYMENT

Of the estimated 450 workers in Brockton, only 15, or 3 percent, were unemployed and seeking work during the calendar week preceding interview. Most of these unemployed workers were either professional or domestic service workers at their last residence.

HOUSING

Over two-thirds of the migrant families were occupying a separate dwelling unit in Brockton; one-fourth were sharing a dwelling with other persons; and a few unattached persons were living in hotels.

Living arrangements	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	72	24	86
Sharing a dwelling with others.....	25	64	14
In hotels.....	3	12	
Total.....	100	100	100

CONCLUSIONS

Both the volume and rate of migration into Brockton during the period covered by this survey were low; only 4 of the 51 cities recently surveyed showed a lower migrant rate. There were very few unemployed among the migrants.

DECEMBER 16, 1941.

RECENT MIGRATION INTO BURLINGTON, IOWA

A survey of migration into Burlington, Iowa, one of the Nation's great new munitions centers, was completed by the Work Projects Administration Division of Research in the early part of November 1941. The survey was concerned with civilians who moved to Burlington from places outside of Des Moines County after October 1, 1940, and who were still living in Burlington at the time of the present survey. Operating on a sample basis, the survey covered the residential districts, lower-priced hotels, and trailer camps, both private and Government-owned, within the corporate limits of the city. An additional canvass was made of trailer camps around the edges of the city. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who had left Burlington during the survey period.

INDUSTRIAL ACTIVITY

Burlington is the location of the new Iowa ordnance plant. Between June 1940 and August 1941, prime defense contracts awarded in connection with this plant were valued at about \$65,000,000, a sum more than six times greater than the value of all Burlington manufactures during 1937. About half the total defense-contract value was allotted to plant construction and about half to the production of ordnance.

Construction of the plant was begun late in 1940, but peak construction employment was not reached until July 1941, when about 13,000 workers were employed. Construction employment declined rapidly in the late summer and fall as the plant approached completion. During the same period completed sections of the plant began operation, providing new employment on a somewhat smaller scale than the original construction job. At the time of the present survey, it was locally estimated that 10,000 workers were still employed about the plant, either on the last phases of construction or in production at newly installed operating units.

NUMBER OF MIGRANTS

Approximately 2,800 families living in Burlington at the time of the present survey had moved to the city after October 1, 1940. These families contained 2,900 workers and 5,000 persons. Migrants made up a group equal to 19.2 percent of Burlington's 1940 population.

The survey found an additional 330 families, containing 900 persons, in tourist and trailer camps just outside the Burlington city limits.

ORIGINS

Iowa was the most important source of Burlington migrants, contributing 39 percent; and Illinois was second with 22 percent. Minnesota and Missouri each contributed 9 percent, and 3 percent came from Wisconsin. The average distance traveled by the migrants was 140 miles; 11 percent had traveled 500 miles or more.

Rural places (less than 2,500 population) contributed slightly less than one-third of the migrants; i. e., 29 percent came from the open country and 29 percent from rural villages. Towns (2,500 to 25,000 population) contributed 30 percent; small cities, 19 percent; and cities of over 100,000 population, 20 percent.

Only 3 percent of the migrant families had formerly lived in Burlington.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Burlington was 33.7 years, considerably above the average for migrants in other cities surveyed. In 1-person families, the average age was 33.4 years; and for heads of multiperson families, 35.2 years. Only 4 percent of the workers were under 20 years, but 23 percent were 45 years and over.

Ten percent of the migrant workers were women. The average age of women workers was 27.1 years, as compared with 34.7 years for men.

Race.—Practically all the migrants were white; Negroes accounted for less than one-half of 1 percent of the total migrants in Burlington.

Size of family.—Migrant families in Burlington were relatively small, averaging 1.8 persons per family. More than half of the families contained only one person.

Size of family in Burlington:	Percent distribution
1 person.....	53
2 persons.....	25
3 and 4 persons.....	19
5 persons and over.....	3
Total.....	100

Many of these families were not complete when interviewed; 40 percent of the 1-person families and 10 percent of the multiperson families had left a spouse or dependent children behind when they moved to Burlington. Before migration the families had contained 6,800 persons. Of these 72 percent had migrated to Burlington, and 28 percent had remained at the migrants' places of origin.

Month of arrival.—Half of the migrants interviewed had come to Burlington about 6 months before the present survey.

Month of arrival:	Percent distribution
October 1940 to February 1941.....	27
March to April 1941.....	19
May to June 1941.....	21
July to August 1941.....	19
September 1941.....	11
October 1941.....	3
Total.....	100

INDUSTRY AND OCCUPATION

Before migration to Burlington, the largest single group among the migrants was made up of construction workers. Important secondary sources of migrants were workers from agriculture, trade, "other" service industries, and workers who held no job at last residence. The proportion of migrants who were employed in manufacturing industries at their last residence was notably small. In Burlington, more than half of the migrants were employed in construction, and nearly one-quarter were engaged in the production of ordnance.

The industrial distribution of migrant workers on their last full-time jobs at their last residence and on their jobs when interviewed in Burlington was as follows:

Industry	Percent distribution	
	At last residence	In Burlington
No job at last residence ¹	12	-----
Unemployed in Burlington.....	-----	3
Agriculture, forestry, and fishing.....	9	(²)
Mining.....	1	(²)
Construction.....	42	54
Manufacturing:		
Chemicals.....	2	23
Other.....	4	3
Transportation, communication, and utilities.....	5	4
Trade.....	12	8
Personal service.....	3	3
Other services.....	10	2
Total.....	100	100

¹ The status of these workers at last residence was as follows: Students, 5 percent; unemployed, 5 percent; and housewives, 2 percent.

² Less than 0.5 percent.

Both before and after migration, the largest occupational groups among the Burlington migrants consisted of craftsmen and—unlike most of the other cities surveyed—unskilled workers. The principal occupational shifts took place among former students, who turned mainly to clerical and unskilled jobs, and among former farm workers, who shifted largely into unskilled work in Burlington.

The occupational distribution of migrants at last residence and in Burlington follows:

Occupation	Percent distribution	
	At last residence	In Burlington
No job at last residence.....	12	-----
Unemployed in Burlington.....	-----	3
Professional and semiprofessional.....	5	5
Proprietors, managers, and officials.....	5	2
Clerical and kindred workers.....	9	12
Craftsmen and kindred workers.....	28	32
Operatives and kindred workers.....	12	14
Domestic service workers.....	1	1
Other service workers.....	5	8
Farm owners, tenants, and laborers.....	8	(¹)
Laborers, except farm.....	15	23
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 2,900 migrant workers in Burlington, an estimated 95, or 3 percent, were unemployed and seeking work during the calendar week preceding the survey.

Unemployment by sex.—Unemployment among male migrants in Burlington had virtually disappeared. The few female migrant workers, however, reported excessive unemployment. Among the males, 1 percent were unemployed, as compared with 27 percent for females. More than three-fourths of the unemployed workers were females.

HOUSING

The majority of the migrant families in Burlington had doubled up with other families, and only about one-fourth occupied separate living quarters. A relatively large proportion of the families lived in tourist and trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	24	1	51
Sharing a dwelling with others.....	63	90	32
In hotels.....	4	7	(1)
In tourist and trailer camps.....	9	2	17
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The rate of recent migration into Burlington is tremendously high, nearly equaling the rate for Wichita, Kans., and about double the rates for Fort Smith, Ark., and Wichita Falls, Tex., two very active small defense cities included in this survey. The number of persons who moved to Burlington during the first year of the defense program is considerably larger than the city's net population gain during the half century between 1890 and 1940.

The recent migration to Burlington has been a notably successful one, since only 3 percent of the migrant workers reported unemployment. In Wichita, on the other hand, 13 percent were unemployed; in Fort Smith, 17 percent; and in Wichita Falls, 6 percent.

A considerable part of the Burlington migrants consisted of construction workers whose stay is temporary. However, the number of migrants who will remain in the city after the end of construction work at the Iowa Ordnance plant and in other more permanent industries will still be relatively large.

JUNE 7, 1941.

RECENT MIGRATION INTO CHICAGO, ILL.

METHOD

A survey of migration into Chicago, Ill., was conducted by the Work Projects Administration Division of Research during the first week of May 1941. The survey was concerned with persons who moved to Chicago from places outside Cook County between October 1, 1940, and May 1, 1941. The city of Chicago as a whole was covered with two independent samples, whose results were in close agreement. Special surveys were made in rooming-house districts, in low-priced hotels and in tourist camps. Migrants in higher-priced hotels were not included in the survey. No attempt was made to gather information on families migrating away from Chicago during the 7-month period covered by the survey.

INDUSTRIAL ACTIVITY

The city of Chicago had not benefited from the national defense program to any exceptional degree at the time the migration survey was conducted. Although Chicago's industries reported generally increased industrial activity between October 1940 and May 1941, a substantial part of the local labor force was still

unemployed in May. Late in the spring of 1940, local estimates put the total number of unemployed workers in Cook County at 300,000.

Chicago could therefore afford few job opportunities to workers from outside the city during the 7-month survey period. The survey of recent migration into Chicago thus provides one bit of evidence for testing the belief that great numbers of workers are migrating into American industrial centers without realistically appraising their chances for finding jobs.

NUMBER OF MIGRANTS

Approximately 11,300 families living in Chicago during the first week of May 1941 had moved to Cook County after October 1, 1940. These families contained approximately 22,800 persons. Migrants thus made up a group equal to 0.7 percent of Chicago's 1940 population.

White persons predominated among the migrants, accounting for 90 percent of all migrants. Negroes made up 9 percent of the migrants, and other races, principally Mexicans, contributed 1 percent.

UNEMPLOYMENT

The rate of unemployment among workers who had recently migrated to Chicago was high. Out of approximately 12,100 workers in the migrant families, 80 percent were working and 20 percent were unemployed and seeking work.

TURN-OVER

The Chicago migration survey provides certain indirect evidence on the extent to which unemployed workers are constantly moving from city to city in search of work. If the turn-over of "floaters" within any given city were high, two conditions would be expected: (a) The rate of unemployment among migrants would be high; and (b) a high proportion of the migrants interviewed at any given time would have been in the city only a short time. In Chicago, the first of these conditions obtained, but not the second. Approximately the same number of migrants interviewed during the first week of May 1941 reported that they had arrived in the city during October and November 1940 as reported arriving during March and April 1941.

INDUSTRY BEFORE AND AFTER MIGRATION

The industrial distribution of Chicago migrant workers on their last full-time job at their last place of residence before moving to Chicago, and on the jobs in Chicago when the survey was made, was as follows:

Industry	Percent distribution	
	At last residence	In Chicago
Agriculture.....	19	
Mining.....	5	
Construction.....	9	8
Manufacturing:		
Food.....	5	11
Iron and steel.....	4	13
Other.....	12	20
Transportation and communication.....	5	6
Trade.....	15	19
Professional and governmental service.....	10	8
Domestic and personal services.....	7	8
Other.....	9	7
Total.....	100	100

A very broad stratum (nearly one-fourth, in fact) of newly arrived workers had come from agriculture and mining. Compensating increases took place among workers engaged in Chicago's manufacturing industries, particularly food and iron and steel, and in trade. The other industrial classes show no significant changes.

AGE

The average age of all workers in the migrant families was 31.6 years, substantially below the average age of resident Chicago workers. In one-person families, the average age of workers was 27.0 years; in multiperson families the average age of family heads was 33.1 years. Only 1 worker in 20 was 45 years of age and over.

ORIGINS

The Chicago migrants had come from exceptionally long distances. Only 5 percent had moved from counties contiguous to Cook County; and only 19 percent had moved from other Illinois counties. States adjoining Illinois (i. e., Indiana, Iowa, Kentucky, Missouri, and Wisconsin) contributed 24 percent. States not contiguous to Illinois contributed 53 percent of the migrant families.

The great majority of the migrants had moved to Chicago from urban places (i. e., places of 2,500 population or more). A total of 80 percent of the families had moved from urban places, and a large proportion of these had come from cities of more than 100,000 population. Rural places contributed 20 percent. Most of the rural migrants came from villages, rather than from places in the open country.

Finally, most of the families had come to the city of Chicago for the first time. Among all the migrant families, 68 percent contained no member who had ever lived in Chicago before; and 32 percent contained one or more members who were formerly Chicago residents. Practically all of the former Chicago residents had moved away from Chicago after 1930.

LIVING ARRANGEMENTS

Considerably less than half of the Chicago migrant families occupied a separate dwelling unit at the time of the survey; the majority lived in rooming houses and hotels or had doubled up with other families. The distribution of the families according to living arrangements was as follows (exactly half the migrants were one-person and exactly half were multiperson families):

Living arrangements	Percent distribution		
	Total	One-person families	Multi-person families
Occupying a separate dwelling	44	18	70
Sharing a dwelling with others	47	63	30
In hotels	9	19	.....
Total	100	100	100

CONCLUSIONS

The flow of migrants, both Negro and white, into the Chicago labor market during recent months has been very small. Moreover, the evidence suggests that very few floaters, moving from city to city in search of work, are passing through the Chicago labor market. The record of recent migration into Chicago offers no support for the belief that the general increase in industrial activity outside important defense centers had brought large numbers of ill-advised workers to the northern industrial regions.

The Chicago survey does suggest, however, that important consequences would probably follow, should the number of migrants appreciably increase in the future. The newly arrived workers in the Chicago labor market were considerably younger than the backlog of resident unemployed workers. Hence it would be expected that the newcomers would be more readily absorbed into Chicago's industries than the local unemployed; and any sizeable increase in the flow of workers would accordingly decrease the chances of reemployment for the local unemployed.

The record of the origins of Chicago migrants indicates that important geographical and industrial shifts may be in process of beginning. The distance traveled by newcomers was exceptional; there are few cases in the history of American internal migration to parallel the record shown by recent Chicago migrants. It is significant, too, that two-thirds of the migrants had never lived in Chicago before, and that one-fourth of the new workers had left the farms and mines before moving to Chicago.

DECEMBER 20, 1941.

RECENT MIGRATION INTO CORPUS CHRISTI, TEX.

A survey of migration into Corpus Christi, Tex., was conducted by the Work Projects Administration, Division of Research in the latter part of October 1941. The survey was concerned with civilians who moved to Corpus Christi from places outside of Nueces County after October 1, 1940, and who were still living there in October 1941. Operating on a sample basis, the survey covered residential districts, lower-priced hotels, and tourist camps within the city limits of Corpus Christi. Higher priced hotels were not surveyed and no attempt was made to gather information about persons who had left the city during the period covered by the survey.

INDUSTRIAL ACTIVITY

Between June 1940 and September 1941 Corpus Christi received direct defense contracts valued at \$43,125,000. This entire sum was allotted for the construction of facilities, principally for the construction of a naval air station in Corpus Christi and a shipyard a few miles outside the city limits. General business activity in Corpus Christi, which was already brisk because of a recent oil boom, has been further intensified by this defense work.

NUMBER OF MIGRANTS

Approximately 2,900 families, containing 3,200 workers and a total of 6,400 persons, moved to Corpus Christi from places outside of Nueces County after October 1, 1940, and were still living there in October 1941. The total number of migrants was equal to 11.1 percent of the 1940 population of the city.

ORIGINS

Texas supplied three-fourths of the migrants in Corpus Christi. Oklahoma was the second most important source, contributing 8 percent, and Louisiana was the third with 2 percent. The average distance traveled by migrants was 240 miles; and 23 percent, a relatively large portion, had traveled 500 miles or more.

Towns (places of 2,500 to 25,000 population) were the origin of the largest proportion of the migrants, 37 percent. Cities of over 100,000 population contributed 28 percent. Rural places contributed 20 percent; i. e. 1 percent came from open country and 19 percent from rural villages. The smallest proportion of migrants, 15 percent, came from small cities (25,000 to 100,000 population).

Only 10 percent of the families reported previous residence in Corpus Christi. Among these former residents, about one-half had been absent for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of all migrant workers was 31.9 years. The average age of family heads was 35.1 years and of unattached workers 29.5. Only 7 percent of the migrant workers were under 20 years of age, but 16 percent were 45 years or over.

Women workers constituted a comparatively high proportion, 17 percent, of the migrant labor force. The average age of women workers was 24.9 years, as against 33.3 years for men.

Race.—Mexicans made up 10 percent, Negroes 6 percent, and white persons 84 percent of the Corpus Christi migrants.

Size of family.—The average size of the migrant families was 2.2 persons.

Size of family in Corpus Christi:

	Percent distribution
1 person.....	43
2 persons.....	25
3 and 4 persons.....	26
5 persons and over.....	6
Total.....	100

Most of these families were complete when interviewed; 8 percent of the 1-person families, however, and 2 percent of the multiperson families had left a family member behind when they moved to Corpus Christi. Before migration the families contained 6,600 persons of whom 97 percent migrated and 3 percent stayed behind at the migrants' last residences. In other survey cities, the

proportion of family members left behind ranged from 3 percent in Greenville, S. C., to 34 percent in Bridgeport, Conn.

Month of arrival in county.—About half of the migrants had been in Corpus Christi for 5 months or more when interviewed. The distribution of migrants by month of arrival in Nueces County follows:

Month of arrival:	Percent distribution
October 1940 to February 1941.....	26
March to April 1941.....	12
May to June 1941.....	18
July to August 1941.....	26
September 1941.....	12
October 1941 ¹	6
Total.....	100

¹ Does not include the whole month.

INDUSTRY AND OCCUPATION

Before and after migration, Corpus Christi migrants were engaged principally in construction, trade, and "other" services. The proportion of manufacturing workers was exceptionally small. There were a few oil field workers among the migrants, and one worker in ten had come from agriculture.

The industrial distribution of the workers on their last full-time jobs at last residence and on their jobs when interviewed in Corpus Christi was as follows:

Industry	Percent distribution	
	At last residence	In Corpus Christi
No job at last residence ¹	8	9
Unemployed in Corpus Christi.....		1
Agriculture, forestry, and fishing.....	10	4
Crude petroleum and natural gas production.....	6	24
Construction.....	21	8
Manufacturing.....	8	5
Transportation, communication, and utilities.....	5	22
Trade.....	21	5
Personal services.....	6	22
Other services.....	15	
Total.....	100	100

¹ The status of these workers at last residence was: Students, 4 percent; housewives, 1 percent; unemployed, 2 percent; and others, 1 percent.

Corpus Christi migrants were principally employed as skilled and white-collar workers both before and after migration. The most significant occupational shift after migration occurred among farm workers, who were mainly employed in Corpus Christi as operatives and "other" service workers (janitors, charwomen, barbers and beauticians, waitresses, etc.). The distribution of migrants by occupations at their last residence and in Corpus Christi was as follows:

Occupation	Percent distribution—	
	At last residence	In Corpus Christi
No job at last residence.....	8	9
Unemployed in Corpus Christi.....		6
Professional and semiprofessional.....	7	8
Proprietors, managers, and officials.....	9	17
Clerical, sales, and kindred workers.....	16	27
Craftsmen, foremen, and kindred workers.....	25	16
Operatives and kindred workers.....	13	2
Domestic service workers.....	3	6
Other service workers.....	6	1
Farm owners, tenants, and laborers.....	9	8
Laborers, except farm.....	4	
Total.....	100	100

UNEMPLOYMENT

Out of 3,200 migrant workers in Corpus Christi, approximately 290 or 9 percent were seeking work at the time of the migration survey. In other survey cities, migrant unemployment ranged from 3 percent in Baltimore, Md., to 17 percent in Fort Smith, Ark.

Unemployment by sex.—The unemployment rate for women workers was five times higher than for men. Among women migrants 25 percent were unemployed, and among men, 5 percent.

Unemployment by race.—Negro workers reported approximately twice the unemployment rate of white workers or of workers of other races. The unemployment rate for Negroes was 18 percent as compared with 8 percent for white workers and 10 percent for workers of other races.

Unemployment by age.—Workers in the age group 20 to 24 years reported the highest unemployment rate, 15 percent. (Among males in this age group, 5 percent were unemployed.) The workers under 20 years reported the lowest rate, 5 percent. The unemployment rates of the various age groups were as follows:

Age of workers:	Percent unemployed in Corpus Christi
Total.....	9
Under 20 years.....	5
20 to 24 years.....	15
25 to 44 years.....	7
45 years and over.....	10

Unemployment by distance traveled.—Unemployment rates increased as the distance traveled by workers increased. Unemployment rates by distance traveled are shown below:

Distance traveled:	Percent unemployed in Corpus Christi
Total.....	9
Less than 200 miles.....	8
200 to 499 miles.....	6
500 to 599 miles.....	13
1,000 miles and over.....	14

Unemployment by month of arrival.—More than two-fifths of the workers who came to Corpus Christi during the survey month were unemployed. Workers who had arrived in the city earlier reported progressively lower unemployment. The tabulation below shows unemployment rate of migrant workers by month of their arrival in Corpus Christi.

Month of arrival:	Percent unemployed in Corpus Christi
Total.....	9
October 1940 to February 1941.....	6
March to April 1941.....	4
May to June 1941.....	6
July to August 1941.....	6
September 1941.....	8
October 1941 ¹	42

¹ Does not include the whole month.

Unemployment by industry and occupation.—Personal service workers, oil-field workers, and those who had no jobs at their last residence reported the highest unemployment rates. Relatively few construction workers and manufacturing workers were unemployed in Corpus Christi at the time of the survey.

Industry at last residence:	Percent unemployed in Corpus Christi
Total.....	9
No job.....	12
Agriculture, forestry, and fishing.....	7
Crude petroleum and natural gas production.....	13
Construction.....	5
Manufacturing.....	4
Transportation, communication, and utilities.....	4
Trade.....	9
Personal services.....	33
Other services.....	4

In terms of occupations, over half of the domestic service workers were unemployed in Corpus Christi. "Other" service workers, nonfarm laborers, and clerical workers reported above-average unemployment rates. There were few unemployed skilled and semiskilled workmen, and few unemployed agricultural workers of Corpus Christi.

Occupation at last residence:	Percent unemployed in Corpus Christi
Total.....	9
No job.....	12
Professional and proprietary.....	5
Clerical, sales, and kindred workers.....	10
Craftsmen, foremen, and kindred workers.....	3
Operatives and kindred workers.....	8
Domestic service workers.....	53
Other service workers.....	16
Farm owners, tenants, and laborers.....	4
Laborers, except farm.....	12

HOUSING

Half of the migrant families in Corpus Christi had doubled up with other persons. An exceptionally large number of migrants lived in tourist and trailer camps.

Living arrangements	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	37	2	64
Sharing a dwelling with others.....	50	86	22
In hotels.....	1	2	
Trailers and tourist camps.....	12	10	14
Total.....	100	100	100

CONCLUSIONS

Corpus Christi enjoyed a phenomenal growth between 1920 and 1940, its population increasing nearly six fold during the two decades. The rapid growth of Corpus Christi continued the first year of the defense program. Among 30 cities covered to date by the migration survey, only 3—Wichita, Kans., Burlington, Iowa, and Wichita Falls, Tex.—showed a higher migrant rate.

FEBRUARY 9, 1942.

RECENT MIGRATION INTO DAYTON, OHIO

A survey of migration into Dayton, Ohio, was conducted by the Work Projects Administration Division of Research in the latter part of December 1941. The survey was concerned with civilians who moved to Dayton from places outside of Montgomery County after October 1, 1940, and who were still living in Dayton at the time of the survey. Operating on a simple basis, the survey covered the residential districts, lower priced hotels, and trailer camps within the corporate limits of Dayton. Higher priced hotels were not surveyed and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941, Montgomery County received prime defense contracts valued at approximately \$95,000,000. A part of this sum was for construction work at Wright and Patterson air fields and part for the manufacture of airplane parts, machine guns, machine tools, etc. Manufacturing employment between November 1940 and November 1941 in Dayton increased 14.5 percent. This increase, however, placed Dayton in only sixtieth rank among 84 American cities. Except for certain skilled categories, no labor shortages were reported in Dayton during the survey period.

NUMBER OF MIGRANTS

An estimated 5,400 families, containing 5,800 workers and a total of 11,400 persons, living in Dayton at the time of this survey had moved to the city after October 1, 1940. Migrants made up a group equal to 5.4 percent of the city's 1940 population.

ORIGINS

Ohio was the principal source of migrants, contributing 47 percent. Kentucky was the second most important source, contributing 17 percent. Other States contributing over 5 percent of the migrants were Indiana, 6 percent and Tennessee, 6 percent. The average distance traveled by migrants was 130 miles; 10 percent had traveled 500 miles or more.

The largest group of migrant workers (28 percent) originated in cities of 100,000 population or over. Three percent came from open country and 26 percent from rural villages. Towns (2,500 to 25,000 population) contributed 24 percent of the migrants and cities of 25,000 to 100,000 contributed 19 percent.

Only a small proportion, 9 percent, of the migrant families were former Dayton residents. Of these returning Dayton residents about half had been absent from the city for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 27.7 years. In one-person families the average age was 24.1 years and for heads of multiperson families it was 32.3 years. Workers under 20 years of age comprised 12 percent of the migrant labor force and those 45 years or over, 10 percent.

Women workers constituted 12 percent of the migrants. The average age of women was 24.0 years as compared with 29.9 years for men.

Race.—Negroes constituted 5 percent of the migrants and white persons constituted 95 percent.

Size of family.—The average size of migrant families was 2.1 persons. One-half of the families were composed of one person.

Size of family in Dayton:	Percent distribution
1 person.....	50
2 persons.....	23
3 and 4 persons.....	21
5 persons or more.....	6
Total.....	100

Many of these families were not complete when interviewed; 36 percent of the one-person families and 22 percent of the multiperson families had left a spouse or dependent children at their last residences. Before migration the families contained 15,200 persons; of these, 75 percent had moved to Dayton and 25 percent had remained at the migrants' last residences.

Month of arrival.—More than three-fourths of the workers arrived in Dayton during the month of September or earlier. The tabulation below shows the distribution of the migrant workers by the month of their arrival in the city.

Month of arrival:	Percent distribution
October 1940 to April 1941.....	21
May to June 1941.....	18
July to August 1941.....	25
September 1941.....	14
October 1941.....	9
November 1941.....	7
December 1941 ¹	6
Total.....	100

¹ Does not include the entire month.

OCCUPATION AND INDUSTRY

The industries contributing the highest proportion of migrants, in order of their relative importance, were: manufacturing, trade, agriculture, and "other" service industries. Nearly a fifth of the workers had no jobs at their last residence. In Dayton, manufacturing absorbed over two-fifths of the migrant

workers. One-fifth of the migrants obtained jobs in "other" service industries and one-sixth were employed in trade.

The industrial distribution of the workers on their last full-time jobs at last residence and on their jobs when interviewed was as follows:

Industry	Percent distribution	
	At last residence	In Dayton
No job at last residence ¹	18	.....
Unemployed in Dayton.....	.....	3
Agriculture, forestry, and fishing.....	14	1
Mining.....	3	(4)
Construction.....	6	6
Manufacturing:		
Iron and steel and their products.....	5	9
Machinery.....	5	12
Transportation equipment.....	4	11
Other.....	8	12
Transportation, communication, and utilities.....	7	7
Trade.....	14	16
Personal service.....	3	3
Other service.....	13	20
Total.....	100	100

¹ The status of these workers at last residence was: Students 10 percent; unemployed 5 percent; housewives 1 percent; and others 2 percent.

² Less than 0.5 percent.

In Dayton, as in most of the other cities surveyed, migrant workers were principally clerks, craftsmen, and operatives. Before migration, these three groups made up 44 percent of the workers, and after migration they made up 62 percent. The proportion of professional workers was relatively large.

The occupations of the migrants before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Dayton
No job at last residence.....	18	.....
Unemployed in Dayton.....	.....	3
Professional and semi-professional.....	10	10
Proprietors, managers, and officials.....	3	3
Clerks and kindred workers.....	15	21
Craftsmen and kindred workers.....	16	20
Operatives and kindred workers.....	13	21
Domestic service workers.....	1	1
Other service workers.....	6	11
Farm owners, tenants, and laborers.....	13	(1)
Laborers, except farm.....	5	10
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 5,800 migrant workers in Dayton, an estimated 175, or 3 percent, were unemployed and seeking work during the week preceding the survey.

Unemployment by sex.—Unemployment among women migrant workers was twice as great as among the men. Six percent of the women were unemployed, as compared with 3 percent among the men.

Unemployment by age.—Unemployment was heaviest among the oldest and the youngest workers:

Age of workers:	Percent unemployed in Dayton
Under 20 years.....	5
20 to 24 years.....	2
25 to 44 years.....	3
45 years or over.....	6
Average.....	4

Unemployment by month of arrival.—No group of workers arriving in the city at different periods showed high unemployment.

Month of arrival:	Percent unemployed in Dayton
Total.....	3
October 1940-June 1941.....	3
July-August 1941.....	4
September-October 1941.....	2
November 1941.....	4
December 1941.....	6

Unemployment by industry and occupation.—Except for personal service workers, no industry group reported high unemployment in Dayton. Unemployment rates by industry at last residence are shown below.

Industry at last residence:	Percent unemployed in Dayton
Total.....	3
No job.....	4
Agriculture, forestry, and fishing.....	5
Mining.....	(¹)
Construction.....	(¹)
Manufacturing.....	2
Iron and steel.....	(¹)
Machinery.....	(¹)
Transportation equipment.....	3
Other.....	2
Transportation, communication, and utilities.....	(¹)
Trade.....	2
Personal service.....	14
Other services.....	4

¹ Less than 0.5 percent.

Except for domestic and other service workers, all occupational groups reported very little unemployment in Dayton. Rates by occupation follow.

Occupation at last residence:	Percent unemployed in Dayton
Total.....	3
No job.....	4
Professional and semiprofessional.....	3
Proprietors, managers, and officials.....	(¹)
Clerks and kindred workers.....	3
Craftsmen and kindred workers.....	1
Operatives and kindred workers.....	2
Domestic and other service workers.....	10
Farm owners, tenants, and laborers.....	3
Laborers, except farm.....	(¹)

¹ Less than 0.5 percent.

HOUSING

Only about a third of the migrant families were living in separate dwelling units when interviewed; the great majority were sharing a dwelling with other persons. A small proportion were living in hotels and a few were living in tourist or trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	34	8	60
Sharing a dwelling.....	64	88	38
In hotels.....	2	4	1
In tourist and trailer camps.....	(¹)	.....	1
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of its population, Dayton has recently attracted a moderately large volume of migration. Although far below the hottest defense centers, its migrant rate nevertheless stands substantially above the rates for such cities as San Francisco and Baltimore.

Migrants to Dayton were unusually successful in finding work. Only two cities among the 51 covered in these surveys showed a lower unemployment rate than Dayton.

DECEMBER 16, 1941.

RECENT MIGRATION INTO DES MOINES, IOWA

A survey of migration into Des Moines, Iowa, was completed early in November 1941, by the Work Projects Administration Division of Research. The survey was concerned with civilians who moved to Des Moines from places outside of Polk County after October 1, 1940, and who were still living in the city at the time of the present survey. Operating on a sample basis, the survey covered the residential districts, lower-priced hotels, and trailer camps within the corporate limits of Des Moines. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and September 1941, Des Moines received direct defense contracts valued at about \$34,000,000, equal to half the value of all Des Moines manufactures during 1937. Practically the entire sum of defense contracts was allotted for the construction of facilities, and particularly for a small-arms ordnance plant. This plant was still under construction at the time of the present survey, employing about 7,000 construction workers.

Manufacturing in Des Moines enjoyed only a very minor increase in activity during the first year of the defense program. Between September 1940 and September 1941, manufacturing employment increased only 4.2 percent, giving Des Moines eighty-second rank among 84 American cities. But insurance and other local service industries, which play a particularly important part in Des Moines' economic life, were reported to be active.

NUMBER OF MIGRANTS

Approximately 3,200 families living in Des Moines at the time of this survey had moved to the city after October 1, 1940. These families contained 3,400 workers and a total of 7,700 persons. Migrants made up a group equal to 4.8 percent of Des Moines' 1940 population.

ORIGINS

The State of Iowa was the origin of 53 percent of the Des Moines migrants. Missouri was second largest contributor, with 8 percent; Texas third, with 6 percent; and Illinois fourth, with 5 percent. The average distance traveled was 155 miles, but 23 percent of the migrants had traveled 500 miles or more.

Rural places contributed about one-fourth of the migrants; i. e., 2 percent had come from open country and 22 percent from rural villages. Towns (2,500 to 25,000 population) contributed 29 percent of the migrants; small cities, 19 percent; and cities of over 100,000 population, 28 percent.

Less than one-fifth (18 percent) of the migrants had formerly lived in Des Moines. Half of these families had been absent from the city for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 29.7 years. In one-person families the average age was 24.1 years, and for heads of multiperson families, 32.5 years. Workers under 20 years made up 5 percent of all workers, and those over 45 made up 12 percent.

One-fourth of the migrant workers were women. The average age of women workers was 23.3 years, as compared with 32 years for men.

Race.—Practically all Des Moines migrants were white; Negroes constituted less than one-half of 1 percent of the migrants.

Size of family.—When interviewed in Des Moines, about one-third of the families consisted of one person:

Size of family:	Percent distribution
1 person.....	32
2 persons.....	25
3 and 4 persons.....	37
5 persons and over.....	6
Total.....	100

Some of these families were not complete when interviewed; 19 percent of the 1-person families and 9 percent of the multiperson families had left a spouse or dependent children behind when they moved to Des Moines. Before migration, the families had contained 8,600 persons. Of these, 90 percent had migrated and 10 percent had stayed at the migrants' places of origin.

Month of arrival.—Half of the migrants had come to Des Moines within about 3 months of the time of the present survey:

Month of arrival:	Percent distribution
October 1940–February 1941.....	18
March–April 1941.....	8
May–June 1941.....	16
July–August 1941.....	20
September 1941.....	18
October 1941.....	20
Total.....	100

INDUSTRY AND OCCUPATION

Both before and after migration, the most important single industry was construction, which occupied about one-fifth of the migrants at last residence and in Des Moines. Trade and "other" services were each nearly as well represented as construction, but manufacturing employment was relatively minor. The principal industrial shift was into finance, insurance, and real estate.

The industrial distribution of the migrants on their last full-time job at last residence and on their jobs when interviewed in Des Moines was as follows:

Industry	Percent distribution	
	At last residence	In Des Moines
No job at last residence ¹	11	.....
Unemployed in Des Moines.....	.....	5
Agriculture, forestry, and fishing.....	5	.....
Mining.....	1	(²)
Construction.....	19	21
Manufacturing.....	13	14
Transportation, communication, and utilities.....	7	8
Trade.....	18	17
Finance, insurance, and real estate.....	3	9
Personal services.....	5	10
Other services.....	18	16
Total.....	100	100

¹ The status of these workers at last residence was: Students, 7 percent; housewives, 3 percent; others, 1 percent.

² Less than 0.5 percent.

Recent migration to Des Moines was predominantly a movement of white-collar workers; both before and after migration, a good majority of the migrants had engaged in professional, proprietary, or clerical work. There were relatively few craftsmen or operatives among the migrants, and very few laborers.

The occupational distribution of the workers before and after migration to Des Moines was as follows:

Occupation	Percent distribution	
	At last residence	In Des Moines
No job at last residence.....	11	5
Unemployed in Des Moines.....		14
Professional and semiprofessional.....	15	9
Proprietors, managers, and officials.....	10	33
Clerical and kindred workers.....	27	13
Craftsmen and kindred workers.....	13	10
Operatives and kindred workers.....	10	6
Domestic service workers.....	3	5
Other service workers.....	4	5
Farm owners, tenants, and laborers.....	5	5
Laborers, except farm.....	2	5
Total.....	100	100

EMPLOYMENT

Out of 3,400 migrant workers in Des Moines, an estimated 170, or 5 percent, were unemployed and seeking work during the week preceding this survey.

Unemployment by sex.—The unemployment rate for female migrant workers in Des Moines was three times greater than for males. Among female workers, 9 percent were unemployed, as compared with 3 percent for men.

Unemployment by age.—Workers 20 to 24 years of age reported the lowest unemployment rate in Des Moines, and those over 45 years reported the highest rate.

Age of worker:	Percent unemployed in Des Moines
Total.....	5
Under 20 years.....	(1)
20 to 24 years.....	4
25 to 44 years.....	5
45 years and over.....	7

¹ Base too small for computation.

Unemployment by month of arrival.—Migrant workers who had been in Des Moines longest reported the highest unemployment rates:

Month of arrival:	Percent unemployment
Total.....	5
October 1940–April 1941.....	7
May–June 1941.....	9
July–August 1941.....	3
September–October 1941.....	3

Unemployment by industry and occupation.—Workers from other services fared worst in Des Moines, and lower-than-average unemployment was reported by workers from construction, transportation, and manufacturing. Unemployment rates by industry at last residence follow:

Industry at last residence:	Percent unemployed in Des Moines
Total.....	5
No job.....	4
Agriculture, forestry and fishing.....	(1)
Mining.....	(1)
Construction.....	3
Manufacturing.....	4
Transportation, communication and utilities.....	(2)
Trade.....	5
Personal services.....	(1)
Other services.....	9

¹ Base too small for computation.

² Less than 0.5 percent.

In terms of occupation at last residence, clerical workers reported the lowest unemployment rate in Des Moines, and operatives reported the highest rate. Unemployment by occupation was as follows:

Occupation at last residence:	Percent unemployed in Des Moines
Total.....	5
No job.....	4
Professional and proprietary.....	4
Clerical and kindred workers.....	3
Craftsmen and kindred workers.....	7
Operatives and kindred workers.....	5
Domestic and other service workers.....	(1)
Farm owners, tenants, and laborers.....	(1)
Laborers, except farm.....	(1)

¹ Base too small for computation.

HOUSING

The great majority of Des Moines migrants occupied separate living quarters when enumerated. About one-third shared a dwelling with other persons, and a few lived in tourist and trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	61	9	86
Sharing a dwelling with others.....	35	85	11
In hotels.....	2	5	.....
In tourist and trailer camps.....	2	1	3
Total.....	100	100	100

CONCLUSIONS

In terms of its population, Des Moines has recently attracted a large flow of migrants. Its migrant rate exceeds, for example, the rates reported for such important defense centers as Portland, Maine, Baltimore, and Indianapolis. Unlike all other cities surveyed to date, Des Moines migrants consist principally of white-collar workers attached to trade and service industries. The construction job at the Des Moines small-arms ordnance plant was also an important attraction for Des Moines migrants.

JULY 14, 1941.

RECENT MIGRATION INTO DETROIT AND ENVIRONS

SURVEY COVERAGE

A survey of migration into Detroit, Mich., and environs was conducted by the Work Projects Administration Division of Research during the early part of June 1941. The survey was concerned with persons who moved into the survey area from places outside of Wayne, Oakland, and Macomb Counties after October 1, 1940, and who were still living in the survey area in June 1941.¹ Migrants living in both residential and rooming-house districts were covered in the survey, and special surveys were conducted in low-priced hotels and in trailer camps within commuting distance of Detroit. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left the Detroit area during the survey period.

¹ The following satellite cities were included in the survey: Highland Park, Hamtramck, Dearborn, Ecorse, River Rouge, Melvindale, Allen Park, Lincoln Park, Wyandotte, Inkster, East Detroit, Roseville, St. Clair Shores, Berkeley, Clawson, Royal Oak, and Ferndale. Open country areas were not included in the survey. Persons were not considered migrants if they had moved between Wayne, Oakland, and Macomb Counties. Had they been so considered, the migration estimates for Wayne County would have been 12 percent greater than actually reported here.

INDUSTRIAL ACTIVITY

Midyear in 1941 found the tempo of Detroit's industrial activity increasing rapidly. As early as March, the Bureau of Employment Security reported acute labor shortages in several highly skilled trades. Unlike most American cities, however, Detroit had not yet recovered the ground lost during the slump of the late 1930's. According to the Bureau of Labor statistics, Detroit's index of factory employment for April 1941 was 15.2 percent higher than in April 1940, but it was still 10.7 percent below the 12-month average for 1937.

During the past year both Work Projects Administration and direct relief loads in the Detroit area have dropped steadily. On June 13, 1941, however, about 18,000 Wayne County workers were still employed on Work Projects Administration, and the proportion of the Wayne County population on Work Projects Administration was only slightly below the proportion for the country as a whole.

In short, Detroit at midyear in 1941 offered broad opportunity for several important categories of workers, but only restricted opportunity for others. An indiscriminate mass migration was obviously not yet justified by the condition of Detroit's industry.

This memorandum is an analysis of the response of outside workers to these opportunities.

NUMBER OF MIGRANTS

Approximately 16,300 families living in the Detroit area in early June 1941 had moved into the area from outside of Wayne, Oakland, and Macomb Counties after October 1, 1940. These families contained 16,300 workers (a few of the families had no workers and a few had more than one worker). And they contained 33,900 persons, equal to 1.8 percent of the 1940 population of the area surveyed.

By comparison, a survey of Akron, Ohio, showed that migrants entering the city after October 1940 and remaining in the city in April 1941 made up a group equal to 0.8 percent of the 1941 population. In May 1941 a similar study of Chicago showed a migrant rate of 0.7 percent, and in Fort Wayne, Ind., a rate of 2.6 percent.

About four-fifths of the migrants were located in Detroit proper, and one-fifth were located in the 17 satellite cities. Migrants in Detroit proper made up a group equal to 1.7 percent of the 1940 population, not significantly below the proportion for the entire survey area. In the satellite cities, the migrant rate was 2.2 percent.

ORIGINS

The principal origins of the migrants were the large industrial cities of the East and Midwest, the depressed areas of northern Michigan, and mountain communities lying south of the Ohio River.

The average distance traveled by Detroit migrants was about 340 miles; that is, half the migrants came from within a circle roughly bounded by Ishpeming, Mich.; Madison, Wis.; Champaign, Ill.; Lexington, Ky.; Harrisburg, Pa.; and Syracuse, N. Y. Although few workers came from the immediate neighborhood of Detroit, (16 percent came from within 100 miles), there were also few workers who came exceptionally long distances. Only 1 worker in 4 had traveled 500 miles or more, and only 1 in 25 had traveled upward of 1,000 miles.

Rural places (i. e., places of less than 2,500 population) contributed an exceptionally high proportion of the migrants. Among all the migrant families, 41 percent came from rural places, 22 percent from towns (2,500 to 25,000 population), 12 percent from small cities, and 25 percent from cities of over 100,000 population.

Most of the families had moved to the Detroit area for the first time; 68 percent contained no member who had ever lived in the Detroit area before. (Among the Negroes, 84 percent had never lived in the area before.) Among the families who had formerly lived in the Detroit area, about half had been absent for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 30.4 years, substantially below the average for local workers. In one-person families the average age was 26.7 years; in multiperson families the average was 32.5 years. One migrant worker in ten was 45 years and over.

Women workers constituted one-sixth of all the migrant workers, a proportion considerably smaller than that prevailing in the Detroit labor market.

Race.—Negroes were underrepresented among Detroit migrants. White families made up 96 percent of the migrants, and nonwhite families (practically all of them Negroes) made up 4 percent. Nonwhite migrants constituted 1.1 percent of the 1940 nonwhite population of the Detroit area, as against a migrant rate of 1.8 percent for white persons.

INDUSTRY AND OCCUPATION

Industry before and after migration.—The industrial distribution of Detroit migrant workers on their last full-time jobs at their last place of residence, and on their jobs in the Detroit area at the time of this survey, was as follows:

Industry	Percent distribution	
	At last place of residence	In Detroit
No job at last residence ¹	17	.....
Unemployed in Detroit.....	.....	10
Agriculture, forestry, and fishing.....	21	(?)
Mining.....	2	(?)
Construction.....	7	5
Manufacturing:		
Transportation equipment.....	5	29
Iron and steel.....	2	4
Machinery.....	2	6
Other.....	10	6
Transportation and communication.....	7	7
Trade.....	10	16
Domestic and personal service.....	6	6
Other services.....	7	7
Other.....	4	4
Total.....	100	100

¹ Included persons unemployed and persons not in the labor market.

² Less than 0.5 percent.

This table reveals important industrial shifts. Before migration, nearly half of the workers fell into four classes: Persons engaged in agriculture, in mining, in construction, and persons without jobs. After migration, these same four classes contained only 15 percent of the workers. Migration to Detroit resulted in a substantial shift to the trade industries, more than doubled the proportion of the migrants in all manufacturing, and multiplied fivefold the proportion of migrants in the manufacture of transportation equipment.

OCCUPATION BEFORE AND AFTER MIGRATION

The occupational distribution of Detroit migrants at their last residence and in Detroit was as follows:

Occupation	Percent distribution—	
	At last place of residence	In Detroit
No job at last residence ¹	17	.....
Unemployed in Detroit.....	.....	10
Professional and semiprofessional workers.....	8	5
Farm owners and managers.....	3	.....
Other proprietors, managers, and officials.....	6	3
Clerical, sales, and kindred workers.....	10	13
Craftsmen, foremen, and kindred workers.....	11	21
Operatives and kindred workers.....	15	31
Domestic service workers.....	3	4
Other service workers.....	3	4
Farm laborers and foremen.....	18	.....
Laborers, except farm.....	6	9
Total.....	100	100

¹ Includes persons unemployed and persons not in the labor market.

The Detroit labor market drew a substantial proportion of its migrants from unskilled occupations, but it offered few unskilled jobs. Before migration, 30 percent of the workers were in unskilled occupations; but in Detroit, only 17 percent held unskilled jobs. Professional and proprietary workers also declined, but less sharply. On the other side of the scale, there was a small increase among clerical workers, and a doubling of persons engaged in skilled and semiskilled occupations.

UNEMPLOYMENT

Out of 16,300 migrant workers in Detroit, a total of 1,600, or 10 percent, were unemployed and seeking work when enumerated. According to current surveys of the Detroit labor market, approximately the same proportion of Detroit's resident workers was unemployed at midyear.

Among the different groups of migrant workers there was a wide and significant divergence in the incidence of unemployment.

Unemployment by race.—The rate of unemployment among Negro migrants was more than three times greater than among white workers. While 9 percent of the white workers were unemployed, Negro migrants reported an unemployment rate of 30 percent.

Unemployment by sex.—Women migrant workers had about twice the unemployment rate of men. Among the men, 8 percent were unemployed; among the women, 17 percent.

Unemployment by age.—Migrants aged 25 to 34 years were the most fortunate group in securing work, and the greatest difficulty was experienced by the very young and the very old.

Age:	Percent of workers unemployed
Total.....	10
Under 20 years.....	20
20 to 24 years.....	11
25 to 29 years.....	4
30 to 34 years.....	3
35 to 44 years.....	10
45 to 54 years.....	12
55 years and over.....	20

Unemployment by distance traveled.—There was little difference in the unemployment rates of migrants who came from within a 500-mile radius of Detroit. Beyond 500 miles, however, the unemployment rate increased progressively. The rates by distance traveled follow:

Distance traveled:	Percent unemployed
Total.....	10
Less than 200 miles.....	8
200 to 499 miles.....	9
500 to 999 miles.....	14
1,000 miles and over.....	19

Unemployment by industry.—Workers engaged in manufacturing on their last full-time jobs at their last residences had found the least difficulty in securing work in the Detroit area, only 1 percent of these workers were unemployed when interviewed. Workers in the trade industries likewise had little unemployment in Detroit. The highest unemployment rates were reported by workers from the domestic and personal-services industries and workers without jobs at their last residence. Rates by industry were as follows:

Industry at last residence:	Percent un- employed in Detroit
Total.....	10
No job.....	20
Agriculture, forestry, and fishing.....	12
Mining.....	7
Construction.....	9
Manufacturing.....	1
Transportation and communication.....	10
Trade.....	3
Domestic and personal services.....	18
Other.....	4

Unemployment by occupation.—Migrant workers who came from white collar, skilled, and semiskilled occupations had the lowest rates of unemployment in Detroit, laborers had about the average rate, and high rates were reported by domestic and personal-service workers and persons without jobs at their last residence. The rates by occupation follow:

Occupation at last residence:	Percent un- employed in Detroit
Total.....	10
No job.....	20
Profession and proprietary workers.....	5
Clerical, sales, and kindred workers.....	4
Craftsmen, foremen, and kindred workers.....	5
Operatives and kindred workers.....	6
Domestic and personal-service workers.....	26
Laborers.....	12

HOUSING

Only about one-third of the migrant families occupied a separate dwelling unit when enumerated. Well over half of the families had doubled up with others, and one-tenth were living in hotels and trailers. The distribution of the families according to living arrangements follow:

Living arrangements	Percent distribution		
	Total	1-person families	Multiper- son families
Occupying a separate dwelling.....	34	5	29
Sharing a dwelling with others.....	56	39	17
In hotels.....	8	8	(¹)
In trailers.....	2	(¹)	2
Total.....	100	52	48

¹ Less than 0.5 percent.

It should be noted that many of the families had moved to the Detroit area without all their normal family members. Every fifth family had left dependents behind at the place of origin and dependents who had not migrated with their families totaled 7,500 persons.

CONCLUSIONS

The recent movement of workers to the Detroit area has obviously involved a certain amount of difficulty for many individual migrants. Mere presence in the Detroit labor market has not proved to be a guarantee of a job for all outside workers, any more than for all Detroit resident workers.

By and large, however, the movement into Detroit appears to have proceeded with reasonable smoothness. Although disadvantaged economic groups among Detroit migrants consistently reported high rates of unemployment, all such groups for which comparisons are possible were underrepresented in the migrant population. In general, the migrants appear to have made a remarkably realistic appraisal of the economic opportunities of the Detroit area. In any case, one finds in Detroit to date no evidence to support the belief that the national defense program has brought a great mass of unneeded workers to this important industrial center.

DECEMBER 9, 1941.

RECENT MIGRATION INTO FORT SMITH, ARK.

A survey of migration into Fort Smith, Ark., was conducted by the Work Projects Administration, Division of Research, at the end of September 1941. The survey was concerned with persons who moved to Fort Smith from places outside of Sebastian County after October 1, 1940, and who were still living in Fort Smith at the time of the survey. Operating on a sample basis, the survey covered residential districts, lower priced hotels, and trailer camps inside the city

limits. Higher priced hotels were not surveyed and no attempt was made to gather information about persons who left Fort Smith during the survey period.

INDUSTRIAL ACTIVITY

At the time of the migration survey, Fort Smith was enjoying the greatest activity it had seen for many years, due mainly to the beginning of construction of new Army facilities. Between June 1940 and August 1941 Fort Smith received \$5,848,000 in defense contracts. In September this sum was increased by \$15,500,000, allotted for the construction of an armored-division camp. Some of the local industries in Fort Smith have also expanded production recently, mainly those engaged in glass, furniture, and fabricated steel manufacture.

During the 1930's Fort Smith suffered unusually high unemployment; and before this recent defense activity, it was still severely depressed. In October 1941 the city still had a small backlog of unemployed, estimated at 1,400 workers, particularly concentrated among the unskilled, both male and female. No general shortage of labor was evident in Fort Smith, but shortages were feared in certain skilled categories.

This situation brought a relatively large number of migrant workers to Fort Smith.

NUMBER OF MIGRANTS

Approximately 1,500 families living in Fort Smith at the time of the survey had moved into Fort Smith after October 1, 1940. These families contained 3,600 persons and 1,500 workers. Migrants made up a group equal to 9.9 percent of the 1940 population of Fort Smith.

ORIGINS

Over two-fifths (42 percent) of the migrant workers were drawn to Fort Smith from other parts of Arkansas outside of Sebastian County. Oklahoma was the second most important source, contributing 20 percent; Missouri was third with 9 percent; and Texas fourth with 7 percent. Fort Smith migrants traveled on the average of 130 miles; and only 11 percent had traveled 500 miles or more.

Rural places, i. e., places of less than 2,500 population, were the source of almost one-third of the migrants; 2 percent had come from open country, and 30 percent from rural villages. Towns (2,500 to 25,000) contributed 40 percent; small cities 13 percent; and 15 percent had come from cities of more than 100,000 population.

One-fifth of the families reported having lived in Fort Smith before. Among former Fort Smith residents, half had been absent for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of all migrant workers in Fort Smith was 32.8 years, substantially higher than in any other survey city covered to date. Only one worker in about 12 was under 20 years of age, but one in 5 was 45 years of age and over. Heads of multiperson families reported about the same average age as the unattached workers; these averages were 33.4 years and 33.7 years, respectively.

Women workers made up 12 percent of all workers in the Fort Smith migrant families. The average age of women workers was 23.7 years, as against 33.7 years for men.

Race.—Practically all of the migrants in Fort Smith were white. Negroes made up 1 percent of the migrants and white persons made up 99 percent.

Size of family.—Fort Smith migrant families were relatively large, averaging two and one-half persons per family. About one-third of the migrant families contained only one person.

Size of family:	Percent distribution
1 person.....	30
2 persons.....	28
3 and 4 persons.....	33
5 persons.....	9
Total.....	100

Most of the migrant families were complete units when interviewed. However, 10 percent of the multiperson families and more than two-fifths of the 1-person families had left some family member behind when they moved to Fort Smith. Before migration these families contained 4,200 persons. Of these, 86 percent migrated to Fort Smith and 14 percent had remained at the places of origin.

Months lived in county.—Over a third of the migrant workers had arrived in Fort Smith immediately before the present survey, when construction work on Army facilities was getting under way. The distribution of the migrants according to the time of arrival in Fort Smith was as follows:

Month of arrival:	Percent distribution
October 1940 to January 1941.....	13
February to March 1941.....	7
April to May 1941.....	10
June 1941.....	6
July 1941.....	12
August 1941.....	13
September 1941.....	39
Total.....	100

INDUSTRY AND OCCUPATION

Fort Smith migrants were drawn mainly from industries similar to the ones which they entered in Fort Smith. One-fifth of all migrants were construction workers. The most important manufacturing industries contributing to Fort Smiths' labor supply were: Lumber, furniture, and lumber products (4 percent), and stone, clay, and glass products (2 percent). Trade was the former industrial background of 17 percent of the migrant workers and 11 percent came from "other" service industries. A very small proportion (8 percent) of the workers held no jobs at their last residence, and 11 percent came from agriculture.

In Fort Smith construction work absorbed 22 percent of the migrants. Lumber, furniture, and lumber products supplied employment to 5 percent, and stone, clay, and glass products employed 3 percent of the migrants. Trade absorbed 18 percent of the workers and 9 percent entered "other" services. More than a sixth of the workers, however, were still seeking employment during the calendar week preceding the survey.

Industry	Percent distribution	
	At last residence	In Fort Smith
No job at last residence ¹	9	17
Unemployed in Fort Smith.....		3
Agriculture, forestry, and fishing.....	11	2
Mining.....	3	22
Construction.....	25	
Manufacturing:		
Lumber, furniture and lumber products.....	4	5
Stone, clay, and glass products.....	2	3
Other.....	7	8
Transportation, communication, and utilities.....	8	9
Trade.....	16	18
Personal services.....	4	4
Other services.....	11	9
Total.....	100	100

¹ The status of these workers at their last residence was: students, 6 percent; housewives, 3 percent; and others less than 1/2 of 1 percent.

The occupational distribution of the migrant workers before and after migration was as follows:

Occupation	Percent distribution	
	At last residence	In Fort Smith
No job	9	17
Unemployed in Fort Smith		9
Professional and semiprofessional	9	5
Proprietors, managers, and officials	5	11
Clerical, sales, and kindred workers	12	24
Craftsmen, foremen, and kindred workers	30	20
Operatives and kindred workers	16	2
Domestic service workers	1	5
Other service workers	4	2
Farm owners, tenants, and laborers	10	5
Laborers, except farm	4	
Total	100	100

Both before and after migration, Fort Smith migrants were engaged principally as skilled and semiskilled workers, and to a somewhat less degree, as clerks. There were few workers from "other" service industries, and very few nonfarm laborers among the migrants. The principal occupational shift took place among farm workers, who turned to skilled and semiskilled work in Fort Smith.

UNEMPLOYMENT

A relatively high proportion (17 percent) of the migrant workers were unemployed and seeking work during the calendar week prior to interview. In other survey cities the unemployment rates among migrants were: 3 percent in Baltimore, Md.; 13 percent in Wichita, Kansas; 11 percent in Macon, Ga.; and 16 percent in St. Louis, Mo.

Unemployment by sex.—Proportionately more women migrant workers were unemployed in Fort Smith than men. Almost one-fourth (24 percent) of the women workers reported themselves unemployed and seeking work, while less than one-sixth (15 percent) of the men were unemployed.

Unemployment by age.—The youngest workers reported the highest unemployment rate. Among migrant workers under 20 years of age, 31 percent were unemployed. Of the age group 20 to 24 years, 12 percent; among those aged 25 to 44 years, 14 percent; and among the workers 45 years of age or over, 23 percent were unemployed.

Unemployment by size of place of origin.—The unemployment rate for workers from different sized localities showed little variation. Migrants from small cities reported the lowest unemployment rate (8 percent) as against 19 percent from farms, rural villages, and the open country, and 12 percent for large cities.

Size of place of origin:	Percent unemployed in Fort Smith
Total	17
Open country	19
Rural villages (less than 2,500)	19
Towns (2,500 to 25,000)	19
Small cities (25,000 to 100,000)	8
Large cities (over 100,000)	12

Unemployment by distance traveled.—The variations in unemployment rates of workers who traveled various distances to Fort Smith were as follows:

Distance traveled:	Percent unemployed in Fort Smith
Total	17
Less than 200 miles	13
200 to 499 miles	27
500 to 999 miles	14
1,000 miles and over	22

Unemployment by month of entering county.—Workers who had arrived in Fort Smith during the month of the survey showed a higher unemployment rate than those who had been in the city for longer periods.

Month of arrival:	<i>Percent unemployed in Fort Smith</i>
Total.....	17
October 1940 to January 1941.....	17
February to March 1941.....	17
April to May 1941.....	13
June 1941.....	8
July 1941.....	8
August 1941.....	10
September 1941.....	23

Unemployment by industry and occupation.—Particularly high unemployment rates were reported by construction and personal service workers, and by new entrants into the labor market and those unemployed at last residence. Workers in "other" services (including professional and related services; amusement, recreation, and related services; business and repair services; and workers in finance, insurance, and real estate) reported the lowest employment rate.

Industry at last residence:	<i>Percent unemployed in Fort Smith</i>
Total.....	17
No job.....	22
Agriculture, forestry, and fishing.....	12
Mining.....	(1)
Construction.....	28
Manufacturing.....	10
Transportation, communication, and utilities.....	10
Trade.....	13
Personal services.....	38
Other services.....	5

¹ Base too small for computation.

In terms of occupations, white collar groups, semiskilled workers, and farm workers of all types reported below-average rates of unemployment in Fort Smith. "Other" service workers (including protective service workers, and waiters, waitresses, beauty parlor workers, barbers, cooks, housekeepers, hospital attendants, etc.) and craftsmen and kindred workers, reported especially high unemployment rates. Domestic service workers and unskilled non-farm workers reported average rates of unemployment.

Occupation at last residence:	<i>Percent unemployed in Fort Smith</i>
Total.....	17
No job.....	22
Professional, proprietary, and clerical.....	7
Craftsmen and kindred workers.....	25
Operatives and kindred workers.....	14
Personal service workers.....	17
Other service workers.....	33
Farm owners, tenants, and laborers.....	13
Laborers, except farm.....	17

HOUSING

Almost two-thirds of the migrant families in Fort Smith secured separate living quarters. Over four-fifths of the multiperson families were occupying a separate dwelling when enumerated.

Living arrangements	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	61	10	84
Sharing a dwelling with others.....	29	60	15
In hotels.....	9	29	(1)
Trailers and tourist camps.....	1	1	1
Total.....	100	100	100

Less than 0.5 percent.

CONCLUSIONS

The rate of recent migration into Fort Smith is relatively high, running almost 4 times higher than in Greenville, S. C.; 10 times higher than in Philadelphia; and half as high as in Wichita, Kans., one of the most active defense boom towns in the country.

A large part of the movement of workers into Fort Smith was in answer to the opening of the army's construction program, and many were still not absorbed by the local labor market at the time of the survey.

JUNE 11, 1941.

RECENT MIGRATION INTO FORT WAYNE, IND.

METHOD

A survey of migration into Fort Wayne, Ind., was conducted by the Work Projects Administration Division of Research during the first week of May 1941. The survey was concerned with persons who moved to Fort Wayne from places outside of Allen County after October 1, 1940, and who were still living in Fort Wayne during the first week of May 1941. Migrants living in both residential and rooming-house districts were covered in the survey, and a special survey was made in low-priced hotels. Trailer camps outside the city limits and higher-priced hotels were not included in the survey. No attempt was made to gather information about persons who had moved away from Fort Wayne during the survey period.

INDUSTRIAL ACTIVITY

At the time of the migration survey, Fort Wayne was enjoying intense industrial activity. Factory employment had increased rapidly after October 1940 as a result of defense subcontracts and generally increased activity in the electrical and farm implement industries. In addition, construction work was under way on an Army airfield and a plant for the manufacture of airplane motors. In spite of this increased activity, however, Fort Wayne still had a small backlog of unemployed residents in May 1941, particularly concentrated among the unskilled workers.

This situation had brought a large number of newcomers to work in the Fort Wayne labor market.

NUMBER OF MIGRANTS

Approximately 1,800 families living in Fort Wayne during the first week of May 1941 had moved into Allen County after October 1, 1940. These families contained about 1,600 workers; there were fewer workers than families since 1 family in 9 contained no workers. The families included approximately 3,200 persons. Migrants thus made up a group equal to 2.6 percent of Fort Wayne's 1940 population. The comparable figure for Akron was 0.8 percent; for Chicago, 0.7 percent. One-half of 1 percent of the migrants were Negroes; the rest were white.

EMPLOYMENT

Practically all of the Fort Wayne migrant workers were employed. Out of 1,600 workers in the migrant families, 97 percent were employed at the time of the survey, and only 3 percent were unemployed and seeking work.

INDUSTRY BEFORE AND AFTER MIGRATION

The industrial distribution of Fort Wayne migrant workers on their last full-time jobs at their last place of residence, and on their jobs in Fort Wayne at the time of the survey, was as follows:

Industry	Percent distribution	
	At last residence	In Fort Wayne
No job at last residence.....	10	3
Unemployed in Fort Wayne.....	7	3
Agriculture.....	18	20
Construction.....	2	13
Manufacturing:		
Electrical machinery and equipment.....	5	5
Transportation equipment.....	15	14
Other manufacturing.....	12	11
Transportation and communication.....	22	24
Trade.....	9	10
Other.....		
Total.....	100	100

Both before and after migration, Fort Wayne migrants included a particularly large proportion of workers engaged in construction, manufacturing, and, somewhat less to be expected, in trade. Industrial shifts were relatively minor. They consisted principally in shifts out of agriculture and "no job" (either because of unemployment or absence from the labor market) and a sizable increase in electrical machinery manufacturing.

OCCUPATION BEFORE AND AFTER MIGRATION

The occupational distribution of Fort Wayne migrant workers at their last place of residence and in Fort Wayne was as follows:

Occupation	Percent distribution	
	At last place of residence	In Fort Wayne
No job at last residence.....	10	3
Unemployed in Fort Wayne.....	6	6
Professional and semiprofessional workers.....	4	10
Farm owners and managers.....	7	23
Other proprietors, managers, and officials.....	21	23
Clerical, sales, and kindred workers.....	27	25
Craftsmen, foremen, and kindred workers.....	17	25
Operatives and kindred workers.....	2	1
Domestic service workers.....	2	5
Other service workers.....	2	2
Farm laborers and foremen.....	2	2
Laborers, except farm.....		
Total.....	100	100

Fort Wayne migrants included an unusually small proportion of unskilled workers. Both before and after migration, 8 percent of the workers were engaged in unskilled occupations. The largest broad grouping was in white-collar occupations, which supplied nearly two-fifths of the migrants' jobs in Fort Wayne.

TURN-OVER

The Fort Wayne survey provides no direct information on the turn-over of migrants. Obviously, the number of migrants who had moved to Fort Wayne after October 1, 1940, and left before the survey was conducted in the first week of May 1941 could not be measured. The survey does, however, provide a basis for inferences about one type turn-over. If there were a high turn-over of "floaters," unemployed workers moving from city to city in search of work, one would expect two conditions to exist at any given time: (a) A high proportion of migrants would have arrived in the city shortly before the survey was made; and (b) the rate of unemployment among migrants would be high.

In Fort Wayne the first of these conditions did obtain: 39 percent of the migrants interviewed in May had arrived during March and April, while only 7 percent had arrived in October and November 1940. Moreover, a considerable

number of the migrants were construction workers, a group known to be highly mobile during recent months. As noted above, however, the rate of unemployment among Fort Wayne migrants was exceptionally small. It appears to be improbable, therefore, that any great number of unemployed floaters were passing through the Fort Wayne labor market at the time of the survey.

AGE

The average age of all workers in the migrant families was 28.2 years, far below the average age of local Fort Wayne workers. In one-person families, the average was 25 years; in multiperson families the average age of family heads was 31 years. Only one worker in seven was 45 years of age or over. The very marked youth of the Fort Wayne migrant workers accounts, in part, for the fact that practically all were able to secure work in a labor market which still contained some resident unemployed workers.

ORIGINS

Fort Wayne migrants had traveled somewhat greater distances than is common among American migrants. Counties adjoining Allen County (including three counties in Ohio) were the origin of 22 percent of the families, other counties in Indiana contributed 26 percent, adjacent States contributed 34 percent, and nonadjacent States contributed 18 percent.

A marked rural-to-urban population shift is revealed in the origins of Fort Wayne migrants. Rural places (places of less than 2,500 population) contributed 34 percent of the migrant families; that is, 20 percent came from villages and 14 percent from places in the open country. Urban places contributed 66 percent of the migrants.

The great majority of the families had moved to Fort Wayne for the first time. Among all the migrant families, 76 percent contained no member who had ever lived in Fort Wayne before, and 24 percent contained one or more members reporting a previous Fort Wayne residence. About two-thirds of the former Fort Wayne residents had moved away from Fort Wayne after 1936.

LIVING ARRANGEMENTS

Only about two-fifths of all the migrant families occupied a separate dwelling unit when enumerated in the survey. The distribution of the families according to their living arrangements was as follows:

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	41	11	75
Sharing a dwelling with others.....	45	64	24
In hotels.....	14	25	1
Total.....	100	100	100

CONCLUSION

The recent flow of migrants into Fort Wayne has been relatively large. In terms of its population, Fort Wayne has absorbed about four times as many migrants as Akron and Chicago in recent months. Judging, however, from the exceptionally low rate of unemployment among the migrants, the movement into Fort Wayne has—to date, at least—involved little hardship or waste motion.

NOVEMBER 5, 1941.

RECENT MIGRATION INTO GREATER GREENVILLE, S. C.

A survey of migration into Greater Greenville, S. C.,¹ was completed by the Work Projects Administration Division of Research at the end of September

¹ Originally, the city of Greenville was laid out in the form of a perfect circle with a radius of 1 mile. The population long since overran this boundary, but the original limits were never changed. Today Greenville proper contains less than half of the 75,000 population of the compact economic unit known as "Greater Greenville." Greater Greenville is not a political unit, but it has "city limits" accepted by common usage.

1941. The survey was concerned with persons who moved into Greater Greenville from places outside of Greenville County after October 1, 1940, and who were still living there a year later. Every section of the area was represented in the survey, with the exception of higher priced hotels. No attempt was made to gather information about persons who had left Greenville during the survey period.

INDUSTRIAL ACTIVITY

Greenville is not a center of large-scale direct defense activity. Between June 1940 and August 1941, Greenville County received prime defense contracts valued at about 2 million dollars, equal to only 3 percent of the 1939 value of manufactures in the county. In the State of South Carolina during the same period, defense contracts equalled 55 percent of the 1939 value of manufactures.

Indirect defense orders, however, and the general increase in the demand for cotton goods have recently brought extraordinary activity to the Greenville textile mills. Textile production has been increasing rapidly for the past two years, and particularly within the past nine months. According to local reports, unemployment in Greenville decreased about 50 percent between September 1940 and September 1941. Early in 1941 three-shift mill operation became the general rule, and by the time of the present survey, Greenville was enjoying one of the most active periods in its history.

NUMBER OF MIGRANTS

In response to this activity approximately 1,050 families had moved to Greater Greenville from places outside of Greenville County between October 1940 and September 1941, and were still living there in September 1941. These families contained 1,090 workers and 2,450 persons. Migrants made up a group equal to 3.2 percent of the 1940 population of Greater Greenville.

Greenville proper contained fewer migrants than that part of Greater Greenville lying outside the Greenville city limits; 44 percent of the migrants lived inside the city limits and 56 percent lived outside. The migration rate was also slightly higher outside. Migrants in Greenville proper equalled 3.0 percent of the 1940 population. In Greater Greenville outside the city limits, the migration rate was 3.4 percent.

ORIGINS

The great majority of the migrants had come to Greenville from nearby mountain and Piedmont counties in South Carolina, North Carolina, and Georgia. A sizable minority of workers, particularly those in the service industries, had migrated from Atlanta, Charlotte, and Knoxville. Practically none had come from the Tidewater.

The distance traveled by Greenville migrants was relatively short, averaging about 70 miles. By comparison, the average distance traveled by Baltimore migrants was 170 miles; and by Detroit migrants, 340 miles.

Rural places, i. e., places of less than 2,500 population, contributed about one-fourth of the migrants. Most of these (24 percent) came from villages, and only 2 percent came from open country. Towns (2,500 to 25,000 population) contributed 43 percent; small cities, 18 percent; and cities of over 100,000 population, 13 percent.

Most of the migrant families had not lived in Greenville before; only 25 percent reported previous Greenville residence. Among the families who formerly lived in Greenville, about half had been absent for 5 years or more.

CHARACTERISTICS

Age and sex.—Greenville migrants were exceptionally young. The average age of all workers in the migrant families was 26.0 years. Among single workers, the average was 23.1 years; in multiperson families, the average age of heads was 32.3 years.

Because Greenville is a cotton-mill city, a relatively large proportion of the migrant workers (28 percent) were women. Women were still underrepresented among the migrants, however, since Greenville contains an even larger proportion of women in its resident labor supply.

Race.—There was a striking underrepresentation of Negroes among the Greenville migrants; Negroes constituted only 5 percent of all the migrants. The migrant rate (based upon Greenville's 1940 population) was 0.6 percent for Negroes, as against 4.1 percent for white persons.

Months lived in county.—A distribution of workers according to the month of their arrival in Greenville follows:

Month of arrival:	Per cent of Greenville migrants	
	At last residence	In Greenville
October to December, 1940.....	14	8
January to February, 1941.....	9	1
March to April, 1941.....	6	5
May to June, 1941.....	28	37
July to August, 1941.....	6	6
September 1941.....	8	9
Total.....	100	100

INDUSTRY AND OCCUPATION

The industrial distribution of Greenville migrant workers on their last full-time job at their last place of residence, and on their jobs in Greenville, was as follows:

Industry	Percent distribution	
	At last residence	In Greenville
No job at last residence ¹	14	8
Unemployed in Greenville.....	9	1
Agriculture, forestry, and fishing.....	6	5
Construction.....	28	37
Manufacturing:	6	6
Textiles.....	28	37
Other.....	6	6
Transportation, communication, and public utilities.....	8	9
Trade.....	13	13
Finance, insurance, and real estate.....	2	5
Personal services.....	2	3
Other services.....	12	13
Total.....	100	100

¹ The status at last residence of these workers was: students, 9 percent; housewives, 3 percent; and others, 2 percent.

Both before and after migration, the majority of Greenville migrants were engaged either in textile manufacturing, or in trade and in "other" service industries. Two principal industrial shifts accompanied the migration of the workers; first, a shift out of agriculture into textile manufacturing, and, second, a shift from nonworker status at last residence (principally involving students) into finance, insurance, and real estate and into "other" service industries.

The movement of workers into Greenville was predominantly a migration of clerks and cotton-mill operatives. There were few craftsmen among the migrants, and very few unskilled workers. The occupational distribution of Greenville migrants before migration and at the time of interview was as follows:

Occupation	Percent distribution	
	At last place of residence	In Greenville
No job at last residence.....	14	8
Unemployed in Greenville.....	9	9
Professional and semiprofessional.....	3	3
Other, proprietors, managers, and officials.....	17	26
Clerical, sales, and kindred workers.....	11	10
Craftsmen, foremen, and kindred workers.....	30	38
Operatives and kindred workers.....	(1)	(1)
Domestic service workers.....	5	4
Other service workers.....	8	1
Farm owners, managers, and laborers.....	3	1
Laborers, except farm.....	3	1
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 1,090 migrant workers in Greenville, a total of 95, or 9 percent, were unemployed and seeking work at the time of the survey. Comparative figures for migrants in other cities are: Akron (April), 10 percent; Chicago (May), 20 percent; Fort Wayne, Ind. (May), 3 percent; Detroit (June), 10 percent; and Baltimore (September), 3 percent.

Unemployment by race.—The rate of unemployment for the few Negroes who migrated to Greenville was nearly five times greater than for white workers. Among Negroes, 33 percent, and among white workers, 7 percent, were unemployed.

Unemployment by sex.—Women migrants to Greenville had three times the unemployment rate of males. Among the women migrants, 15 percent were unemployed; among the men, 5 percent were unemployed.

Unemployment by age.—The age group 25-44 suffered least unemployment in Greenville, and the highest unemployment rate was that of the very young and the very old. Among workers under 25, the unemployment rate was 13 percent; for those aged 25-44 years, 4 percent; and for those 45 years and over, 17 percent.

Unemployment by size of place of origin.—The migrants from rural places reported the highest unemployment rate, 13 percent. Among migrants from towns (2,500 to 25,000 population), the rate of unemployment was 4 percent; and for migrants from places of over 25,000 population, 9 percent.

Unemployment by month of entering county.—Greenville migrants who had arrived during September 1941, the month during which the survey was conducted, reported the highest unemployment rate; 13 percent of these latest arrivals were unemployed. Among those who arrived during June and August, 4 percent were unemployed; and among those who arrived between October 1940 and May 1941, inclusive, 8 percent were unemployed.

Unemployment by industry and occupation.—Workers engaged in textile manufacturing, trade, finance, and transportation and communication industries at their last place of residence before migration reported little or no unemployment in Greenville. The highest rates were reported by workers from the personal service and construction industries, and by workers who held no job at last residence (i. e., former students, housewives, unemployed, etc.). The unemployment rates by industry follow:

Industry at last residence:	Percent unemployed in Greenville
Total.....	9
No job.....	18
Agriculture, forestry, and fishing.....	9
Construction.....	25
Manufacturing.....	3
Textile manufacturing.....	3
Other manufacturing.....	7
Transportation and communication.....	
Trade.....	3
Finance, insurance, and real estate.....	
Personal services.....	33
Other services.....	7

In terms of occupation the highest unemployment rates were reported by persons who had been skilled workers at last residence, by persons from non-farm laborers jobs, and persons without jobs at last residence. The rates by broad occupational groups follow:

Occupation at last residence:	Percent of unemployment, Greenville
Total.....	9
No job.....	18
Professional, proprietary, and clerical.....	3
Craftsmen, foremen, and kindred workers.....	18
Operatives and kindred workers.....	3
Domestic and other service workers.....	15
Farm owners, managers, and laborers.....	9
Laborers, except farm.....	9

HOUSING

About one-third of the migrant families were occupying a separate dwelling in Greenville and more than three-fifths had doubled up with other families. Even among the multiperson families, the majority had doubled up with other families. Only a small number of migrants were living in hotels, and none lived in tourist or trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying separate dwelling.....	35	3	32
Sharing dwelling.....	62	27	35
In hotels.....	3	3	.....
Total.....	100	33	67

Only a very few of these families had moved to Greenville without all family members. One migrant family in 40 had left dependents behind at the place of origin, and dependents who had not migrated with their families totaled 75 persons.

CONCLUSION

During the 1930's, Greenville's growth resulting from in-migration was rapid. In the decade, the population of the city increased 19.1 percent, considerably more than expected natural increase. In this period, Greenville's Negro population increased much faster than the white population.

Rapid in-migration into Greenville has continued through the first year of the national defense program, but with an important difference. During the past year the in-migration of Negroes has dwindled to insignificance, and has been overshadowed by a large influx of white mill hands and clerks. One important reason for this shift may be seen in the widely divergent rates of unemployment reported by different groups of Greenville migrant workers.

FEBRUARY 11, 1942.

RECENT MIGRATION INTO HACKENSACK, N. J.

A survey of migration into Hackensack, New Jersey, was conducted by the Works Progress Administration Division of Research in the latter part of November 1941. The survey was concerned with civilians who moved to Hackensack from places outside of Bergen County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis the survey covered the residential districts within the corporate limits of the city. No attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Hackensack is a small segment in the great industrial area of northern New Jersey, one of the most important defense centers in the country. The city itself has large defense contracts, and in addition, it lies 7 miles from the aircraft factories of Paterson 2 miles from those at Bendix, and 12 miles from the shipyards at Kearny.

NUMBER OF MIGRANTS

An estimated 200 families, containing 210 workers and a total of 560 persons, who were living within the corporate limits of Hackensack at the time of this survey had moved to the city after October 1, 1940. Migrants made up a group equal to 2.2 percent of the city's 1940 population.

ORIGINS

New York was the principal source of Hackensack migrant workers, contributing 55 percent. New Jersey was the second most important source with 27 percent, and Massachusetts was third with 11 percent. The average distance traveled by migrants was 60 miles and only a very few, 1 percent, had traveled 500 miles or more.

The majority of migrants, 66 percent, moved to Hackensack from cities of 100,000 population or more. Small cities (25,000-100,000) contributed 16 percent of the migrants; towns (2,500-25,000) contributed 8 percent; and rural places 10 percent, i. e. 1 percent came from open country and 9 percent from rural villages.

Returning Hackensack residents comprised 12 percent of the migrant families. Of these former residents, about half had been absent from the city for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 31.8 years. In 1-person families the average age was 23.8 years and for heads of multiperson families 33.0 years. Workers under 20 years constituted 6 percent of the migrants and workers 45 years or over, 17 percent.

Women workers constituted 13 percent of the migrant labor force. The average age of women workers was 25.0 years and of men, 32.8 years.

Race.—Negroes comprised 4 percent of the migrants and white persons comprised 96 percent.

Size of family.—Migrant families averaged 2.8 persons. Only one-sixth of the families were composed of one person.

Size of family in Hackensack:	Percent distribution
1 person.....	16
2 persons.....	32
3 and 4 persons.....	43
5 persons or more.....	9
Total.....	100

Only a few of the families left a spouse or dependent children at their last residences. One percent of the multiperson families and 21 percent of the 1-person families were incomplete when interviewed. Before migration the families contained 570 persons, of whom 99 percent had migrated and 1 percent had remained at the migrants' last residence.

Month of arrival.—Approximately half of the workers arrived in Hackensack during July or earlier.

Month of arrival:	Percent distribution
October 1940 to May 1941.....	25
June to July 1941.....	24
August to September 1941.....	31
October 1941.....	10
November 1941.....	10
Total.....	100

INDUSTRY AND OCCUPATION

One third of the workers at their last residences were employed in manufacturing, and a large proportion were in trade and "other" services. In Hackensack manufacturing increased, employing well over two-fifths of the workers. Trade and "other" services decreased only very slightly. The manufacturing industry employing the highest proportion of migrant workers in Hackensack was the manufacture of transportation equipment. Virtually no workers had come from agriculture, and the proportion of new workers was very small.

The industrial distribution of the workers on their last full-time jobs at last residence and on their jobs when interviewed in Hackensack, was as follows:

Industry	Percent distribution	
	Before migration	In Hackensack
No job at last residence ¹	6	3
Unemployed in Hackensack.....	2	2
Agriculture, forestry, and fishing.....	1	(²)
Mining.....	6	6
Construction.....		
Manufacturing:		
Transportation equipment.....	9	23
Apparel and other fabricated textile products.....	4	5
Machinery.....	8	4
Other.....	12	10
Transportation, communication, and utilities.....	9	3
Trade.....	25	23
Personal services.....	3	2
Other services.....	15	14
Total.....	100	100

¹ The status of these workers at last residence were: Students 3 percent; housewives 1 percent; unemployed 2 percent; and others less than 0.5 percent.

² Less than 0.5 percent.

White-collar workers made up the largest single occupational group among the Hackensack migrants, accounting for 44 percent of the workers before migration and 43 percent in Hackensack. Semiskilled workers were the second largest group, and craftsmen were third. There were few laborers among the migrants.

Occupation	Percent distribution	
	At last place of residence	In Hackensack
No job at last residence.....	6	3
Unemployed in Hackensack.....		
Professional and semiprofessional.....	9	11
Proprietors, managers, and officials.....	19	18
Clerical and kindred workers.....	16	14
Craftsmen, foremen, and kindred workers.....	13	19
Operatives and kindred workers.....	24	23
Domestic service workers.....	2	2
Other service workers.....	7	4
Farm owners, tenants, and laborers.....	(¹)	(¹)
Laborers, other than farm.....	4	6
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Nearly all of the migrant workers found employment after migration. Of the estimated 510 migrant workers there were only 15, or 3 percent, who were seeking work during the calendar week preceding interview.

HOUSING

The great majority of migrant families in Hackensack were occupying a separate dwelling unit when interviewed. One-third were sharing a dwelling with other persons.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	66	21	75
Sharing a dwelling.....	34	79	25
Total.....	100	100	100

CONCLUSIONS

The rate of migration to Hackensack during the first year of the defense program was exceptionally low. Among the 51 cities covered in this survey, only 5 showed a lower migrant rate.

Hackensack migrants were notably successful in finding jobs. Only 2 of the 51 cities surveyed reported a lower migrant unemployment rate than Hackensack.

FEBRUARY 16, 1942.

RECENT MIGRATION INTO THE HAMPTON ROADS AREA, VIRGINIA

A survey of migration into the Hampton Roads area, Virginia, was conducted by the Work Projects Administration, Division of Research, between September and November 1941. The survey covered Portsmouth, completed in September; Norfolk, completed in October; and the Newport News area (including Hampton and Phoebus), completed in November. The survey was concerned with civilians who moved to the survey cities from places outside Warwick, Norfolk, and Elizabeth City Counties after October 1, 1940, and who were still living there at the time of this survey. Operating on a sample basis, the survey covered residential districts, rooming houses, defense housing projects, lower-priced hotels, and tourists and trailer camps within or immediately adjacent to the corporate limits of the five survey cities. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left the cities during the survey period.

INDUSTRIAL ACTIVITY

The Hampton Roads area is one of the most intensely active war-production centers in America. Between June 1940 and October 1941, the area received direct defense contracts valued at over \$900,000,000. Defense contracts in Norfolk and Portsmouth were about five times greater than the value of 1937 manufactures, and in Newport News they were nine times greater. Between November 1940 and November 1941, manufacturing employment in the area increased 47.4 percent; among the 84 largest American cities, only 8 reported a greater increase during the same period.

NUMBER OF MIGRANTS

The number of migrant persons, families, and workers, and the migrant rates (migrant persons as a percent of 1940 population) in the Hampton Roads area were as follows:

City	Persons	Families	Workers	Rate
Portsmouth.....	6,400	2,900	2,950	12.6
Norfolk.....	16,700	8,400	7,350	11.6
Newport News.....	7,300	3,850	3,760	19.7
Hampton.....	400	215	210	7.0
Phoebus.....	250	135	130	7.2
Total.....	31,060	15,500	14,400	12.9

In all of the cities except Portsmouth, there were fewer migrant workers than migrant families. The reason was that a number of wives and children came to the area after October 1940 to join family heads who had moved to the area for jobs before October 1, 1940. In the terms of the definitions used in the survey, such family heads were not migrants, but their wives and children were.

ORIGINS

The States which contributed the greatest proportion of Hampton Roads migrants are shown below:

State	Percent distribution			
	Total	Ports-mouth	Norfolk	Newport News area
Georgia.....	3	4	4	2
New York.....	4	5	4	3
North Carolina.....	37	35	37	37
Pennsylvania.....	3	3	3	2
Virginia.....	28	21	22	40
West Virginia.....	4	4	3	3
All other States.....	21	28	27	13
Total.....	100	100	100	100

The majority of the migrants had moved from outside the State of Virginia, and principally from North Carolina. Newport News was the only city in which Virginia was the most important source of migrants, but even there only two-fifths originated within the State.

The average distance traveled by migrants to the area was 170 miles. In Portsmouth, the average was 190 miles; in Norfolk, 170 miles; and in Newport News, 150 miles.

An exceptionally high proportion of the migrants came from rural places, and particularly from the open country.

Size of place of origin	Percent distribution			
	Total	Ports-mouth	Norfolk	Newport News area
Open country.....	36	33	35	36
Less than 2,500.....	12	13	8	15
2,500 to 25,000.....	18	20	18	18
25,000 to 100,000.....	16	17	17	16
100,000 and over.....	18	17	22	15
Total.....	100	100	100	100

CHARACTERISTICS

Age and sex.—Migrant workers in the Newport News area were exceptionally young, averaging only slightly over 26 years. Although somewhat older, the migrants in the other two cities still averaged less than 30 years of age. The average (median) age of the workers was as follows:

Type of worker	Average age (years)			
	Total	Ports-mouth	Norfolk	Newport News area
All workers.....	28.2	29.4	29.1	26.3
Male workers.....	29.0	31.1	30.4	26.7
Female workers.....	24.5	23.7	24.9	24.4
1-person families.....	25.5	27.3	26.8	24.1
Heads of multiperson families.....	30.5	31.8	30.7	29.4

Female workers made up 16 percent of all the migrant workers in the Hampton Roads area. In Portsmouth, females made up 14 percent; in Norfolk, 20 percent; and in the Newport News area, 13 percent.

Race.—Negroes comprised 15 percent of the migrants in the entire survey area. In Portsmouth, Negroes comprised 18 percent; in Norfolk, 14 percent, and in the Newport News area, 16 percent.

Size of family.—When interviewed, migrant families in the Hampton Roads area averaged 1.9 persons per family. In Portsmouth, the families averaged 2.1 persons at interview; in Norfolk, 2 persons; and in the Newport News area, 1.9 persons.

The following table shows the number of persons in the migrant families:

Size of family	Percent distribution			
	Total	Portsmouth	Norfolk	Newport News area
1 person.....	52	48	52	56
2 persons.....	22	22	23	20
3 and 4 persons.....	21	23	21	19
5 persons and over.....	5	7	4	5
Total.....	100	100	100	100

Many of these families were not complete when interviewed; in the entire area, 24 percent of the one-person families and 12 percent of the multiperson families had left a spouse or dependent children behind when moving to the five cities. Before migration, the families had contained 36,100 persons, of whom 86 percent migrated and 14 percent stayed behind. In Portsmouth, 13 percent were left behind; in Norfolk, 16 percent; and in the Newport News area, 13 percent.

MONTHS LIVED IN AREA

About half of the Hampton Roads migrant workers had lived in the area 5 months or more when enumerated:

Months lived in area	Percent distribution			
	Total	Portsmouth	Norfolk	Newport News area
8 months and over.....	23	19	24	29
6 and 7 months.....	16	17	14	17
4 and 5 months.....	19	16	20	21
3 months.....	12	13	12	12
2 months.....	11	14	10	9
1 month.....	11	12	11	7
Less than 1 month.....	8	9	9	5
Total.....	100	100	100	100

INDUSTRY AND OCCUPATION

No one industry predominated among the workers before they moved to the Hampton Roads area. Farm workers made up the largest single group before migration, but they accounted for less than one-fifth of the total. A sizable proportion of the workers had been engaged in each of several industries: Construction, manufacturing, trade, and other service industries, and a large number were new workers.

The industrial attachment of the workers on their last full-time jobs before migration was as follows:

Industry at last residence	Percent distribution			
	Total	Portsmouth	Norfolk	Newport News area
No job:				
Students.....	8	5	6	12
Housewives.....	3	3	3	2
Unemployed.....	4	5	6	3
Other.....	1	2	1	1
Agriculture, forestry, and fishing.....	18	14	18	20
Mining.....	1	2	1	1
Construction.....	15	13	18	12
Manufacturing:				
Transportation equipment.....	3	4	3	3
Other.....	11	19	6	12
Transportation, communication, and utilities.....	6	6	7	5
Trade.....	14	13	14	14
Personal service.....	5	4	7	3
Other services.....	11	10	10	12
Total.....	100	100	100	100

In the Hampton Roads area, shipbuilding became by far the most important single employer of migrant workers. Norfolk, however, differed from the other two cities in this respect; only one-sixth of the Norfolk migrants worked in the shipyards, as compared with a good majority of the migrants in Portsmouth and the Newport News area.

A relatively large proportion of the migrants were employed in construction work, and as usual, a large number were employed in trade and other service industries.

The industries employing migrant workers at the time of interview are shown below:

Industry when interviewed	Total	Percent distribution		
		Portsmouth	Norfolk	Newport News area
Unemployed.....	5	5	5	4
Agriculture, forestry, and fishing.....	1	(¹)	(¹)	1
Mining.....	(¹)	(¹)	(¹)	(¹)
Construction.....	14	11	21	8
Manufacturing:				
Transportation equipment.....	39	56	17	57
Other.....	6	5	9	3
Transportation, communication and utilities.....	6	5	9	3
Trade.....	13	8	17	11
Personal service.....	5	3	6	4
Other service.....	11	7	16	9
Total.....	100	100	100	100

¹ Less than 0.5 percent.

Before migration to the Hampton Roads area, the workers were principally engaged as craftsmen, operatives and farm workers, or held no jobs. An uncommonly small proportion held white-collar jobs, and domestic and "other" service workers were relatively few.

The following table shows the occupations of the workers on their last full-time jobs at their last residence:

Occupation at last residence	Total	Percent distribution		
		Portsmouth	Norfolk	Newport News area
No job	16	15	16	18
Professional and semiprofessional	4	2	4	5
Proprietors, managers, and officials	4	3	4	5
Clerical and kindred workers	9	8	9	9
Craftsmen and kindred workers	22	32	20	17
Operatives and kindred workers	14	12	13	16
Domestic service workers	3	2	4	1
Other service workers	5	4	7	5
Farm owners, tenants, and laborers	17	14	17	20
Laborers, except farm	6	8	6	4
Total	100	100	100	100

After migration to the Hampton Roads area the proportion of migrant workers engaged in skilled and semiskilled jobs increased sharply.

Before migration, these two groups made up 36 percent of the workers; after migration, the proportion increased to 59 percent. The increase in the number of skilled workers resulted largely from the shifting of workers formerly employed in white-collar, semiskilled, and farm work. The new semiskilled workers were drawn principally from former farm workers and from workers who held no jobs at their last residence.

The occupations of the migrants on their jobs in the Hampton Roads area were as follows:

Occupation when interviewed	Total	Percent distribution		
		Portsmouth	Norfolk	Newport News area
Unemployed	5	5	5	4
Professional and semiprofessional	4	3	5	4
Proprietors, managers, and officials	2	1	3	3
Clerical and kindred workers	10	8	12	10
Craftsmen and kindred workers	32	41	28	29
Operatives and kindred workers	27	22	23	35
Domestic service workers	3	2	4	2
Other service workers	7	4	9	6
Farm owners, tenants, and laborers	(1)	(1)	(1)	(1)
Laborers, except farm	10	14	11	7
Total	100	100	100	100

¹ Less than 0.5 percent.

EARNINGS

The average weekly earnings of employed migrant workers in the Hampton Roads area were \$32.49. The averages according to race and sex were as follows:

White males	\$38. 77
White females	15. 26
Negro males	20. 23
Negro females	6. 71

The average weekly earnings for all workers in the three cities were as follows:

Portsmouth	\$33. 16
Norfolk	29. 18
Newport News area	34. 07

UNEMPLOYMENT

Out of the 14,400 migrant workers in the Hampton Roads area, an estimated 700 workers or 5 percent, were unemployed and seeking work during the week prior to interview. Migrant unemployment in both Portsmouth and Norfolk was also 5 percent; but in the Newport News area only 4 percent were unemployed.

Unemployment by sex.—Female migrants reported about five times higher unemployment than males. Among females, 15 percent, and among males, 3 percent, were unemployed.

Unemployment by race.—Negro migrants reported more than double the unemployment rate of white workers. Nine percent of the Negroes and 4 percent of the white workers were unemployed.

Unemployment by age.—The youngest migrant workers were least successful in finding jobs in the Hampton Roads area:

Age of worker:	Percent unemployed in Hampton Roads area
Total.....	5
Under 20 years.....	8
20 to 24 years.....	5
25 to 44 years.....	4
45 years and over.....	5

Unemployment by months lived in county.—Workers who arrived in the Hampton Roads area shortly before the present survey was conducted reported the highest unemployment rates:

Months lived in county:	Percent unemployed in Hampton Roads area
Total.....	5
8 months and over.....	5
6 and 7 months.....	4
4 and 5 months.....	2
3 months.....	4
2 months.....	8
1 month.....	8
Less than 1 month.....	8

Unemployment by industry and occupation.—Except for workers formerly engaged in personal services and those who held no job at their last residence, all industry groups reported very low unemployment rates in the Hampton Roads area. Unemployment rates by industry at last residence follow:

Industry at last residence:	Percent unemployed in Hampton Roads area
Total.....	5
No job.....	9
Agriculture, forestry, and fishing.....	4
Mining.....	2
Construction.....	2
Manufacturing.....	3
Transportation, communication, and utilities.....	4
Trade.....	3
Personal services.....	17
Other services.....	3

In terms of occupations, craftsmen and operatives reported exceptionally low unemployment rates in the Hampton Roads area. Rates markedly higher than average were reported by workers formerly employed as domestics, clerical workers, and as non-farm laborers.

Unemployment by occupations was as follows:

Occupation at last residence:	Percent unemployed in Hampton Roads area
Total.....	5
No job.....	9
Professional and semiprofessional.....	4
Proprietors, managers, and officials.....	3
Clerical and kindred workers.....	8
Craftsmen and kindred workers.....	2
Operatives and kindred workers.....	2
Domestic service workers.....	26
Other service workers.....	1
Farm owners, tenants, and laborers.....	3
Laborers, except farm.....	7

HOUSING

The great majority of the migrant families in the Hampton Roads area were sharing a dwelling with other persons when enumerated. About one-third were occupying a separate dwelling, and a few lived in hotels and trailers camps. The following tables show the living arrangements of the families:

1. ALL FAMILIES

Living arrangements	Total	Percent distribution		
		Ports- mouth	Norfolk	Newport News area
Occupying a separate dwelling.....	32	32	35	28
Sharing a dwelling with others.....	66	64	64	70
In hotels.....	1	3	(1)	1
In tourist and trailer camps.....	1	1	1	1
Total.....	100	100	100	100

2. ONE-PERSON FAMILIES

Occupying a separate dwelling.....	5	3	8	1
Sharing a dwelling with others.....	93	90	92	98
In hotels.....	2	7	(1)	1
In tourist and trailer camps.....	(1)	(1)	(1)	(1)
Total.....	100	100	100	100

3. MULTIPERSON FAMILIES

Occupying a separate dwelling.....	62	58	65	63
Sharing a dwelling with others.....	36	40	34	36
In hotels.....	(1)	(1)	(1)	(1)
In tourist and trailer camps.....	2	2	1	1
Total.....	100	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The volume of migration into the Hampton Roads area was extremely large during the first year of large-scale defense activity. Newport News reported the third highest migrant rate among the 51 cities covered in these surveys, and Portsmouth and Newport News were the sixth and eighth highest cities, respectively.

Unlike migrants in the majority of the other high-migration war-production cities, migrants in the Hampton Roads area were notably successful in finding jobs after migration.

DECEMBER 10, 1941.

RECENT MIGRATION INTO HOUSTON, TEX.

A survey of migration into Houston, Tex., was completed by the Work Projects Administration Division of Research in mid-October 1941. The survey was concerned with civilians who moved to Houston from places outside of Harris County after October 1, 1940, and who were still living in Houston at the time of the survey. Operating on a sample basis, the survey covered the residential districts, rooming house districts, lower-priced hotels, and tourist camps within the Houston corporate limits. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left Houston during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and September 1941, Houston received direct defense contracts totaling about \$60,000,000, equal to approximately one-third the value of its manufactures in 1937. More than nine-tenths of the defense contracts were for the construction of facilities—shipyards, an aircraft parts factory, ordnance plants, and a flying field. In the first year of the defense program, a substantial part of Houston's defense activity was related to the preparation of these facilities.

During the same period, employment in Houston's manufacturing industries increased as a direct and indirect result of the defense program. Between September 1940 and September 1941, the index of factory employment in Houston increased 25.8 percent, or slightly less than in Indianapolis, and considerably less than in Baltimore.

NUMBER OF MIGRANTS

Approximately 6,400 families living in Houston at the time of the present survey had moved to the city from places outside of Harris County after October 1, 1940. These families contained 7,100 workers and 15,900 persons. Migrants made up a group equal to 4.4 percent of Houston's 1940 population.

ORIGINS

Texas was the principal source of Houston migrants, contributing 74 percent of the migrant workers. The next most important sources were Oklahoma, 6 percent; Louisiana, 5 percent; and Illinois, 3 percent. The average distance traveled by the migrants was 175 miles; 14 percent had traveled more than 500 miles.

Rural places (less than 2,500 population) were the origin of one-third of the migrant workers; i. e., 5 percent had come from the open country and 28 percent from rural villages. Towns (2,500 to 25,000 population) contributed 34 percent; small cities, 14 percent; and cities of over 100,000 population, 19 percent.

Less than one-fifth of the families (18 percent) had formerly lived in Houston. Half of these families had been absent from the city for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 29.1 years. In one-person families the average was 24.7 years, and for heads of multi-person families, 31.6 years. Workers under 20 years made up 10 percent of the migrants, and those 45 years and over 12 percent.

Women workers made up 19 percent of the Houston migrant workers. The average age of women workers was 24 years, as compared with 29.9 years for the men.

Race.—Negroes constituted 7 percent of the Houston migrants, and Spanish-Americans made up a fraction of 1 percent. Based on 1940 population, the migrant rate for nonwhite persons was 1.3 percent, as against 5.3 percent for white persons.

Size of family.—Migrant families in Houston were relatively large; only slightly more than one-fourth consisted of one person, and close to half contained three persons or more.

Size of family in Houston:	Percent distribution
1 person.....	28
2 persons.....	26
3 and 4 persons.....	35
5 persons and over.....	11
Total.....	100

Most of these families were complete when interviewed; only 18 percent of the 1-person families and 7 percent of the multiperson families had left a spouse or dependent children behind when they moved to Houston. Before migration the families had contained 16,850 persons; 94 percent of these had migrated and 6 percent had stayed at the migrants' last residence.

Month of arrival.—The distribution of migrants according to the month of their arrival in Houston was as follows:

Month of arrival:	Percent distribution
October 1940 to January 1941.....	18
February to March 1941.....	12
April to May 1941.....	16
June to July 1941.....	23
August 1941.....	16
September 1941 ¹	15
Total.....	100

Includes a part of October 1941.

INDUSTRY AND OCCUPATION

No one industry played a predominant part either in supplying Houston's migrant workers, or in employing migrant workers after their arrival. A substantial number of migrants came from each of five industry groups: Agriculture, construction, manufacturing, trade, and "other" services. In Houston, the most important employer of migrants was manufacturing, with construction, trade, and "other" services as important secondary employers.

The industrial attachment of Houston migrant workers on their last full-time jobs at last residence and on their jobs when interviewed in Houston was as follows:

Industry	Percent distribution	
	At last residence	In Houston
No job at last residence ¹	14	.....
Unemployed in Houston.....	.....	11
Agriculture, forestry, and fishing.....	13	.....
Mining.....	3	1
Construction.....	12	12
Manufacturing:		
Iron and steel.....	1	8
Transportation equipment.....	1	5
Other.....	15	15
Transportation, communication.....	7	7
Trade.....	17	18
Domestic service.....	6	8
Other services.....	11	14
Total.....	100	100

¹ The status of these workers at last residence was: Students, 6 percent; housewives, 2 percent; unemployed, 5 percent; and others, 1 percent.

Both before and after migration, most of the Houston migrants were engaged in clerical, skilled and semiskilled occupations. There were two occupational shifts involved in the migration: Farm workers tended to shift to skilled and semiskilled jobs, and new workers shifted to clerical jobs. The occupational distribution of the workers at last residence and in Houston was as follows:

Occupation	Percent distribution	
	At last residence	In Houston
No job at last residence.....	14	.....
Unemployed in Houston.....	.....	11
Professional and semiprofessional.....	6	6
Proprietors, managers, and officials.....	6	5
Clerical and kindred workers.....	15	18
Craftsmen and kindred workers.....	16	20
Operatives and kindred workers.....	14	20
Domestic service workers.....	6	4
Other service workers.....	6	9
Farm owners, tenants, and laborers.....	12	.....
Laborers, except farm.....	5	7
Total.....	100	100

UNEMPLOYMENT

Out of 7,100 workers in Houston, an estimated 800, or 11 percent, were unemployed and seeking work during the calendar week preceding interview.

Unemployment by sex.—Women migrant workers reported an unemployment rate three times greater than men. Among the women 24 percent were unemployed; among the men, 8 percent.

Unemployment by race.—Negro migrants had more than double the unemployment rate of white workers. Among the Negroes, 22 percent were unemployed, as compared with 10 percent for white workers.

Unemployment by age.—The highest unemployment rates were reported by workers under 20 years and by those over 45 years:

Age of workers:	Percent unemployed in Houston
Total.....	11
Under 20 years.....	16
20 to 44.....	12
25 to 44.....	9
45 years and over.....	16

Unemployment month of arrival.—The highest unemployment rates were reported by workers who arrived in Houston during the months just preceding the present survey.

Month of arrival:	Percent unemployed in Houston
Total.....	11
October 1940-January 1941.....	9
February-May 1941.....	4
June-July 1941.....	12
August 1941.....	15
September 1941.....	23

Unemployment by industry and occupation.—In terms of industry at last residence, the highest unemployment rates were reported by workers formerly engaged in personal service; and workers from agriculture, mining, and construction were somewhat above average. The lowest rate was reported by workers who were employed in manufacturing at their last residences. Rates by industry follow:

Industry at last residence:	Percent unemployed in Houston
Total.....	11
No job at last residence.....	11
Agriculture, forestry, and fishing.....	15
Mining.....	16
Construction.....	16
Manufacturing.....	5
Transportation, communication, and utilities.....	6
Trade.....	10
Personal services.....	32
Other services.....	6

In terms of occupation at last residence, the highest rates were reported by domestic workers and operatives. Unemployment was relatively slight among craftsmen, "other" service workers, and nonfarm laborers. Rates by industry follow:

Occupation at last residence:	Percent unemployed in Houston
Total.....	11
No job at last residence.....	11
Professional, proprietary, and clerical.....	7
Craftsmen and kindred workers.....	6
Operatives and kindred workers.....	23
Domestic service workers.....	39
Other service workers.....	5
Farm owners, tenants, and laborers.....	16
Laborers, except farm.....	(1)

¹ Less than 0.5 percent.

HOUSING

The majority of the Houston migrant families occupied a separate dwelling unit when enumerated. About two-fifths had doubled up with other families, and a small number were living in hotels and tourist camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	51	1	75
Sharing a dwelling with others.....	41	87	23
In hotels.....	3	12	(1)
In tourist and trailer camps.....	2	(1)	2
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In the 1930's, the speed of Houston's growth was second only to Washington, D. C., among the largest cities of the country. Its rate of population gain in the decade was 31.5 percent, half again greater than Los Angeles, and five times greater than Indianapolis and Baltimore. Judging from the volume of in-migration during the past year, Houston's rapid growth is continuing under the defense program. With proportionately less defense activity than Baltimore or Indianapolis, Houston nevertheless shows a substantially higher rate of recent in-migration than either.

DECEMBER 4, 1941.

RECENT MIGRATION INTO INDIANAPOLIS, IND.

A survey of migration into Indianapolis, Ind., was completed by the Work Projects Administration Division of Research early in October 1941. The survey was concerned with civilians who moved to Indianapolis from places outside of Marion County after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered the residential districts, rooming-house districts, and lower-priced hotels inside the Indianapolis corporate limits. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left Indianapolis during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and September 1941, Indianapolis received prime defense contracts valued at \$164,000,000, equal to slightly more than half the 1937 value of manufactures in Indianapolis. Actual production, however, had not yet reached peak tempo at the time of the present survey, and maximum employment was not anticipated before the spring of 1942.

Between August 1940 and August 1941, employment in Indianapolis manufacturing industries rose 27 percent. In filling the resulting large number of new jobs, employers have generally given preference to white males under 25 years of age. According to local reports, practically all the unemployed workers in this preferred group had been rehired by the time of this survey, but the unemployed in other unskilled categories remained relatively numerous. In October 1941, local estimates set the number of these unemployed at 10,000 workers.

NUMBER OF MIGRANTS

Approximately 5,200 families living in Indianapolis at the time of the present survey had moved to the city from places outside of Marion County after October 1, 1940. These families contained 5,100 workers (a few families contained no workers, and a small number contained more than one worker). Present in the families were 12,600 persons. Migrants made up a group equal to 3.2 percent of Indianapolis' 1940 population.

ORIGINS

Indiana was the principal source of Indianapolis migrants, contributing 53 percent. The next most important sources, in the order of their contribution, were: Kentucky, 10 percent; Illinois, 7 percent; Ohio, 6 percent; and Tennessee, 5 percent. The average distance traveled by the migrants was 95 miles, and 1 migrant in every 12 had traveled 500 miles or more.

Rural places (less than 2,500 population), were the origin of more than one-fourth of the migrants, i. e., 3 percent had come from open country and 24 percent from rural villages. Towns (2,500 to 25,000 population) contributed 34 percent; small cities, 19 percent; and cities of over 100,000 population, 20 percent.

About one-fifth of the families (21 percent) had formerly lived in Indianapolis. Half of these families had been absent from the city for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 29.2 years. In 1-person families, the average was 24 years, and for heads of multiperson families, 32 years. Workers under 20 years made up 10 percent of the workers, and those 45 years and over, 12 percent.

Women workers made up 15 percent of all Indianapolis migrant workers. The average age of the women was 24.2 years, as compared with 30.0 years for the men.

Race.—Negroes constituted 4 percent of the migrants. Based on 1940 population, the migrant rate for Negroes was 0.9 percent as against 3.6 percent for white persons.

Size of family.—Migrant families in Indianapolis were relatively large; only one-third consisted of one person, and approximately two-fifths contained three persons or more:

Size of family in Indianapolis:	Percent distribution
1 person.....	33
2 persons.....	27
3 and 4 persons.....	32
5 persons and over.....	8
Total.....	100

A large number of these families were not complete when interviewed; 40 percent of the 1-person families and 11 percent of the multiperson families had left a spouse or dependent children behind when they moved to Indianapolis. Before migration, the families had contained 14,800 persons; of these, 12,600 had migrated and 2,200 had remained at the migrants' places of origin.

Month of arrival.—The distribution of the migrant workers according to the month of their arrival in Indianapolis was as follows:

Month of arrival:	Percent distribution
October 1940–January 1941.....	15
February–March 1941.....	13
April–May 1941.....	20
June–July 1941.....	24
August 1941.....	17
September 1941.....	11
Total.....	100

INDUSTRY AND OCCUPATION

Indianapolis migrants at their last residences had been engaged principally in manufacturing, trade, and "other" service industries. Agriculture also contributed a relatively large number of workers, but the proportion who had held no job at last residence was relatively small. In Indianapolis, the most important employer of migrants was manufacturing, which occupied about half the workers; and the largest single manufacturing industry was the manufacture of transportation equipment.

The industry of migrant workers on their last full-time jobs at their last residence and on their jobs when interviewed in Indianapolis was as follows:

Industry	Percent distribution	
	At last residence	In Indianapolis
No job at last residence ¹	11	.....
Unemployed in Indianapolis.....		6
Agriculture, forestry, and fishing.....	15	(²)
Mining.....	2	1
Construction.....	6	8
Manufacturing:		
Transportation equipment.....	6	22
Other.....	21	26
Transportation, communication, and utilities.....	7	8
Trade.....	15	14
Domestic service.....	4	3
Other services.....	13	12
Total.....	100	100

¹ The status of these workers at last residence was: Students, 6 percent; housewives, 1 percent; unemployed percent; and others, 1 percent.

² Less than 0.5 percent.

Although Indianapolis migrants were principally clerks, craftsmen, and operatives both before and after migration, two kinds of occupational shifts were involved in the movement. Ex-students tended to shift into clerical and operative's jobs; and former farm workers turned to operatives' and laborers' jobs in Indianapolis.

Occupations before and after migration follow:

Occupation	Percent distribution	
	At last residence	In Indianapolis
No job at last residence.....	11	.....
Unemployed in Indianapolis.....		6
Professional and semiprofessional.....	4	5
Proprietors, managers, and officials.....	8	6
Clerical and kindred workers.....	16	18
Craftsmen and kindred workers.....	13	19
Operatives and kindred workers.....	19	25
Domestic service workers.....	2	2
Other service workers.....	6	6
Farm owners, tenants, and laborers.....	14	(¹)
Laborers, except farm.....	7	12
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 5,100 migrant workers in Indianapolis, approximately 290, or 6 percent, were unemployed and seeking work during the calendar week preceding interview. Comparable figures for other recently surveyed cities are: Baltimore, 3 percent; Wichita, Kans., 13 percent; and St. Louis, Mo., 16 percent.

Unemployment by sex.—Women migrants reported about four times the unemployment rate of men. Among the women, 15 percent were unemployed; among the men, 4 percent.

Unemployment by race.—Negroes reported more than double the unemployment rate of white workers. Among the Negroes, 13 percent were unemployed; among white workers, 5 percent.

Unemployment by age.—The youngest migrants reported the highest unemployment rates in Indianapolis, and the least unemployment was reported by workers over 45 years. Rates by age were as follows:

Age of workers:	Percent unemployed in Indianapolis
Under 20 years.....	14
20 to 24 years.....	5
25 to 44 years.....	5
45 years and over.....	(¹)
Total.....	6

¹ Less than 0.5 percent.

Unemployment by month of arrival.—The highest unemployment rates were reported by workers who had arrived in Indianapolis during the months shortly before the present survey was conducted.

Month of arrival:	Percent unemployed in Indianapolis
October 1940–January 1941.....	3
February–May 1941.....	3
June–July 1941.....	5
August 1941.....	8
September 1941.....	11
Total.....	6

Unemployment by industry and occupation.—Except for workers who were domestic servants at their last residence, no industrial group showed a particularly high unemployment rate in Indianapolis. New entrants to the labor market reported below-average unemployment, and the rate was very low among construction workers. Rates by industry at last residence were as follows:

Industry at last residence:	Percent unemployed in Indianapolis
Total.....	6
No job at last residence.....	4
Agriculture, forestry, and fishing.....	6
Mining.....	(1)
Construction.....	(1)
Manufacturing.....	7
Transportation, communication, and utilities.....	7
Trade.....	5
Domestic service.....	13
Other services.....	2

¹ Less than 0.5 percent.

In terms of occupation, professional, proprietary and clerical workers and craftsmen reported very little unemployment, while operatives and service workers were well above average. Ex-farm workers reported average unemployment in Indianapolis. Rates by occupation at last residence follow.

Occupation at last residence:	Percent unemployed in Indianapolis
Total.....	6
No job.....	4
Professional, proprietary and clerical.....	2
Craftsmen and kindred workers.....	2
Operatives and kindred workers.....	11
Personal and other service workers.....	10
Farm owners, tenants, and laborers.....	6
Laborers, except farm.....	3

HOUSING

Half the migrant families were occupying a separate dwelling unit when enumerated in Indianapolis; somewhat less than half were sharing a dwelling with another family; and a small number lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	50	15	66
Sharing a dwelling with others.....	46	72	34
In hotels.....	4	13	(1)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In Indianapolis, as in several of the other large industrial cities surveyed (particularly in Baltimore and St. Louis) immigration during the first year of the defense program reached significant volume. This movement had been generally

successful in the case of Indianapolis; among 11 cities covered to date by this survey, only 2, Baltimore and Fort Wayne, Ind., reported a lower general rate of unemployment among migrants.

FEBRUARY 7, 1942.

RECENT MIGRATION INTO JOHNSTOWN, PA.

A survey of migration into Johnstown, Pa., was conducted by the Work Projects Administration Division of Research in October 1941. The survey was concerned with civilians who moved to Johnstown from places outside of Cambria County after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered the residential districts and lower priced hotels within the corporate limits of Johnstown. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Although Johnstown had received practically no direct defense contracts at the time of this survey, the local iron and steel industry was extremely active with indirect defense orders. The number of persons employed in Johnstown increased by 4,500 between October 1940 and October 1941, reabsorbing a large proportion of the local unemployed and attracting a number of outside workers to the city. According to local reports, however, the great majority of the out-of-city workers originated within Cambria County.

NUMBER OF MIGRANTS

Approximately 350 families living in Johnstown at the time of the Work Projects Administration survey had moved to the city from places outside Cambria County after October 1, 1940. These families contained 450 workers and a total of 700 persons. Migrants made up a group equal to 1 percent of Johnstown's 1940 population.

ORIGINS

Pennsylvania was the principal source of Johnstown migrants, contributing 65 percent of the total. West Virginia was second, with 7 percent, and New York third with 6 percent. The average distance traveled by the migrants was 90 miles, and only 10 percent had traveled 500 miles or more.

Rural places were the origin of about one-quarter of the migrants; i. e., 8 percent came from open country and 15 percent from rural villages. Towns (2,500 to 25,000) were the source of 37 percent; 14 percent came from small cities; and 26 percent from cities of over 100,000 population.

More than one-fourth (27 percent) of the families had formerly lived in Johnstown. About half of these families had been absent for 6 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Johnstown was 32.5 years. In one-person families, the average was 29.6 years, and for heads of multiperson families, 36.0 years. Eleven percent of the workers were under 20 years, and 13 percent were 45 years and over.

Ten percent of the migrant workers were females. The average age of female workers was 33.5 years, and for males, 32.2 years.

Race.—Negroes constituted 6 percent of the Johnstown migrants, and white persons constituted 94 percent.

Size of family.—Migrant families in Johnstown averaged 1.9 persons per family. Nearly half consisted of one person.

Size of family in Johnstown:	Percent distribution
1 person.....	48
2 persons.....	23
3 and 4 persons.....	19
5 persons and over.....	10
Total.....	100

A number of these families were not complete when interviewed; 29 percent of the one-person families and 17 percent of the multiperson families had left a spouse or dependent children behind when they moved to Johnstown. Before migration the families had contained 850 persons. Of these, 82 percent had migrated and 18 percent had remained behind.

Month of arrival.—About half of the Johnstown migrants had arrived during August or later.

Month of arrival:	Percent distribution
October 1940–February 1941.....	14
March–April 1941.....	8
May–June 1941.....	19
July–August 1941.....	35
September 1941.....	19
October 1941.....	5
Total.....	100

INDUSTRY AND OCCUPATION

Johnstown migrants were engaged principally in manufacturing, transportation, trade, and "other" services at their last residences. A small proportion were engaged in mining, but very few had been farm workers. The proportion of new workers among the migrants was also unusually small. In Johnstown, steel manufacturing became the principal industry of the migrants, but a sizable proportion was also engaged in construction, transportation, trade, and "other" services.

The industrial attachment of the workers on their last full-time jobs at their last residence and on their jobs when interviewed in Johnstown was as follows:

Industry	Percent distribution	
	At last residence	In Johnstown
No job at last residence ¹	6	7
Unemployment in Johnstown.....	3	1
Agriculture, forestry, and fishing.....	8	2
Mining.....	14	10
Construction.....	5	35
Manufacturing:	16	9
Iron.....	14	10
Other.....	17	10
Transportation, communication and utilities.....	2	1
Trade.....	15	15
Domestic service.....		
Other services.....		
Total.....	100	100

¹ The status of these workers at their last residence was: Students 6 percent; all others, less than 0.5 percent.

White-collar workers constituted the largest single broad occupational group among the migrants, accounting for 32 percent of the total before migration and 25 percent in Johnstown. Both before and after migration, operatives were the second most important occupational group, and craftsmen were third. There was a sizable shift, however, into laborers' jobs, and the proportion working as laborers in Johnstown was uncommonly large.

The occupational distribution of the workers before and after migration was as follows:

Occupation	Percent distribution	
	At last residence	In Johnstown
No job at last residence.....	6	7
Unemployed in Johnstown.....	—	—
Professional and semiprofessional.....	6	5
Proprietors, managers, and officials.....	8	7
Clerical and kindred workers.....	18	13
Craftsmen and kindred workers.....	16	19
Operatives and kindred workers.....	28	24
Domestic service workers.....	2	1
Other service workers.....	5	6
Farm owners, tenants, and laborers.....	3	(¹)
Laborers, except farm.....	8	18
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 450 migrant workers in Johnstown, an estimated 30 workers, or 7 percent, were unemployed and seeking work during the week preceding interview.

Unemployment by sex.—Female migrants reported about five times higher unemployment than males. Among females, 24 percent, and among males, 5 percent, were unemployed.

Unemployment by race.—Negroes reported about seven times higher unemployment than white workers. Among Negroes, 33 percent were unemployed, as compared with 5 percent for white workers.

Unemployment by age.—Unemployment was reported by 11 percent of the workers under 20 years, 11 percent of those aged 20–34 years, and 1 percent of those 35 years and over.

Unemployment by month of arrival.—Unemployment was highest among the workers who had arrived in Johnstown during the months just preceding the Work Projects Administration survey.

Month of arrival:	Percent unemployed
Total.....	7
October 1940 to April 1941.....	(¹)
May to June 1941.....	6
July to August 1941.....	7
September 1941.....	16
October 1941.....	13

¹ Less than 0.5 percent.

HOUSING

The majority of the migrant families in Johnstown had doubled up with other persons. About one-fourth occupied separate living quarters, and about one-fifth lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	28	11	44
Sharing a dwelling with others.....	52	47	56
In hotels.....	19	39	(¹)
In trailers.....	1	3	(¹)
Total.....	100	100	100

¹ Less than 0.5 percent

CONCLUSIONS

The volume of recent migration into Johnstown from places outside Cambria County was unusually small during the first year of the defense program. Among the 51 cities covered in this survey, none reported a lower migrant rate than Johnstown. By comparison with the migrants in other cities, however, Johnstown migrants reported about average success in finding jobs.

JANUARY 16, 1942.

RECENT MIGRATION INTO KALAMAZOO, MICH.

A survey of migration into Kalamazoo, Mich., was conducted by the Work Projects Administration Division of Research during November 1941. The survey was concerned with civilians who moved to Kalamazoo from places outside Kalamazoo County after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within the corporate limits of Kalamazoo. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Kalamazoo is not directly a defense production center. Between June 1940 and October 1941 the city received defense contracts valued at only about \$250,000, equal to less than one-half of 1 percent of the product value of the city's 1937 manufactures. Indirectly, however, Kalamazoo's industries, particularly the paper mills and metal-products plants, had benefitted from defense activity and the general rise of industrial production levels. A shortage of certain categories of skilled workers had been experienced during the 14 months period covered by this survey, but the local supply of unskilled workers was reported to be more than ample.

NUMBER OF MIGRANTS

Approximately 850 families living in Kalamazoo at the time of this survey had moved to the city from places outside Kalamazoo County after October 1, 1940. These families contained 850 workers and a total of 1,730 persons. Migrants made up a group equal to 3.2 percent of Kalamazoo's 1940 population.

ORIGINS

Michigan was the principal source of Kalamazoo migrants, contributing 55 percent of the total. Illinois and Indiana each contributed 12 percent, and 3 percent came from Ohio. The average distance traveled by the migrants was 95 miles, and only 8 percent traveled 500 miles or more.

Rural places were the origin of nearly one-third of the migrants; i. e., 12 percent came from open country and 20 percent from rural villages. Towns (2,500 to 25,000 population) contributed 27 percent; small cities, 20 percent; and cities of over 100,000 population, 21 percent.

One-fourth (25 percent) of the migrant families had formerly lived in Kalamazoo. Half of these families had been absent about 4 years before their return.

CHARACTERISTICS

Age and sex.—The average age of Kalamazoo migrants was 28.0 years. In one-person families, the average age was 23.8 years, and for heads of multiperson families, 34.3 years. Twelve percent of the migrants were under 20 years, and 13 percent were 45 years and over.

Female workers constituted 26 percent of all the migrant workers. The average age of female workers was 23.1 years, as compared with 29.8 years for males.

Race.—Negroes constituted 3 percent of the Kalamazoo migrants.

Size of family.—When interviewed, Kalamazoo migrant families averaged 2.0 persons per family. Nearly half of the families contained only one person.

Size of family in Kalamazoo:	Percent distribution
1 person.....	47
2 persons.....	22
3 and 4 persons.....	28
5 persons and over.....	3
Total.....	100

Most of these families were complete when interviewed. Only 8 percent of the one-person families and 9 percent of the multiperson families had left a spouse or dependent children behind when moving to Kalamazoo. Before migration,

the families had contained 1,900 persons. Of these, 92 percent had migrated and 8 percent had stayed at the migrants' places of origin.

Month of arrival.—About half of the migrants had arrived in Kalamazoo during or before August 1941:

Month of arrival:	Percent distribution
October 1940–March 1941.....	13
April–May 1941.....	13
June–July 1941.....	19
August–September 1941.....	22
October 1941.....	19
November 1941.....	14
Total.....	100

INDUSTRY AND OCCUPATION

Kalamazoo migrant workers were drawn principally from manufacturing, trade, and "other" service industries. The proportions of both farmers and new workers among the migrants were relatively small. In Kalamazoo, manufacturing (especially paper manufacturing) was the most important employer of migrant workers, with trade second and "other" service industries third.

The industrial distribution of the workers on their last full-time jobs at their last residence, and on their jobs when interviewed in Kalamazoo, was as follows:

Industry	Percent distribution	
	At last residence	In Kalamazoo
No job at last residence ¹	12	.....
Unemployed in Kalamazoo.....	.....	3
Agriculture, forestry, and fishing.....	8	1
Mining.....	3	.....
Construction.....	6	7
Manufacturing:		
Paper.....	3	13
Iron and steel.....	2	5
Machinery.....	3	5
Other.....	14	15
Transportation, communication, and utilities.....	7	6
Trade.....	20	21
Personal services.....	5	9
Other services.....	17	15
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 6 percent; housewives, 2 percent; unemployed, 3 percent; others, 1 percent.

Both before and after migration, Kalamazoo migrants were engaged principally as white-collar workers and operatives. There were few craftsmen among the migrants. The principal occupational shifts involved in the migration were shifts into operative and domestic and other service jobs.

The occupational distribution of the migrants before and after migration follows:

Occupation	Percent distribution	
	At last residence	In Kalamazoo
No job at last residence.....	12	.....
Unemployed in Kalamazoo.....	.....	3
Professional and semiprofessional.....	9	9
Proprietors, managers, and officials.....	9	10
Clerical and kindred workers.....	19	15
Craftsmen and kindred workers.....	8	10
Operatives and kindred workers.....	19	28
Domestic service workers.....	4	6
Other service workers.....	5	8
Farm owners, tenants, and laborers.....	8	(1)
Laborers, except farm.....	7	11
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Unemployment was slight among Kalamazoo migrants. Out of 850 workers, only 25, or 3 percent, were unemployed and seeking work during the week preceding the survey.

Unemployment by sex.—Female migrant workers reported an unemployment rate of 5 percent, as compared with 3 percent for males.

Unemployment by age.—Workers under 25 years reported practically no unemployment, and the highest rate was reported by workers 45 years or over.

Age of worker:	Percent unemployed
Total.....	3
Under 20 years.....	1
20 to 24 years.....	1
25 to 44 years.....	5
45 years and over.....	8

Unemployment by month of arrival.—Only minor variations in unemployment were shown by workers who arrived in Kalamazoo at different times during the 14 months covered by the survey.

Month of arrival:	Percent unemployed
Total.....	3
October 1940 to May 1941.....	4
June to July 1941.....	2
August to September 1941.....	2
October 1941.....	3
November 1941.....	6

Unemployment by industry and occupation.—The least successful migrants in Kalamazoo were those formerly engaged in farming and transportation; even among these workers, however, only 8 percent were unemployed. There were practically no unemployed migrants from either manufacturing or "other" service industries. Unemployment rates by the migrant's industry at last residence were as follows:

Industry at last residence:	Percent unemployed in Kalamazoo
Total.....	3
No job.....	4
Agriculture, forestry, and fishing.....	8
Mining.....	(¹)
Construction.....	5
Manufacturing.....	1
Transportation, communication, and utilities.....	7
Trade.....	3
Personal service.....	(¹)
Other services.....	1

¹ Base too small for computation.

In terms of occupations, farmers, nonfarm laborers, and domestic and other service workers were least successful in Kalamazoo. White-collar, skilled, and semiskilled workers reported the lowest unemployment rate. Rates by occupation follow:

Occupation at last residence:	Percent unemployed in Kalamazoo
Total.....	3
No job.....	4
Professional and proprietary.....	(¹)
Clerical and kindred workers.....	3
Craftsmen and kindred workers.....	2
Operatives and kindred workers.....	2
Domestic and other service workers.....	6
Farm owners, tenants, and laborers.....	8
Laborers, except farm.....	7

¹ Less than 0.5 percent.

HOUSING

The majority of the migrant families were sharing a dwelling with others when enumerated. More than one-third found separate living quarters, and a small number lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	36	14	56
Sharing a dwelling with others.....	57	72	44
In hotels.....	7	14	.....
Total.....	100	100	100

CONCLUSIONS

The number of workers migrating to Kalamazoo during the 14-month period covered in this survey was not particularly large. The majority of the cities covered to date in this survey had attracted a larger number of migrants in relation to their 1940 population. Kalamazoo migrants were, however, unusually successful in finding work; only a negligible number of unemployed workers were included among the migrants.

FEBRUARY 11, 1942.

RECENT MIGRATION INTO LA FAYETTE, IND.

A survey of migration into La Fayette, Ind., was conducted by the Work Projects Administration Division of Research during October 1941. The survey was concerned with civilians who moved to La Fayette from places outside Tippecanoe County after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within the La Fayette corporate limits. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Although La Fayette has received only small direct defense contracts, local employment increased rapidly during the first year of the defense program. The chief new employment was provided at the local aluminum plant, which employed about three times more workers in October 1941 than in October 1940. Meantime, however, material shortages had begun to curtail employment in other La Fayette industries, and according to local reports, a sizable backlog of resident unemployed workers had accumulated by the time of the survey.

NUMBER OF MIGRANTS

Approximately 1,050 families living in La Fayette at the time of this survey had moved to the city from places outside Tippecanoe County after October 1, 1940. These families contained 1,100 workers and a total of 2,500 persons. La Fayette migrants made up a group equal to 8.5 percent of the city's 1940 population.

ORIGINS

Indiana was the major source of the migrants, contributing 75 percent of the total, Illinois was second, with 9 percent, and Kentucky third with 5 percent. Two percent had moved from Tennessee. The average distance traveled by the migrants was 70 miles, and only 4 percent traveled 500 miles or more.

Rural places were the origin of more than one-third of the migrants; i. e., 1 percent came from open country and 35 percent from rural villages. Towns (2,500 to 25,000 population) contributed 36 percent; small cities, 12 percent; and cities of over 100,000 population, 16 percent.

Sixteen percent of the families had formerly lived in La Fayette. About half of these families had been absent for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in La Fayette was 27.7 years. In one-person families, the average was 23.4 years, and for heads of multiperson families, 31.5 years. Twelve percent of the workers were under 20 years, and 12 percent were 45 years and over.

Female workers made up 24 percent of the migrant labor force. The average age of female migrants was 22.9 years, as compared with 29.2 years for males.

Race.—Negroes constituted 2 percent of the La Fayette migrants, and 98 percent were white.

Size of family.—The average size of migrant families in La Fayette was 2.4 persons. About two-fifths contained one person when interviewed.

Size of family:	Percent distribution
1 person.....	38
2 persons.....	22
3 and 4 persons.....	32
5 persons or more.....	8
Total.....	100

A large proportion of these families were not complete when interviewed; 46 percent of the 1-person families and 4 percent of the multiperson families had left a spouse or dependent children behind when they migrated. Before migration, the families had contained 3,100. Of these, 80 percent migrated and 20 percent remained at the migrant's last residences.

Month of arrival.—About half of the La Fayette migrants had arrived during May or earlier.

Month of arrival:	Percent distribution
October 1940–February 1941.....	20
March–April 1941.....	15
May–June 1941.....	21
July–August 1941.....	22
September 1941.....	11
October 1941.....	11
Total.....	100

INDUSTRY AND OCCUPATION

La Fayette migrants came principally from trade, agriculture, and from the group reporting "no job" at their last residence. Only one in seven had been engaged in manufacturing. In La Fayette, however, manufacturing was the largest single employer of migrant workers, and the majority of these were engaged in aluminum manufacturing. A large proportion of workers were also employed in La Fayette trade industries.

The industrial distribution of the migrants on their last full-time jobs at their last residence and on their jobs when interviewed in La Fayette was as follows:

Industry	Percent distribution	
	At last residence	In La Fayette
No job at last residence ¹	15	5
Unemployed in La Fayette.....		
Agriculture, forestry, and fishing.....	13	(?)
Mining.....	1	(?)
Construction.....	8	
Manufacturing:		
Nonferrous metals.....	1	21
Other.....	13	15
Transportation, communication, and utilities.....	10	8
Trade.....	25	23
Personal services.....	5	7
Other services.....	9	10
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 8 percent; housewives, 1 percent; unemployed, 5 percent; others, 1 percent.

² Less than 0.5 percent.

La Fayette migrants were predominantly clerks, craftsmen, and operatives. Before migration these three groups made up half the workers, and in La Fayette, they made up nearly two-thirds. The principal occupational shifts were from the "no job" group to clerical work and from farm jobs to operative work.

Occupation	Percent distribution	
	At last residence	In La Fayette
No job at last residence.....	15	5
Unemployment in La Fayette.....		5
Professional and semiprofessional.....	4	4
Proprietors, managers, and officials.....	5	5
Clerical and kindred workers.....	16	20
Craftsmen and kindred workers.....	15	17
Operatives and kindred workers.....	18	26
Domestic service workers.....	2	2
Other service workers.....	8	13
Farm owners, tenants, and laborers.....	13	(1)
Laborers, except farm.....	4	8
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 1,100 migrant workers in La Fayette, an estimated 50 workers, or 5 percent, were unemployed and seeking work during the week preceding interview.

Unemployment by sex.—Among female migrants, 12 percent, and among male migrants, 2 percent, reported unemployment. The majority of the unemployed workers were females.

Unemployment by race.—Four percent of the white workers, and 20 percent of the Negroes, were unemployed.

Unemployment by age.—Workers aged 25 to 44 years reported the lowest unemployment rate in La Fayette.

Age of worker:	Percent unemployed
Under 20 years.....	6
20 to 24 years.....	6
25 to 44 years.....	3
45 years and over.....	6
Total.....	5

Unemployment by month of arrival.—There was little variation in unemployment according to the month in which workers arrived in La Fayette.

Month of arrival:	Percent unemployed
October 1940–April 1941.....	4
May–July 1941.....	3
August–September 1941.....	7
October 1941.....	3
Total.....	5

Unemployment by industry and occupation.—The most successful industrial groups migrating to La Fayette were workers from manufacturing and "other" service industries; and farm workers reported below-average unemployment.

Personal service workers were the least successful. Unemployment rates by industry follow:

Industry at last residence:	Percent unemployed in La Fayette
No job.....	5
Agriculture, forestry, and fishing.....	3
Mining.....	(1)
Construction.....	4
Manufacturing.....	(2)
Transportation, communication, and utilities.....	7
Trade.....	4
Personal service.....	23
Other service.....	(2)
Total.....	5

¹ Base too small for computation.

² Less than 0.5 percent.

In terms of occupations, nonfarm laborers and professional persons reported unusual success in finding jobs, and skilled and semiskilled workers showed less than average unemployment. Clerks and domestic and other service workers reported the highest unemployment rates. Rates by occupation follow:

Occupation at last residence:	Percent unemployed in La Fayette
No job.....	5
Professional and proprietary workers.....	(1)
Clerical and kindred workers.....	9
Craftsmen and kindred workers.....	2
Operatives and kindred workers.....	2
Domestic and other service workers.....	15
Farm owners, tenants, and laborers.....	3
Laborers, except farm.....	(1)
Total.....	5

¹ Less than 0.5 percent.

HOUSING

The majority of the La Fayette migrant families occupied separate living quarters when interviewed. About two-fifths were sharing a dwelling, and a few lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	53	2	84
Sharing a dwelling with others.....	43	87	16
In hotels.....	4	11	(1)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of its population, La Fayette has recently attracted a large volume of in-migration. Among the 51 cities covered in these surveys, only 12 reported a higher migrant rate. La Fayette migrants were relatively successful in finding jobs; their unemployment rate is well below the average reported by migrants in all the cities surveyed.

JANUARY 8, 1942.

RECENT MIGRATION INTO LOS ANGELES, LONG BEACH, AND NINE OTHER CITIES
IN LOS ANGELES COUNTY, CALIF.

A survey of migration into Los Angeles, Long Beach, and nine Los Angeles satellite cities¹ was conducted by the Work Projects Administration, Division of Research during October and November 1941. The survey was concerned with civilians who moved to these cities from places outside of Los Angeles County after October 1, 1940, and who were still living there in October and November 1941. Operating on a sample basis, the survey covered residential districts, rooming-house districts, lower-priced hotels, and tourist and trailer camps within the corporate limits of the survey cities. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the cities during the period covered by the survey.

NUMBER OF MIGRANTS

Approximately 79,000 families living in Los Angeles, Long Beach, and the 9 Los Angeles satellite cities at the time of this survey had moved to Los Angeles County after October 1, 1940. These families contained 157,300 persons, distributed as follows: 103,400 persons in Los Angeles, 22,000 persons in Long Beach, and 31,900 persons in the 9 other cities.

Migrants in the entire survey area made up a group equal to 7.8 percent of the 1940 population of the area. In the city of Los Angeles, migrants equaled 6.9 percent of 1940 population; in Long Beach, 13.4 percent; and in the 9 other cities, 3.9 percent.

Unlike all other cities covered in this survey, the Los Angeles County cities reported considerably fewer migrant workers than migrant families; in the 79,000 migrant families there were but 73,500 workers. Fifteen percent of the families in Los Angeles, 19 percent of those in Long Beach, and 10 percent of those in the 9 other cities contained no workers, but had come to Los Angeles County to join relatives, for the climate, for medical care, etc. The estimated number of families and workers in the 11 cities was as follows:

Cities	Families	Workers
Los Angeles.....	52,100	48,200
Long Beach.....	10,300	9,000
9 other cities.....	16,600	16,300

ORIGINS

The principal origins of the migrants to the Los Angeles area were the West North Central States, particularly Iowa, Nebraska, Kansas, and Missouri. The West South Central States were less important, although Texas contributed from 6 to 7 percent and Oklahoma 4 to 7 percent of the migrants. A relatively small proportion of the migrants came from the State of California or from other Pacific States. The following table shows the origins of the migrants by census geographical regions:

State and region of origin	Percent distribution		
	Los Angeles	Long Beach	9 other cities
New England.....	1	1	1
Middle Atlantic.....	8	5	4
East North Central.....	15	7	12
West North Central.....	29	28	31
South Atlantic.....	3	2	1
East South Central.....	1	1	2
West South Central.....	14	15	15
Mountain.....	12	13	14
Pacific:			
Washington.....	3	2	1
Oregon.....	1	3	2
California.....	13	23	17
Total.....	100	100	100

¹ These 9 cities are Alhambra, Beldere Township Beverly Hills, Burbank, Glendale, Huntington Park, Inglewood, Santa Monica, and Southgate.

The distance traveled by the migrants was exceptionally great. In Los Angeles, half the migrants had traveled 1,270 miles or more; in Long Beach, 1,070 miles or more; and in the nine other cities 1,190 miles or more. Among other recently surveyed cities, the average distance traveled by migrants ranged from 60 miles in Brockton, Mass., to 340 miles in Detroit.

Los Angeles migrants came principally from large cities, Long Beach migrants from towns, and migrants in the nine satellite cities from rural places. The size of the migrants' places or origin was as follows:

Size of origin	Percent distribution		
	Los Angeles	Long Beach	9 other cities
Rural:			
Open country.....	3	2	3
Villages (less than 2,500).....	15	24	26
Towns (2,500 to 25,000).....	25	30	29
Small cities (25,000 to 100,000).....	19	20	18
Large cities (over 100,000).....	38	24	22
Total.....	100	100	100

Some of the migrant families had previously lived in Los Angeles County. In Los Angeles, these families constituted 20 percent of the total; in Long Beach, 28 percent; and in the nine other cities, 15 percent. Half of these families had been absent about 5 years in Los Angeles, 3 years in Long Beach, and 4 years in the nine other cities.

CHARACTERISTICS

Age.—Migrant workers in the nine satellite cities were exceptionally young, but those in Los Angeles and Long Beach were no younger than migrants in many other cities covered by this survey. The following table shows the average (median) age of migrant workers in Los Angeles County:

Type of worker	Average age (years)		
	Los Angeles	Long Beach	9 other cities
All workers.....	29.9	29.5	26.4
Male workers.....	29.9	29.7	26.3
Female workers.....	29.7	28.2	27.1
1-person families.....	25.9	25.3	23.2
Heads of multiperson families.....	32.7	32.8	31.4

Sex.—In Los Angeles, 25 percent of the migrant workers were females; in Long Beach, 18 percent; and in the nine other cities 17 percent.

Race.—Practically all Los Angeles County migrants were white. In Los Angeles, 2 percent were Negroes and 1 percent "other" races; in Long Beach and the nine other cities 1 percent were Negroes and less than half of 1 percent were of other races.

Size of family.—Migrant families in Los Angeles County averaged approximately 2.0 persons when interviewed. Among other recently surveyed cities, migrant family size ranged from 1.4 persons in Washington, D. C., to 2.6 persons in Oklahoma City, Okla. A distribution of migrant families by family size follows:

Size of family when interviewed	Percent distribution		
	Los Angeles	Long Beach	9 other cities
1 person.....	47	38	51
2 persons.....	24	31	25
3 and 4 persons.....	25	26	20
5 persons and over.....	4	5	4
Total.....	100	100	100

A large number of these families were not complete when interviewed. In Los Angeles, 38 percent of the 1-person families and 10 percent of the multiperson families had left a spouse or dependent children behind when they migrated. In Long Beach, corresponding figures were 21 percent for 1-person families and 14 percent for multiperson families; and in the nine other cities, 35 percent for 1-person families and 7 percent for multiperson families.

Before migration, the families in the entire survey area had contained 195,000 persons; of these, 81 percent had migrated and 19 percent had remained behind. In Los Angeles, 21 percent had been left behind; in Long Beach, 12 percent; and in the nine other cities 20 percent.

Month of arrival.—In Los Angeles and Long Beach, half the migrants had arrived in Los Angeles County about 4 months before interview; in the 9 other cities half had been in the county approximately 5 months before interview.

Month of arrival	Percent distribution		
	Los Angeles	Long Beach	9 other cities
October 1940 to February 1941.....	21	18	24
March to April 1941.....	10	12	15
May to June 1941.....	18	20	20
July to August 1941.....	20	26	21
September 1941.....	14	12	12
October to November 1941.....	17	12	8
Total.....	100	100	100

INDUSTRY AND OCCUPATION

Before migration.—No one industry predominated among Los Angeles County migrant workers at their previous residences. Trade and "other" service industries were among the largest contributors, but each accounted for only about one-fifth of the migrants, or less. Manufacturing contributed less than one-fifth of the migrants in all three sections of the survey area. New workers and workers from agriculture were not particularly important, except in the nine satellite cities, where they made up nearly one-third of all workers.

The following table shows the attachment of the migrants on their last full-time jobs at their last residences:

Industry at last residence	Percent distribution		
	Los Angeles	Long Beach	9 other cities
No job at last residence:			
Students.....	6	7	11
Housewives.....	4	2	2
Unemployed.....	1	2	2
Other.....	1	1	1
Agriculture, forestry, and fishing.....	9	8	15
Mining.....	3	5	2
Construction.....	7	10	3
Manufacturing:			
Transportation equipment.....	4	5	3
Other.....	13	13	15
Transportation, communication, and utilities.....	5	5	6
Trade.....	19	21	21
Personal service.....	6	5	3
Other services.....	22	16	16
Total.....	100	100	100

In terms of occupations at their last residence, the migrants in Los Angeles and Long Beach were principally clerks, craftsmen, and operatives; and those in the nine other cities were, in about equal proportion, clerks, operatives, farm

workers, and new workers. The following table shows the occupational distribution of the migrants at their last residence:

Occupation at last residence	Percent distribution		
	Los Angeles	Long Beach	9 other cities
No job at last residence.....	12	12	16
Professional and semiprofessional.....	10	8	5
Proprietors, managers, and officials.....	6	7	7
Clerical and kindred workers.....	21	16	16
Craftsmen and kindred workers.....	15	14	13
Operatives and kindred workers.....	17	21	17
Domestic service workers.....	3	3	2
Other service workers.....	4	7	4
Farm owners, tenants, and laborers.....	9	8	15
Laborers, except farm.....	3	4	5
Total.....	100	100	100

In Los Angeles County.—After arrival in Los Angeles County, manufacturing, and particularly shipbuilding and aircraft manufacturing, became by far the most important single industry of the migrants. In the nine satellite cities, manufacturing absorbed three-fifths of all the migrant workers, and in Los Angeles, where manufacturing was least important, it still occupied more than one-third of the workers. Trade and "other" service industries absorbed a relatively large proportion of migrants in Los Angeles.

The industrial distribution of the workers on their jobs when interviewed was as follows:

Industry when interviewed	Percent distribution		
	Los Angeles	Long Beach	9 other cities
Unemployed when interviewed.....	16	16	12
Agriculture, forestry, and fishing.....	1	(¹)	(¹)
Mining.....	(¹)	3	(¹)
Construction.....	6	8	3
Manufacturing:			
Transportation equipment.....	26	38	47
Other.....	11	6	13
Transportation, communication, and utilities.....	4	2	3
Trade.....	15	13	11
Personal service.....	6	4	4
Other services.....	15	10	7
Total.....	100	100	100

¹ Less than 0.5 percent.

Migration to Los Angeles entailed a sharp occupational shift into operative work, which became the largest single occupation in all the cities. Clerical and craftsmen's occupations also absorbed a large proportion of the migrants. Very few migrants held unskilled jobs in Los Angeles County.

The occupational distribution of the migrants when interviewed was as follows:

Occupation when interviewed	Percent distribution		
	Los Angeles	Long Beach	9 other cities
Unemployed.....	16	16	12
Professional and semiprofessional.....	9	6	5
Proprietors, managers, and officials.....	4	4	3
Clerical and kindred workers.....	17	16	16
Craftsmen and kindred workers.....	14	16	18
Operatives and kindred workers.....	26	27	36
Domestic service workers.....	4	2	2
Other service workers.....	5	7	4
Farm owners, tenants, and laborers.....	(¹)	(¹)	(¹)
Laborers, except farm.....	5	6	4
Total.....	100	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Unemployment among Los Angeles County migrants was extremely high; 16 percent of the migrant workers in Los Angeles and Long Beach, and 12 percent in the 9 other cities, were unemployed during the calendar week prior to interview. In the entire survey area, an estimated 10,800 migrant workers, or 15 percent, were unemployed. In other recently surveyed cities, migrant unemployment ranged from 2 percent in Bristol, Conn., to 17 percent in Fort Smith, Ark.

Unemployment by sex.—Unemployment among female migrant workers was excessive in all sections of the survey area:

Sex of workers	Percent unemployed in—		
	Los Angeles	Long Beach	9 other cities
Male.....	12	12	7
Female.....	30	35	35
Total.....	16	16	12

Unemployment by race.—In the city of Los Angeles, the only part of the survey area where the number of migrants interviewed was large enough to permit race comparisons, Negroes reported highest unemployment and migrants of "other" races reported least unemployment. Among white migrants, 16 percent were unemployed; among Negroes, 25 percent; and among "other" races, 9 percent.

Unemployment by age.—Workers 45 years and over uniformly reported above-average unemployment; and those under 20 years reported high unemployment except in the city of Los Angeles:

Age of workers	Percent unemployed in—		
	Los Angeles	Long Beach	9 other cities
Under 20 years.....	8	20	19
20 to 24 years.....	20	14	11
25 to 44 years.....	15	15	11
45 years and over.....	18	23	14
Total.....	16	16	12

Unemployment by month of arrival.—Unemployment was largely concentrated among the migrants who had arrived in Los Angeles County during the months just preceding the present survey:

Month of arrival	Percent unemployed in—		
	Los Angeles	Long Beach	9 other cities
October 1940 to April 1941.....	9	5	5
May to June 1941.....	9	5	8
July to August 1941.....	10	22	9
September 1941.....	21	23	20
October to November 1941.....	40	40	54
Total.....	16	16	12

Unemployment by industry and occupation.—Migrant workers from agriculture, construction, and, in the nine satellite cities, workers from manufacturing industries were most successful in finding work in Los Angeles County. Workers from trade and "other" service industries, had, in general, about average success in finding work. Workers from mining, new workers (except in Los Angeles) and,

in the nine satellite cities, workers from personal service industries were least successful. Unemployment rates by industry at last residence follow:

Industry at last residence	Percent unemployed in—		
	Los Angeles	Long Beach	9 other cities
No job.....	15	20	16
Agriculture, forestry, and fishing.....	10	15	7
Mining.....	26	(¹)	(¹)
Construction.....	13	9	10
Manufacturing.....	15	16	8
Transportation, communication, and utilities.....	16	(¹)	14
Trade.....	19	11	14
Personal services.....	16	(¹)	29
Other services.....	18	14	10
Total.....	16	16	12

¹ Base too small for computation.

In terms of occupations, professional and proprietary workers, farm workers, and nonfarm laborers were, in general, the most successful in finding jobs in Los Angeles County. Clerical workers were, in general, the least successful among the migrants. Craftsmen reported unemployment only slightly below the average, but operatives were below average except in the city of Los Angeles. Unemployment rates by the occupation of workers at their last residence follow:

Occupation at last residence	Percent unemployed in—		
	Los Angeles	Long Beach	9 other cities
No job.....	15	20	16
Professional and semiprofessional.....	14	9	13
Proprietors, managers, and officials.....	9	7	9
Clerical and kindred workers.....	23	15	19
Craftsmen and kindred workers.....	13	17	10
Operatives and kindred workers.....	24	14	7
Domestic service workers.....	14	(¹)	(¹)
Other service workers.....	15	15	14
Farm owners, tenants, and laborers.....	7	15	8
Laborers, except farm.....	5	(¹)	12
Total.....	16	16	12

¹ Base too small for computation.

HOUSING

In Los Angeles and the nine satellite cities, the majority of the migrant families were found to be sharing a dwelling unit with other persons. In Long Beach, however, the majority were occupying separate living quarters. A small proportion of the families were living in hotels and trailer camps.

The following tables show the living arrangements of the migrant families according to family size:

1. ALL FAMILIES

Living arrangements	Percent distribution		
	Los Angeles	Long Beach	9 other cities
Occupying a separate dwelling unit.....	43	53	36
Sharing a dwelling with others.....	50	40	60
In hotels.....	6	5	2
In tourist and trailer camps.....	1	2	2
Total.....	100	100	100

2. 1-PERSON FAMILIES

Living arrangements	Percent distribution		
	Los Angeles	Long Beach	9 other cities
Occupying a separate dwelling unit.....	12	8	4
Sharing a dwelling with others.....	76	78	92
In hotels.....	12	12	3
In tourist and trailer camps.....	(1)	2	1
Total.....	100	100	100

3. MULTIPERSON FAMILIES

Occupying a separate dwelling unit.....	72	80	70
Sharing a dwelling with others.....	27	16	25
In hotels.....	(1)	1	(1)
In tourist and trailer camps.....	1	3	5
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of the absolute number of migrants attracted during the first year of the defense program, Los Angeles County cities exceed by far all other cities covered in this survey. An estimated one hundred fifty thousand-odd migrants were found in the Los Angeles County survey area, and more than 100,000 in the city of Los Angeles alone. The cities approaching nearest to this volume were Washington, D. C., and San Diego, with slightly more than 50,000 migrants each; Seattle with approximately 40,000; and Baltimore, with about 30,000 migrants. When recent migration is related to 1940 population, the position of Los Angeles is still impressive, though exceeded by many smaller war boom cities such as San Diego, Wichita, Burlington (Iowa), and Seattle.

In comparison with other cities covered in this survey, the Los Angeles County migrants have been notably unsuccessful. While unemployment among migrants in other defense cities has usually ranged between 3 and 6 percent and has seldom exceeded 10 percent, unemployment among migrants in Los Angeles County ranged from 12 to 16 percent and averaged 15 percent throughout the survey area. During the first year of the defense program, Los Angeles was one of the few cities which attracted migrant workers faster than they could be absorbed.

NOVEMBER 26, 1941.

RECENT MIGRATION INTO MACON, GA.

A survey of migration into Macon, Ga., was conducted by the Work Projects Administration Division of Research at the end of September 1941. The survey was concerned with civilians who moved to Macon from places outside of Bibb County after October 1, 1940, and who were still living in Macon in September 1941. Operating on a sample basis, the survey covered residential districts and lower-priced hotels. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left Macon during the survey period.

INDUSTRIAL ACTIVITY

Macon is a center of large-scale military activity. In or near Macon are Camp Wheeler, built to house 12,400 soldiers; a \$15,000,000 air corps supply depot; Cochran Air Field; and a small ordnance plant for manufacturing fuzes. Early in 1941 as many as 12,000 construction workers had been employed in building these facilities. At the time of the present survey, however, the bulk of the work was completed, and the greater part of the construction workers had gone to other defense centers, leaving behind only enough workers for clean-up jobs at Camp Wheeler and for the defense-housing projects and numerous private homes still under construction.

Macon's trade and service industries had benefited from the new activity, not only during the construction phase, but afterward as well, when the new Army facilities were put into service. In addition, most of Macon's cotton mills changed from two- to three-shift operation during the year preceding the present survey, and had added a large number of operatives to their pay rolls.

This activity had brought a relatively large number of migrant workers to Macon.

NUMBER OF MIGRANTS

Approximately 1,800 families living inside the corporate limits of Macon in September 1941 had moved to the city after October 1, 1940. These families contained 2,050 workers and 4,050 persons. Migrants made up a group equal to 7 percent of the 1940 population of Macon.

ORIGINS

The majority of the migrants came from nearby Georgia farms, villages, and small towns. Georgia supplied 77 percent of all the migrants, and the next largest contributors were Florida, with 6 percent, and Alabama, with 4 percent. The average distance traveled by the migrants was only 70 miles, and only 1 in 16 had traveled more than 500 miles.

Rural places were a particularly important source of Macon migrants; 15 percent had migrated from the open country and 30 percent from rural villages (places of less than 2,500 population). Towns (2,500 to 25,000 population) contributed 32 percent; small cities, 8 percent; and cities of over 100,000 population, 15 percent.

The great majority of the migrants had not lived in Macon before; 83 percent reported no previous Macon residence. Among the 17 percent who formerly lived in Macon, half had been absent for about 7 years.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 28.1 years. In one-person families, the average was 24.5 years; and for heads of multi-person families, 31.3 years. Workers under 20 years made up 12 percent of the total, and those over 45 made up 12 percent. Since Macon is a cotton-mill town many of the migrants were women; women constituted 28 percent of all the workers. The average age of women workers was 23.8 years, as compared with 29.8 years for males.

Race.—Negroes constituted 20 percent of the Macon migrants. Negroes make up close to half the resident population of Macon, however; hence, the migrant rate for Negroes was lower than for white persons.

Size of family.—Migrant families in Macon were relatively large; less than two-fifths consisted of one person.

Size of family in Macon:	Percent distribution
1 person.....	38
2 persons.....	26
3 and 4 persons.....	29
5 persons or more.....	7
Total.....	100

A large number of these families were not complete when interviewed; 50 percent of the 1-person families and 10 percent of the multiperson families had left a spouse or dependent children behind when they moved to Macon. Before migration, the families contained 5,150 persons. Of these, 4,050 had migrated to Macon and 1,100 had remained at the migrants' place of origin.

Months lived in county.—The distribution of the migrant workers according to the month of their arrival in Macon was as follows:

Month of arrival:	Percent of Macon migrants
October 1940–January 1941.....	20
February–March 1941.....	15
April–May 1941.....	13
June–July 1941.....	27
August 1941.....	15
September 1941.....	10
Total.....	100

INDUSTRY AND OCCUPATION

Macon drew heavily upon farm workers and new entrants to the labor market for its migrants; 17 percent of the workers had been in agriculture at last residence and 13 percent were new workers. A large part of these shifted into construction and manufacturing—especially textile manufacturing—upon arrival in Macon. Both before and after migration, the trade and “other” service industries occupied about one-fourth of the migrants.

The industrial distribution of Macon migrants on their last full-time job at their last place of residence, and on their jobs when interviewed in Macon, was as follows:

Industry	Percent distribution	
	At last residence	In Macon
No job at last residence ¹	16	
Unemployed in Macon.....		11
Agriculture, forestry, and fishing.....	17	1
Mining.....	1	
Construction.....	19	24
Manufacturing:		
Textiles.....	4	11
Other.....	9	12
Transportation, communication, and utilities.....	3	7
Trade.....	14	16
Personal services.....	6	6
Other services.....	11	12
Total.....	100	100

¹ The status of these workers at last residence was: Students, 6 percent; housewives, 6 percent; unemployed, 3 percent; too young to work, 1 percent.

The occupational distribution of the workers at last residence and in Macon was as follows:

Occupation	Percent distribution	
	At last residence	In Macon
No job at last residence.....	16	
Unemployed in Macon.....		11
Professional and semiprofessional.....	5	4
Proprietors, managers, and officials.....	6	6
Clerical and kindred workers.....	11	15
Craftsmen, foremen, and kindred workers.....	17	22
Operatives and kindred workers.....	12	21
Domestic service workers.....	3	2
Other service workers.....	6	8
Farm owners, tenants, and laborers.....	17	(¹)
Laborers, except farm.....	7	11
Total.....	100	100

¹ Less than 0.5 percent.

Three important occupational shifts were involved in the recent migration to Macon. Persons who were students at last residence tended to shift into clerical jobs in Macon; housewives became machine operatives; and farm workers turned to operative jobs and unskilled labor.

UNEMPLOYMENT

Out of 2,050 migrant workers in Macon, 220, or 11 percent, were unemployed and seeking work during the calendar week preceding interview. Comparable figures for other recently surveyed cities are: Baltimore, 3 percent, Greenville, S. C., 9 percent; Wichita, Kans., 13 percent; and Philadelphia, 8 percent.

Unemployment by sex.—Women migrants reported about four times the unemployment rate of men. Among the women, 23 percent were unemployed, as compared with 6 percent for the men.

Unemployment by race.—Negro workers reported nearly three times the unemployment rate of white workers. Among the Negroes, 22 percent were unemployed; among the white workers, 8 percent.

Unemployment by age.—The highest unemployment rates were reported by the very young workers and by workers over 45 years. Rates by age were as follows:

Age of workers:	Percent unemployed in Macon
Under 20 years.....	17
20 to 24 years.....	9
25 to 44 years.....	9
45 years and over.....	14
Total.....	11

Unemployment by distance traveled.—The unemployment rate of Macon migrants, was highest for those who had traveled considerable distances:

Distance traveled:	Percent unemployed in Macon
Less than 200 miles.....	10
200 to 499 miles.....	9
500 miles and over.....	21
Total.....	11

Unemployment by size of place of origin.—The highest unemployment rate was reported by migrants from small towns, and the lowest by migrants from large cities. Unemployment among workers from rural places was about average.

Size of place of origin:	Percent unemployed in Macon
Rural (less than 2,500 population).....	12
2,500 to 10,000 population.....	15
10,000 to 25,000 population.....	7
25,000 to 100,000 population.....	4
Over 100,000 population.....	4
Total.....	11

Unemployment by month of arrival.—Workers who had arrived in Macon during the months just preceding the survey showed a higher unemployment rate than those who had been in the city longest.

Month of arrival:	Percent unemployed in Macon
October 1940–January 1941.....	9
February–May 1941.....	8
June–July 1941.....	6
August 1941.....	21
September 1941.....	18
Total.....	11

Unemployment by industry and occupation.—Particularly high unemployment rates were reported by housewives and by workers who were in personal service industries at their last residence; and construction workers and workers from "other" service industries showed the lowest unemployment. Workers in agriculture and manufacturing at last residence had about average unemployment.

Unemployment by industry at last residence was as follows:

Industry at last residence:	Percent unemployed in Macon
No job:	
Students.....	10
Housewives.....	17
Other.....	17
Agriculture, forestry, and fishing.....	10
Mining.....	(1)
Construction.....	6
Manufacturing.....	12
Transportation, communication, and utilities.....	(1)
Trade.....	10
Personal services.....	30
Other services.....	4
Total.....	11

¹ Base too small for calculation.

In terms of occupation at last residence, the professional, proprietary, and clerical workers and the craftsmen showed characteristically little unemployment, operatives were about average, and personal service workers extremely high.

Unemployment by occupation at last residence was as follows:

Occupation at last residence:	Percent unemployed in Macon
Total.....	11
No job.....	14
Professional, proprietary, and clerical.....	5
Craftsmen and kindred workers.....	6
Operatives and kindred workers.....	9
Personal service workers.....	50
Other service workers.....	20
Farm owners, tenants, and laborers.....	8
Laborers, except farm.....	14

HOUSING

Nearly half of the Macon migrants were occupying a separate dwelling when enumerated and about half were sharing a dwelling with other persons. Only a very few were in lower-priced hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	46	5	72
Sharing a dwelling with others.....	52	89	28
In hotels.....	2	6	-----
Total.....	100	100	100

CONCLUSIONS

The rate of recent migration into Macon is relatively high, running twice that of Baltimore and Greenville, S. C., seven times higher than Philadelphia, and one-third as high as Wichita, Kans., one of the most active defense boom towns in the country. The number of civilian migrants attracted to Macon during the first year of the defense program was roughly equal to its net population gain during the entire decade of the 1930's.

One part of this movement consists of "boomers" who follow temporary defense construction jobs. A large number of these workers had already left Macon before the present survey, and most of the remainder were expected to follow as soon as their work ended. The greater part of the movement, however, was made up of migrants of a less temporary sort—manufacturing operatives, tradespeople, and workers in various kinds of service industries.

FEBRUARY 13, 1942.

RECENT MIGRATION INTO MARION, OHIO

A survey of migration into Marion, Ohio, was conducted by the Works Projects Administration Division of Research in November 1941. The survey was concerned with civilians who moved to Marion from places outside of Marion County after October 1, 1940, and who were still living there at the time of this survey. Operating on a sample basis, the survey covered residential districts, lower-priced hotels and tourist and trailer camps within the corporate limits of Marion. The higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941 Marion County received defense contracts valued at approximately \$2,700,000, equal to about one-eighth the value of the county's manufactures in 1937. According to local reports employment in the city increased by approximately 500 workers during the period covered by this survey. Unemployment, however, was reported to have declined by about twice this amount, partly as a result of the out-migration of many skilled workers to nearby defense cities in northeastern Ohio.

NUMBER OF MIGRANTS

Approximately 650 families living in Marion at the time of this survey had moved to the city from places outside Marion County after October 1, 1940. These families contained 675 workers and a total of 1,700 persons. Migrants made up a group equal to 5.5 percent of Marion's 1940 population.

ORIGINS

Ohio was the principal source of Marion migrant workers, contributing 68 percent of the total. Michigan was second with 10 percent. Pennsylvania contributed 4 percent and Indiana, New York, and West Virginia each contributed 3 percent. The average distance traveled by migrants was 90 miles; only 3 percent had traveled 500 miles or more.

Rural places were the origin of nearly one-third of the workers; i. e., 8 percent had moved from open country and 22 percent from rural villages. Towns (2,500 to 25,000 population) contributed 33 percent; small cities, 14 percent, and cities of over 100,000 population, 23 percent.

Seventeen percent of the migrants had formerly lived in Marion. About half of these former residents had been absent from the city for 7 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Marion was 29.7 years. In one-person families the average age was 24.1, and for heads of multiperson families, 32.3 years. Seven percent of the workers were under 20 years of age and 13 percent were 45 years or over.

Female workers made up 14 percent of all the migrant workers. The average age of female workers was 23.6 years as compared with 31.0 years for males.

Race.—Negro migrants in Marion made up less than 0.5 percent of the total.

Size of family.—Migrant families in Marion averaged 2.6 persons per family. Less than one-third consisted of one person when interviewed:

Size of family:	Percent distribution
1 person.....	30
2 persons.....	28
3 and 4 persons.....	29
5 persons and over.....	13
Total.....	100

Some of these families were not complete when interviewed; 34 percent of the 1-person families and 7 percent of the multiperson families had left a spouse or dependent children behind when moving to Marion. Before migration, the families had contained 1,900 persons. Of these, 89 percent had migrated and 11 percent had stayed behind.

Month of arrival.—About half of the migrants arrived in Marion during June or earlier:

Month of arrival:	<i>Percent distribution</i>
October 1940 to April 1941.....	33
May to June 1941.....	12
July to August 1941.....	18
September to October 1941.....	24
November 1941.....	12
December 1941.....	1
Total.....	100

INDUSTRY AND OCCUPATION

The migrant workers came principally from manufacturing, trade and "other" services. The proportion coming from agriculture was larger than in most survey cities, but relatively few of the migrants were new workers. In Marion, manufacturing was the most important single employer of migrant workers, followed by "other" services and trade.

The industrial distribution of the migrants on their last full-time jobs at their last residence, and on their jobs when interviewed in Marion, was as follows:

Unemployment by sex.—Unemployment among female migrant workers was more than seven times higher than among males; 30 percent of the females were unemployed, as compared with 4 percent of the males.

Unemployment by age.—Workers under 20 years reported the highest unemployment rate in Marion:

Age of worker:	<i>Percent unemployed</i>
Under 20 years.....	14
20 to 24 years.....	9
25 to 44 years.....	7
45 years and over.....	7
Total.....	8

Unemployment by month of arrival.—Workers who arrived in Marion several months before the present survey reported the highest unemployment rates:

Month of arrival:	<i>Percent unemployed</i>
October 1940–June 1941.....	6
July–August 1941.....	3
September–October 1941.....	14
November 1941.....	8
December 1941.....	(1)
Total.....	8

¹ Base too small for computation.

HOUSING

The majority of the migrant families in Marion occupied a separate dwelling when enumerated. About two-fifths were sharing a dwelling with other persons, and a few lived in hotels and tourist camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	59	81	50
Sharing a dwelling with others.....	38	12	49
In hotels.....	2	5	(1)
In tourist and trailer camps.....	1	2	1
Total.....	100	100	100

¹ Less than 0.5 percent.

Industry	Percent distribution	
	At last residence	In Marion
No job at last residence ¹	9	8
Unemployed in Marion.....		1
Agriculture, forestry, and fishing.....	13	(2)
Mining.....	3	3
Construction.....	6	
Manufacturing:		
Iron and steel.....	5	13
Machinery.....	10	19
Other.....	6	7
Transportation, communication and utilities.....	12	14
Trade.....	17	16
Personal service.....	4	1
Other services.....	15	18
Total.....	100	100

¹The status of these workers at their last residence was: students, 5 percent; housewives, 1 percent; unemployed, 1 percent; others, 2 percent.

²Less than 0.5 percent.

A substantial part of the migrants were white-collar workers; before migration this group made up one-third, and after migration, two-fifths of the workers. Skilled and semiskilled workers were attracted to Marion in about equal numbers.

The occupations of the migrants before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Marion
No job at last residence.....	9	8
Unemployed in Marion.....		10
Professional and semiprofessional.....	9	12
Proprietors, managers, and officials.....	7	19
Clerical and kindred workers.....	17	18
Craftsmen and kindred workers.....	17	17
Operatives and kindred workers.....	14	1
Domestic service workers.....	2	7
Other service workers.....	7	1
Farm owners, tenants, and laborers.....	11	7
Laborers, except farm.....	7	7
Total.....	100	100

UNEMPLOYMENT

Out of 675 migrant workers in Marion, an estimated 55 workers, or 8 percent, were unemployed and seeking work during the week prior to interview.

CONCLUSIONS

The volume of migration into Marion during the first year of the defense program was moderate; among the 51 cities covered in these surveys, 25 reported a higher migrant rate than Marion, and 25 reported a lower rate. Migrant unemployment in Marion was slightly above the average found in the other survey cities.

FEBRUARY 11, 1942.

RECENT MIGRATION INTO MUSKOGEE, OKLA.

A survey of migration into Muskogee, Okla., was conducted by the Work Projects Administration Division of Research during October 1940. The survey was concerned with civilians who moved to Muskogee from places outside Muskogee County after October 1, 1940, and who were still living there at the time of this survey. Operating on a sample basis, the survey covered the residential districts,

trailer and tourist camps, and lower priced hotels within the corporate limits of Muskogee. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Muskogee is not an active defense center. Between June 1940 and October 1941, Muskogee County received defense contracts valued at about \$300,000, and equal to only about 2 percent of the 1937 value of manufactures in the county. According to local reports, a considerable number of workers had left the city to seek work elsewhere during the first year of the defense program.

NUMBER OF MIGRANTS

Approximately 700 families living in Muskogee at the time of this survey had moved to the city from places outside of Muskogee County after October 1, 1940. These families contained 800 workers and a total of 1,850 persons. Migrants made up a group equal to 5.7 percent of Muskogee's 1940 population.

ORIGINS

Oklahoma was the predominant source of Muskogee migrants, contributing 64 percent of the total. Texas was the second most important source, with 18 percent. Kansas and Missouri each contributed 4 percent; and 2 percent moved from California. The average distance traveled by the migrants was 85 miles; 11 percent had traveled 500 miles or more.

Rural places were the origin of about one-third of the workers; i. e., 4 percent came from open country and 28 percent from rural villages. Towns (2,500 to 25,000 population) contributed 31 percent; small cities, 8 percent; and cities of over 100,000 population, 29 percent.

More than one-third (34 percent) of the workers were former Muskogee residents. About half of these workers had been absent from the city for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Muskogee was 31.6 years. In one-person families, the average was 30.3 years, and for heads of multi-person families, 33.1 years. Six percent of the workers were under 20 years, and 16 percent were 45 years and over.

Female workers constituted 30 percent of all the workers. The average age of females was 31.3 years, as compared with 31.7 years, for males.

Race.—Ten percent of the Muskogee migrants were Negroes.

Size of family.—Migrant families in Muskogee average 2.6 persons per family. Only one-quarter of the families contained one person when interviewed:

Size of family:	Percent distribution
1 person.....	25
2 persons.....	28
3 and 4 persons.....	36
5 persons and over.....	11
Total.....	100

Most of these families were complete when interviewed; however, 20 percent of the 1-person families and 6 percent of the multiperson families had left a spouse or dependent children behind when moving to Muskogee. Before migration, the families had contained 1,900 persons. Of these, 97 percent had migrated and 3 percent had remained behind.

Month of arrival.—About half of the migrants arrived in Muskogee during July or earlier:

Month of arrival:	Percent distribution
October 1940–February 1941.....	15
March–April 1941.....	16
May–June 1941.....	17
July–August 1941.....	26
September 1941.....	20
October 1941.....	6
Total.....	100

INDUSTRY AND OCCUPATION

Both before and after migration, Muskogee migrant workers were principally engaged in construction, trade, and personal and "other" services. A relatively large proportion held no jobs at their last residence, but relatively few were drawn from agriculture. Very few migrants engaged in manufacturing.

The industrial distribution of the migrants on their last full-time jobs at their last residence and on their jobs when interviewed in Muskogee was as follows:

Industry	Percent distribution	
	At last residence	In Muskogee
No job at last residence ¹	15	.....
Unemployed in Muskogee.....	.....	13
Agriculture, forestry, and fishing.....	8	4
Mining.....	(²)	(²)
Construction.....	14	15
Manufacturing.....	5	7
Transportation, communication, and utilities.....	5	6
Trade.....	18	17
Personal service.....	10	8
Other services.....	25	30
Total.....	100	100

¹ The status of these workers at their last residence was as follows: Students, 3 percent; housewives 3 percent; unemployed, 5 percent; and others, 4 percent.

² Less than 0.05 percent.

The largest single occupational group among the migrants consisted of white-collar workers, who accounted for well over two-fifths of the workers both before and after migration. Craftsmen were considerably more numerous than operatives among the migrants. The proportion of nonfarm laborers was very small.

The occupations of the migrants before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Muskogee
No job at last residence.....	15	.....
Unemployed in Muskogee.....	.....	13
Professional and semiprofessional.....	16	18
Proprietors, managers, and officials.....	9	9
Clerical and kindred workers.....	18	17
Craftsmen and kindred workers.....	14	14
Operatives and kindred workers.....	8	10
Domestic service workers.....	7	5
Other service workers.....	4	6
Farm owners, tenants, and laborers.....	8	3
Laborers, except farm.....	1	5
Total.....	100	100

UNEMPLOYMENT

Out of 1,850 migrant workers, an estimated 240 workers, or 13 percent were unemployed and seeking work during the week preceding interview.

Unemployment by sex.—Among female migrants, 18 percent were unemployed, as compared with 10 percent for males.

Unemployment by race.—Muskogee is the only city among the 51 surveyed in which Negroes reported a lower rate of unemployment than white workers. Among Negroes, 8 percent were unemployed; among white workers, 14 percent were unemployed.

Unemployed by age.—The highest unemployment rate was reported by workers under 20 years. Workers 45 years and over reported about average unemployment.

Age of worker:	<i>Percent unemployed</i>
Total.....	13
Under 20 years.....	21
20 to 24 years.....	9
25 to 44 years.....	13
45 years and over.....	14

Unemployment by industry and occupation.—The least successful migrants in Muskogee were those from farming. Personal service workers, as usual, reported well above average unemployment. The most successful workers were those from manufacturing and transportation. Rates by industry follow:

Industry at last residence:	<i>Percent unemployed in Muskogee</i>
Total.....	13
No job.....	13
Agriculture, forestry, and fishing.....	32
Mining.....	(1)
Construction.....	9
Manufacturing.....	(2)
Transportation, communication, and utilities.....	(2)
Trade.....	15
Personal service.....	19
Other services.....	7

¹ Base too small for computation.
² Less than 0.5 percent.

In terms of occupations, the least successful workers were farm and domestic service workers. Operative, professional, and proprietary workers reported the lowest unemployment rates. Rates by occupation follow:

Occupation at last residence:	<i>Percent unemployed in Muskogee</i>
No job.....	13
Professional and semiprofessional.....	6
Proprietors, managers, and officials.....	5
Clerical and kindred workers.....	15
Craftsmen and kindred workers.....	10
Operatives and kindred workers.....	3
Domestic and other service workers.....	26
Farm owners, tenants, and laborers.....	32
Laborers, except farm.....	(1)
Total.....	13

¹ Base too small for computation.

HOUSING

The great majority of the migrant families occupied separate dwellings when enumerated. Less than one-quarter had doubled up with other persons. A few families lived in hotels and tourist camps.

Living arrangements	Total	Percent distribution	
		1-person families	Multi-person families
Occupying a separate dwelling.....	70	18	89
Sharing a dwelling with others.....	22	58	10
In hotels.....	6	22	(1)
In tourist and trailer camps.....	2	2	1
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The volume of migration attracted to Muskogee during the first year of the defense program was relatively large, amounting (in terms of the resident population) to a greater volume than that reported for such cities as South Bend, Portland, Maine, and San Francisco, all cities upon which the defense program had a far greater impact than upon Muskogee.

As in Oklahoma City, however, Muskogee was apparently losing population as a result of out-migration about as fast as new workers were arriving. In April 1940, the census found that 4.1 percent of Muskogee's dwellings were vacant. In October 1941, in spite of the in-migration found by this survey, the gross vacancy rate had actually increased, and stood at 5.8 percent.

DECEMBER 17, 1941.

RECENT MIGRATION INTO NASHVILLE, TENN.

A survey of migration into Nashville, Tenn., was conducted by the Work Projects Administration Division of Research during late September and early October 1941. The survey was concerned with persons who moved to Nashville from places outside of Davidson County after October 1, 1940, and who were still living in Nashville at the time of the survey. Operating on a sample basis, the survey covered the residential districts, and lower-priced hotels within the city limits. Higher-priced hotels were not surveyed and no attempt was made to gather information about persons who had left Nashville during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and September 1941 Nashville received direct defense contracts valued at approximately \$40,000,000 and equal to about one-third the 1937 value of manufactures in Davidson County. A part of this sum was allotted for the construction of aircraft production facilities, but the bulk of it was for supply items, particularly for Army clothing contracts.

As a result of this activity, Nashville was enjoying a moderate increase in industrial activity at the time of the present survey. Between September 1940 and September 1941, manufacturing employment increased 20.5 percent. This increase, however, placed Nashville in only sixty-third rank among 84 American cities. Except for a few categories of skilled workers (such as welders, sheet-metal workers, and construction workers), no labor shortages were reported in Nashville by October 1941.

NUMBER OF MIGRANTS

Approximately 2,800 families, containing 3,000 workers and a total of 6,600 persons moved to Nashville after October 1, 1940, and were still living in the city at the time of the survey. Migrants made up 4.0 percent of the cities' 1940 population.

ORIGINS

Almost two thirds of the migrant workers (63 percent) had come from Tennessee. Kentucky and Alabama residents made up the next largest group of migrants each comprising 9 percent of the migrant workers. The average distance traveled by migrants was relatively short, 85 miles; and only 6 percent had traveled 500 miles or more.

Rural places (less than 2,500 population) were the origin of two-fifths of the migrants, i. e., 19 percent had come from the open country and 21 percent from rural villages. Towns (2,500 to 25,000 population) contributed 38 percent of the migrants; small cities, 5 percent; and 17 percent had come from cities of 100,000 or more population.

Previous residence in Nashville was reported by about one-fourth (24 percent) of the migrants. Among former residents half had been absent from Nashville for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of all migrant workers was 29.6 years. Among the unattached the average age was 24.2 years, and among the family heads, 33.8 years. One migrant worker in 12 was under 20 years of age, and 1 in 10 was 45 years of age or over.

Women constituted 28 percent of all workers, a relatively high proportion. Among 17 cities recently surveyed, only one, Greenville, S. C., reported so large a proportion of women in the migrant labor force. Women workers were on the average 25.2 years of age and men were 31.3 years.

Race.—White persons predominated among the migrants, accounting for 92 percent of all migrants. Negroes made up 8 percent of all migrants and represented 1.2 percent of the 1940 nonwhite population of Nashville. The migrant rate for white persons was 5.1 percent.

Size of family.—When interviewed in Nashville about two-fifths of the families contained only one person. A distribution of the migrant families by size follows:

Size of family in Nashville:	Percent distribution
1 person.....	38
2 persons.....	21
3 and 4 persons.....	32
5 persons and over.....	9
Total.....	100

Some of the migrant families were not complete units when interviewed. About one-fifth (19 percent) of the unattached and one-tenth (11 percent) of the multiperson families had left some family member behind when they moved to Nashville. Before migration the families contained 7,400 persons; of these, 89 percent had moved to Nashville and 11 percent had remained at the families' last residence.

Month of arrival.—Half of the migrants had come to Nashville about 6 months or more before the present survey, but more had arrived during July 1941 than during any other single month.

Month of arrival:	Percent distribution
October 1940–January 1941.....	21
February–March 1941.....	18
April–May 1941.....	17
June 1941.....	10
July 1941.....	14
August 1941.....	11
September 1941 ¹	9
Total.....	100

¹ Includes a part of October.

INDUSTRY AND OCCUPATION

Migration to Nashville involved a marked industrial shift into manufacturing, which absorbed a particularly large number of former farm workers and persons who had no jobs at their last residences. Textiles, clothing, and aircraft were the principal Nashville manufacturing industries employing migrant workers.

The industrial distribution of Nashville migrants on their last full time jobs at their last place of residence, and on their jobs in Nashville, was as follows:

Industry	Percent distribution	
	At last residence	In Nashville
No job at last residence ¹	20	..
Unemployed in Nashville.....	--	6
Agriculture, forestry, and fishing.....	19	(²)
Mining.....	1	(²)
Construction.....	6	7
Manufacturing:		
Apparel and other fabricated textile products and textile mill products.....	9	13
Aircraft and parts.....	2	8
Other.....	7	19
Transportation, communication, and utilities.....	5	8
Trade.....	15	18
Personal services.....	5	6
Other services.....	11	15
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 7 percent; unemployed, 9 percent; housewives, 2 percent; and others, 2 percent.

² Less than 0.5 percent.

The occupational distribution of migrants before and after migration was as follows:

Occupation	Percent distribution	
	At last residence	In Nashville
No job at last residence.....	20	.....
Unemployed in Nashville.....		6
Professional and semiprofessional.....	5	6
Proprietors, managers, and officials.....	6	5
Clerical, sales, and kindred workers.....	12	16
Craftsmen, foremen, and kindred workers.....	13	19
Operatives and kindred workers.....	15	30
Domestic service workers.....	4	3
Other service workers.....	4	7
Farm owners, tenants, and laborers.....	19	(1)
Laborers, except farm.....	2	8
Total.....	100	100

¹ Less than 0.5 percent.

Nashville drew only one-third of its migrant workers from among the skilled and semiskilled but it provided almost half of the migrant workers with skilled and semiskilled jobs. A great part of these new craftsmen and operatives were recruited from the ranks of farm workers and students.

UNEMPLOYMENT

Of the 3,000 migrant workers, about 180, or 6 percent were unemployed and seeking work at the time of this survey. Unemployment rates for other recently surveyed cities range from 3 percent in Baltimore, Md., to 17 percent in Fort Smith, Ark.

Unemployment by sex.—Women migrant workers in Nashville reported an unemployment rate of 9 percent, as compared with 4 percent for men.

Unemployment by race.—Negro migrants reported an unemployment rate of 22 percent, as compared with 4 percent for white workers.

Unemployment by age.—The youngest and the oldest migrant workers reported the highest unemployment rates. Of those under 20 years of age 14 percent were employed and among those 45 years of age and over 11 percent were unemployed. In the groups aged 20–24 and 25–44 years 4 percent were unemployed.

Unemployment by size of place of origin.—Migrants from large cities (over 100,000 population) reported three times the unemployment rates of other workers.

As the size of place of origin decreased, unemployment decreased consistently, and the lowest rate (3 percent) was reported for migrants from the open country.

Size of place of origin:	Percent unemployed in Nashville
Open country.....	3
Rural villages (less than 2,500).....	4
Towns (2,500 to 25,000).....	5
Small cities (25,000 to 100,000).....	(1)
Large cities (over 100,000).....	15
Total.....	6

¹ Base too small for computation.

Unemployment by month of arrival.—There were no great differences in the unemployment rates of workers arriving in Nashville at different periods during the year.

Month of arrival:	Percent unemployed in Nashville
October 1940–March 1941.....	4
April–May 1941.....	3
June–July 1941.....	8
August 1941.....	7
September 1941 ¹	7
Total.....	6

¹ Includes a part of October.

Unemployment by industry and occupation.—Except for the workers connected with personal service industries at their last place of residence, no industry group reported excessive unemployment in Nashville. Particularly low unemployment was reported among agricultural, mining, transportation, and construction workers. Workers who hold no job at their last residence also showed lower than the average rate of unemployment in Nashville. Unemployment rates by industry at last residence follow:

Industry at last residence:	<i>Percent unemployed in Nashville</i>
No job.....	3
Agriculture, forestry, and fishing.....	(1)
Mining.....	(1)
Construction.....	5
Manufacturing.....	9
Transportation, communication, and utilities.....	(1)
Trade.....	6
Personal services.....	30
Other services.....	8
Total.....	6

¹ Less than 0.5 percent.

In terms of occupation, the highest unemployment rate was reported by other service workers (i. e., such workers as practical nurses, barbers, beauticians, waiters, waitresses, janitors, charwomen, etc., and protective service workers). Unemployment among operatives was somewhat above average, among craftsmen it was about average, and among the white-collar groups it was very slight. Unemployment rates according to last occupation were as follows:

Occupation at last residence:	<i>Percent unemployed in Nashville</i>
No job.....	3
Professional, proprietary, and clerical.....	1
Craftsmen, foremen, and kindred workers.....	7
Operatives and kindred workers.....	11
Domestic service workers.....	(1)
Other service workers.....	24
Farm owners, tenants, and laborers.....	(2)
Laborers except farm.....	(1)
Total.....	6

¹ Base too small for computation.

² Less than 0.5 percent.

HOUSING

Over half of the migrant families were occupying an entire dwelling unit when interviewed in Nashville. Only a very few were living in hotels or in trailer or tourist camps.

Living arrangements	Total	1-person families	Multi-person families
Occupying separate dwelling.....	60	14	88
Sharing a dwelling with others.....	39	84	12
In hotels.....	1	2	(1)
In trailer or tourist camps.....	(1)	-----	(1)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of its population, Nashville received a relatively large influx of migrants during the first year of the defense program. Its migrant rate was somewhat higher than the rates reported for Baltimore and Indianapolis, where defense activity is considerably greater. Migrants seeking work in Nashville have been generally successful, since few were found to be unemployed at the time of this survey.

FEBRUARY 12, 1942.

RECENT MIGRATION INTO NEWBURGH, N. Y.

A survey of migration into Newburgh, N. Y. was conducted by the Works Projects Administration Division of Research during the early part of November 1941. The survey was concerned with civilians who moved to Newburgh from places outside of Orange County after October 1, 1940, and who were still living there at the time of this survey. Operating on a sample basis the survey covered the residential districts, and the lower-priced hotels within the corporate limits of the city. Higher-priced hotels were not covered and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941 Orange County received over \$2,500,000 in direct defense contracts. Defense contracts were equal, however, to only about one-sixteenth of the 1937 product value of manufactures in the county. At the time of this survey a considerable number of construction workers were leaving Newburgh as a result of completion of work on the aqueduct for the New York City water system. No labor shortages were reported in the local industries of Newburgh during the survey period.

NUMBER OF MIGRANTS

An estimated 390 families, containing 430 workers and a total of 900 persons who were living within the corporate limits of Newburgh at the time of this survey had moved to the city after October 1, 1940. Migrants made up a group equal to 2.9 percent of the city's population in 1940.

OPIGINS

New York was the most important source of migrant workers, contributing 66 percent. New Jersey was the second most important source with 9 percent, and Pennsylvania was third with 5 percent. The average distance traveled by migrants was 70 miles, and only 8 percent had traveled 500 miles or more.

Large cities (100,000 population and over) were the former residence of 52 percent of the migrants. Twenty percent came from towns (2,500 to 25,000 population) and 19 percent came from small cities (25,000 to 100,000 population). Migrants from rural places made up 9 percent of the workers; i. e., 3 percent came from open country and 6 percent from rural villages.

Returning Newburgh residents comprised 23 percent of the migrant families. About half of these former residents had been absent from the city for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 33.9 years. In one-person families the average age was 32.5 years and for heads of multi-person families it was 35.4 years. Only 4 percent of the workers were under 20 years of age but 17 percent were 45 years of age or over.

Women workers comprised a relatively high proportion, 28 percent, of the migrants. The average age of women workers was 27.7 years as compared with 35.2 years for men.

Race.—Negroes comprised 4 percent of the migrants.

Size of family.—The average size of migrant families was 2.3 persons. Over one-third of the families were composed of one person.

Size of family in Newburgh:	Percent distribution
1 person.....	37
2 persons.....	22
3 and 4 persons.....	34
5 persons or over.....	7
Total.....	100

A number of those families were not complete when interviewed; 25 percent of the one-person families and 12 percent of the multi-person families had left a spouse or dependent children behind when they moved to Newburgh. Before migration the families had contained 1,100 persons, of whom 87 percent had migrated and 13 percent had remained behind.

Month of arrival.—Two-thirds of the migrants arrived in Newburgh during the 6 months preceding interview.

Month of arrival:	Percent distribution
October 1940 to May 1941.....	34
June to July 1941.....	23
August to September 1941.....	26
October 1941.....	13
November 1941.....	4
Total.....	100

OCCUPATION AND INDUSTRY

Manufacturing employment among migrants increased from 24 percent before migration to 33 percent after migration. The major manufacturing industries employing migrants in Newburgh were textile mill products, and apparel and other fabricated textile products. Only 3 percent of the workers were in agriculture at last residence, but 26 percent were engaged in trade. The industry of the last full-time jobs of migrant workers and their jobs in Newburgh are shown below:

Industry	Percent distribution	
	At last residence	In Newburgh
No job at last residence ¹	10	9
Unemployed in Newburgh.....		
Agriculture, forestry, and fishing.....	3	(2)
Mining.....	1	(2)
Construction.....	9	10
Manufacturing:		
Textile mill products.....	8	11
Apparel and other fabricated textile products.....	6	8
Other.....	10	14
Transportation, communication, and utilities.....	7	8
Trade.....	26	25
Personal services.....	8	7
Other services.....	12	8
Total.....	100	100

¹ The status of these workers at last residence was: students 4 percent; housewives 3 percent; unemployment 2 percent; and others 1 percent.

² Less than 0.5 percent.

Two-fifths of the workers were engaged in white-collar occupations at their last residence and one-third were in the skilled and semiskilled categories. In Newburgh the proportion of white-collar groups increased only slightly, but that of the craftsmen and operatives increased to constitute two-fifths of the migrants. Laborers comprised only a small proportion of the migrant workers.

Occupation	Percent distribution	
	At last residence	In Newburgh
No job at last residence.....	10	9
Unemployed in Newburgh.....		
Professional and semiprofessional.....	11	11
Proprietors, managers, and officials.....	15	15
Clerical and kindred workers.....	14	13
Craftsmen, foremen, and kindred workers.....	15	16
Operatives and kindred workers.....	19	21
Domestic service workers.....	5	4
Other service workers.....	6	8
Farm owner, tenants, and laborers.....	3	(1)
Laborers other than farm.....	2	3
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Of the estimated 430 migrant workers in Newburgh, 40 or 9 percent were unemployed and seeking work during the calendar week preceeding interview.

Unemployment by sex.—Unemployment among women workers was more than twice as heavy as among men; 16 percent of the women and 7 percent of the men were unemployed.

Unemployment by race.—One-fourth (25 percent) of the Negro workers, but only 8 percent of the white workers were unemployed in Newburgh.

Unemployment by age.—The youngest workers had the highest unemployment rate in Newburgh, and the oldest workers also reported very high unemployment.

Age of workers:	Percent unemployed in Newburgh
Total.....	9
Under 20 years.....	33
20 to 24 years.....	12
25 to 44 years.....	4
45 years or more.....	22

Unemployment by month of arrival.—Workers arriving during the first full month prior to interview had the highest unemployment rate in Newburgh.

Month of arrival:	Percent unemployed in Newburgh
Total.....	9
October 1940 to May 1941.....	9
June to July 1941.....	13
August to September 1941.....	4
October 1941.....	19
November 1941.....	(1)

¹ Base too small for computation.

UNEMPLOYMENT BY OCCUPATION AND INDUSTRY

Workers from personal service had the highest unemployment rate. There were few unemployed manufacturing employees among the migrants.

Industry at last residence:	Percent unemployed in Newburgh
Total.....	9
No job.....	10
Agriculture, forestry, and fishing.....	(1)
Mining.....	(1)
Construction.....	5
Manufacturing.....	4
Transportation, communication, and utilities.....	(1)
Trade.....	(2)
Personal services.....	38
Other services.....	5

¹ Base too small for computation.

² Less than 0.5 percent.

In terms of occupations, domestic service workers showed by far the highest unemployment rate. Semiskilled workers, clerks and kindred workers, and those who had no job at their last residence had slightly above average unemployment. There were only a few unemployed skilled workers among the migrants.

Occupation at last residence:	Percent unemployed in Newburgh
Total.....	9
No job.....	10
Professional and semiprofessional.....	5
Proprietors, managers, and officials.....	3
Clerks and kindred workers.....	10
Craftsmen, foremen, and kindred workers.....	(1)
Operatives and kindred workers.....	11
Domestic service workers.....	30
Other service workers.....	8
Farm owners, managers, and laborers.....	(2)
Laborers other than farm.....	(2)

¹ Less than 0.5 percent.

² Base too small for computation.

HOUSING

Less than half of the migrant families were living in a separate dwelling unit; one-half were sharing a dwelling with other persons and a few unattached migrants were living in hotels.

Living arrangements	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	47	7	72
Sharing a dwelling.....	50	86	28
In hotels.....	3	7	-----
Total.....	100	100	100

CONCLUSIONS

The volume of recent migration into Newburgh was relatively small. Only 9 of the 51 cities covered in this survey showed a lower migrant rate. Migrants in Newburgh were less successful in obtaining employment than those in most of the small cities covered by this survey.

FEBRUARY 3, 1942.

RECENT MIGRATION INTO OAKLAND, CALIF., AND ENVIRONS

A survey of migration into Oakland, Calif., and five neighboring cities¹ was conducted by the Work Projects Administration Division of Research during November and December 1941. The survey was concerned with civilians who moved to the cities from places outside of Alameda County after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered residential districts, rooming-house districts, trailer camps, defense housing projects, and lower priced hotels within the corporate limits of the survey cities. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the cities during the period covered by the survey.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941 Alameda County received prime defense contracts valued at approximately \$125,000,000, allotted mainly for the construction and expansion of shipyards, for shipbuilding, and for army and navy air and supply bases. It is estimated by the California State Employment Service that approximately 10,000 new jobs have been created in the survey area since the beginning of the defense program.

NUMBER OF MIGRANTS

Approximately 11,600 families, containing 11,500 workers and 29,700 persons, living in Oakland and the 5 neighboring cities at the time of this survey had moved to Alameda county after October 1940. The migrants made up a group equal to 6.6 percent of the 1940 population of the cities.

ORIGIN

Nearly two-thirds of the migrants originated in the three Pacific States. California was the principal source of migrants, contributing 58 percent. The average distance traveled by migrants was 350 miles, and 40 percent had traveled 500 miles or more.

¹ These 5 cities are Alameda, Berkeley, Piedmont, San Leandro, and Emeryville.

The following table shows the migrants' origins according to census geographical regions.

State and region of origin:	Percent distribution
New England.....	1
Middle Atlantic.....	2
East North Central.....	4
West North Central.....	10
South Atlantic.....	1
East South Central.....	2
West South Central.....	8
Mountain.....	9
Pacific:	
Washington.....	3
Oregon.....	2
California.....	58
Total.....	100

Rural places were the origin of 17 percent of the migrants; i. e. 1 percent came from open country, and 16 percent came from rural villages. Towns (2,500 to 25,000 population) contributed 33 percent; small cities, 16 percent; and cities of over 100,000 population, 34 percent.

Former residents of Alameda County made up 22 percent of the migrant families. About half of these returning residents had been absent for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 31.7 years. The average age of one-person families was 27.9 years, and for heads of multiperson families, 33.6 years. Workers under 20 years made up 6 percent of the migrant workers, and workers 45 years of age or over made up 15 percent.

Women workers comprised 16 percent of the migrant labor force. The average age of female workers was 29.5 years, as compared with 32.0 years for males.

Race.—Three percent of the migrants were Negroes, and "other" races contributed less than one-half of 1 percent.

Size of family.—Migrant families in the Oakland area were relatively large, averaging 2.6 persons per family.

Average size of family in Oakland and environs:	Percent distribution
1 person.....	31
2 persons.....	25
3 and 4 persons.....	35
5 persons or more.....	9
Total.....	100

Most of these families were complete when interviewed; only 10 percent of the 1-person families and 2 percent of the multiperson families had left a spouse or dependent children at their last residences. The families contained 30,400 persons of whom 98 percent had migrated to Oakland and 2 percent had stayed at the families' last residences.

MONTH OF ARRIVAL

About half of the workers arrived in Oakland during September or later.

Month of arrival:	Percent distribution
October 1940–March 1941.....	14
April–May 1941.....	11
June–July 1941.....	15
August 1941.....	11
September 1941.....	17
October 1941.....	13
November–December 1941.....	19
Total.....	100

INDUSTRY AND OCCUPATION

No one industry contributed a preponderant share of the workers migrating to Oakland, but a sizeable contribution was made by each of these sources: Construction, manufacturing, trade "other" services, and new workers. Few workers were drawn from farming. In the Oakland area, manufacturing, and particularly shipbuilding, was the principal employer of migrant workers, with relatively large numbers also engaged in construction, trade, and "other" services.

The following table shows the industries of the migrants on their last full-time jobs at last residence and on their jobs when interviewed in Oakland.

Industry	Percent distribution	
	At last residence	In Oakland
No job at last residence ¹	12	7
Unemployed in Oakland.....		
Agriculture, forestry, and fishing.....	7	(?)
Mining.....	2	(?)
Construction.....	14	11
Manufacturing:		
Transportation equipment.....	8	20
Other.....	14	19
Transportation, communication, and utilities.....	6	4
Trade.....	16	17
Personal service.....	4	5
Other services.....	17	17
Total.....	100	100

¹ The status of these workers at last residence was: Students, 8 percent; housewives, 2 percent; unemployed, 2 percent; and others, less than 0.5 percent.

² Less than 0.5 percent.

In terms of occupations, skilled and semiskilled workers were predominant. About two-fifths held skilled and semiskilled jobs before migration, and about one-half in the Oakland area. There were relatively few clerical workers or laborers among the migrants.

Occupations at last residence and in Oakland follow:

Occupations	Percent distribution	
	At last residence	In Oakland
No job at last residence.....	12	7
Unemployed in Oakland.....		
Professional and semiprofessional.....	9	9
Proprietors, managers, and officials.....	7	6
Clerical and kindred workers.....	10	11
Craftsmen and kindred workers.....	22	24
Operatives and kindred workers.....	17	23
Domestic service workers.....	3	4
Other service workers.....	5	5
Farm owners, tenants, and laborers.....	6	(¹)
Laborers other than farm.....	9	11
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Seven percent of the migrant workers, or an estimated 810 workers, were unemployed and seeking work during the calendar week preceding interview.

Unemployment by sex.—Women migrant workers had three times as much unemployment as men; 5 percent of the men and 15 percent of the women were unemployed.

Unemployment by age.—There was little variation in unemployment according to age. Unemployment rates by workers by age are given below:

	<i>Percent un- employed</i>
Age of workers:	
Under 20 years.....	10
20 to 24 years.....	7
25-44 years.....	7
45 years or more.....	7
Total.....	7

Unemployment by month of arrival.—Most recently arrived workers had the highest unemployment rates in the Oakland area.

	<i>Percent un- employed in Oakland</i>
Month of arrival:	
October 1940-March 1941.....	3
April-May 1941.....	(1)
June-July 1941.....	(1)
August 1941.....	7
September 1941.....	6
October 1941.....	6
November-December 1941.....	20
Total.....	7

¹ Less than 0.5 percent.

Unemployment by industry and occupation.—Personal service workers and workers engaged in agriculture, forestry, and fishing at their last residences had the highest unemployment rates in Oakland. Workers in manufacturing, construction, and transportation, showed well below average unemployment rates. Rates by industry follow:

	<i>Percent unemployed in Oakland</i>
Industry at last residence:	
Total.....	7
No job.....	7
Agriculture, forestry, and fishing.....	12
Mining.....	(1)
Construction.....	4
Manufacturing.....	3
Transportation, communication, and utilities.....	1
Trade.....	7
Personal service.....	14
Other services.....	7

¹ Base too small for computation.

There were few unemployed semiskilled or skilled migrant workers in the Oakland area. Farm workers, unskilled industrial laborers, and clerks were the least successful in obtaining jobs. Unemployment rates by occupation follow:

	<i>Percent unemployed in Oakland</i>
Occupation at last residence:	
Total.....	7
No job.....	7
Professional and semiprofessional.....	6
Proprietors, managers, and officials.....	4
Clerical and kindred workers.....	10
Craftsmen and kindred workers.....	5
Operatives and kindred workers.....	1
Domestic service workers.....	(1)
Other service workers.....	8
Farm owners, tenants, and laborers.....	14
Laborers other than farm.....	13

¹ Base too small for computation.

HOUSING

The majority of the migrant families in the Oakland area were occupying separate living quarters when interviewed. About one-third had doubled up with other families, and a few lived in hotels and trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying separate dwelling.....	57	13	77
Sharing a dwelling.....	36	71	21
In hotels.....	5	16	(1)
In tourist or trailer camps.....	2	(1)	2
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of its population, the Oakland area has recently attracted a large volume of in-migration. Its migration rate, approximately equal to the rates found in Bridgeport, Conn., and in Los Angeles, was exceeded by less than one-third of the 51 cities included in this survey. In absolute numbers, too, the volume was large, running substantially higher than the volume of migrants attracted to the city of San Francisco.

Oakland migrants were more successful in finding jobs than migrants to any other of the six survey areas on the west coast.

DECEMBER 26, 1941.

RECENT MIGRATION INTO OKLAHOMA CITY, OKLA.

A survey of migration into Oklahoma City, Okla., was conducted by the Work Projects Administration Division of Research during September 1941. The survey was concerned with civilians who moved to Oklahoma City from places outside of Oklahoma County after October 1, 1940, and who were still living there in September 1941. Operating on a sample basis, the survey covered residential districts, rooming-house districts, lower-priced hotels, and tourist and trailer camps within the corporate limits of the city. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left the city during the period covered by the survey.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941, Oklahoma County received prime defense contracts valued at about \$25,000,000, and equal to one-third the 1937 value of manufactures in the county. Practically the entire sum was allotted for the construction of facilities, and principally for an air corps base and supply depot. Between September 1940 and September 1941, manufacturing employment in Oklahoma City increased 22.7 percent, giving the city only fifty-second rank in rate of increase among 84 American cities.

NUMBER OF MIGRANTS

Approximately 5,000 families living in Oklahoma City at the time of this survey had moved to the city after October 1, 1940. These families contained 5,000 workers and a total of 12,900 persons. Migrants made up a group equal to 6.3 percent of Oklahoma City's 1940 population.

ORIGINS

Oklahoma was the chief source of Oklahoma City migrants, contributing 60 percent. Texas was second with 16 percent, and Kansas third with 4 percent. Three percent had come from Missouri, 3 percent from Arkansas, and 2 percent from California. The average distance traveled by the migrants was 120 miles, and 11 percent had traveled 500 miles or more.

Rural places were the origin of 27 percent of the families, i. e., 5 percent came from open country and 22 percent from rural villages. Towns (2,500 to 25,000 population) contributed 41 percent; small cities, 9 percent; and cities of over 100,000 population, 23 percent.

A relatively large proportion (41 percent) of the families had formerly lived in Oklahoma City. Half of these families had been absent from the city for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of Oklahoma City migrant workers was 30.5 years. In one-person families the average was 24.0 years, and for heads of multi-person families, 32.8 years. Eight percent of all workers were under 20 years, and 13 percent were 45 or over.

Women workers made up 22 percent of all migrant workers. The average age of women workers was 24.9 years, as compared with 31.5 years for men.

Race.—One percent of the migrants were Negroes, and less than one-half of 1 percent were Indian.

Size of family.—Migrant families in Oklahoma City were relatively large, averaging 2.6 persons per family.

Size of family in Oklahoma City:	Percent distribution
1 person.....	28
2 persons.....	27
3 and 4 persons.....	36
5 persons and over.....	9
Total.....	100

Most of these families were complete when interviewed. Only 10 percent of the 1-person families and 2 percent of the multiperson families had left a spouse or dependent children behind when they moved to Oklahoma City. Before migration, the families had contained 13,300 persons. Of these, 97 percent had immigrated and 3 percent had remained at the migrants' places of origin.

Month of arrival.—Half of the migrants arrived in Oklahoma City about 4 months or more before the present survey.

Month of arrival:	Percent distribution
October 1940 to January 1941.....	20
February to March 1941.....	12
April to May 1941.....	16
June to July 1941.....	27
August 1941.....	18
September 1941.....	7
Total.....	100

INDUSTRY AND OCCUPATION

The two chief industries among the migrants were trade and "other" services, which occupied about two-fifths of the workers both at last residence and in Oklahoma City. The proportion of migrants who had left jobs in agriculture was not particularly large, and manufacturing was relatively unimportant both before and after migration. A relatively large proportion of the workers held no jobs at their last residence.

The industrial distribution of the workers according to their last full-time jobs at last residence and their jobs when interviewed in Oklahoma City was as follows:

Industry	Percent distribution	
	At last residence	In Oklahoma City
No job at last residence ¹	17	—
Unemployed in Oklahoma City.....	—	15
Agriculture, forestry, and fishing.....	9	(²) 5
Mining.....	6	5
Construction.....	8	9
Manufacturing.....	11	15
Transportation, communication, and utilities.....	6	7
Trade.....	23	24
Personal services.....	3	6
Other services.....	17	19
Total.....	100	100

¹ The status of these workers at last residence was: Students, 7 percent; unemployed, 4 percent; housewives, 3 percent; and others, 3 percent.

² Less than 0.5 percent.

Oklahoma migrants were principally engaged in clerical and operative occupations before and after migration. The proportion of skilled workers was relatively small, and there were few migrants working as laborers in Oklahoma City. The principal occupational shifts were from farm work at last residence to operative jobs, and from "no job" at last residence to clerical work in Oklahoma City.

The occupational distribution of the migrants at last residence and in Oklahoma City follows:

Occupation	Percent distribution	
	At last residence	In Oklahoma City
No job at last residence.....	17	-----
Unemployed in Oklahoma City.....	-----	15
Professional and semiprofessional.....	5	6
Proprietors, managers, and officials.....	12	10
Clerical and kindred workers.....	19	21
Craftsmen and kindred workers.....	10	11
Operatives and kindred workers.....	18	21
Domestic service.....	2	3
Other service workers.....	4	7
Farm owners, tenants, and laborers.....	9	(1)
Laborers, except farm.....	4	6
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 5,000 migrant workers in Oklahoma City, an estimated 750 workers, or 15 percent, were unemployed and seeking work during the calendar week preceding this survey. In other recently surveyed cities, migrant unemployment has ranged from 3 to 17 percent.

Unemployment by sex.—Among female migrant workers, 29 percent were unemployed, as compared with 11 percent among males.

Unemployment by race.—Among Negro migrant workers, 35 percent were unemployed, as compared with 15 percent for white workers.

Unemployment by age.—The highest unemployment rates were reported by workers under 20 years and those 45 years and over:

Age of worker:	Percent unemployed
Under 20 years.....	30
20 to 24 years.....	16
25 to 44 years.....	12
45 years and over.....	20
Total.....	15

Unemployment by month of arrival.—More than two-fifths of the workers who arrived in Oklahoma City immediately preceding this survey were unemployed.

Month of arrival:	Percent distribution
October 1940-January 1941.....	18
February-May 1941.....	7
June-July 1941.....	12
August 1941.....	20
September 1941.....	42
Total.....	15

UNEMPLOYMENT BY INDUSTRY AND OCCUPATION

Highest unemployment rates were reported by workers who held jobs in manufacturing and personal service industries at their last residence. Rates well below average were reported by workers from mining (i. e., oil-field workers), construction and transportation. Unemployment rates by industry follow:

Industry at last residence:	Percent un- employed in Oklahoma City
No job.....	18
Agriculture, forestry, and fishing.....	14
Mining.....	(¹)
¹ Less than 0.5 per cent.	
Construction.....	10
Manufacturing.....	29
Transportation, communication, and utilities.....	2
Trade.....	15
Personal services.....	27
Other services.....	13
Total.....	15

In terms of occupation, domestic and other service workers and nonfarm laborers had fared worst in Oklahoma City. Farm workers and operatives reported about average unemployment, and the lowest rates were reported by clerks and craftsmen. Rates by occupation follow:

Occupation at last residence:	Percent un- employed in Oklahoma City
No job.....	18
Professional and proprietary workers.....	14
Clerical and kindred workers.....	9
Craftsmen and kindred workers.....	7
Operatives and kindred workers.....	15
Domestic service workers.....	40
Other service workers.....	36
Farm owners, tenants, and laborers.....	14
Laborers, except farm.....	30
Total.....	15

HOUSING

The great majority of the migrants found separate living quarters in Oklahoma City:

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling unit.....	67	16	88
Sharing a dwelling with others.....	29	74	11
In hotels.....	3	10	(¹)
In tourist and trailer camps.....	1	-----	1
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

Oklahoma City attracted a large flow of migrants during the period covered by the present survey. In terms of its population, it received roughly twice the volume of in-migration attracted to such important defense centers as Baltimore and Indianapolis, and about the same volume of Bridgeport, Conn., one of the most active defense cities in the Nation.

There is evidence, however, that Oklahoma City's net population gain was considerably less than its gain from in-migration during this period. In April 1940, the census found that 7.7 percent of the dwelling units in Oklahoma City

were vacant. But in December 1941, the gross vacancy rate was still high, standing at about 6.0 percent, according to preliminary results of a Work Projects Administration survey. Oklahoma City residents were apparently departing from the city about as rapidly as migrants were arriving.

NOVEMBER 25, 1941.

RECENT MIGRATION INTO PHILADELPHIA

A survey of migration into Philadelphia was conducted by the Work Projects Administration Division of Research during September 1941. The survey was concerned with persons who moved to Philadelphia from places outside of Philadelphia County after October 1, 1940, and who were still living in the survey area in September 1941. Operating on a sample basis, the survey covered the residential districts, the rooming-house districts, and hotels within the Philadelphia City limits. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who had left Philadelphia during the survey period.

INDUSTRIAL ACTIVITY

The Philadelphia industrial area, including Camden, N. J., ranks second in the United States in the value of direct defense contracts received, with total awards of about \$1,200,000,000 between June 1940 and September 1941. Philadelphia County itself has received about \$500,000,000 of this sum, and ranks among the top half-a-dozen counties in the United States in terms of total defense contracts.

Philadelphia assumes a less spectacular position, however, when the value of its defense contracts is compared with the value of its manufactures in 1937. In San Diego, for example, the value of defense contracts to date is about 12 times greater than the value of 1937 manufactures, and in Wichita 6 times greater. But in Philadelphia the value of defense contracts to date is equal to only about one-third the value of manufactures in 1937. Philadelphia's index of manufacturing employment rose 25.9 percent between August 1940 and 1941, but this increase put Philadelphia in only fifty-fifth place among 84 American cities.

A year ago, when the defense program was just getting under way, the Philadelphia labor market contained a huge backlog of unemployed workers. Since then, defense activity has, of course, drawn a great number of the unemployed back into private industry. But in September 1941 (when the present survey was conducted) there was still an abnormally large group of unemployed in Philadelphia, estimated to number about 80,000 workers.

Under these conditions, Philadelphia has not to date drawn extensively upon other labor markets for workers.

NUMBER OF MIGRANTS

Approximately 10,900 families living in Philadelphia in September 1941 had moved to the city after October 1, 1940. These families contained 12,900 workers and 19,800 persons. Migrants made up a group equal to 1.0 percent of Philadelphia's 1940 population. In terms of its population, Philadelphia has received less than one-third as much migration as Baltimore, and only one-twentieth as much as Wichita, Kans.

ORIGINS

More than half (54 percent) of the Philadelphia migrants originated in the State of Pennsylvania. New York was second with 14 percent, New Jersey third with 9 percent, and Maryland fourth with 3 percent. The average distance traveled was only 80 miles. Ten percent of the migrants had traveled more than 500 miles, and a small proportion—Canadians and European refugees—had come from foreign countries.

Rural places—i. e., places of less than 2,500 population—were the source of 21 percent of the Philadelphia migrants; 5 percent had come from the open country and 16 percent from rural villages. Towns (2,500 to 25,000 population) contributed 32 percent, small cities, 17 percent, and 30 percent came from cities of over 100,000 population.

The majority of the migrants had not lived in Philadelphia before; 75 percent reported no previous Philadelphia residence. Among the 25 percent who formerly lived in Philadelphia, half had been absent for about 7 years.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 29.7 years. In one-person families, the average was 26.5 years; and for heads of multiperson families, 33.7 years. Workers under 20 years made up 8 percent of all workers, and those over 45 made up 11 percent.

Women workers made up 22 percent of all the Philadelphia migrant workers. The average age of the women workers was 24.1 years, as compared with the 31 years for the men.

Race.—Negroes constituted 6 percent of the Philadelphia migrants. The migrant rate (based upon Philadelphia's 1940 population) was 0.4 percent for nonwhite persons, as against 1.1 percent for white persons.

Size of family.—The majority of the Philadelphia migrants consisted of only one person when interviewed in Philadelphia:

Size of family in Philadelphia:	Percent distribution
1 person.....	60
2 persons.....	19
3 and 4 persons.....	15
5 persons or more.....	6
Total.....	100

A substantial number of these families, however, were not complete when interviewed; 27 percent of the one-person families and 6 percent of the multiperson families had left a spouse or dependent children behind when they moved to Philadelphia. Before migration the families contained 22,830 persons. Of these 19,800 had migrated and 3,030 had remained at the migrants' place of origin.

Months lived in county.—A distribution of the migrant workers according to the month of their arrival in Philadelphia was as follows:

Month of arrival:	Percent of Philadelphia migrants
October 1940 to January 1941.....	22
February to May 1941.....	27
June to July 1941.....	20
August 1941.....	11
September 1941.....	20
Total.....	100

INDUSTRY AND OCCUPATION

The industrial distribution of Philadelphia migrants on their last full-time job at their last place of residence, and on their jobs when interviewed in Philadelphia, was as follows:

Industry	Percent distribution	
	At last residence	In Philadelphia
No job at last residence ¹	18	8
Unemployed in Philadelphia.....		
Agriculture, forestry, and fishing.....	2	(²)
Mining.....	6	
Construction.....	11	8
Manufacturing:		
Machinery.....	3	10
Transportation equipment.....	4	16
Other.....	16	18
Transportation, communication, and utilities.....	5	4
Trade.....	15	14
Personal services.....	6	5
Other services.....	14	17
Total.....	100	100

¹ The status of these workers at last residence was: students, 11 percent; housewives, 1 percent; and unemployed 6 percent.

² Less than 0.5 percent.

Before migration, the Philadelphia migrants were principally engaged in manufacturing, trade, and other service industries, or were students outside the labor market. A few were minors, but only a very few were farmers. After migration to Philadelphia, the proportion engaged in manufacturing nearly doubled, with especially marked increases for those engaged in the manufacture of transportation equipment (e. g., shipbuilding) and machinery. Nearly one-third of the migrants were engaged in the trade and other service industries in Philadelphia.

The occupational distribution of the workers at last residence and in Philadelphia was as follows:

Occupation	Percent distribution	
	At last residence	In Philadelphia
No job at last residence.....	18	.....
Unemployed in Philadelphia.....	.....	8
Professional and semiprofessional.....	6	7
Proprietors, managers, and officials.....	8	8
Clerical and kindred workers.....	15	14
Craftsmen, foremen, and kindred workers.....	22	27
Operatives and kindred workers.....	19	24
Domestic service workers.....	3	1
Other service workers.....	6	6
Farm owners, tenants, and laborers.....	1	.....
Laborers, except farm.....	2	5
Total.....	100	100

The movement of workers into Philadelphia was principally a movement of clerks, craftsmen, and operatives. These three occupations engaged 56 percent of the migrant workers before migration, and 65 percent in Philadelphia. Few workers were drawn from the unskilled categories and few were working at unskilled jobs in Philadelphia.

UNEMPLOYMENT

Out of 12,900 migrant workers in Philadelphia, 1,080 or 8 percent were unemployed and seeking work during the calendar week prior to interview. The comparable unemployment rates for other recently surveyed cities are: Baltimore, 3 percent; Greenville, S. C., 9 percent, and Wichita, Kans., 13 percent.

Unemployment by sex.—Women workers among the migrants reported more than five times the unemployment rate of the men. Among the women, 23 percent were unemployed; among the men, 4 percent.

Unemployment by race.—Negro migrants reported about 7 times the unemployment rate of white workers. Among Negroes, 46 percent were unemployed as against 7 percent for white persons.

Unemployment by age.—The most successful Philadelphia migrants were those aged 20 to 24 years and, peculiarly enough, those over 45; and the least successful were the workers under 20. Workers aged 25 to 44 reported about the average rate of unemployment. Unemployment rates by age were as follows:

Age of workers:	Percent unemployed in Philadelphia
Total.....	8
Under 20 years.....	29
20 to 24 years.....	3
25 to 29 years.....	9
30 to 34 years.....	9
35 to 44 years.....	9
45 years and over.....	1

Unemployment by distance traveled.—The workers who traveled the shortest distance reported the lowest unemployment rate, and the unemployment rate increased progressively with increased distance.

	<i>Percent un- employed in Philadelphia</i>
Distance traveled:	
Total.....	8
Less than 100 miles.....	4
100 to 199 miles.....	4
200 to 499 miles.....	16
500 miles and over.....	30
Foreign.....	33

Unemployment by month of entering county.—The highest unemployment rate was reported by the workers who had arrived in Philadelphia most recently:

	<i>Percent un- employed in Philadelphia</i>
Month of arrival:	
Total.....	8
October 1940 to January 1941.....	3
February to May 1941.....	7
June to July 1941.....	6
August 1941.....	6
September 1941.....	21

Unemployment by industry and occupation.—Particularly high unemployment rates were reported by workers engaged in agriculture, transportation, and domestic service industries at their last residence. Very low rates were reported by workers from mining, construction manufacturing, trade, and other service industries. Unemployment according to industry was as follows:

	<i>Percent un- employed in Philadelphia</i>
Industry at last residence:	
Total.....	8
No job.....	13
Agriculture, forestry, and fishing.....	31
Mining.....	2
Construction.....	5
Manufacturing.....	26
Transportation, communication, and utilities.....	4
Trade.....	35
Domestic services.....	1
Other services.....	1

In terms of occupation the highest unemployment rates were reported by workers engaged in personal service and farming occupations at last residence. The lowest rates were for craftsmen and unskilled nonfarm workers.

	<i>Percent un- employed in Philadelphia</i>
Occupation at last residence:	
Total.....	8
No job.....	13
Professional, proprietary, and clerical.....	6
Craftsmen and kindred workers.....	1
Operatives and kindred workers.....	6
Personal service workers.....	50
Other service workers.....	11
Farm owners, tenants, and laborers.....	44
Laborers, except farm.....	1

HOUSING

Only about one-third of all the migrant families were occupying a separate dwelling in Philadelphia; 57 percent were sharing a dwelling unit with other persons, and 11 percent were in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	32	8	69
Sharing a dwelling.....	57	75	30
In hotels.....	11	17	1
Total.....	100	100	100

CONCLUSION

In spite of huge defense contracts, Philadelphia attracted a relatively small number of migrant workers during the first year of the defense program. The reason is clear: At the time of the present survey, new industrial activity had not yet exhausted the supply of locally available unemployed workers, particularly unemployed unskilled workers. Unlike several of other survey cities, Philadelphia had scarcely begun to draw workers out of the agricultural labor supply; and the few migrants it did attract were principally clerks, craftsmen, and operatives from nearby urban communities.

JANUARY 20, 1942.

RECENT MIGRATION INTO PITTSBURGH, PA., AND ENVIRONS

A survey of migration into Pittsburgh, Pa., and into 53 other cities¹ in Allegheny County was completed by the Work Projects Administration, Division of Research, at the end of November 1941. The survey was concerned with civilians who had moved into the survey cities after October 1, 1940, and who were still living there at the time of the survey. Operating on a sample basis, the survey covered the residential districts, rooming-house districts, defense housing projects, trailer camps, and lower-priced hotels within the survey area. Higher-priced hotels were not surveyed, and no attempt was made to secure information about persons who left the survey cities during the period covered by the survey.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941, Allegheny County received prime defense contracts valued at about \$250,000,000. This sum was equal, however, to only about one-fifth of the county's 1937 value of manufactures, a relatively small proportion by comparison with many of the Nation's other important war-production centers.

In part because of recent technological changes in the steel industry the new defense activity created fewer jobs in the Pittsburgh area than might be supposed. Between October 1940 and October 1941, manufacturing employment in Pittsburgh increased 22.7 percent, but 50 of the 84 largest American cities showed a greater increase during the same period.

NUMBER OF MIGRANTS

An estimated 8,700 families living in Pittsburgh and its environs moved there after October 1, 1940. These families contained 17,500 persons and a total of 8,800 workers. Migrants made up a group equal to 1.6 percent of the 1940 population of these cities. The migrants were distributed as follows:

Area	Families	Workers	Persons
Pittsburgh.....	4,600	4,800	8,500
53 neighboring cities.....	4,100	4,000	9,000

The migrant rate for the city of Pittsburgh was 1.3 percent, and for the other 53 cities, 2.1 percent.

ORIGINS

Pennsylvania was the most important source of the migrants, contributing 52 percent of the total. Ohio was the second most important source, with 10 percent, followed by New York and West Virginia, each contributing 6 percent. Illinois was the origin of 3 percent of the workers and the District of Columbia contributed 2 percent. The average distance traveled by the migrant workers was 100 miles. Only a small proportion, 9 percent, traveled 500 miles or more.

¹ These cities were: (Monongahela Valley) Braddock, Chalfont, Clairton, Dravosburg, Duquesne, East Pittsburgh, East McKeesport, Edgewood, Elizabeth, Forest Hills, Glassport, Homestead, McKeesport, Munhall, North Braddock, Port Vue, Pitcairn, Rankin, Swissvale, Turtle Creek, Wall Boro, West Elizabeth, West Homestead, Whitaker, Wilmerding. (Allegheny Valley) Arnold, Aspinwall, Blawnox, Brackenridge, Cheswick, Etna, Millvale, New Kensington (includes Parnassum), Oakmont, Reserve Township, Sharpsburg, Springdale, Tarentum, Verona. (Ohio Valley) Avalon, Bellevue, Ben Avon, Ben Avon Heights, Coraopolis, Edgeworth, Emsworth, Glenfield, Haysville, Leetsdale, McKees Rocks, Osborne, Sewickley, Stowe Township. Mount Oliver is included with the city of Pittsburgh.

Rural places were the origin of 27 percent of the migrants, i. e., 3 percent came from open country and 24 percent from rural villages. Towns (2,500 to 25,000 population) were the origin of 33 percent; 15 percent came from cities of 25,000 to 100,000 population; and 25 percent came from cities of over 100,000 population.

One-fifth of the migrants had formerly been Pittsburgh residents. About half of these had been absent for 4 years before their return to the city.

CHARACTERISTICS

Sex and age.—The average age of migrant workers in Pittsburgh and environs was 28.9 years. For 1-person families the average was 27.6 years; and for heads of multiperson families, 31.6 years. Ten percent of the workers were under 20 years of age, and 10 percent were 45 years and over.

Women workers made up 17 percent of all workers. The average age of women workers was 24.0 years, as compared with 29.9 years for men.

Race.—Compared with other recently surveyed cities, Pittsburgh attracted a large proportion of Negroes; Negroes made up 8 percent of the migrants.

Size of family.—Migrant families in Pittsburgh and environs averaged 2.0 persons. In the 53 neighboring cities, migrant families contained on the average 2.2 persons, and in Pittsburgh, 1.9 persons.

Size of family in Pittsburgh and environs:	Percent distribution
1 person.....	53
2 persons.....	19
3 and 4 persons.....	22
5 persons or more.....	6
Total.....	100

Most of these families were complete when interviewed; however, 18 percent of the 1-person families and 4 percent of the multiperson families had left a spouse or dependent children at their former residences. Before migration the families contained 19,200 persons of whom 91 percent had migrated and 9 percent had stayed at the migrants' previous residences.

Month of arrival.—Almost half of the workers arrived in Pittsburgh within the 5 months immediately preceding this survey.

Month of arrival:	Percent distribution
October 1940–March 1941.....	17
April–May 1941.....	15
June–July 1941.....	20
August 1941.....	13
September 1941.....	12
October 1941.....	12
November 1941.....	11
Total.....	100

INDUSTRY AND OCCUPATION

No one industry predominated among Pittsburgh-area migrants at their previous residence. Manufacturing was the largest single industry, but it supplied only about one-fifth of the migrants. New workers, and workers from construction, transportation, trade, personal service, and "other" service industries each contributed a sizable group of migrants. Mining and agriculture were only minor sources of migrant workers. In the Pittsburgh area, manufacturing was by far the largest employer of migrant workers, followed by transportation, construction, and trade.

The following table shows the industrial distribution of the migrants on their last full-time jobs at their last residence and on their jobs when interviewed in the Pittsburgh area.

Industry	Percent distribution	
	At last residence	In Pitts- burgh and environs
No job at last residence ¹	14	9
Unemployed in Pittsburgh.....		1
Agriculture, forestry, and fishing.....	5	(²)
Mining.....	6	10
Construction.....	12	
Manufacturing:		
Iron and steel.....	8	26
Other.....	12	17
Transportation, communication, and utilities.....	10	11
Trade.....	10	10
Personal service.....	9	8
Other services.....	14	8
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 9 percent; unemployed, 3 percent; and others, 2 percent.

² Less than 0.5 percent.

Both before and after migration, Pittsburgh migrants were principally engaged as clerks, craftsmen, and operatives. The proportion of craftsmen increased slightly after migration. A relatively high proportion of the migrants held unskilled jobs in Pittsburgh.

The occupational distribution of the migrants before and after migration follows:

Occupation	Percent distribution	
	At last residence	In Pitts- burgh and environs
No job at last residence.....	14	9
Unemployed in Pittsburgh.....		10
Professional and semiprofessional.....	9	5
Proprietors, managers, and officials.....	4	14
Clerical and kindred workers.....	15	17
Craftsmen and kindred workers.....	13	15
Operatives and kindred workers.....	17	7
Domestic service workers.....	5	5
Other service workers.....	6	
Farm owners, tenants, and laborers.....	5	(¹)
Laborers, except farm.....	12	18
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 8,800 migrant workers in the Pittsburgh area, an estimated 800 workers, or 9 percent, were unemployed and seeking work during the week preceding this survey. In the city of Pittsburgh, 8 percent of the workers were unemployed, as compared with 10 percent in the other Allegheny County cities surveyed.

Unemployment by sex.—No appreciable difference in unemployment rates was reported by male and female migrants. Among males, 9 percent were unemployed, as compared with 10 percent for females.

Unemployment by race.—Negroes reported more than four times the unemployment rate of white workers. Among the Negro migrants 29 percent, and among white migrants, 7 percent, were unemployed.

Unemployment by age.—Migrant workers 45 years and over showed relatively high unemployment in the Pittsburgh area.

	<i>Percent unemployed</i>
Age of worker:	
Total.....	9
Under 20 years.....	8
20 to 24 years.....	9
25 to 44 years.....	8
45 years and over.....	16

Unemployment by month of arrival.—Workers who arrived in the Pittsburgh area shortly before the present survey reported the highest rates of unemployment:

	<i>Percent unemployed</i>
Month of arrival:	
Total.....	9
October 1940–May 1941.....	5
June–July 1941.....	6
August–September 1941.....	7
October 1941.....	21
November 1941.....	16

Unemployment by industry and occupation.—The most successful migrants in the Pittsburgh area were new workers, and workers from trade were least successful. Workers from agriculture, mining, and manufacturing reported about average unemployment. Unemployment rates by industry follow:

	<i>Percent unemployed in Pittsburgh area</i>
Industry at last residence:	
Total.....	9
No job.....	4
Agriculture, forestry, and fishing.....	7
Mining.....	8
Construction.....	11
Manufacturing.....	9
Transportation, communication, and utilities.....	10
Trade.....	16
Personal service.....	7
Other services.....	10

In terms of occupations, craftsmen reported unemployment well below average in the Pittsburgh area, and white-collar and semiskilled workers were slightly below average. Nonfarm laborers reported the highest unemployment rate. Rates by occupation follow:

	<i>Percent unemployed in Pittsburgh area</i>
Occupation at last residence:	
Total.....	9
No job.....	4
Professional and semiprofessional.....	7
Proprietors, managers, and officials.....	7
Clerical and kindred workers.....	9
Craftsmen and kindred workers.....	5
Operatives and kindred workers.....	7
Domestic and other service workers.....	18
Farm owners, tenants, and laborers.....	7
Laborers, except farm.....	26

HOUSING

The majority of the migrant families in the Pittsburgh area were doubled up with other families when interviewed. Less than one-third occupied separate living quarters. An exceptionally large number, most of them in the city of Pittsburgh, lived in hotels; and a few families in the survey cities outside of Pittsburgh lived in tourist and trailer camps. The following tables show the living arrangements of the migrant families:

1. ALL FAMILIES

Living arrangements	Percent distribution		
	Total	In Pitts- burgh	In 53 neigh- boring cities
Occupying a separate dwelling.....	31	23	37
Sharing a dwelling with others.....	51	45	54
In hotels.....	16	29	5
In tourist and trailer camps.....	2	.....	4
Total.....	100	100	100

2. 1-PERSON FAMILIES

Occupying a separate dwelling.....	6	1	11
Sharing a dwelling with others.....	66	54	79
In hotels.....	28	45	10
In tourist and trailer camps.....	(¹)	.....	(¹)
Total.....	100	100	100

¹ Less than 0.5 percent.

3. MULTIPERSON FAMILIES

Occupying a separate dwelling.....	60	60	60
Sharing a dwelling with others.....	34	39	32
In hotels.....	1	1	1
In tourist and trailer camps.....	5	.....	7
Total.....	100	100	100

CONCLUSIONS

The volume of recent migration into Pittsburgh and vicinity has been exceptionally small. Out of 44 cities for which recent migrant data are available, only two (Philadelphia and Johnstown, Pa.) reported a lower migrant rate than Pittsburgh and the neighboring Allegheny County cities. In terms of resident populations, Pittsburgh attracted about half as many migrants as Baltimore, one-third as many as Houston, one-fourth as many as Los Angeles, one-seventh as many as Seattle.

Pittsburgh migrants had not been particularly successful in finding work. Among the 44 cities covered in this survey, only 12 reported higher migrant unemployment rates than Pittsburgh and its environs.

DECEMBER 15, 1941.

RECENT MIGRATION INTO PORTLAND AND SOUTH PORTLAND, MAINE

A survey of migration into Portland and South Portland, Maine, was conducted by the Work Projects Administration, Division of Research during the early part of October 1941. The survey was concerned with civilians who moved to Portland and South Portland from places outside of Cumberland County after October 1, 1940, and who were still living there in September 1941. Operating on a sample basis, the survey covered residential districts and lower-priced hotels within the city limits of Portland and South Portland. Higher-priced hotels were not surveyed and no attempt was made to gather information about persons who had left the cities during the year covered by the survey.

INDUSTRIAL ACTIVITY

Up to the time of the present survey, defense work in Portland and South Portland was devoted largely to the preparation of facilities for later activity. One large shipyard had been built, and the construction of seven cargo vessels begun. A second large shipyard was still under construction. A navy drydock had been built and dredging of Portland Harbor was under way.

Portland anticipated that this activity would eventually create 9,000 new jobs, but, according to local estimates, only 2,500 of these jobs had been created by the time of the migration survey. And although labor shortages were reported for many skilled categories, such as welders, shipfitters, and lay-out men, no general labor shortage had developed.

NUMBER OF MIGRANTS

Approximately 1,600 families, containing 1,700 workers and 4,000 persons, moved to Portland and South Portland from places outside of Cumberland County after October 1, 1940, and were still living there in September 1941. The total number of migrants was equal to 4.5 percent of the total population of the two cities. Approximately 3,200 of these migrants lived in the city of Portland and 800 lived in South Portland. Based on 1940 population the migrant rate for Portland was 4.4 percent, and for South Portland 5.1 percent.

ORIGINS

The majority of migrants (60 percent) came from Maine. Massachusetts was the second most important source of migrant workers, contributing 18 percent. New York and New Hampshire each contributed 3 percent. The average distance traveled by migrant workers was 100 miles; and only 7 percent had traveled 500 miles or more.

Towns (places of 2,500 to 25,000 population) were the origin of the largest proportion of the migrants, 38 percent. Rural places (places under 2,500 population) contributed the next largest proportion, 31 percent, of which 8 percent were from open country and 23 percent from rural villages. Small cities contributed 15 percent; and 16 percent had come from cities of more than 100,000 population.

Only 15 percent of the families reported previous residence in either of the two cities. Among these former residents, about one-half had been absent for 5 years or more.

CHARACTERISTICS

Age and sex.—The average age of all migrant workers was relatively high, 32.3 years. In other survey cities the averages ranged from 26 years in Greenville, S. C., to 32.8 years in Fort Smith, Ark.,. The average age of family heads was 34.1 and of unattached workers 29.6. Only 6 percent of the migrant workers were under 20 years of age, but 18 percent were 45 years and over.

Women workers constituted 15 percent of all workers in the migrant families. The average age of women workers was 26.9 years, as against 33 years for men.

Race.—Practically all of the migrants were white. Negroes made up less than one-half of 1 percent of all migrants.

Size of family.—Only one-third of the families, when interviewed in Portland and South Portland, were composed of one person.

Size of family in Portland and South Portland:	Percent distribution
1 person.....	33
2 persons.....	25
3 and 4 persons.....	33
5 persons and over.....	9
Total.....	100

Some of these families were not complete; 15 percent of the 1-person families and 6 percent of the multiperson families had left a family member behind when they moved to Portland and South Portland. Before migration the families contained 4,500 persons, of whom 10 percent stayed behind and 90 percent migrated.

Months lived in county.—The majority of the migrants had come to Cumberland County within 3 months of the time of the migration survey.

Month of arrival:	Percent distribution
October 1940 to January 1941.....	11
February to March 1941.....	9
April to May 1941.....	16
June 1941.....	13
July 1941.....	14
August 1941.....	20
September 1941.....	17
Total.....	100

INDUSTRY AND OCCUPATION

Portland migrant workers were drawn mainly from construction, trade, "other" services, and from manufacturing, which contributed about one-fifth of the migrants.

In Portland, shipbuilding and repairing, of course, became the predominant industry of the migrant workers; one-third of all migrant workers (34 percent) were employed at shipbuilding at the time of the survey. But for every migrant worker who had found a job in the Portland shipyards, there were two other migrants working in other industries or still seeking work. The industrial distribution of Portland migrants at their last residence, and on their jobs in Portland was as follows:

Industry	Percent distribution	
	At last residence	In Portland
No job at last residence ¹	11	.....
Unemployed in Portland.....	.....	5
Agriculture, forestry, and fishing.....	5	1
Mining.....	(²)	(²)
Construction.....	16	12
Manufacturing:		
Ship and boat building and repairing.....	8	34
Lumber, furniture and lumber products.....	7	(²)
Other.....	11	10
Transportation, communication, and public utilities.....	6	6
Trade.....	19	19
Personal services.....	3	3
Other services.....	14	10
Total.....	100	100

¹ The status of these workers at last residence was: Students, 5 percent; housewives, 3 percent; unemployed 2 percent; and others, 1 percent.

² Less than 0.5 percent.

Over half of the migrant workers in Portland were employed as skilled or semiskilled workers. Former farm workers and workers who had no jobs at their last residence were the most important new source of the skilled and semiskilled workers in Portland. The distribution of migrants by occupation at their last residence and in Portland is as follows:

Occupation	Percent distribution	
	At last residence	In Portland
No job at last residence.....	11	.....
Unemployed in Portland.....	.....	5
Professional and semiprofessional.....	8	8
Proprietors, managers, and officials.....	8	7
Clerical, sales, and kindred workers.....	14	15
Craftsmen, foremen, and kindred workers.....	24	29
Operatives and kindred workers.....	16	22
Domestic service workers.....	1	1
Other service workers.....	5	5
Farm owners, tenants, and laborers.....	4	(¹)
Laborers, except farm.....	9	8
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Migrant workers by and large were successful in obtaining jobs in Portland. Only a few, 5 percent of all workers, were still seeking work when enumerated. Comparable figures for other survey cities are: Baltimore, Md., 3 percent; Greenville, S. C., 9 percent; Philadelphia, Pa., 8 percent; and Wichita, Kans., 13 percent.

Unemployment by sex.—The unemployment rate for women workers was more than four times as high as for men. Among women migrants 14 percent were unemployed, and among men 3 percent.

Unemployment by age.—The youngest workers reported the highest unemployment rate in Portland, and workers over 45 years reported the lowest rate:

Age of workers:	Percent unemployed in Portland
Total.....	5
Under 20 years.....	14
20 to 24 years.....	8
25 to 44 years.....	4
45 years and over.....	2

Unemployment by size of place of origin.—The highest unemployment rate (11 percent) was reported by migrants from cities of 25,000 to 100,000. Migrants from small towns and large cities both reported below-average unemployment. Those from rural places had an average unemployment rate.

Size of place of origin:	Percent unemployed in Portland
Total.....	5
Rural places.....	5
2,500 to 25,000.....	3
25,000 to 100,000.....	11
100,000 and over.....	4

Unemployment by month entering county.—Migrants who arrived recently in Portland had the highest unemployment rates.

Month of arrival:	Percent unemployed in Portland
Total.....	5
October 1940–March 1941.....	3
April–May 1941.....	1
June 1941.....	2
July 1941.....	5
August 1941.....	5
September 1941.....	12

Unemployment by industry and occupation.—Above average unemployment rates were reported by workers from agriculture, forestry, and fishing and from trade. Workers from transportation and communication industries, from mining and personal services reported exceptionally low rates of unemployment. Unemployment rates by industry of migrant workers were as follows:

Industry at last residence:	Percent unemployed in Portland
Total.....	5
No job.....	4
Agriculture, forestry, and fishing.....	9
Mining.....	(1)
Construction.....	3
Manufacturing.....	4
Transportation, communication, and utilities.....	(2)
Trade.....	9
Personal services.....	1
Other services.....	2

¹ Base too small for calculation.

² Less than 0.5 percent.

In terms of occupation, domestics, farm workers, nonfarm laborers, and operatives reported higher than average unemployment rates. There were practically no unemployed white-collar or skilled migrants in Portland. Unemployment rates according to last occupation were as follows:

Occupation at last residence:	Percent unemployed in Portland
Total.....	5
No job.....	4
Professional, proprietary, and clerical.....	(1)
Craftsmen, foremen, and kindred workers.....	(1)
Operatives and kindred workers.....	8
Domestic service workers.....	25
Other service workers.....	10
Farm owners, tenants, and laborers.....	10
Laborers, except farm.....	9

¹ Less than 0.5 percent.

HOUSING

Over half of the migrant families were sharing a dwelling unit with other persons when interviewed; 2 percent were living in hotels and 47 percent occupied a separate dwelling unit. A small number of families were living in trailer or tourist camps.

Living arrangements	Total	1-person families	Multi-person families
Occupying separate dwelling.....	47	4	69
Sharing dwelling.....	51	91	31
In hotels.....	2	5	(1)
In trailer and tourist camps.....	(1)	(1)	(1)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The greater part of Portland's defense activity had not yet developed at the time of the present survey. Even so, Portland and South Portland, in terms of their population, had already attracted a moderately large flow of migrants by October 1941. These migrants had been by and large successful, and had been absorbed into the local industries—particularly into shipbuilding—without great difficulty.

FEBRUARY 12, 1942.

RECENT MIGRATION INTO QUINCY, ILL.

A survey of migration into Quincy, Ill., was conducted by the Work Projects Administration Division of Research in December 1941. The survey was concerned with civilians who moved to Quincy from places outside Adams County after October 1, 1940, and who were still living there at the time of this survey. Operating on a sample basis, the survey covered the residential districts and lower priced hotels within the corporate limits of Quincy. Higher priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Quincy is an important stove-manufacturing center. When material shortages first began to develop many months ago, it was anticipated that Quincy would suffer from widespread priorities unemployment. In the meantime, however, Quincy received defense contracts valued at about \$10,000,000, which were expected to relieve the local unemployment problem.

NUMBER OF MIGRANTS

An estimated 800 families containing 700 workers and a total of 1,700 persons, who lived in Quincy at the time of this survey, had moved to the city from places outside Adams County after October 1, 1940. Migrants made up a group equal to 4.2 percent of Quincy's 1910 population.

ORIGINS

Illinois was the chief source of Quincy migrants, contributing 50 percent of the total. Missouri was the second most important source, contributing 34 percent. Six percent had moved from Iowa. The average distance traveled by the migrants was 85 miles, and only 6 percent had traveled 500 miles or more.

Rural places were the origin of nearly two-fifths of the migrants; i. e., 5 percent came from open country and 34 percent from rural villages. Towns (2,500 to 25,000 population) contributed 30 percent; small cities, 18 percent; and cities of over 100,000 population, 13 percent.

Nearly one-fourth (23 percent) of the migrant families had formerly lived in Quincy. About half of these families had been absent from the city for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Quincy was 31.4 years. In 1-person families, the average was 24.6 years, and for heads of multiperson families, 33.4 years. Nine percent of the workers were under 20 years, and 17 percent were 45 years and over.

Females constituted 27 percent of the migrant workers. The average age of female workers was 25.8 years, as compared with 32.7 years for males.

Race.—Negroes made up 2 percent of the Quincy migrants, and 98 percent were white.

Size of family.—Migrant families in Quincy averaged 2.2 persons per family when interviewed.

Size of family:	Percent distribution
1 person	39
2 persons	28
3 and 4 persons	26
5 persons and over	7
Total	100

A considerable proportion of these workers were not complete when interviewed; 38 percent of the 1-person families and 11 percent of the multiperson families had left a spouse or dependent children behind when migrating to Quincy. Before migration the families had contained 2,050 persons, of whom 83 percent migrated to Quincy and 17 percent stayed behind.

Month of arrival.—The majority of the migrants arrived in Quincy in August 1941 or before.

Month of arrival:	Percent distribution
October 1940 to April 1941	30
May to June 1941	14
July to August 1941	10
September to October 1941	30
November 1941	12
December 1941	4
Total	100

INDUSTRY AND OCCUPATION

Before migration, the workers had engaged principally in trade, "other" service industries, and agriculture, or had held no jobs. Although the proportion of migrants contributed by manufacturing industries was uncommonly small, manufacturing was the largest single employer of migrants in Quincy, with trade and "other" service industries next in importance.

The industrial distribution of the migrants' last full-time jobs at their last residences and their jobs in Quiney was as follows:

Industry	Percent distribution	
	At last residence	In Quiney
No job at last residence ¹	18	.....
Unemployed in Quiney.....		6
Agriculture, forestry, and fishing.....	12	(?)
Mining.....	(?)	.....
Construction.....	4	5
Manufacturing:.....		
Iron and steel.....	3	10
Machinery.....	4	9
Other.....	5	11
Transportation, communication, and utilities.....	9	11
Trade.....	24	26
Personal services.....	2	4
Other services.....	19	18
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 9 percent; unemployed, 8 percent; and others, 1 percent.

² Less than 0.5 percent.

White-collar workers made up the largest single occupational group among the migrants, accounting for 39 percent before migration and 47 percent in Quiney. Skilled and semiskilled workers together made up only a quarter of the workers at their last residence and less than one-third in Quiney. There were few non-farm laborers among the migrants.

The occupations of the workers before and after migration was as follows:

Occupation	Percent distribution	
	At last residence	In Quiney
No job at last residence.....	18	.....
Unemployed in Quiney.....		6
Professional and semiprofessional.....	11	12
Proprietors, managers, and officials.....	13	14
Clerical and kindred workers.....	15	21
Craftsmen and kindred workers.....	14	14
Operatives and kindred workers.....	11	17
Domestic service workers.....	1	3
Other service workers.....	3	6
Farm owners, tenants, and laborers.....	12	1
Laborers, except farm.....	2	6
Total.....	100	100

UNEMPLOYMENT

Out of 700 migrant workers in Quiney, an estimated 40 workers, or 6 percent, were unemployed and seeking work during the week preceding interview.

Unemployment by sex.—Among female migrants, 9 percent, and among male migrants, 5 percent were unemployed.

Unemployment by age.—Migrant workers 45 years and over reported the highest unemployment rate in Quiney:

Age of worker:	Percent unemployed
Total.....	6
Under 20 years.....	6
20 to 24 years.....	2
25 to 44 years.....	7
45 years and over.....	9

Unemployment by month of arrival.—Workers who arrived in Quincy during the month in which this survey was conducted reported about four times higher unemployment than average:

Month of arrival:	Percent unemployed
Total.....	6
October 1940–June 1941.....	2
July–August 1941.....	6
September–October 1941.....	9
November 1941.....	8
December 1941.....	25

Unemployment by industry and occupation.—Highest unemployment in Quincy was reported by manufacturing workers, and lowest rates were reported by workers from trade and transportation. New workers and workers from agriculture reported about average unemployment. Rates by industry follow:

Industry at last residence:	Percent unemployed in Quincy
Total.....	6
No job.....	6
Agriculture, forestry, and fishing.....	5
Mining.....	(¹)
Construction.....	(¹)
Manufacturing.....	9
Transportation, communication, and utilities.....	2
Trade.....	2
Personal service.....	(¹)
Other services.....	8

¹ Base too small for computation.

In terms of occupation, highest unemployment rates were reported by skilled, semiskilled, domestic, and "other" service workers. Professional and proprietary workers showed least unemployment.

Occupation at last residence:	Percent unemployed in Quincy
Total.....	6
No job.....	6
Professional and proprietary.....	2
Clerical and kindred workers.....	7
Craftsmen and kindred workers.....	12
Operatives and kindred workers.....	12
Domestic and other service workers.....	14
Farm owners, tenants, and laborers.....	5
Laborers, except farm.....	(¹)

¹ Base too small for computation.

HOUSING

The majority of the Quincy migrant families were sharing living quarters with other persons when enumerated. Slightly less than half occupied a separate dwelling, and a few lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	48	16	70
Sharing a dwelling with others.....	51	83	30
In hotels.....	1	1	(¹)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The pattern of migration into Quincy during the first year of the defense program closely resembles the pattern found in several other small midwestern cities. It is characterized by a moderate volume of in-migration and by relatively low unemployment among the migrants.

JANUARY 20, 1942.

RECENT MIGRATION INTO SAGINAW, MICH.

A survey of migration into Saginaw, Mich., was completed by the Work Projects Administration Division of Research in mid-November 1941. The survey was concerned with civilians who moved to Saginaw from places outside of Saginaw County after October 1, 1940, and who were still living in Saginaw at the time of the survey. Operating on a sample basis, the survey covered the residential districts, lower priced hotels, and tourist camps within the corporate limits of Saginaw. Higher priced hotels were not surveyed and no attempt was made to gather information about persons who left Saginaw during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and September 1941, Saginaw County received direct defense contracts totaling about \$30,000,000, and equal to slightly more than one-third the 1937 product value of manufacturers in the county. These contracts, together with increased activity in the automobile industry, raised Saginaw employment to the highest level in history during the early summer of 1941, and created a moderate demand for new skilled and semiskilled workers.

NUMBER OF MIGRANTS

Approximately 1,400 families living in Saginaw at the time of the survey had moved to the city from places outside of the county after October 1, 1940. These families contained 1,300 workers and 2,900 persons. Migrants made up a group equal to 3.5 percent of Saginaw's 1940 population.

ORIGINS

Michigan was the principal source of migrants, contributing 67 percent. The next most important source was Indiana with 7 percent; Illinois with 6 percent; and Ohio with 4 percent. The average distance traveled by migrants was 90 miles; only 9 percent traveled more than 500 miles.

Rural places (less than 2,500 population), were the origin of 28 percent of the migrant workers; i. e., 2 percent had come from open country and 26 percent from rural villages. Towns (2,500 to 25,000 population) contributed 26 percent; small cities, 18 percent; and cities over 100,000 population 28 percent.

Seventeen percent of the migrant families had formerly lived in Saginaw. About half of these families had been absent from the city for 7 years or more.

CHARACTERISTICS

Age and sex.—The average age of all workers in migrant families was 29.4 years. In 1-person families the average was 24.6 years, and for heads of multiperson families, 31.5 years. Workers under 20 made up 9 percent of the migrants, and those 45 years and over, 11 percent.

Women workers made up 13 percent of the Saginaw migrant workers. The average age of women workers was 23.2 years, as compared with 30 years for men.

Race.—Negroes constituted 2 percent of the Saginaw migrants, and white persons 98 percent.

Size of family.—Saginaw migrant families averaged 2.3 persons per family; close to half contained only one person when interviewed.

Size of family:	Percent distribution
1 person.....	45
2 persons.....	23
3 and 4 persons.....	26
5 persons and over.....	6
Total.....	100

Most of these families were complete when interviewed; only 15 percent of the 1-person families and 5 percent of the multiperson families had left a spouse or dependent children behind when they moved to Saginaw. Before migration the families had contained 3,200 persons, of whom 91 percent had migrated and 9 percent had stayed at the migrants' last residences.

Month of arrival.—Almost half of the migrant workers arrived in Saginaw during the 5 months preceding this survey. The distribution of migrants according to the month of their arrival in Saginaw was as follows:

Month of arrival:	Percent distribution
October 1940-February 1941.....	21
March-April 1941.....	15
May-June 1941.....	18
July-August 1941.....	11
September 1941.....	11
October 1941.....	11
November 1941 ¹	13
Total.....	100

¹ Does not include the whole of November 1941.

INDUSTRY AND OCCUPATION

The most important manufacturing industries contributing to Saginaw's labor supply were iron and steel and transportation equipment. Trade was the former industrial attachment of 18 percent of the workers and 17 percent came from "other" service industries. A considerable proportion (15 percent) of the workers held no jobs at last residence, and 9 percent came from agriculture.

In Saginaw iron and steel manufacture and automobile-parts plants employed the largest proportion of the migrants. Trade and "other" services absorbed a sizeable proportion of the migrants.

Industry	Percent distribution	
	At last residence	In Saginaw
No job at last residence ¹	15	.....
Unemployed in Saginaw.....	.....	5
Agriculture, forestry, and fishing.....	(1) 9	(1)
Mining.....	(1) 8	(1) 6
Construction.....	.....	.....
Manufacturing:	.....	.....
Iron and steel and their products.....	7	22
Transportation equipment.....	7	15
Other.....	10	15
Transportation, communication, and utilities.....	6	6
Trade.....	18	15
Personal services.....	3	2
Other services.....	17	14
Total.....	100	100

¹ Less than 0.5 percent.

² The status of these workers at last residence was students, 9 percent; housewives, 2 percent; unemployed, 3 percent; others, 1 percent.

In terms of occupations, migration to Saginaw was primarily the movement of skilled, semiskilled, and clerical employees. These three occupational groups made up 46 percent of the migrants at their last residence, but in Saginaw they comprised 67 percent of the migrants. Especially significant shifts occurred in the proportions of workers reporting themselves as semiskilled and skilled workers. The occupational distribution of migrants before and after migration follows:

Occupation	Percent distribution	
	At last residence	In Saginaw
No job at last residence.....	15	.....
Unemployed in Saginaw.....		5
Professional and semiprofessional.....	10	9
Proprietors, managers, and officials.....	12	10
Clerical and kindred workers.....	15	17
Craftsmen and kindred workers.....	13	18
Operatives and kindred workers.....	18	32
Domestic and kindred workers.....	1	1
Other service workers.....	5	4
Farm owners, tenants, and laborers.....	8	(1)
Laborers, except farm.....	3	4
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 1,300 workers in Saginaw an estimated 65, or 5 percent, were unemployed during the calendar week immediately preceding the survey.

Unemployment by sex.—Unemployment among female migrant workers was seven times greater than among males; 22 percent of the women were unemployed as compared with 3 percent of the men.

Unemployment by age.—The youngest workers and those over 45 years of age reported the highest unemployment rates in Saginaw.

Age of worker:	Percent unemployed in Saginaw
Total.....	5
Under 20 years.....	17
20 to 24 years.....	5
25 to 44 years.....	2
45 years and over.....	11

Unemployment by month of arrival.—Recently arrived workers in Saginaw reported generally lower unemployment than migrants who had been in the city longer.

Unemployment by month of arrival:	Percent unemployed in Saginaw
Total.....	5
October 1940–February 1941.....	8
March–April 1941.....	4
May–June 1941.....	10
July–August 1941.....	5
September 1941.....	(1)
October 1941.....	(1)
November 1941.....	4

¹ Less than 0.5 percent.

UNEMPLOYMENT BY INDUSTRY AND OCCUPATION

Workers who held jobs in "other" service industries at last residence reported twice the average unemployment rate in Saginaw. Relatively slight unemployment was reported by workers formerly engaged in manufacturing and practically

none by farm workers. Workers who held no job at their last residence reported somewhat above average unemployment. Rates by industry follow:

Industry at last residence:	Percent unemployed in Saginaw
Total.....	5
No job.....	7
Agriculture, forestry, and fishing.....	(1)
Mining.....	(1)
Construction.....	(1)
Manufacturing.....	3
Transportation, communication, and utilities.....	(1)
Trade.....	9
Personal services.....	(2)
Other services.....	10

¹ Less than 0.5 percent.

² Base too small for computation.

In terms of occupations, professional and semiprofessional and semiskilled workers had the highest unemployment rates in Saginaw. Craftsmen and clerical workers, on the other hand, were singularly successful in finding employment. The table below presents unemployment rates by occupations of migrant workers at their former residence.

Occupation at last residence:	Percent unemployed in Saginaw
Total.....	5
No job at last residence.....	7
Professional and semiprofessional.....	10
Proprietors, managers and officials.....	(1)
Clerical, sales, and kindred workers.....	1
Craftsmen, foremen, and kindred workers.....	1
Operatives and kindred workers.....	9
Domestic-service workers.....	(1)
Other service workers.....	(1)
Farm owners, tenants, and laborers.....	(1)
Laborers except farm.....	(1)

¹ Base too small for computation.

HOUSING

Almost one-half of the migrant families in Saginaw secured separate living quarters. Four-fifths of the multiperson families were occupying a separate dwelling when enumerated. Three percent of the families were living in hotels and 3 percent in trailer or tourist camps.

Living arrangements	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	49	9	80
Sharing a dwelling with others.....	45	83	15
In hotels.....	3	8	(1)
In trailer or tourist camps.....	3	(1)	5
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

The volume of migration into Saginaw during the first year of defense activity has been relatively small, but Saginaw migrants were relatively successful in finding work. The great majority of the cities covered in this survey reported a higher migrant rate than Saginaw, but only a small proportion of the cities showed a lower rate of unemployment among migrant workers.

NOVEMBER 29, 1941.

RECENT MIGRATION INTO ST. LOUIS

A survey of migration into St. Louis Mo., was completed by the Work Projects Administration, Division of Research, during the first week of November 1941. The survey was concerned with persons who moved to St. Louis after October 1, 1940, and who were still living there when the survey was conducted. Operating on a sample basis, the survey covered the residential districts, the rooming-house districts, and lower-priced hotels within the corporate limits of St. Louis. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who had left St. Louis during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and August 1941, St. Louis received defense contracts valued at about \$240,000,000, or only half as much as Baltimore received and only two-thirds as much as Wichita, Kans. Close to half of the St. Louis defense contracts were to provide new industrial facilities, some of which were still under construction at the time of the present survey.

The index of manufacturing employment in St. Louis rose 27.8 percent between August 1940 and August 1941, reflecting substantial direct and indirect benefit from the defense program. Relatively, however, this increase was not particularly great, for it gave St. Louis only forty-third rank among 84 American cities.

According to local estimates, there were 57,000 unemployed workers in St. Louis shortly before the beginning of the defense program. At the time of the present survey, the local labor reserve had apparently not been exhausted; and in view of pending lay-offs as a result of shortages of materials, it was not expected to disappear for many months to come. Labor shortages had been reported only in certain skilled categories and some types of clerical and professional workers.

NUMBER OF MIGRANTS

Approximately 9,800 families living in St. Louis at the time of the present survey had moved to the city after October 1, 1940. These families contained 11,200 workers and 20,800 persons. Migrants made up a group equal to 2.5 percent of St. Louis' 1940 population. In terms of its population, St. Louis had received $2\frac{1}{2}$ times more migration than Philadelphia, but received one-third less than Baltimore.

ORIGINS

The State of Missouri was the origin of 44 percent of the migrants. Illinois was second contributor with 17 percent, and Arkansas third with 5 percent. The average distance traveled by the migrants was 160 miles. One worker in seven had traveled more than 500 miles to St. Louis.

Rural places contributed nearly two-fifths of the migrants; i. e., 16 percent came from the open country and 22 percent from rural villages. Towns (2,500 to 25,000 population) contributed 27 percent; small cities, 13 percent; and cities of over 100,000 population, 22 percent.

A relatively high proportion of the migrants (31 percent) had formerly lived in St. Louis. Half of these families had been absent from the city for approximately 5 years.

CHARACTERISTICS

Age and sex.—The average age of all workers in the migrant families was 30.8 years. In one-person families the average was 29.7 years, and for heads of multiperson families, 33.8 years. Workers under 20 years made up 11 percent of the workers, and those over 45 years made up 17 percent.

Women workers made up 21 percent of all the St. Louis migrant workers. The average age of women workers was 26 years, as compared with 32.2 years for males.

Race.—Negroes constituted 3 percent of the St. Louis migrants. The migrant rate for Negroes was 0.5 percent of the 1940 population as against 2.7 percent for white persons.

Size of family.—When interviewed in St. Louis, half the families consisted of only one person:

Size of family in St. Louis:	Percent distribution
1 person.....	50
2 persons.....	17
3 and 4 persons.....	25
5 persons and over.....	8
Total.....	100

Many of these families were not complete when interviewed; 35 percent of the 1-person families, and 5 percent of the multiperson families had left a spouse or dependent children behind when they moved to St. Louis. Before migration, the families had contained 22,750 persons; of these, 20,800 had migrated and 2,950 had remained at the migrants' places of origin.

Months lived in county.—A distribution of migrant workers according to the month of their arrival in St. Louis was as follows:

Month of arrival:	Percent distribution
October 1940–February 1941.....	13
March–April 1941.....	13
May–June 1941.....	20
July–August 1941.....	28
September 1941.....	18
October 1941.....	8
Total.....	100

INDUSTRY AND OCCUPATION

The industrial distribution of the migrant workers on their last full-time jobs at last residence and on their jobs when interviewed in St. Louis was as follows:

Industry	Percent distribution	
	At last residence	In St. Louis
No job at last residence ¹	23	16
Unemployed in St. Louis.....		(?)
Agriculture, forestry, and fishing.....	15	1
Mining.....	2	23
Construction.....	17	
Manufacturing:		
Iron and steel.....	2	8
Other.....	14	23
Transportation, communication, and utilities.....	4	5
Trade.....	10	11
Personal services.....	4	2
Other services.....	9	11
Total.....	100	100

¹ The status of these workers at last residence was: Students, 9 percent; housewives, 8 percent; unemployed, 5 percent; and others, 1 percent.

² Less than 0.5 percent.

The largest single source of migrants was among workers who held no job at last residence; i. e., former students, housewives, and unemployed workers. Another large group of workers had left farming to migrate to St. Louis. In St. Louis, the most important industries for the migrants were construction and manufacturing. These two industries had contributed only one-third of the workers, but in St. Louis had absorbed well over one-half.

The occupations of the migrants before and after migration to St. Louis were as follows:

Occupation	Percent distribution	
	At last residence	In St. Louis
No job at last residence.....	23	.....
Unemployed in St. Louis.....	.....	16
Professional and semiprofessional.....	4	6
Proprietors, managers, and officials.....	3	2
Clerical and kindred workers.....	8	12
Craftsmen and kindred workers.....	21	26
Operatives and kindred workers.....	16	21
Domestic service workers.....	2	1
Other service workers.....	3	4
Farm owners, tenants, and laborers.....	14	(1)
Laborers, except farm.....	6	12
Total.....	100	100

¹ Less than 0.5 percent.

Migration to St. Louis involved a marked shifting into clerks', craftsmen's, and operatives' jobs. In the case of the clerks, the new recruits came largely from among students and housewives; among the craftsmen and operatives, it resulted from a shift of farm workers. A number of farm workers also shifted to laborers' jobs.

UNEMPLOYMENT

Out of 11,200 migrant workers, in St. Louis, an estimated 1,800, or 16 percent, were unemployed and seeking work during the week preceding interview in connection with this survey. Comparative figures for other survey cities are: Baltimore, 3 percent; Wichita, Kans., 13 percent; Philadelphia, 8 percent; and Macon, Ga., 11 percent.

Unemployment by sex.—Unemployment among female migrant workers was nearly four times higher than among males; 38 percent of the females were unemployed, as compared with 10 percent for males.

Unemployment by race.—Negroes reported more than four times the unemployment rate of white persons. Among the Negro migrant workers, 61 percent were unemployed; among white workers, 14 percent.

Unemployment by age.—The least successful migrant workers in St. Louis were the very young, but workers over 45 reported no more than average unemployment. Rates by age were as follows:

Age of workers:	Percent unemployed in St. Louis
Total.....	16
Under 20 years.....	24
20 to 24 years.....	16
25 to 44 years.....	14
45 years and over.....	16

Unemployment by month of arrival.—The highest unemployment rate was reported by workers who had been in St. Louis longest:

Month of arrival:	Percent unemployed in St. Louis
Total.....	16
October 1940–April 1941.....	22
May–June 1941.....	8
July–August 1941.....	14
September 1941.....	16
October 1941.....	20

Unemployment by industry and occupation.—The highest unemployment rate was reported by migrant workers who held no job at last residence. In terms of industry, unemployment was particularly severe among workers from transportation and trade. Rates were low for workers from the construction industry, and about average for farm workers. Rates by industry follow:

Industry at last residence:	Percent unemployed in St. Louis
Total.....	16
No job at last residence.....	26
Agriculture, forestry, and fishing.....	16
Mining.....	(¹)
Construction.....	5
Manufacturing.....	12
Transportation, communication, and utilities.....	22
Trade.....	20
Personal services.....	17
Other services.....	10

¹ Base too small for calculation.

In terms of occupation, laborers from nonfarm jobs at last residence had fared worst in St. Louis, and skilled workers fared best. Workers from operatives' jobs reported about average unemployment, and domestic servants were only slightly above average. Rates by occupation follow.

Occupation at last residence:	Percent unemployed in St. Louis
Total.....	16
No job at last residence.....	26
Professional, proprietary, and clerical.....	11
Craftsmen and kindred workers.....	4
Operatives and kindred workers.....	16
Domestic service workers.....	20
Other service workers.....	20
Farm owners, tenants, and laborers.....	16
Laborers, except farm.....	27

HOUSING

St. Louis is the first survey city to show a higher proportion of migrant families occupying a separate dwelling than sharing a dwelling with other persons. The number of families living in hotels was also unusually high in St. Louis.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling.....	44	7	81
Sharing a dwelling with other persons.....	36	55	18
In hotels.....	20	38	1
Total.....	100	100	100

CONCLUSIONS

Although St. Louis is obviously not a boom city after the fashion of Wichita, or even Baltimore, recent in-migration has been impressive, both in terms of absolute numbers and in relation to the size of the resident population. This movement has not, however, been a particularly successful one. Unemployment among St. Louis migrants was high in general, and among several groups of migrants—for example, among new workers, Negroes, and unskilled nonfarm workers—it was excessive.

JANUARY 17, 1942.

RECENT MIGRATION INTO SAN DIEGO, CALIF., AND ENVIRONS

A survey of migration into San Diego, Calif., and its environs was completed by the Work Projects Administration Division of Research in the early part of December 1941. The survey was concerned with civilians who moved to San Diego, Chula Vista, Coronado, La Mesa, and National City from places outside of San Diego County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis, the survey covered residential districts, defense housing projects, tourist and trailer camps, and lower-priced hotels within the survey area. Higher-priced hotels were not surveyed and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

San Diego is probably the "hottest" war-boom city in America. Between June 1940 and October 1941, San Diego received defense contracts, principally for aircraft manufacturing, valued at \$626,000,000, a sum 13 times greater than the 1937 product value of San Diego manufactures; no other large American city shows so high a ratio of defense contracts to 1937 manufactures. In October 1941, the index of manufacturing employment in San Diego stood at 449.6 (1937 average=100), the highest, by far, among all large American cities. Between October 1940 and October 1941, manufacturing employment in San Diego increased 85.7 percent, and was second only to Wichita among the 84 largest cities.

NUMBER OF MIGRANTS

An estimated 29,900 families living within the corporate limits of San Diego and the 4 neighboring cities at the time of this survey had moved to these cities from places outside of San Diego County after October 1, 1940. These families contained 59,900 persons and 29,900 workers. The migrants were distributed within the survey area as follows:

Area	Families	Workers	Persons
City of San Diego.....	27,700	27,900	54,500
4 neighboring cities.....	2,200	2,000	5,400

Migrants in the city of San Diego made up a group equal to 26.8 percent of the city's 1940 population. In the four other cities the migrant rate was 20.4 percent. In the entire survey area the migrant rate was 26.1 percent.

ORIGINS

California was the largest single source of San Diego migrants, and the three Pacific States contributed a greater number than any other census region. California was, however, the origin of only about one-quarter of the migrants, and only 29 percent came from the Pacific States. The West North Central States, particularly Missouri, Minnesota, and Iowa, were the second most important regional source. The West South Central States were the third largest regional source, although Texas and Oklahoma, contributing 10 and 7 percent, respectively, ranked next to California. The following table shows the origins of the migrants by census geographical regions:

State and region of origin:	Percent distribution
New England.....	1
Middle Atlantic.....	3
East North Central.....	9
West North Central.....	23
South Atlantic.....	1
East South Central.....	2
West South Central.....	18
Mountain.....	14
Pacific:	
Washington.....	2
Oregon.....	1
California.....	26
Total.....	100

The distance traveled by migrants was great, averaging 1,100 miles. Among other recently surveyed cities, the average distance traveled by migrants ranged from 60 miles in Brockton, Mass., to 1,270 miles in Los Angeles.

Rural places were the origin of one-fourth of the migrant workers, i. e., 4 percent came from open country and 21 percent from rural villages. Towns (2,500 to 25,000 population) were the origin of 28 percent of the migrant workers, and small cities (25,000 to 100,000 population), 17 percent. The largest number, 30 percent, came from cities of 100,000 or over population.

Former residents of San Diego constituted a small minority of the migrants, 9 percent. Of these former residents about one-half had been absent for 4 years or more.

CHARACTERISTICS

Sex and age.—The average age of migrant workers in San Diego was 27.2 years. For one-person families the average age was 23.6 years and for heads of multiperson families 31.0 years. Ten percent of the workers were under 20 years, and 10 percent were 45 years or over.

Women workers made up 12 percent of the migrant labor force in San Diego. The average age of women workers was 28.7 years compared with 27.0 years for men.

Race.—Migrants in San Diego were practically all white. Negroes made up 1 percent and persons of other races less than one-half of 1 percent of the migrants.

Size of family.—Migrant families in San Diego averaged 2.0 persons per family. Nearly half of the families, when interviewed, were one-person families.

Size of family in San Diego:	Percent distribution
1 person.....	48
2 persons.....	24
3 and 4 persons.....	22
5 persons or more.....	6
Total.....	100

Many of these families were not complete when interviewed; 40 percent of the one-person families and 8 percent of the multiperson families had left a spouse or dependent children at their former residences. Before migration the families had contained 74,000 persons. Of these 81 percent had migrated to the San Diego area and 19 percent had remained at the migrants' previous residences.

Month of arrival.—About half of the migrants arrived in San Diego during or before July 1941.

Month of arrival:	Percent distribution
October 1940–March 1941.....	25
April–May 1941.....	8
June–July 1941.....	16
August 1941.....	10
September 1941.....	16
October 1941.....	11
November–December 1941.....	14
Total.....	100

INDUSTRY AND OCCUPATION

Before migration, no one industry predominated among San Diego migrants. Workers from trade made up the largest single group, 21 percent, and other services the next largest, 15 percent. Workers from agriculture comprised 14 percent of the workers and 13 percent were nonworkers or unemployed at their last residence. Only 14 percent had been engaged in manufacturing. In San Diego, the majority of the migrants were employed in aircraft manufacturing.

The industrial distribution of the migrants on their last full-time jobs before migration and on their jobs when interviewed in San Diego was as follows:

Industry	Percent distribution	
	At last residence	In San Diego
No job at last residence ¹	13	9
Unemployed in San Diego.....		
Agriculture, forestry, and fishing.....	14	(2)
Mining.....	2	(2)
Construction.....	10	9
Manufacturing:		
Aircraft and parts.....	3	55
Other.....	11	3
Transportation, communication, and utilities.....	6	2
Trade.....	21	11
Personal service.....	5	3
Other services.....	15	8
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 10 percent; housewives, 2 percent; unemployed, 1 percent; others less than 0.5 percent.

² Less than 0.5 percent.

Skilled and semi-skilled jobs, the principal attraction for San Diego migrants occupied nearly two-thirds of the migrants when interviewed but only about one-third of the workers at their last residences. There were few migrants employed as laborers in San Diego. The occupations of San Diego migrants at their last residences and in San Diego are presented below:

Occupation	Percent distribution	
	At last residence	In San Diego
No job at last residence.....	13	9
Unemployed in San Diego.....		
Professional and semiprofessional.....	6	4
Proprietors, managers, and officials.....	6	2
Clerical and kindred workers.....	15	14
Craftsmen and kindred workers.....	16	22
Operatives and kindred workers.....	18	38
Domestic service workers.....	1	1
Other service workers.....	8	6
Farm owners, tenants, and laborers.....	12	(1)
Laborers, except farm.....	5	4
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of the 29,900 migrant workers an estimated 2,800 or 9 percent were unemployed and seeking work during the calendar week directly preceding the survey.

Unemployment by sex.—Unemployment was more than four times greater among women workers than among the men. Among the women 26 percent were unemployed and among the men 6 percent.

Unemployment by age.—The older workers, those 45 years or over, were the least successful age group in San Diego. Those under 20 years reported above average unemployment rates:

Age of worker:	Percent unemployed in San Diego
Total.....	9
Under 20 years.....	13
20 to 24 years.....	6
25 to 44 years.....	7
45 years and over.....	17

Unemployment by month of arrival.—Workers arriving in San Diego during the month the survey was conducted and the month preceding it reported the highest rates of unemployment:

Month of arrival:	Percent unemployed
Total.....	9
October 1940–May 1941.....	3
June–July 1941.....	5
August 1941.....	3
September 1941.....	6
October 1941.....	14
November–December 1941.....	29

Unemployment by industry and occupation.—Migrants from different industries showed relatively minor differences in unemployment rates when interviewed in San Diego. Unemployment rates by industry follow:

Industry at last residence:	Percent unemployed in San Diego
Total.....	9
No job.....	7
Agriculture, forestry, and fishing.....	9
Mining.....	5
Construction.....	7
Manufacturing.....	7
Transportation, communication, and utilities.....	7
Trade.....	9
Personal services.....	9
Other services.....	18

Skilled and semiskilled workers were the most successful occupational groups in obtaining employment in San Diego. Half of the domestic service workers and one-eighth of the other service workers were unemployed and seeking work during the calendar week preceding this survey. Rates by occupation were as follows:

Occupation at last residence:	Percent unemployed in San Diego
Total.....	9
No job.....	7
Professional and semiprofessional.....	7
Proprietors, managers, and officials.....	8
Clerical and kindred workers.....	10
Craftsmen and kindred workers.....	3
Operatives and kindred workers.....	8
Domestic service workers.....	51
Other service workers.....	15
Farm owners, tenants, and laborers.....	9
Laborers, except farm.....	9

HOUSING

The majority of the migrant families in San Diego were sharing a dwelling unit with other persons when enumerated. About one-fourth were occupying separate living quarters; 6 percent were living in hotels; and 8 percent lived in trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	28	2	52
Sharing a dwelling with others.....	58	83	34
In hotels.....	6	9	4
In tourist and trailer camps.....	8	6	10
Total.....	100	100	100

CONCLUSIONS

In terms of its population, San Diego has recently attracted far more migrants than any other war-industry city covered by this survey. Its migrant rate is substantially higher than the rate (20.0 percent) found in Wichita, Kans., the second highest among the cities for which data are now available. It is more than double the rates for Seattle and Norfolk, more than three times higher than the rate for Los Angeles and Washington, D. C., about eight times higher than the rate for Baltimore, and 27 times higher than the rate for Philadelphia.

Like several other more widely publicized war-industry cities (particularly Los Angeles, Wichita, and Seattle) San Diego is attracting migrant workers faster than they can be absorbed into its industries.

FEBRUARY 2, 1942.

RECENT MIGRATION INTO SAN FRANCISCO, CALIF.

A survey of migration into San Francisco, Calif., was conducted by the Work Projects Administration, Division of Research, in November and December 1941. The survey was concerned with civilians who moved to San Francisco after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis, the survey covered the residential districts, rooming house districts and lower priced hotels within the corporate limits of the city. Higher-priced hotels were not surveyed and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

By October 1941 San Francisco had received direct defense contracts valued at approximately \$275,000,000, and equal to 83 percent of the product value of San Francisco manufactures in 1937. In October 1941 the index of manufacturing employment in San Francisco was 155.5 (1937 average = 100), an increase of 43.5 percent since October 1940. Only 6 out of 81 of the largest American cities showed a greater increase during the same period.

NUMBER OF MIGRANTS

An estimated 11,900 families, containing 12,200 workers and 26,700 persons, living within the corporate limits of San Francisco at the time of this survey had moved to the city after October 1, 1940. Migrants in the city made up a group equal to 4.2 percent of the 1940 population of San Francisco.

ORIGINS

California was the principal source of San Francisco migrants, contributing 56 percent; and the three Pacific States together contributed 63 percent. The West Central States, which contributed so large a proportion of southern California migrants, were only a minor source of San Francisco migrants. The following table shows the origins of the migrants by census geographic regions:

State and region of origin:	Percent distribution
New England.....	1
Middle Atlantic.....	4
East North Central.....	5
West North Central.....	8
South Atlantic.....	2
East South Central.....	1
West South Central.....	4
Mountain.....	8
Pacific:	
Washington.....	5
Oregon.....	2
California.....	56
Foreign countries and Alaska.....	4
Total.....	100

The average distance traveled by migrant workers was 330 miles, and 42 percent had traveled 500 miles or more.

The largest group of migrant workers (37 percent) came from cities of 100,000 population or over. Only 2 percent from open country, but 13 percent from rural villages. One-third (33 percent) originated in towns of 2,500 to 25,000 population, and 15 percent came from cities of 25,000 to 100,000 population.

Former San Francisco residents comprised 28 percent of the migrant families. About half of these returning San Francisco migrants had been away from the city for 5 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 32.3 years. In one-person families the average age was 32.2 years and for heads of multiperson families 34 years. Workers under 20 years comprised 6 percent, and those 45 years or over, 17 percent of the workers.

Women workers comprised one-fourth of the migrant workers. The average age of women workers was 28.1 years, as compared with 33.7 years for men.

Race.—Less than one-half of 1 percent of the migrant persons were Negroes or other nonwhites.

Size of family.—The average size of migrant families was 2.2 persons. The tabulation below shows the size of San Francisco migrant families when interviewed.

Size of family in San Francisco:	Percent distribution
1 person.....	45
2 persons.....	28
3 and 4 persons.....	21
5 persons or more.....	6
Total.....	100

A few of the families were not complete when interviewed; 13 percent of the 1-person families and 8 percent of the multiperson families left a spouse or dependent children at their former residences. Before migration the families contained 28,500 persons, of whom 94 percent migrated to San Francisco and 6 percent had stayed at the migrants' last residences.

MONTH OF ARRIVAL

Over half of the migrants arrived at San Francisco during August or later.

Month of arrival:	Percent distribution
October 1940–March 1941.....	22
April–May 1941.....	9
June–July 1941.....	13
August 1931.....	9
September 1941.....	10
October 1941.....	14
November–December 1941.....	23
Total.....	100

INDUSTRY AND OCCUPATION

Recent migration to San Francisco has consisted principally of various types of service workers. Transportation, trade, personal service, and "other" services contributed 58 percent of the migrants, and employed an equal proportion in San Francisco. Manufacturing was relatively unimportant, although a few workers had found jobs in the San Francisco shipyards. There were very few farm workers among the migrants.

The following table shows the industrial distribution of the migrants on their last full-time jobs at last residence and on their jobs in San Francisco.

Industry	Percent distribution	
	At last residence	In San Francisco
No job at last residence ¹	14	.....
Unemployed in San Francisco.....	.....	10
Agriculture, forestry, and fishing.....	5	(?)
Mining.....	1	(?)
Construction.....	8	.....
Manufacturing:.....	.....	5
Transportation equipment.....	2	12
Other.....	12	15
Transportation, communication, and utilities.....	8	11
Trade.....	21	20
Personal service.....	6	7
Other services.....	23	20
Total.....	100	100

¹ The status of these workers at their last residence was: Students 5 percent; housewives 5 percent; unemployed 3 percent; and others 1 percent.

² Less than 0.5 percent.

Clerical workers formed the largest single occupational group among San Francisco migrants, and all white-collar workers outnumbered the skilled and semiskilled workers combined. As usual, there were relatively few unskilled workers among the migrants.

Occupation	Percent distribution	
	At last residence	In San Francisco
No job at last residence.....	14	.....
Unemployed in San Francisco.....	.....	10
Professional and semiprofessional.....	8	7
Proprietors, managers, and officials.....	7	7
Clerical and kindred workers.....	22	23
Craftsmen and kindred workers.....	14	16
Operatives and kindred workers.....	13	16
Domestic service workers.....	2	3
Other service workers.....	9	9
Farm owners, tenants, and laborers.....	5	(1)
Laborers except farm.....	6	9
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

An estimated 1,220 migrant workers or 10 percent of the total were unemployed and seeking work during the calendar week preceding interview.

Unemployment by sex.—Unemployment among women workers was about three times heavier than among the men; 20 percent of the women migrant workers, but only 7 percent of the men, were unemployed.

Unemployment by age.—The youngest workers were the most successful in obtaining jobs in San Francisco, and the oldest workers were least successful. The tabulation below gives unemployment rates by age groups.

Age of worker:	Percent unemployed in San Francisco
Total.....	10
Under 20 years.....	4
20 to 24 years.....	6
25 to 44 years.....	11
45 years and more.....	14

Unemployment by month of arrival.—Unemployment was heaviest among the most recently arrived workers but was relatively high among all the workers, regardless of their time of arrival.

Month of arrival:	Percent un- employed in San Francisco
Total.....	10
October 1940-March 1941.....	7
April-May 1941.....	6
June-July 1941.....	8
August 1941.....	6
September 1941.....	11
October 1941.....	9
November-December 1941.....	18

Unemployment by industry and occupation.—Farm, fishing, and forestry workers, construction workers, and personal service workers were least successful in finding jobs in San Francisco. New workers, and those from manufacturing and transportation were most successful. Unemployment by industry at last residence was as follows:

Industry at last residence:	Percent un- employed in San Francisco
Total.....	10
No job.....	3
Agriculture, forestry, and fishing.....	20
Mining.....	(¹)
Construction.....	16
Manufacturing.....	7
Transportation, communication and utilities.....	2
Trade.....	12
Personal service.....	15
Other services.....	10

¹ Base too small for computation.

San Francisco migrants reported little variation in unemployment according to their occupations at their last residences. Clerical and skilled workers reported only slightly below average unemployment, and domestic and other service workers were only slightly above average. Unemployment by occupation was as follows:

Occupation at last residence:	Percent unem- ployed in San Francisco
Total.....	10
No job.....	3
Professional and proprietary workers.....	11
Clerks and kindred workers.....	8
Craftsmen and kindred workers.....	9
Operatives and kindred workers.....	14
Domestic and other service workers.....	13
Farm owners, tenants, and laborers.....	16
Laborers, other than farm.....	10

HOUSING

The majority of the families were occupying a separate dwelling unit when interviewed. One-third of the families were sharing a dwelling unit with other persons and one-tenth were living in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multi- person families
Occupying a separate dwelling unit.....	56	24	83
Sharing a dwelling.....	33	53	17
In hotels.....	11	23	(¹)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of the absolute number of migrants attracted, San Francisco stands high among the cities covered in this survey. The number of migrants moving to San Francisco was surpassed only in Los Angeles, San Diego, Seattle, the Oakland area, Washington, D. C., Baltimore, and Detroit among the 51 cities surveyed. In relation to its resident population, however, San Francisco has attracted relatively few migrants. Well over half of the 51 cities surveyed showed a higher migrant rate than San Francisco.

Like migrants found in the other large west coast cities, migrants in San Francisco had not been particularly successful in finding jobs. Migrants in a substantial majority of the cities surveyed showed less unemployment than was reported in San Francisco.

JANUARY 10, 1942.

RECENT MIGRATION INTO SEATTLE, WASH.

A survey of migration into Seattle, Wash., was conducted by the Work Projects Administration Division of Research during October and November 1941. The survey was concerned with civilians who moved to Seattle from places outside of King County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis, the survey covered Seattle residential districts, rooming houses, tourist and trailer camps, and lower-priced hotels. Higher priced hotels were not covered, and no attempt was made to gather information about persons who left the city during the survey period.

NUMBER OF MIGRANTS

An estimated 23,600 families living within the corporate limits of Seattle during October and November 1941 had moved to the city from places outside of King County after October 1, 1940. These families contained 23,200 workers; there were fewer workers than families because 10 percent of the families contained no workers, while only 8 percent contained more than 1 worker. An estimated 42,100 migrant persons were included in the Seattle migrant families, and these made up a group equal to 11.4 percent of Seattle's 1940 population.

The survey found an additional 180 families, containing 430 persons in tourist and trailer camps just outside the city limits.

ORIGINS

Washington was the principal source of Seattle migrants, contributing 43 percent. Oregon was the second most important source, contributing 12 percent, and Montana was third with 9 percent. Eight percent had come from California, 6 percent from Minnesota, 4 percent from North Dakota, 3 percent from Idaho, and 2 percent from Alaska. The following States each contributed 1 percent of the migrants: Colorado, Illinois, Iowa, Kansas, Michigan, Missouri, Nebraska, South Dakota, Utah, and Wisconsin. The average distance traveled by the migrants was 260 miles, and 38 percent had traveled 500 miles or more.

Rural places were the origin of 30 percent of the migrants; i. e., 9 percent had come from the open country and 21 percent from rural villages. Towns (2,500 to 25,000 population) were the origin of 29 percent; 14 percent came from small cities; and 27 percent from cities of over 100,000 population.

One-fourth of the migrants had formerly been Seattle residents. Half of these had been absent from the city about 5 years before their return.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Seattle was 27.8 years. For one-person families, the average was 24.7 years; and for heads of multi-person families, 32.9 years. Twelve percent of all workers were under 20 years, and 14 percent were 45 years or over.

Female workers made up 22 percent of all migrant workers in Seattle. The average age of female workers was 25.9 years, as compared with 28.5 years for males.

Race.—Practically all Seattle migrants were white; Negroes and "other" races each made up less than one-half of 1 percent of the migrants.

Size of family.—Migrant families in Seattle averaged 1.8 persons per family. More than half contained only one person.

Size of family in Seattle:	Percent distribution
1 person.....	58
2 persons.....	21
3 and 4 persons.....	18
5 persons or more.....	3
Total.....	100

Most of these families were complete when interviewed; however, 11 percent of the one-person families and 8 percent of the multiperson families had left a spouse or dependent children at their former residences. Before migration, the families had contained 45,450 persons. Of these, 93 percent had migrated to Seattle and 7 percent had stayed at the migrants' previous residences.

Month of arrival.—About half the migrants had arrived in Seattle during or after August 1941.

Month of arrival:	Percent distribution
October 1940–February 1941.....	15
March–April 1941.....	10
May–June 1941.....	12
July–August 1941.....	19
September 1941.....	18
October–November 1941.....	26
Total.....	100

INDUSTRY AND OCCUPATION

Before migration, no one industry predominated among Seattle migrants. Workers from manufacturing, trade, and "other" services, and new workers were the principal sources of migrants, but none of these groups contributed as much as one-fifth of the total. Only 8 percent of the workers had been engaged in agriculture, forestry, and fishing at their last residence. In Seattle, manufacturing was the most important employer of migrant workers, and a particularly large group were employed in shipbuilding and aircraft manufacturing. Large numbers of migrants also found work in trade and "other" service industries.

The distribution of migrants on their last full-time jobs at their last residence and on their jobs when interviewed in Seattle was as follows:

Industry	Percent distribution	
	At last residence	In Seattle
No job at last residence ¹	15	
Unemployed in Seattle.....		9
Agriculture, forestry, and fishing.....	8	(²)
Mining.....	3	(²)
Construction.....	10	8
Manufacturing:		
Lumber, furniture, and lumber products.....	6	3
Transportation equipment.....	3	31
Other.....	9	8
Transportation, communication, and utilities.....	7	7
Trade.....	13	17
Personal service.....	5	6
Other services.....	16	11
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 8 percent; housewives, 4 percent; unemployed, 2 percent; and others, 1 percent.

² Less than 0.5 percent.

In terms of occupations, Seattle migrants principally held clerical, craftsmen's, and operatives' jobs both before and after migration. Before migration, 47 percent of the workers were included in these three groups, and after migration, the proportion increased to 63 percent. The increase in operatives after migration

was especially sharp. As in many other survey cities, the proportion of laborers among the migrants was small.

The occupational attachment of the migrants before and after migration to Seattle was as follows:

Occupation	Percent distribution	
	At last residence	In Seattle
No job at last residence.....	15	.....
Unemployed in Seattle.....		9
Professional and semiprofessional.....	7	6
Proprietors, managers, and officials.....	6	4
Clerical and kindred workers.....	15	13
Craftsmen and kindred workers.....	14	18
Operatives and kindred workers.....	18	27
Domestic service workers.....	2	3
Other service workers.....	7	5
Farm owners, tenants, and laborers.....	7	(1)
Laborers, except farm.....	9	7
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of the 23,200 migrant workers in Seattle, an estimated 2,130, or 9 percent, were unemployed and seeking work during the week preceding interview. Among other survey cities, migrant unemployment ranged from 2 percent in Bristol, Conn., to 17 percent in Fort Smith, Ark.

Unemployment by sex.—Female migrant workers reported about double the unemployment rate of males. Among females, 15 percent were unemployed as compared with 8 percent for males.

Unemployment by age.—There were only minor differences in unemployment rates according to the age of Seattle migrant workers, although the young and old workers were slightly less successful than the middle age groups.

Age of worker:	Percent unemployed in Seattle
Total.....	9
Under 20 years.....	11
20 to 24 years.....	9
25 to 44 years.....	8
45 years and over.....	12

Unemployment by month of arrival.—Workers arriving in Seattle during the 2 months in which the present survey was conducted showed the highest rate of unemployment:

Month of arrival:	Percent unemployed in Seattle
Total.....	9
October 1940 to April 1941.....	4
May to June 1941.....	7
July to August 1941.....	5
September 1941.....	8
October to November 1941.....	19

Unemployment by industry and occupation.—The least successful Seattle migrants were those engaged in agriculture and mining at their last residence. New workers showed average unemployment, and the lowest rates were reported for

workers from construction and manufacturing. Unemployment rates by industry follow:

Industry at last residence:	Percent unemployed in Seattle
Total	9
No job	9
Agriculture, forestry, and fishing	15
Mining	18
Construction	6
Manufacturing	6
Transportation, communication, and utilities	10
Trade	11
Personal services	10
Other services	8

Clerks and craftsmen were the most successful Seattle migrants, reporting unemployment rates well below the average. Domestic and other service workers were least successful. Nonfarm laborers and operatives showed rates only slightly above average. Rates by occupation follow:

Occupation at last residence:	Percent unemployed in Seattle
Total	9
No job	9
Professional and semiprofessional	9
Proprietors, managers, and officials	9
Clerical and kindred workers	5
Craftsmen and kindred workers	6
Operatives and kindred workers	10
Domestic service workers	15
Other service workers	16
Farm owners, tenants, and laborers	14
Laborers, except farm	11

HOUSING

The majority of the Seattle migrants were sharing a dwelling with other persons when enumerated. One-third were occupying separate living quarters; about one-eighth—a relatively high proportion—were in hotels; and a few were in tourist and trailer camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling	33	7	70
Sharing a dwelling with others	52	72	25
In hotels	13	20	2
In tourist and trailer camps	2	1	3
Total	100	100	100

CONCLUSIONS

The volume of recent migration into Seattle has been tremendous. Among 39 cities for which recent migrant data are now available, only 3—Los Angeles, San Diego, and Washington, D. C.—received a greater absolute number of migrants during the first year of the defense program. And in relation to its 1940 population, Seattle attracted a greater number of migrants than any other survey city of over 300,000 population, and was exceeded only by Norfolk, Long Beach, San Diego, and Wichita among cities of over 100,000 population.

The Seattle migrants had not been notably successful in finding work. Although the unemployment rate of Seattle migrants was considerably lower than that of several other large defense centers—particularly Los Angeles, Wichita, and St. Louis—it was far higher than has been commonly found among the cities included in this survey.

DECEMBER 20, 1941.

RECENT MIGRATION INTO SOUTH BEND, IND.

A survey of migration into South Bend, Ind., was completed by the Work Projects Administration Division of Research in the early part of November 1941. The survey was concerned with civilians who moved to South Bend from places outside of St. Joseph County after October 1, 1940, and who were still living in South Bend at the time of the present survey. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within the corporate limits of South Bend. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left South Bend during the survey period.

INDUSTRIAL ACTIVITY

South Bend is an important center of defense production. Between June 1940 and August 1941, St. Joseph County received prime defense contracts valued at about \$100,000,000, and equal to about three-fifths of the 1937 value of all manufactures in the county. The greater part of the defense activity is centered in the production of aircraft motors and parts. As a result of this activity, manufacturing employment in South Bend increased 31.6 percent between September 1940 and September 1941, giving South Bend twenty-ninth rank among 84 American cities.

NUMBER OF MIGRANTS

Approximately 2,600 families living in South Bend at the time of this survey had moved to the city after October 1, 1940. These families contained 2,700 workers and a total of 5,600 persons. Migrants made up a group equal to 5.5 percent of South Bend's 1940 population.

ORIGINS

Indiana was the principal source of South Bend migrants, contributing 36 percent, and Illinois was second with 20 percent. Michigan contributed 13 percent; Ohio, 5 percent; and California and Wisconsin, 3 percent each. The average distance traveled by the migrants was 110 miles, and 13 percent traveled 500 miles or more.

Rural places (less than 2,500 population) were the origin of 18 percent of the migrants; i. e., 3 percent came from open country and 15 percent from rural villages. Towns (2,500 to 25,000 population) contributed 26 percent; small cities, 21 percent; and cities of over 100,000 population, 35 percent.

One-fifth of the families had formerly lived in South Bend. About half of these families had been absent from the city for 5 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in South Bend was 31.7 years. In 1-person families the average age was 28.3 years, and for heads of multiperson families, 34.6 years. Eight percent of all workers were under 20 years, and 14 percent were 45 years or over.

Women workers made up 15 percent of all the migrant workers. The average age of women workers was 25.2 years, as compared with 32.6 years for men.

Race.—Negroes constituted 2 percent of all migrants in South Bend.

Size of family.—Migrant families, when interviewed in South Bend, averaged 2.2 persons per family.

Size of family:	Percent distribution
1 person.....	44
2 persons.....	23
3 and 4 persons.....	27
5 persons and over.....	6
Total.....	100

Some of these families were not complete; 33 percent of the 1-person families and 7 percent of the multiperson families had left a spouse or dependent children behind when they moved to South Bend. Before migration, the families had contained 6,600 persons. Of these, 85 percent had migrated and 15 percent had remained at the migrants' places of origin.

Month of arrival.—Half of the migrants interviewed in South Bend had come to the city about 4 months or more before the present survey:

Month of arrival:	Percent distribution
October 1940–February 1941.....	20
March–April 1941.....	9
May–June 1941.....	17
July–August 1941.....	21
September 1941.....	15
October 1941 ¹	18
Total.....	100

¹ Includes a part of November 1941.

INDUSTRY AND OCCUPATION

Before migration, the South Bend migrants were principally engaged in manufacturing, trade, and "other" service industries. A few were farmers and construction workers. After migration to South Bend, the proportion engaged in manufacturing nearly doubled, largely as a result of a very sharp shift of workers into the manufacture of transportation equipment.

The industrial attachment of the migrant workers on their last full-time jobs at their last residence, and on their jobs when interviewed in South Bend, is shown in the following table:

Industry	Percent distribution	
	At last residence	In South Bend
No job at last residence ¹	11	.....
Unemployed in South Bend.....	.....	4
Agriculture, forestry, and fishing.....	7	1
Mining.....	1	.....
Construction.....	7	8
Manufacturing:		
Iron and steel.....	4	6
Machinery.....	9	5
Transportation equipment.....	6	28
Other.....	9	8
Transportation, communication, and utilities.....	7	7
Trade.....	17	18
Personal services.....	5	3
Other services.....	17	12
Total.....	100	100

¹ The status of these workers at last residence was: Students, 8 percent; housewives, 1 percent; unemployed, 1 percent; others, 1 percent.

The migration of workers into South Bend was principally a movement of clerks, craftsmen, and operatives. These three groups constituted 54 percent of the migrant workers before migration, and 63 percent in South Bend. Few workers were drawn from the unskilled categories and few were working at unskilled jobs in South Bend.

Occupation	Percent distribution	
	At last residence	In South Bend
No job at last residence.....	11	.....
Unemployed in South Bend.....	.....	4
Professional and semiprofessional.....	8	9
Proprietors, managers, and officials.....	11	10
Clerical and kindred workers.....	18	21
Craftsmen and kindred workers.....	18	15
Operatives and kindred workers.....	18	27
Domestic-service workers.....	2	1
Other service workers.....	4	7
Farm owners, tenants, and laborers.....	7	1
Laborers, except farm.....	3	5
Total.....	100	100

UNEMPLOYMENT

Out of 2,700 migrant workers in South Bend, an estimated 100 workers, or 4 percent, were unemployed and seeking work during the week preceding the present survey. In other recently surveyed cities, unemployment ranged from 3 percent in Baltimore, Md., and Burlington, Iowa, to 17 percent in Fort Smith, Ark.

Unemployment by sex.—The majority of the unemployed migrants in South Bend were females. Among all female migrant workers, 15 percent were unemployed, as compared with 2 percent for males.

Unemployment by age.—The highest unemployment rate was reported by workers under 20 years.

Age of worker:	<i>Percent unemployed</i>
Total.....	4
Under 20 years.....	11
20-24 years.....	6
25 to 44 years.....	2
45 years and over.....	5

Unemployment by race.—Negroes reported about seven times the unemployment rate of white workers. Among Negroes, 20 percent, and among white workers, 3 percent were unemployed.

Unemployment by month of arrival.—Unemployment was highest among workers who arrived in South Bend during the early summer of 1941.

Month of arrival:	<i>Percent unemployed</i>
Total.....	4
October 1940-February 1941.....	3
March-April 1941.....	2
May-June 1941.....	7
July-August 1941.....	2
September 1941.....	3
October 1941.....	6

Unemployment by industry and occupation.—Only one industry group, workers from the personal service industries, showed a particularly high unemployment rate in South Bend. Workers from construction, manufacturing, and "other" services reported very little unemployment, and workers from agriculture and those who held no job at last residence reported the average unemployment rate. Rates by industry at last residence follow:

Industry at last residence:	<i>Percent unemployed in South Bend</i>
Total.....	4
No job.....	4
Agriculture, forestry, and fishing.....	4
Mining.....	(1)
Construction.....	1
Manufacturing.....	2
Transportation, communication, and utilities.....	7
Trade.....	6
Personal services.....	24
Other services.....	1

¹ Base too small for computation.

In terms of occupation, the craftsmen and operatives had fared best in South Bend. Unemployment among white-collar groups was no less than average, and the highest rate was reported by "other" service workers. Unemployment rates by occupation follow:

Occupation at last residence:	Percent un- employed in South Bend
Total.....	4
No job.....	4
Professional, proprietary, and clerical.....	4
Craftsmen and kindred workers.....	(1)
Operatives and kindred workers.....	2
Domestic service workers.....	(2)
Other service workers.....	11
Farm owners, tenants, and laborers.....	4
Laborers, except farm.....	(2)

¹ Less than 0.5 percent.

² Base too small for computation.

HOUSING

Considerably less than half of the South Bend migrants were occupying separate living quarters at the time of this survey. The majority of the families had doubled up with other persons, and a few lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multiper- son families
Occupying a separate dwelling.....	40	5	67
Sharing a dwelling with others.....	56	86	32
In hotels.....	4	9	1
Total.....	100	100	100

CONCLUSION

In terms of its population, South Bend has recently attracted a large flow of migrant workers. Among the 10 cities of over 100,000 population which have recently been covered in this survey, only two—Wichita, Kans., and Bridgeport, Conn.—reported higher migrant rates. The movement to South Bend has been generally successful, for very few of the migrants had failed to find work after their arrival.

JANUARY 22, 1942.

RECENT MIGRATION INTO TERRE HAUTE, IND.

A survey of migration into Terre Haute, Ind., was conducted by the Work Projects Administration Division of Research in mid-December 1941. The survey was concerned with civilians who moved to Terre Haute from places outside Vigo County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis, the survey covered the residential districts and lower-priced hotels within the corporate limits of Terre Haute. Higher-priced hotels were not covered, and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Vigo County received no sizable defense contracts between June 1940 and October 1941. Substantially increased employment was reported, however, among Terre Haute railroad and foundry workers, although this activity was offset in part by layoffs in other industries resulting from shortages of materials. At the time of this survey, it was reported that the local labor market still contained a large backlog of resident unemployed workers. Local reports indicate a heavy out-migration of Terre Haute workers to nearby defense cities during the year preceding this survey.

NUMBER OF MIGRANTS

An estimated 1,000 families containing 1,000 workers and a total of 2,300 persons living within the corporate limits of Terra Haute in December 1941 had moved to the city after October 1, 1940. Migrants made up a group equal to 3.7 percent of Terra Haute's 1940 population.

ORIGINS

Over half of the migrants came from Indiana. Illinois contributed 27 percent and Ohio 5 percent of the migrants. Terre Haute migrants traveled an average of 85 miles. Only 4 percent traveled 500 miles or more.

Rural places contributed 24 percent of the migrants, i. e., 3 percent originated in the open country and 21 percent in rural villages. Towns (2,500 population to 25,000) contributed 38 percent; small cities 13 percent; and large cities (100,000 population or over) 25 percent of the migrants.

Former Terre Haute residents returning to the city made up 21 percent of the migrants. Half of these returning families had been absent from the city for 5 years or more.

CHARACTERISTICS

Age and sex.—Terre Haute migrants were relatively old in comparison with migrants in other cities. The average age of migrant workers in Terre Haute was 32.1 years. One-person families averaged 25.3 years, and heads of multi-person families 35.2 years. Nine percent of the workers were under 20 years, and 15 percent were 45 years and over.

Women workers comprised 22 percent of the migrant labor force. The average age of women workers was 27.3 years, as compared with 33.4 years for men.

Race.—Practically all migrant persons in Terre Haute were white; Negroes made up 1 percent and white persons 99 percent of the migrants.

Size of family.—Migrant families averaged 2.3 persons.

Size of family in Terre Haute:	Percent distribution
1 person.....	37
2 persons.....	26
3 and 4 persons.....	30
5 persons and more.....	7
Total.....	100

Most of these families were complete when interviewed; however, 29 percent of the 1-person families and 4 percent of the multiperson families left a spouse or dependent children at their last residence. The families contained 2,600 persons before migration. Of these, 89 percent moved to Terre Haute and 11 percent remained at the migrants' last residences.

Month of arrival.—More than half of the migrant workers arrived in Terre Haute prior to August 1941.

Month of arrival:	Percent distribution
October–April 1941.....	25
May–June 1941.....	16
July–August 1941.....	14
September 1941.....	13
October 1941.....	10
November 1941.....	11
December 1941 ¹	11
Total.....	100

¹ Does not include the entire month.

INDUSTRY AND OCCUPATION

The principal industries of the Terre Haute migrants were trade and "other" service industries which occupied more than two-fifths of the workers before migration and half of them in Terre Haute. The proportion engaged in transportation was much larger than ordinary, and the proportion in manufacturing much smaller. A large proportion of the workers held no jobs at their last residence, but relatively few migrants came from either agriculture or mining.

The following table shows the industries of the migrant workers on their last full-time jobs at their last residence and on their jobs in Terre Haute.

Industry	Percent distribution	
	At last residence	In Terre Haute
No job at last residence ¹	19	.....
Unemployed in Terre Haute.....		4
Agriculture, forestry, and fishing.....	5	(1)
Mining.....	2	4
Construction.....	2	(1)
Manufacturing:		
Food and allied products.....	5	9
Other.....	10	10
Transportation, communication, and utilities.....	12	16
Trade.....	23	27
Personal service.....	3	7
Other services.....	19	23
Total.....	100	100

¹ The status of these workers at their last residence was: students 12 percent; housewives 1 percent; unemployed 4 percent; and others 2 percent.

² Less than 0.5 percent.

In terms of occupations, Terre Haute migrants were principally white-collar and semiskilled workers; before migration more than half the workers, and after migration nearly two-thirds, fell within these two occupational classes. There were relatively few skilled workers among the migrants, and very few unskilled.

Occupations before and after migration follow:

Occupation	Percent distribution	
	At last residence	In Terre Haute
No job at last residence.....	19	.....
Unemployed in Terre Haute.....		4
Professional and semiprofessional.....	11	11
Proprietors, managers, and officials.....	10	11
Clerical and kindred workers.....	20	24
Craftsmen and kindred workers.....	8	8
Operatives and kindred workers.....	13	19
Domestic service workers.....	2	5
Other service workers.....	8	13
Farm owners, tenants and laborers.....	5	(1)
Laborers except farm.....	4	5
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of the 1,000 migrant workers in Terre Haute an estimated 40, or 4 percent, were unemployed and seeking work in the census week preceding this survey.

UNEMPLOYMENT BY SEX

The unemployment rates among women migrant workers was three times greater than among the men. Three percent of the men and 9 percent of the women were unemployed.

UNEMPLOYMENT BY AGE

Workers in the younger and older age groups were somewhat less successful than the middle age groups in finding employment.

Age of worker:	Percent unemployed in Terre Haute
Total.....	4
Under 20 years.....	6
20-24 years.....	3
25-44 years.....	3
45 years and over.....	7

UNEMPLOYMENT BY MONTH OF ARRIVAL

The most recently arrived workers had the highest unemployment rates in Terre Haute.

Month of arrival:	Percent un- employed in Terre Haute
Total.....	4
October 1940-April 1941.....	4
May-June 1941.....	3
July-August 1941.....	(1)
September 1941.....	4
October 1941.....	(1)
November 1941.....	5
December 1941.....	14

¹ Less than 0.5 percent.

UNEMPLOYMENT BY INDUSTRY AND OCCUPATION

The least successful Terre Haute migrants were those engaged in personal service and agriculture at their last residence. New workers and workers from "other" services were singularly successful in obtaining employment.

Industry at last residence:	Unemployed in Terre Haute
Total.....	4
No job.....	(1)
Agriculture.....	11
Mining.....	(2)
Construction.....	(2)
Manufacturing.....	4
Transportation, communication, and utilities.....	4
Trade.....	4
Personal service.....	18
Other services.....	(1)

¹ Less than 0.5 percent.

² Base too small for computation.

Relatively high unemployment was reported by farm workers and domestic and "other" service workers. Clerks, nonfarm laborers, and new workers reported virtually no unemployment. Rates by occupation follows:

Occupation at last residence:	Percent un- employed in Terre Haute
Total.....	4
No job.....	(1)
Professional and proprietary.....	3
Clerical and kindred workers.....	(1)
Craftsmen, and kindred workers.....	7
Operatives and kindred workers.....	4
Domestic and other service workers.....	14
Farm owners, tenants, and laborers.....	11
Laborers except farm.....	(1)

¹ Less than 0.5 percent.

HOUSING

The majority of Terre Haute migrants were occupying a separate dwelling unit when enumerated. Over one-third were sharing living quarters with other persons and a small proportion were living in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multi- person families
Occupying a separate dwelling.....	58	6	89
Sharing a dwelling with others.....	36	78	11
In hotels.....	6	16	(1)
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

Recent migration into Terre Haute has been relatively successful and, in view of the reported dull labor market, relatively large. In spite of the volume of in-migration, however, it appears probable that Terre Haute's net population was declining throughout the period covered by this survey. The census found 3.2 percent of Terre Haute's dwellings to be vacant in April 1940 but at the time of this survey, the proportion of vacancies had increased to 4.1 percent.

JANUARY 12, 1942.

RECENT MIGRATION INTO WARREN, RAVENNA, AND NEWTON FALLS, OHIO

A survey of migration into Warren, Ravenna, and Newton Falls, Ohio, was conducted by the Work Projects Administration Division of Research late in November 1941. The survey was concerned with civilians who moved into Warren and Newton Falls from places outside of Trumbull County, and into Ravenna from places outside of Portage County, after October 1, 1940, and who were still living in these cities at the time of the survey. Operating on a sample basis, the survey covered the residential districts, lower-priced hotels, and tourist and trailer camps within the corporate limits of the three cities. In addition, tourist and trailer camps in the open country near the Atlas powder plant were surveyed.

INDUSTRIAL ACTIVITY

The principal defense activity in the Warren-Ravenna area during the 13 months covered by this survey was the construction of a huge ordnance plant in Portage County between Ravenna and Newton Falls. Defense contracts awarded in connection with this plant were valued at about \$93,000,000 through October 1941 of which about \$65,000,000 was allotted for construction. During the same period the numerous established industries in the area enjoyed substantially increased activity and employment. At peak activity, reached in midsummer, the construction job at the arsenal employed about 13,000 men. This labor demand was many times greater than could be supplied by Warren, Ravenna, Newton Falls, and other nearby towns. Labor was accordingly attracted from two sources: (a) From among workers living in Cleveland, Akron, Youngstown, Canton, and numerous other cities within a radius of 50 miles, who commuted back and forth between home and work each day; and (b) from among migrant workers, many of whom moved into Warren, Ravenna, and Newton Falls, and, after all available housing was occupied, into the more distant cities, such as Akron and Youngstown.

After midsummer construction employment declined rapidly as construction workers were laid off. The majority of the migrants departed for other jobs, though some remained in the area for production work at the completed plant. According to local reports, attempts were being made at the time of this survey to induce a greater proportion of the construction workers to stay at the plant after the last construction work was finished.

NUMBER OF MIGRANTS

Approximately 2,200 families living in Warren, Newton Falls, and Ravenna in November 1941 had moved to the towns from places outside their respective counties after October 1, 1940. These families contained 2,250 workers and a total of 4,090 persons. Migrants made up a group equal to 7.5 percent of the 1940 population of the three towns.

The survey found an additional 130 families, containing 400 persons, in tourist and trailer camps in the open country near the Atlas powder plant.

In the city of Warren, the estimated number of migrants was 2,750, equal to 6.4 percent of Warren's 1940 population. In Ravenna, the estimated number of migrants was 830, equal to 9.8 percent of Ravenna's 1940 population. In Newton Falls, the estimated number of migrants was 510, equal to 16.3 percent of its 1940 population.

ORIGINS

Ohio was the chief source of the migrants, contributing exactly half; and Pennsylvania was second, with 24 percent. Five percent came from West Virginia, and an equal proportion from New York. The average distance traveled by the migrants was 115 miles, and only 5 percent traveled 500 miles or more.

Rural places were the origin of about one-fourth of the migrants; i. e., 5 percent from open country and 19 percent from rural villages. Towns (2,500 to 25,000 population) contributed 30 percent, small cities, 17 percent; and cities of over 100,000 population, 29 percent.

Six percent of the families had formerly lived in one of the three survey towns. Half of these families had been absent for 7 years or more before their return.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in the three towns was 32.6 years. In one-person families, the average was 32.9 years, and for heads of multi-person families, 33.6 years. Only 6 percent of the workers were under 20 years, but 18 percent were 45 years and over.

Women workers constituted 13 percent of all the migrant workers. The average age of the women workers was 25.6 years, as compared with 33.3 years for men.

Race.—Negroes constituted 4 percent of the migrant workers in the three towns.

Size of family.—Migrant families in the three towns were relatively small, averaging 1.9 persons per family. More than half consisted of only 1 person.

Size of family:	Percent distribution
1 person.....	55
2 persons.....	20
3 and 4 persons.....	19
5 persons and over.....	6
Total.....	100

Many of these families were not complete when interviewed; 40 percent of the 1-person families and 8 percent of the multiperson families had left a spouse or dependent children at their last residence. Before migration, the families had contained 5,400 persons; of these 76 percent had migrated and 24 percent had remained behind.

Month of arrival.—Half of the migrants in the three towns had arrived during June or earlier:

Month of arrival:	Percent distribution
October 1940 to March 1941.....	21
April to May 1941.....	15
June to July 1941.....	23
August to September 1941.....	20
October 1941.....	12
November 1941.....	9
Total.....	100

INDUSTRY AND OCCUPATION

The two chief industries attracting migrants to the Warren-Ravenna area were construction and manufacturing, and particularly manufacturing at the Ravenna arsenal and in Warren steel mills. The construction workers in the three towns had in most cases been construction workers at their last residence, but the great majority of the ordnance manufacturing workers had been engaged at nonmanufacturing jobs before migration. The representation of trade and other service industries was relatively minor.

The industrial distribution of the migrants on their last full-time jobs at their last previous residence and on their jobs in the three towns was as follows:

Industry	Percent distribution	
	At last residence	In the 3 towns
No job at last residence ¹	9	4
Unemployed in the 3 towns.....	7	.....
Agriculture, forestry, and fishing.....	4	.....
Mining.....	26	26
Construction.....	.....	.....
Manufacturing:	.....	.....
Chemicals.....	1	26
Iron and steel.....	10	14
Other.....	11	7
Transportation, communication, and utilities.....	6	4
Trade.....	12	8
Personal services.....	2	2
Other services.....	12	9
Total.....	100	100

¹ The status of these workers at last residence was: Students, 4 percent; "too young to work," 2 percent; unemployed, 2 percent; others, 1 percent.

Both before and after migration, the majority of the migrants held white collar and skilled jobs. Operatives were relatively few, but a rather large proportion of the migrants worked as laborers in the three towns.

The occupational distribution of the migrants before and after migration follows:

Occupation	Percent distribution	
	At last residence	in the 3 towns
No job at last residence.....	9	.....
Unemployed in the three towns.....	.....	4
Professional and semiprofessional.....	8	8
Proprietors, managers, and officials.....	8	6
Clerical and kindred workers.....	11	13
Craftsmen and kindred workers.....	28	30
Operatives and kindred workers.....	15	13
Domestic service workers.....	1	1
Other service workers.....	5	7
Farm owners, tenants, and laborers.....	7	.....
Laborers, except farm.....	8	18
Total.....	100	100

UNEMPLOYMENT

Out of 2,250 workers in the 3 towns, an estimated 80 workers, or 4 percent, were unemployed and seeking work at the time of the present survey.

Unemployment by sex.—Among female migrant workers, 13 percent were unemployed, as compared with 2 percent among males.

Unemployment by age.—Workers under 20 years reported the lowest unemployment rate, and those over 45 years the highest.

Age of workers:	Percent unemployed
Total.....	4
Under 20 years.....	(1)
20 to 24 years.....	2
25 to 44 years.....	3
45 years and over.....	7

Less than 0.5 percent.

Unemployment by race.—Negroes reported an unemployment rate more than five times greater than white workers. Among Negroes, 17 percent, and among white workers, 3 percent, were unemployed.

UNEMPLOYMENT BY MONTH OF ARRIVAL

Migrants who arrived in the three towns just before the present survey reported the highest unemployment rates:

Month of arrival:	Percent unemployed
Total.....	4
October 1940-May 1941.....	2
June-July 1941.....	4
August-September 1941.....	2
October 1941.....	7
November 1941.....	9

UNEMPLOYMENT BY INDUSTRY AND OCCUPATION

The most successful workers among migrants in the Warren-Ravenna area were new workers, and those engaged in farming and transportation at their last residence. Construction and manufacturing workers reported below-average unemployment. Workers from the trade industries were least successful. Unemployment rates by industry at last residence follow:

Industry at last residence:	Percent unemployed in 3 towns
Total.....	4
No job.....	(1)
Agriculture, forestry, and fishing.....	(1)
Mining.....	(2)
Construction.....	3
Manufacturing.....	2
Transportation, communication, and utilities.....	(1)
Trade.....	12
Personal services.....	(2)
Other services.....	4

¹ Less than 0.5 percent.

² Base too small for computation.

In terms of occupations, the clerks, craftsmen, operatives, farm workers, and nonfarm laborers reported very little unemployment in the 3 towns, and only the domestic and other service workers reported exceptionally severe unemployment. Unemployment rates by occupation at last residence were as follows:

Occupation at last residence:	Percent unemployed in 3 towns
Total.....	4
No job.....	(1)
Professional and semiprofessional.....	5
Proprietors, managers, and officials.....	9
Clerical and kindred workers.....	3
Craftsmen and kindred workers.....	2
Operatives and kindred workers.....	3
Domestic and other service workers.....	19
Farm owners, tenants, and laborers.....	(1)
Laborers, except farm.....	(1)

¹ Less than 0.5 percent.

HOUSING

The great majority of the migrant families in the 3 towns had doubled up with other persons; about one-fourth were occupying separate living quarters; a relatively large number were living in tourist and trailer camps; and a few lived in hotels.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying a separate dwelling.....	27	6	53
Sharing a dwelling with others.....	64	89	32
In hotels.....	2	4	(1)
In tourist and trailer camps.....	7	1	15
Total.....	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

Although the volume of recent migration into Warren, Ravenna, and Newton Falls has been very large in terms of the resident population, the three towns have not grown with such impressive speed as numerous other war-boom cities. The migrant rate for the three towns, for example, is only about one-quarter that of San Diego, about one-third that of Burlington, Iowa, another arsenal site, and substantially less than that of several Army camp towns in the South and Southwest. The explanation appears to lie in the fact that the Ravenna Arsenal has depended upon long-distance commuters for a great part of its labor. Approximately 1,000,000 workers live within a 50-mile radius of the Ravenna Arsenal, and these workers, rather than migrant workers, are the chief present source of labor for the arsenal.

JANUARY 5, 1942.

RECENT MIGRATION INTO WASHINGTON, D. C.

A survey of migration into Washington, D. C., was conducted by the Work Projects Administration Division of Research during November 1941. The survey was concerned with civilians who moved to Washington after October 1, 1940, and who were still living there in November 1941. Operating on a sample basis, the survey covered the residential districts, rooming houses, apartment houses, defense housing projects, and lower-priced hotels within the corporate limits of the District. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

NUMBER OF MIGRANTS

Approximately 36,300 families living in Washington, D. C., in November 1941 had moved to the city after October 1, 1940. These families contained 36,800 workers and a total of 51,700 persons. Migrants made up a group equal to 7.8 percent of Washington's 1940 population.

ORIGINS

Washington migrants came in substantial numbers from all sections of the Nation, and no one State predominated as the origin of the migrants. Pennsylvania and New York were the most important sources, but contributed only 12 and 13 percent, respectively. Eight percent came from Virginia, 6 percent from Illinois, 5 percent from North Carolina, and 5 percent from Maryland. The average distance traveled by the migrants was 290 miles, but 33 percent had traveled 500 miles or more.

Rural places were the origin of 15 percent of the migrants; i. e., 4 percent came from open country and 11 percent from rural villages. Towns (2,500 to 25,000 population) contributed 24 percent; small cities, 23 percent; and cities of over 100,000 population, 38 percent.

Eleven percent of the families had formerly been Washington residents. Half of these families had been absent from the city for four years or more.

CHARACTERISTICS

Age and sex.—The average age of Washington migrant workers was 26.1 years. In 1-person families the average was 24.6 years, and for heads of multiperson families, 30.8 years. Eleven percent of the workers were under 20 years, and 9 percent were 45 years or older.

Women workers made up 45 percent of all workers, an exceptionally high proportion. The average age of women workers was 24.1 years, as compared with 28.6 years for men.

Race.—Seven percent of the migrant workers were Negroes. Based on 1940 population, the migrant rate for nonwhite persons was 1.9 percent, as compared with 10.1 percent for white persons.

Size of family.—Migrant families in Washington were unusually small, average 1.4 persons per family. More than three-fourths of the families consisted of only one person.

Size of family in Washington:	Percent distribution
1 person.....	78
2 persons.....	10
3 and 4 persons.....	10
5 persons and over.....	2
Total.....	100

Many of these families were not complete when interviewed; 14 percent of the 1-person families and 11 percent of the multiperson families had left a spouse or dependent children behind when they moved to Washington. Before migration, the families had contained 61,400 persons. Of these, 84 percent had migrated and 16 percent remained at the migrants' places of origin.

Month of arrival.—Half of the Washington migrants had arrived in the city about 5 months or more prior to the present survey.

Month of arrival:	Percent distribution
October 1940–March 1941.....	24
April–May 1941.....	12
June–July 1941.....	22
August 1941.....	9
September 1941.....	13
October 1941.....	13
November 1941 ¹	7
Total.....	100

¹ Does not represent the entire month.

INDUSTRY AND OCCUPATION

Before migration, the majority of Washington migrants were either engaged in trade and "other" services, or held no jobs. Relatively few had been engaged in agriculture or manufacturing. In Washington, the Government service was of course the principal employer of migrant workers. It had absorbed, however, slightly less than half the migrants; for each migrant engaged in "other" services, trade, construction, and other Washington industries.

The industrial distribution of Washington migrants on their last full-time jobs at last residence and on their jobs in Washington was as follows:

Industry	Percent distribution	
	At last residence	In Washington
No job at last residence ¹	18	3
Unemployed in Washington.....		
Agriculture, forestry, and fishing.....	4	(²)
Mining.....	1	(²)
Construction.....	7	7
Manufacturing.....	10	3
Transportation, communication, and utilities.....	5	3
Trade.....	15	10
Finance, insurance, and real estate.....	5	1
Personal services.....	5	5
Government.....	9	46
Other services.....	21	22
Total.....	100	100

¹ The status of these workers at their last residence was: Students, 10 percent; unemployed, 4 percent; housewives, 1 percent; others, 3 percent.

² Less than 0.5 percent.

Both before and after migration, Washington migrants were engaged predominantly in white-collar occupations. There were few craftsmen or operatives among the migrants, and the number of unskilled workers was exceptionally small.

The occupations of Washington migrants before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Washington
No job at last residence.....	18	.....
Unemployed in Washington.....	.....	3
Professional and semiprofessional.....	10	9
Proprietors, managers, and officials.....	4	4
Clerical and kindred workers.....	41	56
Craftsmen and kindred workers.....	11	10
Operatives and kindred workers.....	5	6
Domestic service workers.....	2	3
Other service workers.....	4	7
Farm owners, tenants, and laborers.....	3	.....
Laborers, except farm.....	2	2
Total.....	100	100

UNEMPLOYMENT

Out of 36,800 migrant workers in Washington, an estimated 1,100 or 3 percent, were unemployed and seeking work at the time of the present survey. In other recently surveyed cities, migrant unemployment ranged from 2 percent in Bristol, Conn., to 17 percent in Fort Smith, Ark.

Unemployment by sex.—Among female migrants, 4 percent were unemployed, as compared with 2 percent among males.

Unemployment by age.—Migrant workers 45 years and over were least successful in finding work in Washington.

Age of worker:	Percent unemployed
Total.....	3
Under 20 years.....	(1)
20 to 24 years.....	2
25 to 44 years.....	2
45 years and over.....	10

¹ Less than 0.5 percent.

Unemployment by race.—Seven percent of the Negro migrant workers were unemployed, as compared with 3 percent among white workers.

Unemployment by month or arrival.—Workers who had been in Washington the shortest time reported the highest unemployment rates:

Month of arrival:	Percent unemployed
Total.....	3
October 1940–May 1941.....	2
June–September 1941.....	2
October 1941.....	6
November 1941.....	6

UNEMPLOYMENT BY INDUSTRY AND OCCUPATION

Unemployment was least among migrants who had come from agriculture, transportation, and Government service. Highest rates were reported by workers from manufacturing, trade, and personal services. New workers reported less than average unemployment in Washington. Rates by industry at last residence follow:

Industry at last residence:	<i>Percent un- employed in Washington</i>
Total.....	3
No job.....	2
Agriculture, forestry, and fishing.....	(1)
Mining.....	(2)
Construction.....	2
Manufacturing.....	6
Transportation, communication, and utilities.....	(1)
Trade.....	7
Personal services.....	8
Government.....	(1)
Other services.....	1

¹ Less than 0.5 percent.

² Base too small for computation.

No occupational group reported high unemployment in Washington, although skilled workers showed a rate higher than average. Exceptionally low rates were reported by professionals, operatives, and former farm workers. Rates by occupation at last residence follow:

Occupation at last residence:	<i>Percent un- employed in Washington</i>
Total.....	3
No job.....	2
Professional and semiprofessional.....	1
Proprietors, managers, and officials.....	2
Clerical and kindred workers.....	4
Craftsmen and kindred workers.....	6
Operatives and kindred workers.....	(1)
Domestic and other service workers.....	2
Farm owners, tenants, and laborers.....	(1)
Laborers, except farm.....	(2)

¹ Less than 0.5 percent.

² Base too small for computation.

HOUSING

The great majority of Washington migrants had doubled up with other persons, and only a small proportion occupied a separate dwelling unit when enumerated,

Living arrangements	Percent distribution		
	Total	1-person families	Multi- person families
Occupying a separate dwelling.....	15	2	60
Sharing a dwelling with others.....	82	94	39
In hotels.....	3	4	1
Total.....	100	100	100

CONCLUSIONS

As the nerve center of the defense program, Washington attracted an exceptionally large number of migrant workers between October 1940 and November 1941, both in terms of absolute numbers and relative to its resident population. Among the five cities of over 500,000 population recently covered in this survey, Washington shows the highest migrant rate, higher than Los Angeles, twice as high as Baltimore, three times higher than St. Louis, and eight times higher than Philadelphia.

The movement to Washington differed in many respects from the movement to other defense centers. The proportion of female workers and one-person families among the migrants was unusually large; migrants were drawn from all parts of the country instead of from within a radius of 100 or 200 miles; and the migrants were preponderantly white-collar workers, rather than craftsmen and operatives.

The movement was also a notably successful one; out of 35 cities covered to date in this survey, only one (Bristol, Conn.) reported a lower unemployment rate than Washington, D. C.

FEBRUARY 5, 1942.

RECENT MIGRATION INTO WASHINGTON, PA.

A survey of migration into Washington, Pa., was conducted by the Work Projects Administration, Division of Research, during the latter part of November 1941. The survey was concerned with civilians who moved to Washington from places outside of Washington County after October 1, 1940, and who were still living there when this survey was conducted. Operating on a sample basis the survey covered the residential districts and lower priced hotels within the corporate limits of the city. Higher priced hotels were not covered and no attempt was made to gather information about persons who left the city during the survey period.

INDUSTRIAL ACTIVITY

Between June 1940 and October 1941 Washington County received over \$8,000,000 in direct defense contracts. Nearly \$5,000,000 of this sum was contracted for supply items and \$3,000,000 for facilities. Defense contracts, however, were equal to only about one-sixteenth of the 1937 product value of manufactures in the county. According to local reports employment under the impetus of defense work has increased substantially over 1940 levels, and shortages were claimed in some skilled categories.

NUMBER OF MIGRANTS

An estimated 290 families containing 700 persons and 290 workers living within the corporate limits of Washington at the time of this survey had moved to the city after October 1, 1940. Migrants made up a group equal to 2.8 percent of the city's population in 1940.

ORIGINS

Pennsylvania was the most important source of migrant workers, contributing 59 percent. Ohio was the second most important source with 18 percent, and West Virginia was third with 11 percent. The average distance traveled by migrants was 100 miles and only 7 percent had traveled 500 miles or more.

Towns (2,500 to 25,000 population) were the former residence of 45 percent of the migrants. Twenty percent came from cities of 100,000 or more population; 19 percent came from rural places (i. e., 1 percent moved from open country and 18 percent from rural villages); and 16 percent moved from cities of 25,000 to 100,000 population.

Returning Washington residents comprised a relatively high proportion, 30 percent, of the migrant families. Of these former residents, about half had been absent from the city for 2 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers was 30.6 years. For one-person families the average was 29.9 years and for heads of multiperson families 32.5 years. Only 3 percent of the workers were under 20 years of age, but 24 percent, an unusually high percentage, were 45 years of age or over.

Women workers comprised one-fourth of the migrant labor force. Women workers were on the average 26.3 years of age, and men were 32.8 years.

Race.—Negroes comprised 10 percent of the migrants and white persons comprised 90 percent.

Size of family.—Migrant families average 2.5 persons. Fewer than one-third of the families were composed of one person.

Size of family in Washington:	Percent distribution
1 person.....	32
2 persons.....	26
3 and 4 persons.....	31
5 persons or more.....	11
Total.....	100

Many of these families were not complete when interviewed; 33 percent of the one-person families and 18 percent of the multiperson families had left a spouse or dependent children at their former residences. Before migration the families had contained nearly 900 persons, 84 percent of whom had migrated and 16 percent had remained at the migrants' last residences.

Month of arrival.—Nearly half of the migrant workers arrived in Washington during the 4 months preceding this survey.

Month of arrival:	Percent distribution
October 1940 to March 1941.....	20
April to May 1941.....	9
June to July 1941.....	25
August 1941.....	11
September 1941.....	12
October 1941.....	15
November 1941.....	8
Total.....	100

INDUSTRY AND OCCUPATION

Both before and after migration, Washington migrants were engaged principally in other services, manufacturing, and trade. Only a very small group of workers were drawn from agriculture and mining, but new workers made up a substantial proportion of the migrants.

The industrial distribution of the migrant workers on their last full-time jobs at their last residence and on their jobs when interviewed in Washington was as follows:

Industry	Percent distribution	
	At last residence	In Washington
No job at last residence ¹	14	.....
Unemployed in Washington.....		14
Agriculture, forestry, and fishing.....	3	(²)
Mining.....	2	4
Construction.....	10	5
Manufacturing:		
Stone, clay, and glass products.....	6	5
Iron and steel and their products.....	7	6
Other manufacturing.....	8	10
Transportation, communication, and utilities.....	8	10
Trade.....	15	18
Personal services.....	7	4
Other services.....	20	24
Total.....	100	100

¹ The status of these workers at their last residence was: Students 9 percent; housewives 1 percent; unemployed 2 percent; and others, 2 percent.

² Less than 0.5 percent.

White-collar workers made up the largest single occupational group among the Washington migrants, accounting for 37 percent before migration and 44 percent in Washington. There were also many operatives among the migrants, but skilled workers were relatively few. An unusually small proportion of the migrants held laborers jobs in Washington.

Occupations before and after migration were as follows:

Occupation	Percent distribution	
	At last residence	In Wash- ington
No job at last residence.....	14	.....
Unemployed in Washington.....		14
Professional and semiprofessional.....	12	20
Proprietors, managers, and officials.....	8	7
Clerical and kindred workers.....	17	17
Craftsmen, foremen, and kindred workers.....	12	13
Operatives and kindred workers.....	19	19
Domestic service workers.....	4	3
Other service workers.....	5	4
Farm owners, tenants, and laborers.....	3	(¹)
Laborers, except farm.....	6	3
Total.....	100	100

¹ Less than 0.5 percent.

UNEMPLOYMENT

Out of 290 migrant workers in Washington, an estimated 40 workers, or 14 percent, were unemployed and seeking work during the calendar week preceding interview.

Unemployment by sex.—Over one-fourth (26 percent) of the women migrant workers were unemployed at the time of the survey. Among the men the unemployment rate was 10 percent.

Unemployment by race.—Unemployment was more than three times heavier among Negro workers than among white workers. Among Negroes 37 percent were unemployed compared with 11 percent among white workers.

Unemployment by age.—Workers 45 years of age or over were the least successful in Washington.

Age of worker:	Percent un- employed in Washington
Total.....	14
Under 20 years.....	(¹)
20 to 24 years.....	15
25 to 44 years.....	13
45 years or over.....	18

¹ Base too small for computation.

Unemployment by month of arrival.—The rate of unemployment was heaviest among workers who arrived in Washington in the survey month and in the month prior to it. It was also heavy, however, among migrants who had been in the city for 6 months or more. Unemployment rates by month of arrival in Washington were as follows:

Month of arrival:	Percent un- employed in Washington
Total.....	14
October 1940–March 1941.....	11
April–May 1941.....	12
June–July 1941.....	13
August 1941.....	10
September 1941.....	9
October 1941.....	21
November 1941.....	29

Unemployment by industry and occupation.—Workers from construction, manufacturing, and other services were the least successful in finding jobs in Washington. New workers and those connected with trade reported much lower than average unemployment.

Industry at last residence:	<i>Percent un- employed in Washington</i>
Total.....	14
No job.....	7
Agriculture, forestry, and fishing.....	(1)
Mining.....	(1)
Construction.....	22
Manufacturing.....	11
Transportation, communication, and utilities.....	(1)
Trade.....	7
Personal services.....	(1)
Other services.....	11

¹ Base too small for computation.

Clerks, craftsmen, and operatives all reported unusually high unemployment in Washington, while least unemployment was reported by new workers and professional workers. Rates by occupation follow:

Occupation at last residence:	<i>Percent un- employed in Washington</i>
Total.....	14
No job.....	7
Professional and semiprofessional.....	(1)
Proprietors, managers, and officials.....	(2)
Clerical and kindred workers.....	19
Craftsmen and kindred workers.....	18
Operatives and kindred workers.....	22
Domestic service workers.....	(2)
Other service workers.....	(2)
Farm owners, tenants, and laborers.....	(2)
Laborers, other than farm.....	(2)

¹ Less than 0.5 percent.

² Base too small for computation.

HOUSING

Well over one-half of the migrant families were sharing a dwelling with other persons in Washington; less than two-fifths were occupying an entire dwelling unit; and a few were living in hotels at the time of interview.

Living arrangements	Percent distribution		
	Total	1-person families	Multi- person families
Occupying a separate dwelling.....	37	13	48
Sharing a dwelling with others.....	61	79	52
In hotels.....	2	8	.....
Total.....	100	100	100

CONCLUSIONS

In spite of reports of greatly increased local industrial activity, Washington, Pa., attracted relatively few migrant workers during the first year of the defense program. Few as they were, however, the workers were notably unsuccessful in finding jobs. Among 38 eastern cities surveyed, only Atlanta showed a higher migrant unemployment rate than Washington.

NOVEMBER 30, 1941.

RECENT MIGRATION INTO WICHITA KANS.

A survey of migration into Wichita, Kans., one of America's great new aircraft manufacturing centers, was conducted by the Work Projects Administration, Division of Research, during September 1941. The survey was concerned with persons who moved to Wichita from places outside of Sedgwick County after October 12, 1940, and who were still living there in September 1941. Operating on a sample basis, the survey covered the residential district, lower-priced hotels and trailer camps within the city limits of Wichita and, in addition, Hilltop Manor, a defense housing project outside the city limits. Higher priced hotels were not surveyed and no attempt was made to gather information about persons who had left Wichita during the survey period.

INDUSTRIAL ACTIVITY

Wichita stands beside San Diego as one of the hottest defense boom cities in America. In August 1941 Wichita's index of manufacturing employment reached the extraordinary figure of 324.4 (1937 average=100), second only to San Diego. Between August 1940 and August 1941, manufacturing employment in Wichita increased 167.7 percent, the highest in the country. Between October 1, 1940, and September 1941 (i. e., during the period covered by the present migration survey) employment in Wichita aircraft plants rose from 3,500 to 14,500 or a more than fourfold increase within slightly less than 12 months.

These figures reflect a spectacular transformation of the city. A year ago Wichita was predominantly a farm service city with only a few small manufacturing industries. Today, after being awarded \$368,000,000 in direct defense contracts, it has suddenly become one of the Nation's important aircraft production centers.

NUMBER OF MIGRANTS

This activity has brought a tremendous wave of migrants into Wichita. Approximately 12,800 families living in the corporate limits of Wichita¹ in September 1941 had moved from outside Sedgwick County after October 1, 1940. These families contained 13,000 workers. The total number of persons present in the migrant families was 23,000, equal to 20 percent of Wichita's 1940 population. In terms of its population, Wichita has attracted during the past year 6 times more migration than Baltimore and 20 times more than Philadelphia, even though both these latter cities are themselves important defense centers.

ORIGINS

Wichita migrants were drawn from near at hand. The majority of the migrants (54 percent) came from Kansas. Oklahoma was the second most important source, contributing 18 percent; Missouri was third with 9 percent; and Iowa fourth with 3 percent. The average distance traveled by Wichita migrants was approximately 135 miles; and only 7 percent had traveled 500 miles or more.

Rural places, i. e., places of less than 2,500 population, were the source of more than two-fifths of the migrants; 10 percent had come from the open country, and 32 percent from rural villages. Towns (2,500 to 25,000 population) contributed 38 percent; small cities, 9 percent; and 11 percent had come from cities of more than 100,000 population.

A very large proportion of the migrants had come to Wichita for the first time; 89 percent reported no prior residence in Wichita, and only 11 percent reported having lived in Wichita before. Among former Wichita residents, about half had been absent for 3 years or more.

CHARACTERISTICS

Age and sex.—The average age of all migrant workers was 24.9 years. (In other survey cities, the average age was as follows: Greenville, S. C., 26.0 years; Baltimore 27.5 years; and Philadelphia, 29.7 years.) In one-person families the average age was 23.0 years; and for heads of multiperson families, 29.0 years. One migrant worker in approximately 7 was under 20 years of age, but only 1 in 16 was 45 years and over.

¹ In Hilltop Manor, outside the Wichita city limits, the survey found an additional 230 migrant families containing 880 migrant persons.

Women workers constituted 13 percent of all workers in the migrant families, (Comparative figures for other survey cities are: Baltimore, 10 percent; Greenville, S. C., 28 percent; and Philadelphia, 22 percent.)

Race.—Practically all of the migrants were white. Negroes made up 2 percent of the migrant workers, and white persons made up 98 percent.

Size of family.—When interviewed in Wichita, more than half of the migrant families contained only one person:

Size of family in Wichita:	Percent distribution
1 person.....	56
2 persons.....	22
3 and 4 persons.....	19
5 persons and over.....	3
Total.....	100

Most of these families were complete. Only 5 percent of the multiperson families, and 10 percent of the one-person families, had left a spouse or dependent children behind when they moved to Wichita. Before migration, the families contained 24,800 persons. Of these, 23,000 had migrated and 1,800 had remained at the migrants' places of origin.

Months lived in county.—The distribution of the migrants according to the time of their arrival in Wichita was as follows:

Month of arrival:	Percent of Wichita migrants
October 1940–January 1941.....	17
February–March 1941.....	13
April–May 1941.....	20
June 1941.....	14
July 1941.....	14
August 1941.....	13
September 1941 ¹	9
Total.....	100

¹ The survey was conducted during September; hence this figure does not represent total in-migration during the month.

INDUSTRY AND OCCUPATION

Wichita migrants were drawn mainly from farming, trade, other service industries, and from students who were not in the labor market at their previous residences. These four groups supplied two-thirds of the migrant workers. Manufacturing industries contributed only 10 percent of the migrants.

In Wichita, aircraft manufacturing, of course, became the predominant industry for the migrants, absorbing 52 percent of all the workers. But for every migrant worker who had found a job in the aircraft factories, there was another migrant worker in Wichita who was either working in another industry or was unemployed.

The industrial distribution of Wichita migrants on their last full-time job at their last place of residence, and on their jobs in Wichita, was as follows:

Industry	Percent distribution	
	At last residence	In Wichita
No job at last residence ¹	23	13
Unemployed in Wichita.....	19	(²)
Agriculture, forestry, and fishing.....	3	1
Mining.....	7	6
Construction.....	3	32
Manufacturing:		
Transportation equipment.....	7	4
Other.....	4	3
Transportation, communication, and public utilities.....	17	13
Trade.....	4	3
Personal services.....	13	5
Other services.....		
Total.....	100	100

¹ The status at last residence of these workers was: Students, 18 percent; housewives, 1 percent; unemployed, 4 percent.

² Less than 0.5 percent.

The occupational distribution of the migrant workers before and after migration was as follows:

Occupation	Percent distribution	
	At last residence	In Wichita
No job at last residence	23	.....
Unemployed in Wichita		13
Professional and semiprofessional	4	3
Proprietors, managers, and officials	5	2
Clerical, sales, and kindred workers	13	11
Craftsmen, foremen, and kindred workers	15	30
Operatives and kindred workers	13	30
Domestic service workers	1	2
Other service workers	4	6
Farm owners, tenants, and laborers	18	(1)
Laborers, except farm	4	3
Total	100	100

¹ Less than 0.5 percent.

Wichita drew only about one-fourth of its migrant workers from among craftsmen and operatives, but it provided 60 percent of the migrants with craftsmen's and operatives' jobs. The greater part of these newly skilled and unskilled workers were recruited from the ranks of the farm workers and students. A very small proportion of the migrants held unskilled jobs in Wichita.

UNEMPLOYMENT

Out of 13,230 migrant workers in Wichita and Hilltop Manor, about 1,680, or 13 percent, were unemployed and seeking work during the calendar week prior to interview. The comparable unemployment figures for other recently surveyed cities are: Baltimore, 3 percent; Greenville, S. C., 9 percent; and Philadelphia, 8 percent.

Unemployment by sex.—Women workers among the migrants reported about twice the unemployment rate of the men. Among the women, 23 percent were unemployed; among the men, 11 percent were unemployed.

Unemployment by age.—The youngest workers reported especially high rates of unemployment. Among migrant workers under 25 years, 19 percent were unemployed, as against 7 percent for the age group 25 to 44, and 9 percent for those over 45. Among the very young, the difference was still greater; out of the 1,950 migrant workers who were under 20 years of age 30 percent were unemployed.

Unemployment by size of place of origin.—The highest unemployment rate (19 percent) was reported by workers from the open country. As the size of place of origin increased, unemployment decreased consistently; and the lowest rate (4 percent) was reported for migrants from large cities.

Size of place of origin:	Percent unemployed in Wichita
Total	13
Open country	19
Rural villages (less than 2,500)	14
Towns (2,500 to 25,000)	13
Small cities (25,000 to 100,000)	9
Large cities (over 100,000)	4

Unemployment by distance traveled.—Unemployment tended to increase with the distance traveled by the migrants, with the one exception that the few workers who traveled more than 1,000 miles to Wichita (principally made up of aircraft workers from California) reported relatively little unemployment.

Distance traveled:	Percent unemployed in Wichita
Total	13
Less than 100 miles	11
100 to 199 miles	13
200 to 499 miles	15
500 to 999 miles	18
1,000 miles and over	6

Unemployment by month of entering county—Wichita migrants reported an extraordinary difference in unemployment rates according to the duration of their stay in Sedgwick County:

Month of arrival:	Percent unemployed in Wichita
Total.....	13
October 1940-January 1941.....	2
February-March 1941.....	4
April-May 1941.....	5
June 1941.....	10
July 1941.....	17
August 1941.....	25
September 1941.....	44

From the evidence shown in this table, there can be no doubt that during the 4 months preceding this survey Wichita's new industries had been attracting far more migrant workers than they could currently absorb.

Unemployment by industry and occupation.—Exceptionally high unemployment rates were reported by workers who held no job at their last residence (particularly the students and housewives), and by workers from agriculture and the personal service industries. Workers from the construction and manufacturing industries reported relatively little unemployment in Wichita. Workers who had been unemployed or on Works Progress Administration at their last residence showed about the average rate of unemployment in Wichita. Unemployment rates by industry at last residence follow:

Industry at last residence:	Percent unemployed in Wichita
Total.....	13
No job:	
Students.....	20
Housewives.....	30
Unemployed.....	14
Agriculture, forestry, and fishing.....	18
Mining.....	7
Construction.....	2
Manufacturing.....	5
Transportation, communication, and public utilities.....	10
Trade.....	11
Personal services.....	25
Other services.....	9

In terms of occupation, the highest unemployment rates were reported by two of the unskilled groups, farm workers and domestic service workers. Unemployment among operatives was about average, and among craftsmen it was very slight. Unemployment rates according to last occupation were as follows:

Occupation at last residence:	Percent unemployed in Wichita
Total.....	13
No job.....	20
Professional, proprietary, and clerical.....	7
Craftsmen, foremen, and kindred workers.....	4
Operatives and kindred workers.....	11
Domestic service workers.....	31
Other service workers.....	11
Farm owners, tenants, and laborers.....	19
Laborers except farm.....	11

HOUSING

About two-thirds of the migrant families were sharing a dwelling unit with other persons when interviewed in Wichita; 5 percent were living in hotels, and considerably less than one-third of the families occupied a separate dwelling unit. A small number of families lived in trailers.

Living arrangements	Percent distribution		
	Total	1-person families	Multi-person families
Occupying separate dwelling	29	6	59
Sharing dwelling	66	87	39
In hotels	5	7	1
In trailers	(1)	(1)	1
Total	100	100	100

Less than 0.1 percent.

CONCLUSIONS

The rate of recent migration into Wichita has reached spectacular proportions, surpassing many times over the rate for any other city covered to date by this survey. At the time of the present survey, however, the movement was running ahead of itself. Workers were arriving in Wichita faster than they could be absorbed into the local industries; and a redundant supply of migrant workers—heavily weighted with job seekers under 20 years of age—had accumulated within the local labor market.

DECEMBER 12, 1941.

RECENT MIGRATION INTO WICHITA FALLS, TEX.

A survey of migration into Wichita Falls, Tex., was conducted by the Work Projects Administration Division of Research during the third week of October 1941. The survey was concerned with civilians who moved to Wichita Falls from places outside of Wichita County after October 1, 1940, and who were still living in the city at the time of the present survey. Operating on a sample basis, the survey covered the residential districts, lower-priced hotels, and trailer camps located within the corporate limits of Wichita Falls. Higher-priced hotels were not surveyed, and no attempt was made to gather information about persons who left the city during the survey period.

MILITARY ACTIVITY IN WICHITA FALLS

The chief factor affecting migration into Wichita Falls during the period covered by this survey was the construction of Sheppard Field Air Corps Technical Training School. According to local estimates, about 15,000 workers had been employed on this job at one time or another. Labor turn-over was high, however, and on October 9, 1941, near the peak of construction, 6,300 workers, both local and migrant, were employed on the job. Lay-offs first began during the week preceding the present survey, when about 1,000 men were released for construction jobs in other parts of the State.

NUMBER OF MIGRANTS

Approximately 2,100 families living in Wichita Falls at the time of the present survey had moved to the city after October 1, 1940. These families contained 2,200 workers and 5,300 persons. Migrants made up a group equal to 11.8 percent of the 1940 population of Wichita Falls.

ORIGINS

More than three-fourths (77 percent) of the Wichita Falls migrants came from within the State of Texas. Oklahoma was second most important contributor, with 14 percent; and Louisiana was third with 2 percent. The average distance traveled by the migrants was 160 miles; 7 percent had traveled more than 500 miles.

Rural places (less than 2,500 population) were the source of about one-quarter of the migrants; i. e., 10 percent had come from open country and 16 percent from rural villages. Towns (2,500 to 25,000 population) contributed 39 percent; small cities, 17 percent; and cities of over 100,000 population, 18 percent.

About one-sixth (16 percent) of the families had formerly lived in Wichita Falls. Half of those families had been absent from the city for 4 years or more.

CHARACTERISTICS

Age and sex.—The average age of migrant workers in Wichita Falls was 32.5 years. In one-person families, the average was 35.6 years, and for heads of multiperson families, 33.9 years. Workers under 20 years made up 7 percent of all workers, and those over 45 years made up 15 percent.

Women workers made up 11 percent of all the migrant workers. The average age of women workers was 24.1 years, as compared with 33.7 years for men.

Race.—Negroes constituted 5 percent of the migrants, somewhat less than the proportion of Negroes in the resident population of Wichita Falls; and 2 percent were of "other" races.

Size of family.—Migrant families in Wichita Falls were relatively small, averaging 2.6 persons per family. Less than one-fourth contained one person.

Size of family:	Percent distribution
1 person.....	24
2 persons.....	31
3 and 4 persons.....	37
5 persons and over.....	8
Total.....	100

A number of these families were not complete when interviewed; 33 percent of the 1-person families and 10 percent of the multiperson families had left a spouse or dependent children behind when they moved to Wichita Falls. Before migration, the families contained 6,100 persons. Of these, 88 percent had migrated, and 12 percent remained at the migrants' last residence.

Month of arrival.—The distribution of migrants according to the month of their arrival in Wichita Falls was as follows:

Month of arrival:	Percent distribution
October 1940–February 1941.....	11
March–April 1941.....	10
May–June 1941.....	19
July–August 1941.....	33
September 1941.....	18
October 1941 ¹	9
Total.....	100

¹ Does not include the full month.

OCCUPATION AND INDUSTRY

Both before and after migration, construction was the predominant industry of Wichita Falls migrants. For every migrant construction worker, however, there were about two other workers following other industries, particularly trade, "other" services, and transportation. Only minor industrial shifts took place among the migrants in the course of moving to Wichita Falls.

The industrial distribution of migrant workers on their last full-time jobs at last residence and on their jobs when interviewed in Wichita Falls was as follows:

Industry	Percent distribution	
	At last residence	In Wichita Falls
No job at last residence ¹	8	.....
Unemployed in Wichita Falls.....	.....	6
Agriculture, forestry and fishing.....	9	2
Mining.....	6	5
Construction.....	35	36
Manufacturing.....	7	6
Transportation, communication, and utilities.....	6	10
Trade.....	14	13
Personal services.....	4	6
Other services.....	11	16
Total.....	100	100

¹ The status of these workers at last residence was: Students, 2 percent; housewives, 2 percent; and unemployed, 4 percent.

In terms of occupation, the by far largest single group among the migrants were skilled workers, with white-collar and semiskilled workers occupying a secondary position both before and after migration. A number of migrants had secured unskilled jobs in Wichita Falls. The occupational distribution of the migrants before and after migration follow:

Occupation	Percent of	
	At last residence	Wichita Falls
No job at last residence	8	6
Unemployed in Wichita Falls		5
Professional and semiprofessional	5	5
Proprietors, managers, and officials	6	5
Clerical and kindred workers	13	14
Craftsmen and kindred workers	34	35
Operatives and kindred workers	12	14
Domestic service workers	3	3
Other service workers	4	5
Farm owners, tenants, and laborers	8	2
Laborers, except farm	7	11
Total	100	100

UNEMPLOYMENT

Out of 2,200 migrant workers in Wichita Falls, an estimated 130, or 6 percent, were unemployed and seeking work during the entire calendar week preceding this survey. Comparable figures for migrants in other small defense-construction cities are: Burlington, Iowa, 3 percent; Macon, Ga., 11 percent; and Corpus Christi, Tex., 9 percent.

Unemployment by sex.—Unemployment among female migrant workers was more than four times higher than among males; 21 percent of the females were unemployed, as compared with 5 percent for males.

Unemployment by race.—Negroes reported more than three times the unemployment rate of white workers. Among the Negro migrant workers, 17 percent, and among white workers, 5 percent were unemployed.

Unemployment by age.—The younger workers (including those aged 20 through 24 years, ordinarily a low-unemployment age group) showed the highest unemployment rates in Wichita Falls. Workers over 45 years showed average unemployment.

Age of worker:	Percent unemployed in Wichita Falls
Total	6
Under 20 years	10
• 20 to 24 years	10
25 to 44 years	4
45 years and over	6

Unemployment by month of arrival.—The highest unemployment rates were reported by workers who arrived in Wichita Falls shortly before the present survey. The migrants who had been in the city longest reported average unemployment.

Month of arrival:	Percent unemployed in Wichita Falls
Total	6
October 1940–February 1941	6
March–June 1941	3
July–August 1941	3
September 1941	9
October 1941	17

Unemployment by industry and occupation.—Workers who held jobs in the personal service industries at last residence reported the highest unemployment rate in Wichita Falls, and workers from agriculture, forestry, and fishing and mining and workers who held no job at last residence reported substantially higher than average unemployment rates. Relatively slight unemployment was

reported by workers who engaged in construction, manufacturing, and other service industries at their last residence. Unemployment rates by industry follow:

Industry at last residence:	Percent unemployed in Wichita Falls
Total	6
No job at last residence	10
Agriculture, forestry, and fishing	10
Construction	10
Manufacturing	2
Transportation, communication, and utilities	(1) 7
Trade	7
Personal services	26
Other services	4

¹ Less than 0.5 percent.

In terms of occupation at last residence, domestic-service workers and nonfarm laborers had fared worst in Wichita Falls. Very low unemployment rates were reported by craftsmen and white-collar workers. Unemployment among former farm workers was only slightly above average. Rates by occupation were as follows:

Occupation at last residence:	Percent unemployed in Wichita Falls
Total	6
No job at last residence	10
Professional, proprietary, and clerical	3
Craftsmen and kindred workers	2
Operatives and kindred workers	6
Domestic service workers	38
Other service workers	6
Farm owners, tenants, and laborers	8
Laborers, except farm	15

HOUSING

An exceptionally small proportion of the migrants had found separate living quarters in Wichita Falls; even among the multiperson families the great majority had doubled up with other families. A number of the migrants lived in trailer and tourist camps.

Living arrangements	Percent distribution		
	Total	1-person families	Multiperson families
Occupying a separate dwelling	26	9	32
Sharing a dwelling with others	66	87	60
In hotels	1	3	(1)
In trailer and tourist camps	7	1	8
Total	100	100	100

¹ Less than 0.5 percent.

CONCLUSIONS

In terms of its population, Wichita Falls has recently attracted a large influx of migrant workers. Among all the cities surveyed to date, only one, Wichita, Kans., reported a higher migrant rate.

The greater part of this movement has occurred during the 4 months preceding the present survey, and was obviously related to the construction of Sheppard Field. About one-third of the migrants were engaged in this construction work and were expected to leave the city at the completion of the airfield or before. The other two-thirds of the migrants, however, had been absorbed by the more permanent local industries, and many were to stay on as residents of Wichita Falls.

EXHIBIT 2—MANPOWER

FOR THE CONSTRUCTION OF CAMP ALBERT H. BLANDING

(An analysis of the characteristics of those workers who applied for and those workers who received work during the construction of Camp Albert H. Blanding, Starke, Fla.)

SEPTEMBER 1941, PREPARED BY DEPARTMENT OF RESEARCH AND STATISTICS,
FLORIDA INDUSTRIAL COMMISSION, TALLAHASSEE, FLA.

PREFACE

This study was made in an effort to throw some light on the social and economic problems encountered in meeting the labor requirements of the Camp Blanding construction project. The study reveals interesting data on defense migration, housing problems, occupational and geographic mobility of labor, and the value of a public employment system in staffing such a project. It also reveals a definite need for more preplanning on projects of this magnitude.

The basic data for the study were obtained from the registration cards of the applicants. Grateful acknowledgement is made for the cooperation and valuable assistance rendered by Mr. Harvey D. Driscoll and members of his staff in the Jacksonville office of the Florida State Employment Service in making these data available. The study itself was prepared in the department of research and statistics by Edward E. Wiles, statistician, with the able assistance of other members of the department.

A. FREDERICK SMITH,

Chief, Research and Statistics Department.

INTRODUCTION

Grandiose dreams of Florida real-estate promoters during the boom twenties seemed insignificant when compared with the reality which faced the residents of Starke, Fla., in September 1940, when they suddenly found that there would be a \$25,000,000 "city of soldiers" as their next door neighbor—a city equal in size to the fifth largest city in the State. At that time the huge project was still in the planning stage, but it had been definitely decided that the location of the camp would be on the shores of Kingsley Lake, just a few miles east of Starke. The small community immediately began to hum with activity as one of the country's largest Army cantonments was about to be constructed a short distance from town. This naturally meant there would be an unprecedented boom for Starke merchants and businessmen.

A NEW NATIONAL GUARD CAMP

Events leading up to this cloudburst of humanity on this sparsely populated area began early in 1939. It was little more than just another news item to the citizens of Starke when they read that the National Guard Camp J. Clifford Foster, located near Jacksonville, had been purchased by that city. These citizens did, however, later join with the rest of the State in rejoicing over the selection of the former camp site for a proposed new United States naval air station. Amid this news little significance had been placed on the disappearance of the former National Guard camp to make way for the new naval base. The State armory board, having realized \$400,000 from the sale of the former camp site had meanwhile been searching for a new location. When the final decision was made, the dry, rolling, pine-covered terrain surrounding Kingsley Lake, near Starke, had been selected.

It seemed to be a typical spot for a modest Army camp to be used 2 weeks each summer by the Florida National Guard. Plans called for an expenditure of approximately \$700,000 for the construction of buildings and other facilities. Starke looked with complacency on the establishment of the camp nearby. There actually was little cause for joyous celebration, since the 2-week camping period would probably come and go each year with little effect on the tills of Starke's few small merchandising establishments. So it was early in 1940 that Camp Blanding was established and named after Gen. Albert H. Blanding, former commanding officer of the Thirty-first (Dixie) Division.

RUMORS OF EXPANSION

The accelerated national defense program resulted in many rumors regarding the possibility that Camp Blanding was destined to become much larger. At first it looked as if the Thirty-first Division would train there; then came the report that there would also be the Forty-third Division from Maine, Vermont, Connecticut, and Rhode Island. It was not long before a couple of artillery regiments and two observation squadrons were added to the reported plans. Then in September came the announcement of an appropriation for expansion of the facilities of the camp.

CONTRACT AWARDED SEPTEMBER 11, 1940

Notice of the award of the original contract came on September 11, 1940, with the original construction cost set at \$8,700,000. The contract specifications called for 10,254 buildings including a hospital equipped with 2,000 beds, 2 large machine-equipped laundries, barracks, mess halls, service clubs, theaters, target range, post office, gasoline-storage plant, cold-storage plant, bakery, 2 incinerators, an electric-power distribution system, telephone system, sewer and water system, roads, walks, railroad-track facilities, post exchanges and acre after acre of pyramid Army tents. The camp area, including Infantry and Field Artillery ranges, was to cover 55,000 acres or 90 square miles.

At the time the contract was awarded, the National Guard units of the Thirty-first Division had been notified that they were to be called into active service and stationed at Camp Blanding. It was planned to have the units arrive at the camp in late November or December. For this reason speed in construction was a most essential factor.

LOCATION OF CAMP SITE AND ECONOMIC CHARACTERISTICS OF AREA

The camp itself is located in Clay County, although Starke, the county seat of Bradford County, is the nearest town, being approximately 9 miles west of the camp site. Green Cove Springs, the county seat of Clay County, is approximately 20 miles east of the camp. The camp is approximately 40 miles from Jacksonville, Florida's largest city, with a population of 173,065; and 25 miles in the opposite direction is Gainesville, a city of 13,757. The camp is also approximately 50 miles inland from the Atlantic Ocean at St. Augustine, a city of 12,000 people. The 1940 census figures show Starke with 1,480 residents and Green Cove Springs with 1,752. The figures for both towns represent slight increases (less than 5 percent) over the 1930 census. No other town in either of the counties has more than 1,000 population. The total population of Clay County for 1940 was 6,468, a decrease of 5.7 percent from the 1930 figures. Bradford County had a decrease of 7.3 percent from 1930.

These two counties are in the heart of a predominately agricultural area of the northeastern part of the State. The Bradford County area around Starke is particularly noted for its strawberry crops. Other agricultural activity in the section includes large potato crops in St. Johns and Clay Counties, lima bean and string-bean crops in Alachua, Columbia Union, and Bradford Counties. Parts of the vast stretches of pines surrounding the camp area have been tapped by turpentine operators in that section. There are a few sawmills in the area, but sawmill activity is not a major factor in the economic life.

The camp site is made up of sandy pine-studded terrain bordering on the north and east sides of Kingsley Lake, a favorite fishing spot in that section of the State. The lake shore has long been spotted with summer cottages and fishing camps for week-end occupants as well as summer vacationers.

It is not likely that anyone could have visualized the transformation that was to take place in this somewhat desolate camp site; that even by vast stretches of the imagination could he have pictured a city of 60,000 mushrooming from the sandy shores of Kingsley Lake with water, light, and power facilities comparable with any large city. But, strange as it may seem, such a transformation did take place during the brief span of 6 months, from September 1940 to March 1941.

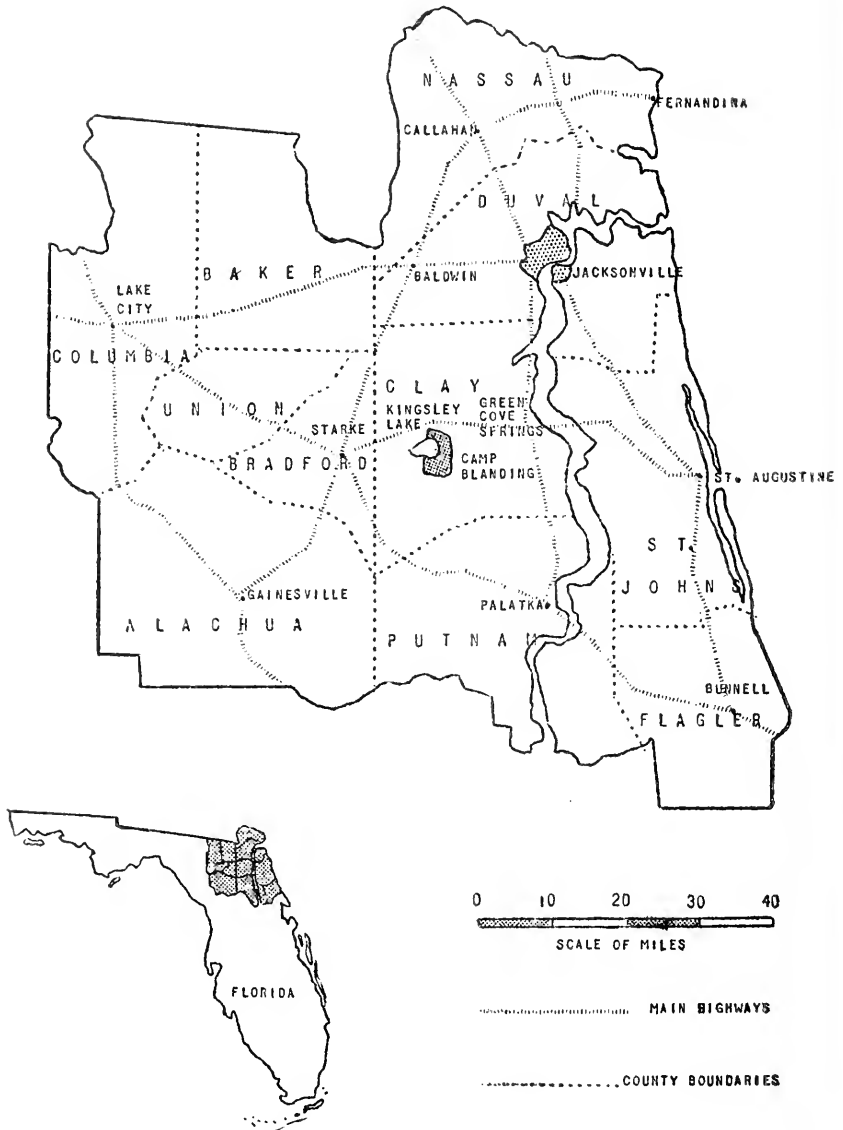


CHART 1. Map of northeast Florida showing camp Blanding, surrounding towns, and main highways.

ROLE OF THE FLORIDA STATE EMPLOYMENT SERVICE

On September 16 the representative of the contractor, Starrett Bros. & Eken of New York, arrived at the site to begin work. After a conference between representatives of the contractor, the State employment service, and the unions, it was found that the contract called for a closed shop and it was decided that the employment service together with the unions would cooperate in supplying the labor needs of the contractor.

It was decided to establish a temporary office at the site to house the representatives of the public employment service. This office at the camp was completed on September 2, and at 8 a. m. on that date one of the construction superintendents placed the initial order for 400 grubbers. At the time there were approximately 500 men gathered around the office to file work applications. These men were registered for work and sent immediately to the work site. The order for 400 grubbers was filled before the day ended. During the day the employment service was informed that the contractor expected to hire 600 laborers per day for the next 10 days and that 2,000 carpenters would be hired the following week upon arrival of lumber materials. The estimate of labor needs was placed at 10,000 men at this time. This estimate showed the necessity for an immediate expansion of the personnel at the employment office. Only 3 men had been assigned to the office, but 6 more interviewers were added and still more were added later. Applications were taken in skeleton form as rapidly as possible. All workers not immediately needed were told to return home to await notification from the employment service when they would be needed. Publicity resulted in a rapid expansion of the application load at the site. When the contractor was ready for carpenters and other skilled building mechanics, the employment office notified the registered workers from the nearby communities. As each man reported to work he brought with him 3 or 4 friends and relatives who were also desirous of employment. It appeared at first that this natural trend of events would solve the recruitment problem. It also appeared at first that there would be no serious housing problem for workers, since most of this first group were residents of the commuting area.

AVAILABILITY OF LABOR

After the contract was awarded, an immediate question arose as to whether or not there would be a sufficient supply of available labor within a reasonable distance of the area. Practically all of the workers within a 25-mile radius of the camp were agricultural laborers. It appeared that this major construction project had been dropped in the midst of a virtual contraction labor vacuum which would necessitate extensive recruitment in order to staff the job with competent workers. However, it was soon discovered that there was an "invisible" supply of labor in the area concerning which no forecast could have been made, and which had not appeared in the employment records of the public employment service of the State. The publicity accompanying the project resulted in a mass shifting of these workers to the camp site as this was a period when local agricultural workers were for the most part idle.

In addition, the contract was awarded at a time when the seasonal influx of labor had begun to arrive in Florida. While the heaviest influx was not normally due until late October or November, the publicity in connection with the establishment of the camp caused many of the migrants to enter the State earlier than usual. Many agricultural migrants who would not ordinarily be needed in the agricultural regions of South Florida until winter began to stream into the camp site area early in October. While few of the workers among those normally migrating to this area are skilled in building trades, it was found that many possess sufficient skill to satisfy the requirements of this mass-production job; consequently, the influx aided in providing a readily available supply of workers in the lesser skilled classifications.

Besides the seasonal agricultural migrants and the local agricultural workers, the establishment of the camp served as an incentive to increase the traffic of the poorer class of tourists to Florida. Many men who ordinarily would not have ventured a vacation trip South headed for this large construction project with the idea that by securing employment they could also provide their families with a winter vacation in Florida. Among this group there were many who actually were skilled in construction work and who had little difficulty in securing employment on the project.

CONSTRUCTION AWARD EXPANDED TO \$27,000,000

On October 7 the peak estimated need of 10,000 was increased to 25,000 and the contract expanded from \$8,700,000 to \$27,000,000. This unforeseen expansion immediately resulted in a multiplication of the problems of recruitment of workers and in provision for housing facilities.

Speed was even a greater necessity. The announcement that the Thirty-first and Forty-third Divisions of the National Guard would be stationed at Camp Blanding in late November or December had already been made. It would be necessary to rush this project to completion, at least to such an extent that these military units could be moved in. The contractor's labor demand, therefore, became even more urgent and it became the full duty of the Employment Service and of the unions to locate the 25,000 workers to staff the project.

Approximately 10,000 workers had become available during the first few weeks of construction. These men had come from nearby areas so that there had not been created any serious problems, but this increase in labor requirements meant that it would be necessary to bring workers from much greater distances than had previously been anticipated.

RECRUITMENT OF WORKERS

With this large expansion of labor requirements, all local employment offices throughout the State were notified of the estimated requirements for this project. Requests were then issued to nearly all of these offices to furnish a given number of workers in specified occupations. If these workers were not available, the local office manager was requested to comb the local area in cooperation with the local unions in order to try to locate the men. The clearance system was simplified as much as possible in order to speed up referrals and avoid added confusion which would result from sending the records to the Blanding office.

The unions cooperating with the employment office at Blanding also sent orders to their locals throughout the State and the Southeast for workers of their crafts to work at the camp. This recruitment campaign of the unions resulted in securing several hundred skilled men for this project.

PLACEMENT PROCEDURE

With the increased urgency of the labor requirements the operations of the office were simplified as much as possible. The office was moved within the camp site and placed in a fenced area adjoining the union office and the personnel office of the contractor. Job seekers assembled in this fenced area and those who had already filed their applications awaited the call for work in this area. In some cases where calls from the contractor's personnel office came to the employment office for several hundred men in a given occupation, there was no time for individual selection from the registration files; consequently, a loudspeaker system was installed and through this system a call was issued for the number of workers required. For example, in order to fill a request for 200 carpenters, the interviewer at the employment office would ask over the public-address system for 200 carpenters to line up at a given window of the office. As the workers lined up they were either registered and given stamped identification cards; or if already registered, their identification cards were stamped and information taken that they were being referred to the job. The workers were required to have double-stamped identification cards before they could report to the job foreman; one stamp indicated their registration with the employment office, and the second stamp indicated their approved union status by the adjoining union office. Having secured these double-stamped cards, the workers were then lined up at the contractor's personnel office and their names, social security numbers, etc., were entered on the time records and they were issued work buttons. The workers were then loaded on trucks and hauled to the actual site of the job.

The fact that the majority of the construction work would be done on a mass-production scale through a prefabrication process reduced the skill requirement for men on carpenter work. Due to this fact, and because the project had to be done under extreme pressure, due to the time element, it was necessary to abolish the selective process to a considerable extent. It is true that all workers placed on the job had to be cleared through the union office; however, the union accepted for employment all workers referred by the Employment Service with but few exceptions. There was no indication that highly technical trade questions were being asked of applicants seeking jobs. The mass-production process instituted seemed to make it unnecessary for carpenters in most cases to be more than

ordinary "hammer and saw" carpenters. This condition held true through the peak employment period and until the finishing work was begun on the buildings which had been constructed. At that time several trade questions were asked so as to select "finish" men. Some of these were: (1) What is a threshold? (2) What figure on the square do you use to lay off the run of a hip or valley rafter? (3) What size opening would you frame for a two foot eight inch by six foot eight inch door? (4) What size opening would you frame for a two foot eight inch by five foot, six inch single window? (5) What is bridging and where used? (6) In concrete form work: What is a spreader? A whaler? (7) What is one-third pitch of a roof? (8) What are door butts? (9) What is the difference between a coped joint and a mitered joint? (10) What is a dormer? These questions were used by union agents to determine whether the applicant could accurately carry out the type of finish work which he claimed to be able to do.

UNION AFFILIATION REQUIRED

From the beginning it was determined that union members would be given preference in employment. However, it was easy to see that the union registrants in the entire Northeast area of the State would not be sufficient to fulfill the labor requirements at the site; therefore, an agreement was reached whereby those men recruited by the public employment service who were not union members would be admitted to the union with a stipulated initiation fee depending upon the occupational classification of the workers. All workers were notified by mimeographed bulletin of the schedule of fees required.

The special membership fee for construction laborers was \$10.50, payable in 5 weeks; \$3 after the first pay day; \$2 for the second, third, and fourth weeks, and \$1.50 for the fifth week. This amount included 3 months' dues in advance. The carpenters were informed that their membership fee would be \$50, payable in weekly amounts of \$10 each, with the first installment coming due on the first pay day. The \$50 fee would include all membership charges and dues to January 1, 1941. At one time there was some slight difficulty resulting from union officials attempting to enforce payment of the dues. This was particularly true among the construction labor group. The situation did not become serious, however, inasmuch as Army officials issued an order stating that any person attempting to collect union dues by force on the camp property would be placed in the guard-house. This order was enforced, and the method of forced collection of dues was discontinued.

THE NEED FOR PREPLANNING

The many experiences encountered during construction of this large cantonment indicated a serious need for preplanning. Had it been possible to plan for fulfilling the labor requirements on the project in advance of the beginning of the construction, many problems encountered would have been either entirely eliminated or greatly reduced.

Because thousands of workers had to be brought from outside the immediate area, there was a problem of housing facilities which became serious. The residents of Starke had thrown open every available space for sleeping quarters for the workers. Tents, trailers, and rude camp outfits were scattered throughout the pine woods across the highway from the project. It was not unusual for there to be three shifts in one bed throughout the day. For a short period of time many workers slept on the ground.

Tied in with the housing problem was one of transportation. The narrow, two-lane, slag-surfaced highway passing the camp site, which had been insufficient to serve even the heavy "football weekend" traffic between Jacksonville and the State university at Gainesville, was the only highway which came within miles of the site. This road, besides being narrow, also possessed many sharp curves and antiquated, narrow wooden bridges. The nearest railroad was at Starke, where the North-South streamliners of the Seaboard Airline Railway streaked through without so much as a flag stop. The necessity for thousands of workers to commute daily to and from work resulted in a serious traffic problem as far away as 40 miles from the camp.

It was obvious when the contractor arrived at the camp for the purpose of beginning operations, that there had been no plans made regarding actual labor needs on the project. This fact was further proven in the early days of construction. For several weeks instances were noted where a group of 200 workers was hired at 8 a. m., while another group of 200 workers was laid off at 8:30 a. m. These lay-offs could have been avoided through shifting of the working crews

within the project. However, each crew foreman had been assigned a specific unit of work by the contractor. Upon completion of his unit, his entire crew was laid off regardless of the fact that they could have been shifted to similar work in another section of the camp. This practice resulted in a relatively heavy turn-over on the project and an additional unnecessary burden on the employment office. It was not known definitely for some time as to what the peak labor requirements for each occupational classification would be other than that a certain total number of men would be needed. It is quite probable that with a little more planning in advance of this project at least a portion of the migratory influx into the area could have been eliminated. The statistical data gathered from the records of the workers applying at the project indicated that there was probably a supply of workers within the 175-mile radius sufficient to handle all jobs. The elimination, therefore, of any part of the 28.6 percent of the total applicants who had come from beyond 175 miles would certainly have eased the local housing situation. Had the Employment Service definitely known a short period in advance what the requirements were to be, publicity could have been used in areas beyond 175 miles to discourage the migration of the workers.

With a preplanning of labor requirements, the unions and the Employment Service could have been notified as to the volume of each of the occupations which they would be expected to supply. The Employment Service and the unions then would have been able to plan in advance an organized recruitment program. After determining where the labor was located and the necessary volume to be brought into the area of construction, the problem of housing could next be given consideration. What facilities would be available for these workers during the period of construction? It is believed that an estimate of the actual housing needs for a project of this type could have been furnished either by the public Employment Service, by the contractor, or by some local governmental unit. No movement of workers into the area should have started until such housing needs had been determined and some plan for reaching the requirements had been completed. The temporary housing facilities which were constructed in the camp in the form of bunkhouses were entirely satisfactory but were not sufficient to meet the needs of the project. These temporary bunkhouses cared for approximately 2,000 men, but this was a very small percentage of the 22,000 who were finally employed on the project at its peak.

The third problem that should be considered following the determination of labor needs and housing requirements was that of transportation facilities available to those workers who would necessarily commute to and from the project. It should not be necessary for workers employed on a project of this type to travel from 50 to 100 miles each way daily in an open-bodied truck or packed to capacity in passenger automobiles. Circumstances of this type led to loss of life and serious injury to several persons during the period of construction. In addition, workers cannot produce at peak when tired from travel and insufficient rest. It was not until after construction was started and the problem had become acute that work trains were instituted to haul men from Jacksonville to Starke, a distance of 44 miles each way. After arriving at Starke the men were then hauled by truck the additional 9 miles to the camp site. It was not until some time later that a spur track was extended to the camp site.

However, apparently no one was forewarned of what was to occur in this area and no preplanning occurred. The time element apparently was responsible for the lack of preplanning on the project in question. It was a rush order for the United States Army, with the contract awarded on September 11, construction began on September 23, and construction was originally to be completed in 120 days.

EMPLOYMENT PEAK AND COMPLETION

A peak employment figure of approximately 22,000 men was reached by November 1. Activity continued at a rapid pace through November, so that facilities were available in December 1940 for the arrival of most of the units of the Thirty-first Division. The entire contract was not fully completed until March 1941, so that many workers, particularly finish carpenters and most highly skilled building trades mechanics, received 6 months work.

What was originally established as the site for a 2-week's training camp for Florida National Guard troops is now a full-time major Army cantonment. The peak occupancy of the camp is between 50,000 to 60,000 officers and men. There are approximately 45,000 in camp at present, including the Thirty-first, or "Dixie," Division from Florida, Alabama, Louisiana, and Mississippi; the Forty-third Division from Maine, Vermont, Connecticut, and Rhode Island; two Artillery

regiments; and several thousand selectees. Additional contracts for approximately \$5,000,000 have been awarded since the completion of the original \$27,000,000 program so as to further expand the camp facilities.

VALUABLE DATA SECURED

Much valuable data were secured by the Employment Service during its operations on this project even though it was not possible for the interviewers in the employment office to take a complete interview of all applicants. The skeleton registration cards contained the name, home address, occupation, age, number of dependents, color, marital status, and name of last employer, for practically all of the applicants. The social security number was also obtained inasmuch as it was necessary for the contractor's pay-roll office. Following the completion of the contract, the registration cards for all applicants were assembled in the Jacksonville office. Here they were coded, using the 1939 Dictionary of Occupational Titles and Codes, and preparations were made for a complete analysis of the information which they contained. The plans included complete coding of all cards to determine area of residence. This was to be used for the purpose of studying the sources of applicants and their characteristics. Information was made available with respect to migration but also with respect to occupational relations and invisible skills. This latter information was to be obtained from a study of the registrations for many agricultural workers in the area surrounding the camp, concerning whom no previous records had been available and whose employment status had not been known at the time of the contract award.

In addition to statistical data obtained from the registration cards, the Employment Service participation in staffing this project brought to light many problems which undoubtedly are common to all projects of this type. For example, information concerning housing problems, transportation problems, and union relationships was made available. This information, which has been incorporated into this study, should offer assistance in anticipating probable staffing problems which will arise when the defense program reaches its peak.

PART I. SOURCES OF LABOR

POTENTIAL SOURCES

At the time the contract award was announced in September, the sources of labor concerning which definite information was available consisted of Employment Service files and union rolls. The active file of the Jacksonville employment office at this time consisted of 7,472 applications, several thousand of which represented registrants who were not qualified in construction occupations. Other employment offices within commuting distance of the project were St. Augustine and Gainesville. The total active file for these two offices was 2,758, making a grand total for the commuting area of 10,230. It was obvious that these files did not contain anywhere near the number of construction workers, either skilled or unskilled, who would be needed on the Camp Blanding project. There was no definite information available as to the percentage of coverage in the employment-office files of the total available workers in the area. Prior to this time employment opportunities had been such that unions were hesitant about expanding their rolls beyond a rather small volume. It was obvious, therefore, that workers who were already included on union rolls, plus all workers qualified and available through the public employment offices in the entire commuting area, would not be sufficient to fulfill the demands at the project.

A third potential source within the commuting area was that group of workers who were not registered with the public employment offices and who were not affiliated with a union. There was no way whatsoever to measure or even estimate this volume. The population of the counties adjacent to the project consisted chiefly of persons dependent on agriculture for a livelihood. Practically all of the workers had been employed in agriculture for some time, and there was no indication that they might possess skills which would be useful in the construction of the large Army cantonment. In addition, there was also the unpredictable volume of migrant workers who drifted into the area. This volume included the normal seasonal influx plus additional workers attracted by the large project.

A complete, or nearly complete, coverage in the employment-office active file of all available workers in the commuting area would have been valuable in planning the staffing of this project. As was learned during the project, it is quite probable that work applications of these several thousand agricultural

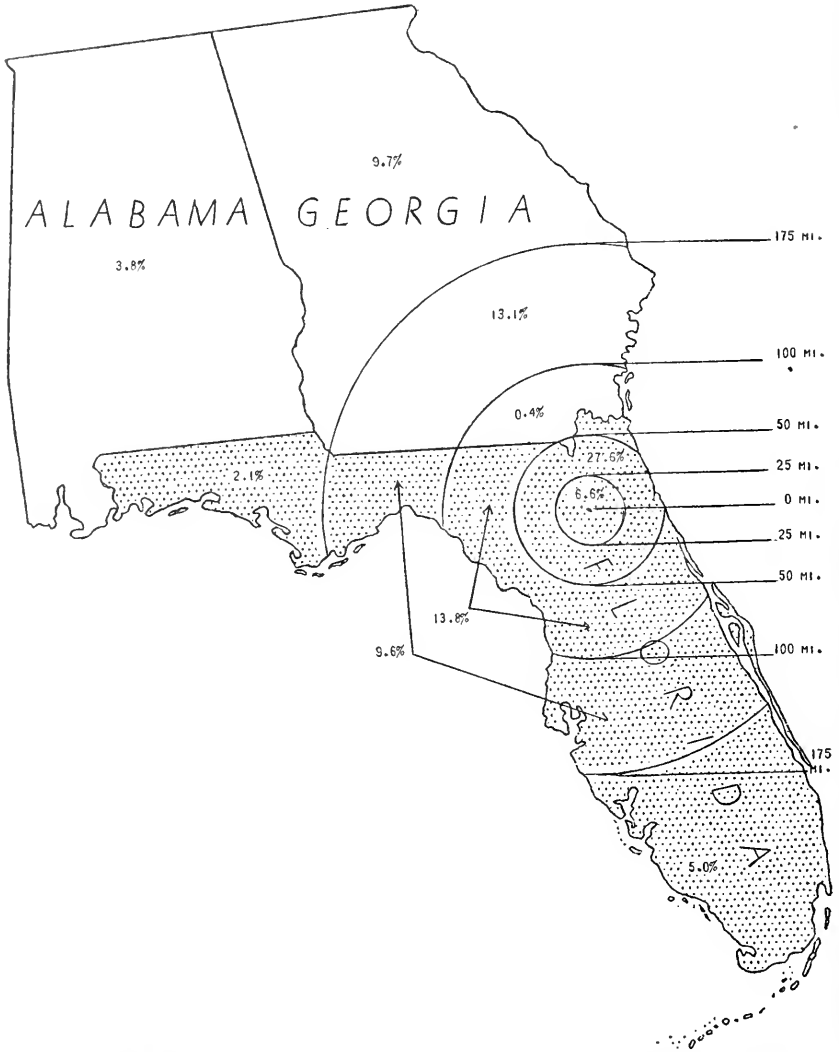


CHART II. Map of Florida, Georgia, and Alabama showing distribution of Blanding applicants.

workers might have revealed secondary skills which would have aided greatly in an early solution to the recruitment problem. It is estimated, however, that the coverage of unemployed in the active file was little more than 50 or 60 percent and did not reveal an accurate picture of the available labor supply within the commuting area.

ACTUAL SOURCES OF LABOR

Inasmuch as the contract award and the commencement of operations on the project permitted little planning for a recruitment program, there resulted a rather disorganized movement of labor from within the area to the project, as well as from outside the commuting area and outside the State. A study of the registration cards of those persons applying for work at the project site reveals that every state in the United States was represented. In all there were 33,798 persons who registered at the temporary office located at the camp site, and 23,481 of these were placed. Approximately 34 percent of the total registrants came from within a radius of 50 miles of the project. There were 71.4 percent who came from within a radius of 175 miles, including approximately 4,500, or 13.6 percent, from the neighboring state of Georgia. It is interesting to note that the large urban centers did not supply as many workers as did the rural areas. The city of Jacksonville, with a population of 172,000, furnished 32.6 percent of the 11,576 workers who came from within the 50-mile radius. Gainesville, the only other city in the area with a population of 10,000 or over, supplied only 743, or approximately 6.4 percent, of the registrants from the area. The area between 100 and 175 miles from the camp supplied approximately 22.7 percent of the total applicants. This area included the cities of Tampa, Orlando, Lakeland, Tallahassee, Sanford, and Clearwater, Fla.; and Waycross, Valdosta, Brunswick, Thomasville, and Moultrie, Ga. These urban centers furnished, only 33.5 percent of the total applicants drawn from the area, as compared with the 66.5 percent furnished by the other sections.

Table I in the appendix contains a detailed break-down by area of residence for all persons who registered for work at the camp. This break-down includes separate figures for each city of 10,000 or more within 175 miles of the camp. It was found that 92.2 percent of the total applicants came from the Southeastern states of Florida, Georgia, Alabama, South Carolina, North Carolina, Tennessee, and Mississippi. The northeast and North Central States supplied 6.4 percent of the total applicants, while only 1.4 percent came from the States west of the Mississippi River. Every State was represented by one or more applicants. Georgia, alone, supplied 7,860, or 23.5 percent, of the total registrants. There were 4,576, or 58.2 percent, of these who came from that area of Georgia which is within a 175-mile radius of the project. Alabama supplied 1,296 registrants. The State of New York had the fourth largest individual representation among the registrants with 776. This figure is larger than any other out-of-State figure except those of Georgia and Alabama and represents more applicants than furnished by any other of the 12 social-security regions represented.

THE CLEARANCE SYSTEM AS A SOURCE OF LABOR SUPPLY

The system of clearance between local employment offices and between State employment services was of only limited value in the emergency encountered at Camp Blanding. The lack of advance information concerning the contract made it impossible for local offices in sections remote from the project properly to organize their local supply for clearance movement. To the contrary, news of the large contract reached the workers as quickly as it reached the employment offices and resulted in a greatly disorganized migratory movement. In some specific cases the clearance system was used, and it did furnish several hundred workmen. Data obtained in the study, however, show that the value of clearance as a source of labor for this project was greatly limited due to the time element involved. Approximately 1,000 complete clearance placements were made at the project. The clearance figures, however, show that these placements were in no case representative of the actual number of workers obtained from the areas from which the clearance referrals were made. For example, table 1 shows there were 437 applicants from Tampa. Only 171 applicants were obtained from Tampa through clearance procedures. From Miami there were 48 clearance placements, as compared with 145 applicants at the project. A similar condition exists for practically all areas from which clearance referrals were made; that is, there were far more applicants available at the site from these areas than were obtained through clearance through the local employment offices.

TABLE 1.—Comparison between number of workers who registered at the project and number referred through clearance by local office area

Local office area	Registered at project	Referred through clearance	Ratio
Gainesville	743	204	3.6
St. Augustine	242	47	5.1
Orlando	563	61	9.2
Tampa	437	171	2.5
Daytona Beach	90	35	2.6
Lakeland	311	38	8.2
Tallahassee	63	7	9.0
St. Petersburg	213	30	7.1
Miami	145	48	3.0
West Palm Beach	20	4	5.0
Arcadia	42	12	3.5
Pensacola	143	154	.9
Total	3,012	811	3.7

Under an ideal labor market, this condition should not appear. By this we mean that if it were possible to have a completely organized labor market and an ideal system of clearance, the movement of workers to the project could be more efficiently promoted. There would also result a higher ratio of workers coming shorter distances to the project. The time element and the magnitude of this project were such that the voluntary movement of labor in this instance, although disorganized, was of vital importance in getting men to do the job.

CHARACTERISTICS OF THE JOB APPLICANTS

The more than 33,000 different applicants who flowed to the project consisted of men in all walks of life representing approximately 600 different occupations, while there were only 93 different occupations in which job openings occurred on the project during the entire period of construction. Appendix table II contains a cross classification of all applicants by residence and major occupational group. This table shows the largest number of applicants to be in the skilled production classifications and the second largest to be in agricultural and kindred classifications. Approximately 28.6 percent of the total applicants were registered in the skilled production group, 26.7 percent in the agricultural, 24.9 percent in the unskilled production and 14.2 percent in the semiskilled production groups. Agricultural workers and unskilled production workers represented more than 50 percent of the registrants from within the 50-mile radius. This is also true of the area from 51 to 100 miles from the project and of the area in Georgia which is more than 100 but less than 175 miles from the camp.

Table 2 below gives a comparison of distance traveled by registrants in skilled production classifications and by registrants in unskilled production and the agricultural classifications. It is brought out here that there is a definite tendency on the part of skilled production workers to travel greater distances for work of this type. This may be due to several factors. In the first place, it is most likely that skilled workers would be in greater demand than unskilled workers, thus increasing their chances for obtaining jobs. The unions also probably brought several in from some distance. As a general rule, on a project of this type, there is a predominance of unskilled labor within the local supply; and any shortage that might occur is most likely to occur in the skilled group first. It is usually necessary, therefore, in recruiting skilled workers, to cover a much broader territory than in recruiting unskilled workers.

There is another major factor which might be responsible for the tendency on the part of skilled workers to travel greater distances. This is the factor of earning power. A skilled worker who stands a chance of obtaining a job at \$1 or more per hour is in a much better position to travel great distances than a worker who might obtain a job at 40 cents per hour or less. Previous employment at the higher wage level also makes it possible for the skilled worker to shift from job to job and even move his entire family without undergoing many of the hardships encountered by a migrant worker in the lower wage class.

TABLE 2.—*Cumulative distribution by area of residence for workers registered in skilled, unskilled, and agricultural jobs*

Distance from project	Production workers				Agricultural workers	
	Skilled		Unskilled		Number	Percent
	Number	Percent	Number	Percent		
25 miles or less.....	337	3.5	774	9.2	714	7.9
50 miles or less.....	2,316	23.9	3,806	45.1	2,995	33.1
100 miles or less.....	3,301	34.1	5,075	60.1	4,713	52.1
175 miles or less.....	5,586	57.8	6,380	75.6	7,482	82.8
From all areas.....	9,671	100.0	8,442	100.0	9,041	100.0

The data for Blanding registrants show that more than 42 percent of the skilled production registrants came more than 175 miles to the project. Only 24.4 percent of the unskilled production workers came from outside the 175-mile radius.

Approximately 60 percent of the unskilled production registrants were available within 100 miles of the project while only 34 percent of the skilled production registrants were available in that area. Although the percentage of agricultural workers coming from within the 100-mile radius was not as high as that for unskilled production workers, it was found that there was a much lower percentage of these agricultural workers who came from outside the 175-mile area. The high percentage (31 percent) coming from the 100-175 area is accounted for by the fact that 2,129, or 23.5 percent, of the total agricultural workers came from that area of Georgia which is more than 100 but not more than 175 miles from the project. This group of South Georgia farm workers accounted for 48 percent of the total registrants from that area and 27 percent of the total number of workers from Georgia.

Table 3 contains data concerning white applicants as to age and distance traveled to the project. Table 4 contains similar information for colored applicants. Approximately 69.8 percent, or 23,600, of the total applicants were white. There were 27.4 percent of these who came from outside the State. Only 28.7 percent of the white applicants were drawn from within a 50-mile radius while more than 47 percent of the colored applicants were drawn from that area. Approximately 58.4 percent of the white applicants came more than 100 miles to the project. There were but 2,680, or 36 percent, of the colored applicants who traveled this far.

TABLE 3.—*Distribution of white applicants according to distance traveled and by major age group*

Distance from project	Total		Under 30		Over 50	
	Number	Percent	Number	Percent	Number	Percent
25 miles or less.....	1,571	6.6	899	7.8	133	5.1
26 to 50.....	5,222	22.1	2,661	23.3	562	21.6
51 to 100.....	3,063	12.9	1,506	13.2	385	14.8
101 to 175.....	6,023	25.6	2,886	25.2	663	25.5
Over 175 miles.....	7,721	32.8	3,503	30.5	857	33.0
Total.....	23,600	103.0	11,455	103.0	2,600	100.0

There is some indication from the data shown in these two tables that there was a tendency among young colored workers to travel farther than older colored workers and a tendency among older white workers to travel farther than young white workers. For example, table 3 shows that 30.5 percent of the white workers under 30 years of age traveled more than 175 miles to the project while approximately 33 percent of those over 50 years traveled more than 175 miles. The opposite appears in table 4 with respect to colored applicants. Here it is shown that 19.6 percent of the colored workers under 30 traveled more than 175 miles while only 16.9 percent of the colored workers over 50 traveled more than 175 miles.

TABLE 4.—*Distribution of colored applicants according to distance traveled and by major age group*

Distance from project	Total		Under 30		Over 50	
	Number	Percent	Number	Percent	Number	Percent
25 miles or less.....	672	6.6	386	6.8	52	6.6
26 to 50.....	4,111	40.3	2,298	40.4	318	40.6
51 to 100.....	1,735	17.0	1,001	17.6	143	18.3
101 to 175.....	1,640	16.1	891	15.6	138	17.6
Over 175.....	2,040	21.0	1,116	19.6	132	16.9
Total.....	10,198	100.0	5,692	100.0	783	100.0

The fact that there appears to be a greater degree of mobility over great distances among white workers than among colored workers is not difficult to understand. Data presented in chart 4 show a much higher ratio of skilled applicants among the white workers. It has already been shown that the skilled workers tend to travel farther for jobs. Therefore, the reasons why white workers are able to travel farther would be similar if not identical to the reasons set forth concerning skilled and unskilled workers. The comparison between young white workers and older white workers might be made on a similar basis. The older white workers as a general rule have attained some degree of skill while the young workers in many instances are capable only of unskilled labor jobs. This is brought out to some extent by the data shown in table 5.

TABLE 5.—*Distribution of skilled and unskilled registrants by age*

Age group	Skilled		Unskilled	
	Number	Percent	Number	Percent
Under 21.....	314	3.2	1,476	17.5
31 to 40.....	2,738	28.4	1,895	22.4
41 to 50.....	2,215	22.7	987	11.8
51 to 60.....	1,365	14.4	419	4.9
61 and over.....	334	3.5	111	1.3
Total.....	9,671	100.0	8,442	100.0

From this table we find that approximately 60 percent of the unskilled workers are less than 31 years of age while nearly 70 percent of the skilled workers are 31 years of age or older. The average age computed using the midpoints of each class interval with age 20 for the lower and age 65 for the upper limits was found to be 37.9 for the skilled and 30.7 for the unskilled production workers. There were 1,699, or 17.6 percent, of the skilled production workers who were over 50 years of age and only 530, or 6 percent, of the unskilled production workers who were over 50. Similarly we find 17.5 percent of the unskilled production workers to be under 21, while only 3.2 percent of the skilled production workers were that young.

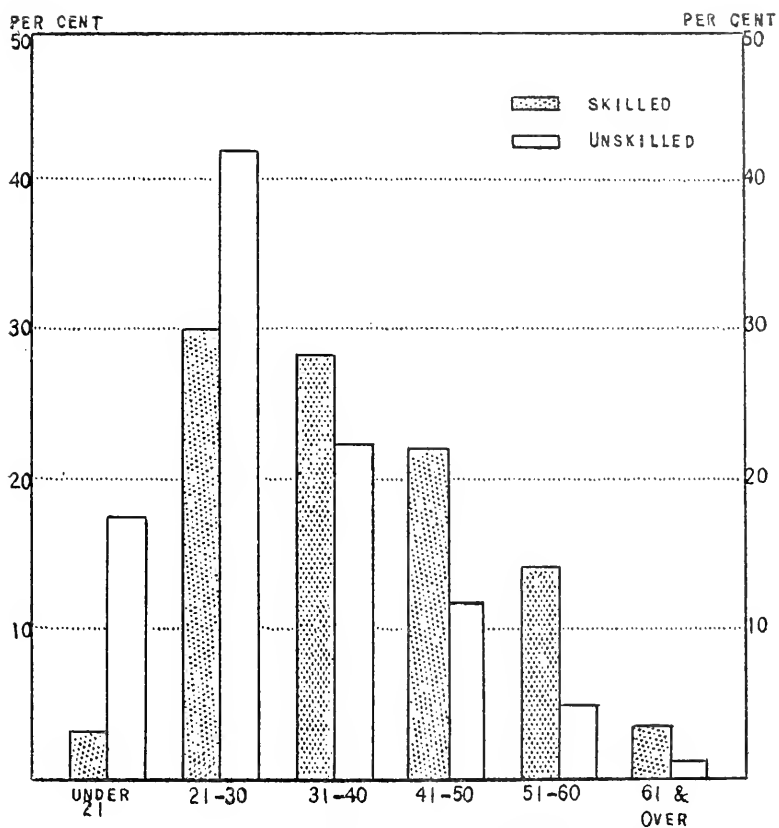


CHART III. Distribution of skilled and unskilled registrants by age.

Table 6 and chart IV afford a more complete picture of the comparative age distribution between white and colored workers. It is noted from these data that approximately 50 percent of the white workers registered were under 31 years of age while nearly 56 percent of the colored workers were in that age group. Similarly it is found that 25 percent of the white workers were over 40 while approximately 20 percent of the colored workers were that old. This relation is brought out more clearly in the bar chart (chart IV) than in the table. Both groups were about the same, between ages 31 and 40, with the percentage of colored above that age group and less than the percentage of colored below that age group.

TABLE 6.—Distribution of all registrants by age and color

Age group	Total		White		Colored	
	Number	Percent	Number	Percent	Number	Percent
Under 21.....	4,487	13.2	2,722	11.5	1,765	17.3
21 to 30.....	12,666	37.5	8,733	37.0	3,927	38.5
31 to 40.....	8,132	24.1	5,761	24.4	2,371	23.2
41 to 50.....	5,136	15.2	3,784	16.0	1,352	13.3
51 to 60.....	2,760	8.0	2,100	8.9	600	5.9
61 and over.....	683	2.0	500	2.2	183	1.8
Total.....	33,798	100.0	23,600	100.0	10,198	100.0

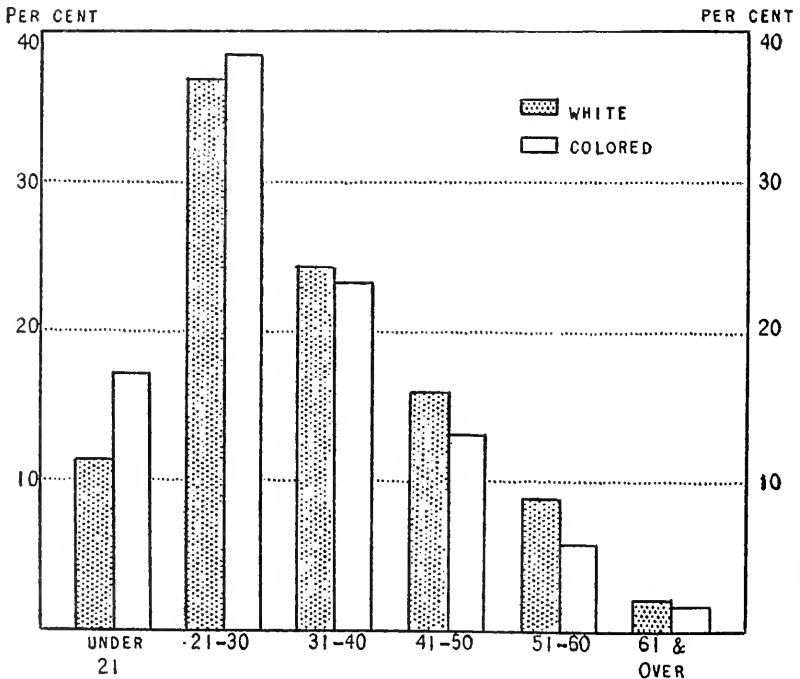


CHART IV. Age distribution of white and colored registrants by percentage of total.

Table 7 shows the dependency status of all applicants by residence. There were approximately 20,500, or 60.6 percent, of the total applicants who were known to have dependents at the time of registration. There were approximately 4,500 concerning whom this information was not obtained. The remaining 8,500 were reported as having no dependents. The data do not reveal any specific trend or relationship between dependency status and distance traveled in seeking work. Approximately 60.7 percent of the workers from within the 175-mile radius were recorded as having dependents while 60.4 percent of those outside the 175-mile radius were reported as having dependents.

TABLE 7.—*Dependency status of all applicants by area of residence*

Miles from project	Total	Dependency status				Status unknown
		With dependents		Without dependents		
		Number	Percent	Number	Percent	
0 to 25.....	2,243	1,333	6.5	652	7.4	258
26 to 50.....	9,333	5,304	26.2	2,481	28.2	1,488
51 to 100.....	4,798	2,877	14.1	1,264	14.4	657
101 to 175.....	7,663	5,020	24.5	1,660	18.9	983
Over 175.....	9,653	5,834	28.5	2,713	30.8	1,106
Unknown.....	108	41	.2	23	.3	44
Total.....	33,798	20,469	100.0	8,793	100.0	4,536

Table 8 contains an occupational grouping of all registrants classified by color and union status. These figures show that only 2,985, or 8.8 percent, of the total applicants were affiliated with a union at the time of registration. The largest number of union applicants was in the skilled group. In this group there were approximately 2,260, or 75.7 percent, of the total union registrants. This represented only 23.4 percent of the total skilled-production registrants. The percentage of union membership was also found to be higher among white than among colored applicants. Of the total of 23,600 white applicants, 2,806, or 11.9 percent, were union. Only 179, or 1.7 percent, of the total colored applicants were union members.

TABLE 8.—*Occupational distribution of all applicants by color and union status*

Occupational group	Total	White			Colored		
		Total	Union	Percent	Total	Union	Percent
Percent.....	100.0	69.8	8.3	-----	30.2	0.5	-----
Professional and kindred.....	189	173	18	.6	16	0	0
Clerical.....	604	571	14	.5	33	0	0
Service.....	1,063	482	60	2.1	581	14	7.8
Agriculture.....	9,041	5,727	56	2.0	3,314	10	10.6
Skilled.....	9,671	9,152	2,197	78.4	519	70	39.1
Semiskilled.....	4,788	3,797	329	11.7	991	17	9.5
Unskilled.....	8,442	3,698	132	4.7	4,744	59	33.0
Total.....	33,798	23,600	2,806	100.0	10,198	179	100.0

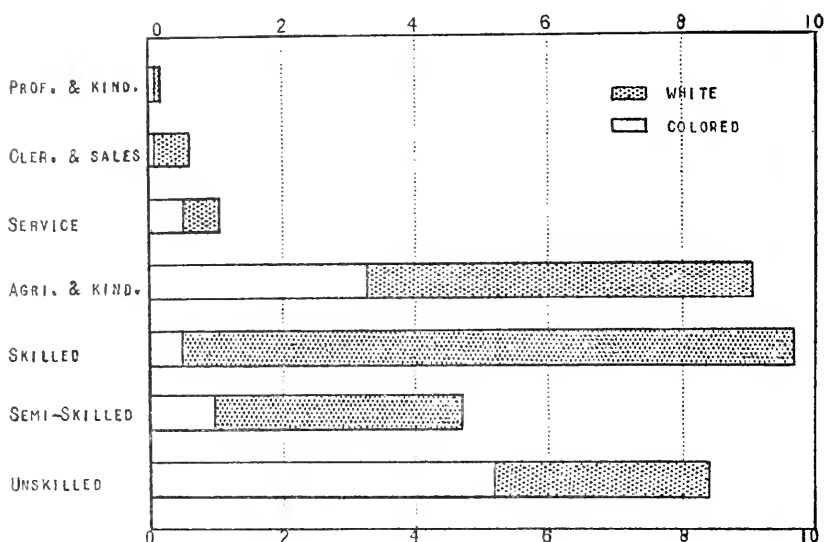


CHART V. Composition of occupational groups of registrants by color.

THE LOCAL SUPPLY AS REVEALED IN A STUDY OF APPLICATIONS

There were slightly over 24,000 workers registered from within the 175-mile radius (see table 9). Inasmuch as the total number of workers placed was less than 24,000, it appears that there was a considerable amount of unnecessary migration into the area. That is to say, that the 28.6 percent of total registrants who came from outside the 175-mile radius constituted a surplus labor supply. Many of these workers obtained jobs which might probably have been given to workers from the local labor market. The group from within the 175-mile radius contained a sufficient number of workers with the proper occupational skills to fulfill the requirements of the project as was indicated by the primary occupations of the persons who filled the job openings at the camp.

TABLE 9.—Distribution of men placed by registered occupation showing number placed and number available within 175 miles

Occupational group	Total placed	Percent	Available within 175 miles					
			Total	Percent	Placed	Percent	Not placed	Percent
Professional and kindred	96	0.4	122	0.3	61	0.3	61	0.8
Clerical and sales	308	1.3	399	1.6	210	1.3	189	2.6
Service	644	2.7	754	3.2	441	2.6	313	4.3
Agricultural and kindred	6,381	27.2	7,482	31.2	5,350	32.0	2,132	29.1
Production workers:								
Skilled	6,721	28.6	5,586	23.3	3,763	22.6	1,823	24.9
Semiskilled	3,089	13.2	3,314	13.8	2,142	12.8	1,172	16.0
Unskilled	6,242	26.6	6,380	26.6	4,751	28.4	1,629	22.3
Total	23,481	100.0	24,037	100.0	16,718	100.0	7,319	100.0

Table 9 shows that the number of workers available within the 175-mile radius exceeded the number of workers placed in each of the occupational groups with the exception of the skilled production group. In this case there were 6,721 placements of skilled production workers, while only 5,586 skilled production workers were registered from within the area. Further review of the records, however, shows that 1,823 of these skilled production workers from within the 175-mile radius were not placed at all. In examining the over-all placement figures, we find that 69.6 percent of the total registrants from within the 175-mile radius were placed, and 66 percent of the registrants from outside the 175-mile

radius were placed. This indicates that area of residence did not affect the worker's chances of obtaining employment at the project.

The fact that a considerable number of agricultural workers and semiskilled production workers filled skilled jobs at the camp permits the assumption that the supply of workers within the 175-mile radius could have fulfilled the project requirements. There were also many skilled registrants at the project who were placed in semiskilled and unskilled jobs. One factor which might tend to disprove this assumption is the time series distribution of registrations at the camp. For the purpose of this study, date of registration was not obtained for each individual applicant; and, therefore, a time series distribution for registrations by occupation or residence cannot be presented. It is possible, therefore, that many of the workers in the skilled production occupations who did not obtain jobs, and many of the workers from the local area who did not obtain jobs, were not registered at the project until after the peak employment period, or until after their chances for employment were greatly reduced.

Chart 6 contains a cumulative distribution of applications filed and placements made. This chart shows that many applications were filed during the latter part of the period of construction, which naturally would result in a decreased opportunity for employment. It can be stated with justification that many of the workers were employed on other jobs at the beginning of the Blanding project. It can also be said, however, that many of the late applicants did not become interested in the Blanding job openings until the majority of the placements had been made. It is known that many skilled construction workers were employed at the naval air base at Jacksonville when the Blanding contract was begun. It is also known that large numbers of these workers, particularly carpenters, were released during and following the period of employment peak at Camp Blanding. Inasmuch as these workers were already in the project area, the majority of them filed applications for work at the camp.

REMARKS

Although it cannot be said definitely that the Camp Blanding project could have been completely staffed by registrants from within a 175-mile radius at the time the workers were needed, it appears, however, that there was some unnecessary migration. It must be remembered, however, that a part of the migration was not due entirely to the construction project. This project was under construction at a time of year when there is a normal flow of migratory workers into Florida. Many of these migratory workers are agricultural although some skilled and white collar workers are included. It is also quite probable that many migratory workers who might normally have come into the State later did advance their date of arrival directly because of the employment opportunities which Blanding offered.

PART II. CHARACTERISTICS OF MEN PLACED

Of the total of 33,798 applicants, 23,481 obtained jobs on the Camp Blanding project. While many of these workers, particularly in the unskilled production group, maintained only part-time employment throughout the period of construction, practically all of them worked during the major portion of the six months during which work was carried on. While information was not obtained as to the number of times each applicant was placed, it is known that many of them were laid off and rehired several times during the course of construction.

Of the men placed, 16,041, or approximately 68.3 percent, were white and 7,400, or 31.7 percent, colored. Table 10 contains an occupational distribution for white men placed according to major age group. Table 11 contains similar information for the colored workers who were placed.

TABLE 10.—*Age distribution of white men placed*

Age group	Total placed		Skilled		Unskilled	
	Number	Percent	Number	Percent	Number	Percent
Under 21.....	1,796	11.2	193	2.7	1,431	19.7
21 to 30.....	6,022	37.5	2,033	28.6	3,135	43.2
31 to 40.....	3,931	24.5	2,023	28.4	1,466	20.2
41 to 50.....	2,626	16.4	1,641	23.0	848	11.7
51 to 60.....	1,368	8.5	997	14.0	329	4.5
61 and over.....	298	1.9	235	3.3	52	0.7
Total.....	16,041	100.0	7,122	100.0	7,261	100.0

The percentage of placements appeared higher among the colored workers under 21 than among the white workers under 21. Approximately 16.9 percent of the colored workers who were placed were under 21 years of age while only 11.2 percent of the white workers placed were under 21 years of age. Approximately 94.7 percent of the total colored placements were unskilled labor. The opposite is true among white workers where 44.3 percent were placed in skilled jobs and 45.2 percent in unskilled. The higher ratio of unskilled placements among the colored workers does not appear out of proportion inasmuch as 46.5 percent of the colored registrants were in this classification and 32.5 percent were agricultural.

TABLE 11.—Age distribution of colored men placed

Age group	Total placed		Skilled		Unskilled	
	Number	Percent	Number	Percent	Number	Percent
Under 21.....	1,262	17.0	21	7.6	1,227	17.4
21 to 30.....	2,842	38.2	64	23.0	2,730	38.7
31 to 40.....	1,749	23.5	81	29.3	1,635	23.2
41 to 50.....	1,029	13.8	68	21.5	950	13.5
51 to 60.....	432	5.8	29	10.5	396	5.6
61 and over.....	126	1.7	14	5.1	111	1.6
Total.....	7,440	100.0	277	100.0	7,049	100.0

Only 2,595, or 11 percent, of the total number of persons placed were union members at the time of placement. The remaining 89 percent had to join the union at the project, inasmuch as the contractor was operating under a closed shop agreement.

TABLE 12.—Distribution of men placed by registered occupation, color, and union status

Occupational group	Total	White			Colored		
		Total	Union	Percent	Total	Union	Percent
Percent.....	100.0	68.3	10.4	-----	31.7	0.6	-----
Professional and kindred.....	96	85	14	0.6	11	-----	-----
Clerical.....	308	285	10	.4	23	-----	-----
Service.....	644	282	57	2.3	362	12	7.9
Agricultural and kindred.....	6,381	3,941	44	1.8	2,440	16	10.5
Production workers:							
Skilled.....	6,721	6,389	1,897	77.7	342	59	38.8
Semiskilled.....	3,089	2,413	305	12.5	676	15	9.9
Unskilled.....	6,242	2,656	116	4.7	3,586	50	32.9
Total.....	23,481	16,041	2,443	100.0	7,440	152	100.0

Largest percentage of union workers was in the skilled production classification. This group contained 77.7 percent of the white union members and 38.8 percent of the colored union members. The second largest union representation among the colored workers was the unskilled production group with 32.9 percent of total colored placements being represented. The largest group of nonunion white men was the skilled group with 33 percent, followed by agricultural workers with 28.7 percent. The unskilled production group accounted for nearly 50 percent of the total nonunion colored workers. Second largest group of nonunion colored workers was the agricultural and kindred group with 2,424, or 23.2 percent, of the total.

Table 13 contains a comparison between the workers who were placed from within the 175-mile radius and the workers who were placed from beyond the 175-mile radius according to occupation on the job. There were 16,696, or 71.1 percent, of the total men placed who come from the 175-mile radius. Approximately 66.8 percent of this group were placed in unskilled jobs. There were 26.3 percent of this group who were placed in skilled jobs.

TABLE 13.—*Comparison of occupational distribution of jobs filled between registrants from within 175 miles and beyond 175 miles*

Occupation of placement	Total		Within 175 miles		Beyond 175 miles	
	Number	Percent	Number	Percent	Number	Percent
Professional and kindred.....	7	0.1	7	0.1	0	0.0
Clerical.....	65	.3	42	.3	23	.3
Service.....	101	.4	70	.4	31	.5
Skilled.....	7,399	31.5	4,394	26.3	3,004	44.4
Semiskilled.....	1,599	6.8	1,025	6.1	574	8.5
Unskilled.....	14,310	60.9	11,158	66.8	3,152	46.3
Total.....	23,481	100.0	16,696	100.0	6,784	100.0

A study of the distribution of those placed from beyond the 175-mile radius shows that the distribution between skilled and unskilled jobs filled was about equal. Approximately 46.3 percent of these workers filled unskilled jobs while 44.4 percent were placed in skilled jobs. This makes the ratio of skilled placements to total placements from beyond the 175-mile radius higher than the ratio of the total number of skilled placements to all placements. This bears out points discussed in part I with respect to the greater distance traveled by skilled workers and the necessity for covering broader territory in recruiting the skilled workers for a project of this size. The ratio of skilled placements to total placements from outside the 175-mile radius compares favorably with the ratio of skilled registrants to the total number of registrants from outside the 175-mile radius.

Table 14 contains a cumulative distribution by area of residence for workers in skilled and unskilled occupations. This brings out further the concentration of the unskilled workers in the area closer to the project. The largest percentage of the unskilled workers were obtained from within the 100-mile radius. This area furnished 57.3 percent of the total unskilled workers placed. It is interesting to note here, however, that there were more unskilled workers who migrated to the project from beyond 100 miles in Georgia than there were from beyond the 100 miles in Florida. The area between 100 and 175 miles in Georgia accounted for 1,948, or 13.6 percent, of the total unskilled workers while the corresponding area in Florida accounted for only 1,029, or 7.2 percent, of the total unskilled workers.

TABLE 14.—*Cumulative distribution by area of residence for workers placed in skilled and unskilled jobs*

Area of residence	Skilled		Unskilled	
	Number	Percent	Number	Percent
25 miles or less.....	251	3.4	1,327	9.3
50 miles or less.....	1,836	24.8	5,906	41.3
100 miles or less.....	2,636	36.6	8,201	57.3
175 miles or less.....	4,395	59.4	11,178	78.1
All areas.....	7,399	100.0	14,310	100.0

There were 5,665, or 24.1 percent, of the total workers placed who came from outside the State of Florida and beyond the 175-mile area of Georgia. This group was made up of 2,735, or 45 percent, unskilled and 2,380, or 42 percent, skilled. This area furnished 32.2 percent of the total workers placed on skilled jobs and only 19 percent of the total workers placed on unskilled jobs. Detailed information concerning area of residence for workers in all occupations is furnished in appendix table VI.

Further reference to table 14 reveals that only 59.4 percent of the total skilled workers came from within the 175-mile radius as compared with the 78.1 percent of unskilled workers who came from the same area. It is also shown that more than 40 percent of the unskilled workers came from within the 50-mile radius, with only 24.8 percent of the skilled workers coming from that area.

Table 15 shows the distribution of workers placed in skilled jobs by number of dependents. Table 16 shows similar data for workers placed in unskilled jobs. Approximately 68.8 percent of the skilled workers placed were married. There were 1,472, or 28.9 percent, of these who had two or more dependents while 167, or 7.2 percent, of the unmarried skilled workers had two or more dependents.

TABLE 16.—*Distribution of workers placed in skilled jobs by number of dependents*

Number of dependents	Total	Percent	Married		Unmarried	
			Number	Percent	Number	Percent
None.....	998	13.6	28	0.6	970	42.0
1.....	2,836	38.3	2,698	53.0	138	6.0
2 or 3.....	1,639	22.1	1,472	28.9	167	7.2
4 or 5.....	633	8.6	606	11.9	27	1.2
More than 5.....	298	4.0	287	5.6	11	.5
Unspecified.....	995	13.4			995	43.1
Total.....	7,399	100.0	5,091	100.0	2,308	100.0

NOTE.—The 43.1 percent of unmarried skilled workers with number of dependents unspecified resulted from the fact that this data did not appear on the registration card. It is quite probable that where the worker had no dependents, in many cases no entry was made at the time of registration. For this reason it is logical to assume that at least the greatest portion of these unmarried workers should be classed as having no dependents.

There were 893, or 17.5 percent, of the total married skilled workers who had four or more dependents. Only 38, or 1.7 percent, of the unmarried skilled workers had that many. The largest group of married skilled workers reported only one dependent. This group accounted for 53 percent of the total number of skilled workers who were married.

TABLE 16.—*Distribution of workers placed in unskilled jobs by number of dependents*

Number of dependents	Total	Percent	Married		Unmarried	
			Number	Percent	Number	Percent
None.....	4,471	31.3	75	1.1	4,396	57.8
1.....	3,945	27.6	3,542	53.8	403	5.3
2 or 3.....	2,238	15.6	1,790	26.7	448	5.9
4 or 5.....	996	6.7	842	12.6	124	1.6
More than 5.....	504	3.5	451	6.7	53	.7
Unspecified.....	2,186	15.3	3	.1	2,183	28.7
Total.....	14,310	100.0	6,703	100.0	6,706	100.0

Among the unskilled workers there was an even distribution between the married and unmarried groups. Approximately 53 percent of the unskilled married workers listed one dependent while approximately 46 percent reported two or more dependents. Among the unskilled workers who were not married, only 13.5 percent were reported as having any dependents. The 28.7 percent with number of dependents unspecified probably represented for the most part single men with no dependents. There were placed in this classification due to the fact that no entry was made on the registration with respect to dependency status.

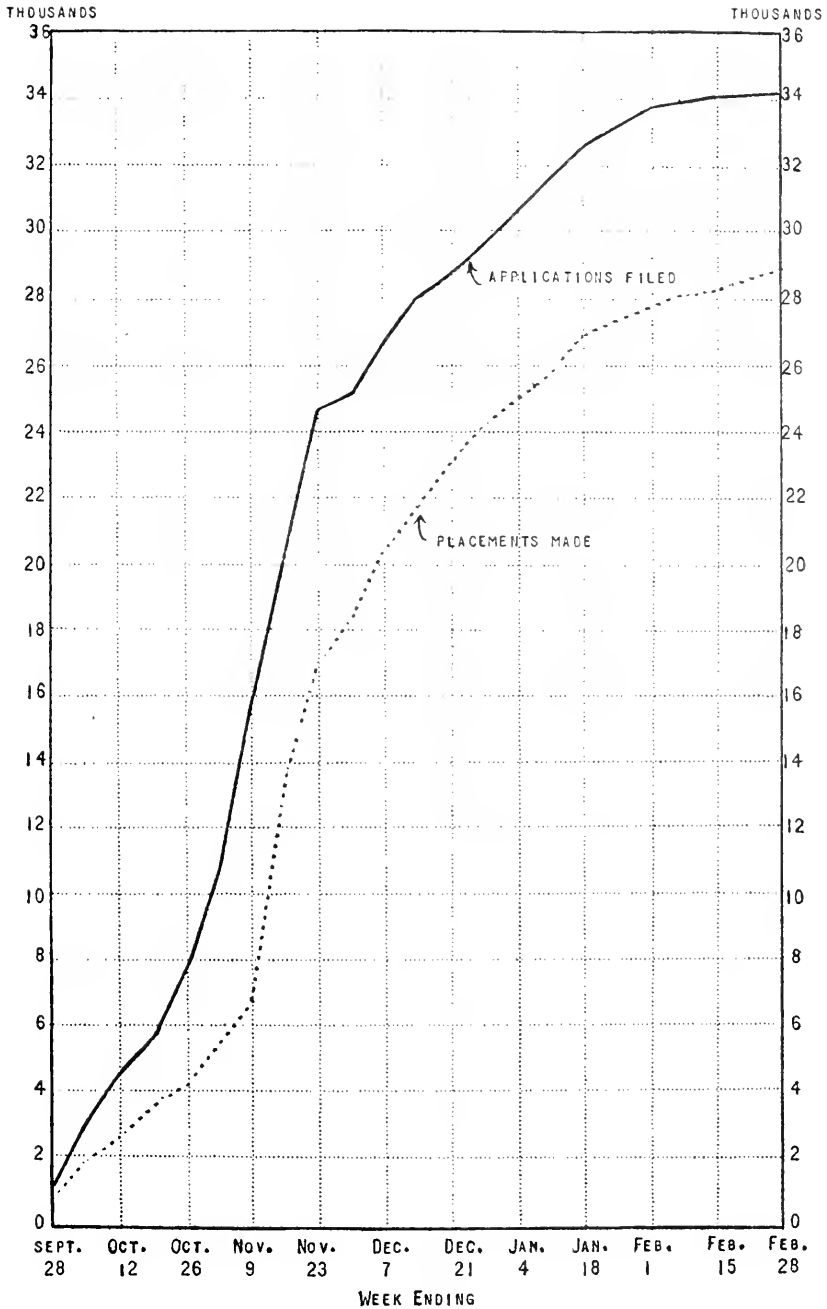


CHART VI. Cumulative distribution of applications filed and placements made.

PART III. SELECTIVE FACTORS

Considering the circumstances under which the placement work had to be done, it appears that the Employment Service did a good job. There was no indication of inefficient performance on the job attributable to occupational maladjustment of the workers placed. In most cases very little time was given to fill an order for one of the construction foremen. Consequently, a loudspeaker system at the employment center was used to call for registered workers to fill the jobs. Workers who could fill these jobs would line up to obtain their work permits. No interview and no review of occupational experience were carried out. At the same time during the major part of the construction period, there were very few trade questions asked by the unions in accepting new members.

Due to the fact that the need for men on this project was immediate and in such large volume, it was necessary to ignore almost entirely the workers' qualifications in placing them on the job. The fact that the project was entirely closed shop resulted in a higher ratio of placements among union applicants than among nonunion applicants. This factor is discussed in more detail in a later paragraph. Even the primary occupations did not constitute a selective factor in a great many cases.

TABLE 17.—*Distribution by occupation of placement of all skilled, semiskilled, unskilled, and agricultural registrants*

Occupation of placement	Registered occupation							
	Skilled		Semiskilled		Unskilled		Agricultural	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Professional and kindred.....		0.0	1	0.0		0.0		0.0
Sales and clerical.....	7	.1	4	.1	5	.1	2	.0
Service.....	8	.1	15	.3	28	.3	17	.2
Skilled.....	5,579	57.7	455	9.5	409	4.8	709	7.8
Semiskilled.....	217	2.2	972	20.3	182	2.2	164	1.8
Unskilled.....	910	9.4	1,642	34.3	5,618	66.5	5,488	60.8
Not placed.....	2,950	30.5	1,699	35.5	2,200	26.1	2,600	29.4
Total.....	9,671	100.0	4,788	100.0	8,442	100.0	9,041	100.0

Table 17 gives a distribution by occupation of placement for all skilled, semiskilled, unskilled, and agricultural registrants. It is shown that only 57.7 percent of the total skilled registrants at the camp were placed in skilled jobs. There were 30.5 percent of the skilled workers who were not placed at all. At the same time 4.8 percent of the unskilled registrants and 7.8 percent of the agricultural registrants were placed as skilled workers. There were 9.4 percent of the skilled registrants who were placed in unskilled jobs and 34.3 percent of the semiskilled registrants who were placed in unskilled jobs. There was a larger percentage of semiskilled workers placed in unskilled jobs than were placed in semiskilled jobs. Approximately 61 percent of the agricultural workers were placed in unskilled jobs.

Chart 7 gives a graphic picture of the placements on this project in which applicants were placed outside of their registered occupation. This chart shows the proportion of workers in each registered occupational group who were placed on the job in their registered occupational group as compared with the proportion who were not placed in their registered occupational group.

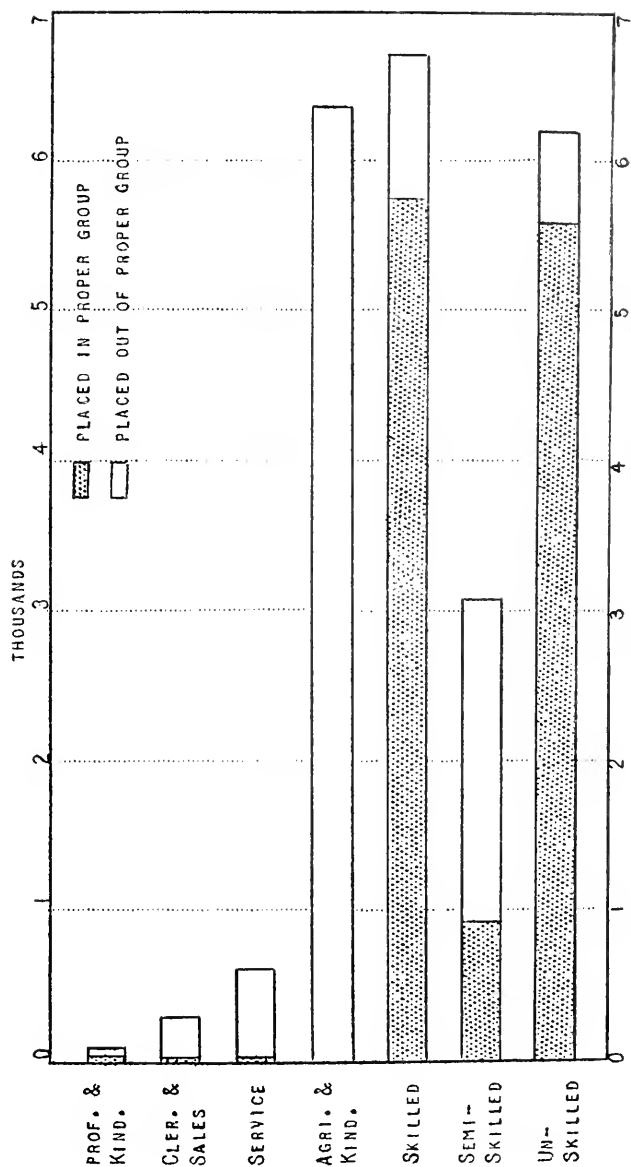


CHART VII. Bar chart showing placements out of primary classifications by registered occupations.

This chart gives only a general idea of the actual extent to which other than the primary classification was used. A study of individual occupations within each group revealed a much greater tendency in this direction. For example, table 18 gives some idea as to the extent of occupational mobility which was found among the workers placed as carpenters. This table shows that of the men working as carpenters on the project, approximately 71.6 percent had registered as such. The relatively high rate of occupational mobility found among this group might have been due to normal multiple skills. However, there is no doubt but that the modified experience requirement and urgent need were important contributing factors.

TABLE 18.—*Distribution by registered occupation of men placed as carpenters*

Registered occupation	Number	Percent
Carpenters.....	4,177	71.6
Farmers.....	337	5.8
General farm hands.....	276	4.7
Construction laborers.....	198	3.4
Truck drivers.....	194	3.3
Others ¹	650	11.2
Total.....	5,832	100.0

¹ 168 different general occupational classifications among those placed as carpenters.

It is also shown that slightly over 10 percent of the men placed as carpenters were registered as farmers or farm hands, 3.4 percent as construction laborers, and 3.3 percent as truck drivers. Approximately 11 percent were distributed among 163 other individual occupational classifications. Even this distribution is confined to a general rather than to a specific occupational classification, leaving an indication that an exact distribution by specific occupation would reach a much higher figure.

Table 19 contains similar information for men placed as construction laborers.

TABLE 19.—*Distribution by registered occupation of men placed as construction laborers*

Registered occupation	Number	Percent
Construction laborers.....	3,592	25.3
General farmers.....	1,099	7.7
Farm hands.....	4,069	28.6
Cannery laborers.....	973	6.8
Truck drivers.....	920	6.5
Carpenters.....	393	2.8
Others ¹	3,172	22.3
Total.....	14,218	100.0

¹ 290 different general occupational classifications among those placed as construction laborers.

Only 25.3 percent of the men placed in this classification had been registered as construction laborers. There were 35.3 percent among this group who had been registered as farmers and farm hands. Nearly 3 percent had registered as carpenters while approximately 13 percent had registered as truck drivers and cannery laborers. There were in all 290 general occupational classifications among the men placed as construction laborers. This is not an unusual condition for a large project of this type and is expected to some extent.

Table 20 gives a distribution of all workers placed in skilled jobs according to registered occupation. This information is given according to major occupational group rather than according to the three-digit classification used in tables 19 and 20. There were 7,399 workers placed in skilled jobs. Approximately 75 percent of these had been registered as skilled workers. There were 9.6 percent who were agricultural workers and approximately 13 percent semiskilled and unskilled.

TABLE 20.—*Distribution of persons placed as skilled workers by their registered occupation*

Registered occupation	Number of workers	Percent
Professional.....	41	0.6
Clerical.....	77	1.0
Domestic.....	129	1.7
Agricultural.....	709	9.6
Skilled.....	5,579	75.4
Semiskilled.....	455	6.2
Unskilled.....	409	5.5
Total.....	7,399	100.0

Table 21 gives some idea as to the percentage of placements outside of registered occupations which occurred among certain selected skilled jobs filled. For example, the table shows that of 150 workers placed as sheet-metal workers only 115 had been registered in that classification. Approximately 23.3 percent, therefore, were drawn from other occupations. The highest percentage of misplacements occurred among the group who worked as maintenance mechanics. Only one of these men had been registered as a maintenance mechanic while 17 were drawn from other occupations. Only 22 of the 100 construction foremen working on the job had been registered as construction foremen.

TABLE 21.—*Registered occupational classifications among selected skilled jobs filled*

Selected skilled jobs	Total placed	In registered occupation	Not in registered occupation	Percent placed outside of registered occupation
Sheet-metal workers.....	150	115	35	23.3
Electricians.....	240	187	53	22.1
Bricklayers.....	114	38	76	66.6
Carpenters.....	5,832	4,177	1,655	28.4
Cement finishers.....	152	100	52	34.2
Painters.....	429	354	75	17.5
Maintenance mechanics.....	18	1	17	94.4
Construction foremen.....	100	22	78	78.0
Total.....	7,035	4,994	2,041	29.0

Approximately 87 percent of the union registrants were placed while only 68 percent of the nonunion registrants were placed. The percent of placement for nonunion applicants was 64 percent for skilled and 74 percent for unskilled. The placement of union applicants in these two groups was 86 percent.

As mentioned previously, there was some indication that union members were receiving placement preference over nonunion members; however, as shown in table 22, we find there were approximately 300 skilled union workers who registered at the camp and were not placed.

TABLE 22.—*Occupational distribution showing placement percentage for union and non-union applicants*

Occupational group	Total	Union			Nonunion		
		Total	Placed	Percent placed	Total	Placed	Percent placed
Professional and kindred.....	189	18	14	77.8	171	82	47.9
Clerical.....	604	14	10	71.4	590	298	50.5
Service.....	1,063	74	69	93.4	989	575	58.1
Agricultural.....	9,041	75	60	80.0	8,966	6,321	70.5
Skilled.....	9,671	2,267	1,956	86.3	7,404	4,765	64.3
Semiskilled.....	4,788	346	320	92.5	4,442	2,769	62.3
Unskilled.....	8,442	191	166	86.9	8,251	6,076	73.6
Total.....	33,798	2,985	2,595	86.9	30,813	20,886	67.8

Although the contractor requested that information be obtained for each registrant regarding number of dependents, there was no indication from the data obtained that the existence of dependents affected a man's chance of getting a job. Among the workers registered as having dependents, approximately 69.2 percent were placed while among those without dependents approximately 67.7 percent were placed. There were 4,538 registrants concerning whom dependent information was not available. Approximately 70 percent of this group were placed, indicating a relatively even ratio between placed and unplaced for all registrants regardless of dependent status.

TABLE 23.—*Dependency status of placed and unplaced registrants*

Dependency status	Total	Placed		Not placed	
		Number	Percent	Number	Percent
With dependents.....	20,467	14,158	69.1	6,309	30.9
Without dependents.....	8,793	5,957	67.7	2,836	32.3
Unspecified.....	4,538	3,316	73.0	1,172	27.0
Total.....	33,798	23,481	69.5	10,317	30.5

An age distribution of applicants placed reveals a relatively constant ratio between workers placed and workers not placed for all groups. This is brought out clearly in chart VIII and is also shown in table 24. The contractor requested in some cases workers between 30 and 40 years of age. The data obtained covering all registrants and workers placed reveals that the ratio of placements in this age group was no higher than the ratio of placements in other age groups.

TABLE 24.—*Age group distribution showing percent placed and not placed*

Age group	Total	Placed		Not placed	
		Number	Percent of registrants	Number	Percent of registrants
Under 21.....	4,487	3,058	68.2	1,429	31.8
21 to 30.....	12,660	8,864	70.0	3,796	30.0
31 to 40.....	8,132	5,680	69.8	2,452	30.2
41 to 50.....	5,136	3,655	71.2	1,481	28.8
51 to 60.....	2,700	1,800	66.7	900	33.3
Over 60.....	683	424	62.1	259	37.9
Total.....	33,798	23,481	69.5	10,317	30.5

In observing the data with respect to the placement rates in various occupations between white and colored applicants, it is interesting to note that the ratio of placements to applications was higher among the colored workers in all occupational groups with the exception of the skilled group.

TABLE 25.—*Occupational distribution showing placement percentage for white and colored applicants*

Occupational group	Total	White			Colored		
		Total applicants	Placed	Percent	Total applicants	Placed	Percent
Professional and kindred.....	189	173	85	49.1	16	11	68.7
Clerical.....	604	571	285	49.9	33	23	69.7
Service.....	1,063	482	282	58.5	581	362	62.3
Agricultural.....	9,041	5,727	3,941	68.8	3,314	2,440	73.6
Skilled.....	9,671	9,152	6,389	69.8	519	342	65.8
Semiskilled.....	4,788	3,797	2,413	63.5	991	676	68.2
Unskilled.....	8,442	3,698	2,656	71.8	4,744	3,586	75.6
Total.....	33,798	23,600	16,041	67.9	10,198	7,440	72.9

Table 25 above shows that 7,440, or 72.9 percent, of the total colored applicants were placed. There were 16,041, or 67.9 percent, of the total white applicants placed. In the skilled group 69.8 percent of the white applicants were placed as compared with 65.8 percent of the colored applicants. The higher ratio of total placements among colored workers is in line with previous data. There was a higher absolute number of unskilled placements and a predominance of colored applicants were in that group.

In studying further the data concerning the registrants at Camp Blanding, there is no indication that the local applicants received any preference over applicants coming from great distances. It was pointed out in part I that approximately 24 percent of the total number of registrants came from outside the 175 mile area. The percentage of these workers who were placed was found to be 69.3 percent while the percentage of registrants within 175 miles who were placed was found to be 69.5 percent.

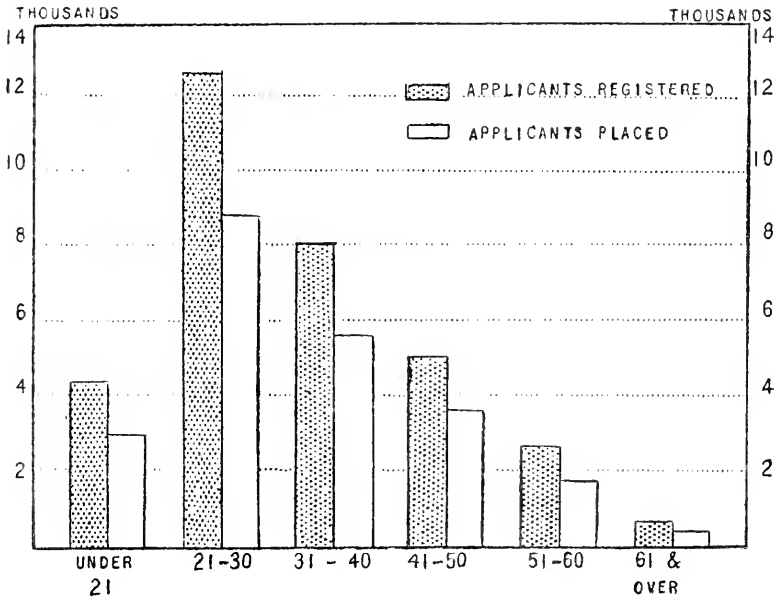


CHART VIII. Age distribution.

TABLE 26.—Distribution by area of residence showing whether placed

Distance from project	Total	Placed		Not placed	
		Number	Percent	Number	Percent
0 to 25 miles.....	2,243	1,691	7.2	552	5.3
26 to 50 miles.....	9,333	6,660	28.4	2,673	25.9
51 to 100 miles.....	4,798	3,300	14.1	1,498	14.5
101 to 175 miles.....	7,663	5,066	21.6	2,597	25.2
Over 175 miles.....	9,652	6,687	28.4	2,966	28.7
Unknown.....	108	77	0.3	31	0.4
Total.....	33,798	23,481	100.0	10,317	100.0

COULD THIS PROJECT HAVE BEEN STAFFED WITHIN THE 175-MILE RADIUS

From the data obtained it appears that this project could have been staffed with workers from within the 175-mile radius. It is definitely known that sufficient workers were available in that area during the period of construction to fulfill all needs of the contractor. It is not known, however, at what time all of these workers became available. If time had been permitted for planning a complete recruitment program, there is no doubt but that a large majority of these workers would have been found available prior to the beginning of the contract. Table 9 in part I shows that there were sufficient workers available within the area in all occupational groups with the exception of the skilled group. However, data concerning all registrants show that approximately 3,000 skilled workers who were registered were never placed. Many of these were registered from within the 175-mile area.

Table 27 below contains a distribution by area of residence for registrants in certain selected skilled occupations who were not placed.

TABLE 27.—*Distribution by area for registrants in selected skilled occupations who were not placed*

Occupation	Total	Within 50 miles	51 to 100 miles	100 to 175 miles	Over 175 miles
Carpenters	1,670	360	297	510	593
Painters	341	87	32	77	145
Cement finishers	60	16	5	10	29
Plumbers	116	16	10	25	65
Cranemen	40	12	4	9	15
Mechanics	144	38	17	48	41
Foremen	105	42	13	21	29
Electricians	93	22	9	20	42
Total	2,569	593	297	720	959

It is shown in this table that there were 360 carpenters from within the 50-mile radius who were not placed. There were 297 more available and not placed from within the 100-mile radius and 720 more within the 175-mile radius. This makes a total of 1,410 carpenters from within the 175-mile radius who did not receive employment although registered at the project. At the same time the clearance records show that the Employment Service brought approximately 329 carpenters from beyond the 175-mile radius through regular clearance channels. Table 18 shows further that approximately 1,600 of the workers who were placed as carpenters were drawn from other occupations while the 1,400 carpenters from within the 175-mile radius, as shown above, were unplaced.

From the data, therefore, it appears that with proper planning it would not have been necessary to bring more than 40 percent of the skilled workers from distances in excess of 175 miles. A review of workers available locally in other occupations also adds to the indication that there was some unnecessary migration to this project. It cannot be said that all, or even a major portion, of the migration which did occur was a result of a recruitment program by the Employment Service or by any other agency. The only active recruitment of workers from beyond 175 miles by the Employment Service resulted in the clearance of approximately 330 carpenters, as mentioned previously. The question, therefore, is not whether the project was overrecruited but rather whether the migration to Blanding could have been discouraged or curtailed to any great extent.

It must be kept in mind that a relatively large portion of this voluntary migration consisted of agricultural workers who normally migrate into Florida at this same season each year. These agricultural workers, as mentioned previously, were attracted to the Blanding project by the relatively high laboring wage. The overmigration in this particular instance created a surplus of labor at the site which at times proved valuable in filling the immediate needs of the contractor. However, sufficient time for planning should have permitted the scheduling of a regular flow of applicants to the camp at all times, so that there would have always been an adequate supply on hand with not so much lost time for the workers.

The most fruitful source of labor, other than workers ordinarily engaged in construction work, was found to be farmers and farm laborers. Inasmuch as this project was under construction at a time when the farmers and farm hands in the

surrounding area were idle, a large labor pool resulted. Many of these agricultural workers filled skilled jobs; and it is reasonable to assume that although a shortage might have appeared from the point of view of registered occupations, this pool of workers with invisible skills could have filled the labor requirements of the project. The skilled group, as shown before, was the only group in which a registered shortage appeared within the 175-mile area. The data, however, covering placements showed that more than one-fourth of the skilled workers on the job were drawn from occupational groups other than the skilled group.

From the observations it appears that the time factor is the only factor which did affect the possibility of the job's having been staffed from within a much closer area. Inasmuch as it is definitely known that all of these workers would become available at some time during the period of construction, it is reasonable to assume that they have been found available prior to the beginning of the project had sufficient time been made for a thorough and well-organized local recruitment program.

PART IV. Staffing problems

As pointed out in the introduction, there were several problems which were encountered during the period of construction due chiefly to the magnitude of the project and to the lack of planning. A period of less than 2 weeks elapsed between the date of the announcement of the contract award and the date of arrival of the contractor's representatives to begin work. Although it was immediately realized that a large supply of construction labor would be required to staff this project, there had been no estimates or surveys made prior to the arrival of the contractor as to the maximum labor needs on the project or to the number of workers available within commuting distance of the proposed site.

The Jacksonville office of the Florida State Employment Service contained registrations for less than 8,000 workers on the date the contract was awarded. The Gainesville and St. Augustine employment offices had a total active file of less than 3,000. Among these registrants there were relatively few qualified construction workers, particularly in the skilled production classes. It was recognized, therefore, that if the public employment service was to play any large part in supplying labor on this project, other labor sources would have to be tapped.

The fact that the project was to be operated on a closed shop basis resulted in the availability of union registers as a source of immediate supply. These registers had necessarily been kept at a relatively low figure due to the lack of demand for skilled building mechanics throughout the area during previous months. The fact that an immediate cooperative agreement was reached between the Employment Service and the unions greatly facilitated the early recruitment problems. The original estimate of labor needs was set at 10,000. The union rolls were not sufficient to meet such labor requirements; and, therefore, the Employment Service was called in to assist in recruitment.

ESTABLISHMENT OF EMPLOYMENT SERVICE OFFICE

The first problem encountered by the Employment Service in carrying out its part of the work was provision of a suitable location for operations at the site of the project. Originally a small frame building was constructed across the highway outside of the camp area. It was necessary to transfer personnel from various offices throughout the State to staff this temporary office. The first order for workers was received at this office before a single registration had been taken. Hundreds had assembled around the office awaiting an opportunity to file an application. It was necessary to confine the registrations to skeleton form in order to keep a supply of laborers moving to the construction superintendents. The number of applicants at the temporary office increased continually as a result of the publicity concerning the project. It was necessary to increase the staff of the temporary office from three to ten interviewers after the first day. Workers in the skilled trades classifications were told to return to their homes and await a call from the Employment Service. These skilled workmen were not needed during the first 2 weeks of preliminary clearing and grubbing of the camp site.

For a time it appeared that all labor requirements might be met as a result of the large number of workers appearing at the site in search of employment. Soon after the work had begun, however, the estimated labor needs were increased from 10,000 to 25,000; and it was then realized that an active recruitment campaign would be necessary.

One morning upon arrival at the temporary office to begin work, the Employment Service staff found that during the night the office had been jacked up on timbers about 6 feet off the ground. The doors and windows were jammed, and it was impossible to gain entrance to the building. It was reported that an order had been issued to move the employment office across the highway into a fenced area on the camp property. The order, however, had later been canceled, and the office had been left in such a position as to be entirely useless. In the meantime the various foremen on the project were demanding allotments of all types of workers. Inasmuch as there was a supply of new applicants available, the Employment Service staff made use of their automobiles in taking registrations. It was necessary to continue this process for 3 days while an attempt was being made to contact the construction superintendent. Finally the Employment Service building was moved into a fenced area on the camp reservation adjacent to the main entrance gate. This area was designated as the employment center, and the work of the Employment Service was greatly facilitated as a result of the new set-up.

Placements made by the Employment Service soon jumped from 1,200 per week to 1,200 per day, and it was impossible for the office staff to maintain detailed records and file the necessary statistical reports on this enormous volume of labor. For this reason it was necessary to transfer all registration cards to the Jacksonville office where they were placed in the charge of a statistician with ten assistants to classify and code each registration. The voluntary migration of workers to the camp site proved sufficient to meet the requirements of the contractor during the first few days of each week, but it became necessary for the Employment Service to resort to its clearance facilities in order to recruit workers for the latter half of the week. The volume of applicants moving into the area from other offices resulted in a decision to abolish the policy of transferring the applicant's registration card from his previous office. Instead, the referral office provided each applicant with a referral card which was to be exchanged by the applicant at the Blanding office for a referral card bearing the Camp Blanding stamp. The referral cards which were received in exchange for the Blanding cards were batched and sent to the Jacksonville office, from where they were later returned to the office in which the referral originated. Placement reports were then compiled by the office which had made the referral, but were designated as representing placements by the Jacksonville office, which was the order-holding office.

The employment office at the camp site operated on a three-shift basis with eight interviewers working from 8 a. m. to 4 p. m. and two shifts of four each working from 4 p. m. until 8 a. m. The personnel director for the contractor complained that approximately an hour was lost each morning in waiting for new applicants to clear both the employment office and the union office. In order to meet this problem a fourth crew was assigned by the employment office to work from 4 a. m. until 10 a. m. in order to speed up the flow of men to the project. This made it possible for the Employment Service to clear all applicants who appeared at the site soon after daylight, so that these men would be ready to report to the time office when it opened at 8 o'clock.

PROBLEM OF HOUSING

The large volume of workers who had moved into the area during the first three weeks in October created a serious housing problem. By the last week in October all of the nearby towns were crowded to capacity. Commuting to and from the project was seriously curtailed as a result of the narrow highway which was the only road by which the camp could be reached. There were barracks or bunk houses and cafeteria facilities available on the camp site for building trades mechanics. The capacity of these facilities, however, was limited to 2,000. Additional facilities of this kind should have been provided on a contract as large as this Camp Blanding project and located in an area so remote from large urban centers. The facilities which were available, although inadequate, were of the very best. The bunks were cared for by expullman porters, and complete sanitation was maintained throughout. The capacity limit was the only criticism that could be offered for such facilities.

TRANSPORTATION PROBLEM

As mentioned above, the only paved highway by which Camp Blanding could be reached was narrow and contained many sharp curves and antiquated bridges. The highway in both directions from the camp was jammed with cars for two or three hours preceding each change of shift at the camp. Sometime after the

project had been under way, a railroad spur was extended to the camp, and shuttle trains operated to and from Jacksonville once each day. This method of transportation was used chiefly by the 40 cents per hour laborers. The cost of transportation was 75 cents per round trip, and a considerable amount of the traffic congestion on the highways could have been avoided had more workers been encouraged to use this mode of travel. Many serious accidents occurred on this highway as a result of the traffic congestion.

PROBLEM OF THE MIGRANT WORKER

In addition to the many hundreds of workers who had obtained employment but who were unable to find housing facilities in the area, there was a group of poor migratory workers which created a further problem for a period of approximately 2 weeks. This group of workers was made up chiefly of agricultural migrants who normally would go to south Florida in the fall for the early harvest season. Many of these workers, however, moved into the Blanding area and established makeshift camps throughout the pine woods across the highway from the camp site. These workers had been attracted to Blanding by the 40 cents per hour labor scale, and for a period of approximately 2 weeks several hundred settled in trailers and other various types of shelters near the Camp. There was no way to determine the number of these workers who were employed on the construction project. Approximately 50 percent of the group were Negroes, and it was known that many of them were working at 40 cents per hour. At the same time, however, there was a large number of migrants with families who had been unsuccessful in finding employment; consequently, a great amount of adverse newspaper publicity was released concerning the conditions under which these people were living. As a result of this publicity the State Welfare Board installed a commodity disbursement post in the area. All persons who were not on the contractor's pay roll were able to obtain food from this disbursement center. It was reported that approximately 28,000 pounds of foodstuffs were dispensed during a 10-day period. In order to protect the health of these campers, two trained Red Cross nurses were placed in residence on the site to render assistance where needed. Although the facilities which these migrants maintained were very crude, it appeared that the majority of these workers were of a type who had been accustomed to such an existence. All of the land on which they were camped was dry and relatively high for the area and contained an abundance of firewood. The majority of the camps were either auto trailers, covered trucks, or small tents; and it appeared that with some resourcefulness on the part of the campers themselves, they should have been able to keep themselves warm and dry. In some instances persons were found sleeping on the ground (but this was for a short period of time) or in nothing more than a blanket, and the majority of these cases were young single men who were living "catch as catch can" in order to preserve as much of their earnings as possible.

PUBLICITY USED TO HALT MIGRATION

Even after the peak of employment was reached on the construction project, there continued a vast influx of transient workers. It was necessary, therefore, for the Employment Service to request the cooperation of the agencies in adjoining States to discourage any further movement to this area. The Employment Services of South Carolina, Georgia, and Alabama were specially asked to notify all of their job seekers not to come to Blanding in search of work, inasmuch as the employment peak had passed, and there was a sufficient supply of labor on hand to meet all anticipated needs.

PART V. *Conclusion*

The experience gained in the construction of Camp Blanding indicates a necessity for preplanning of all major construction projects of this type. This is particularly true with reference to construction projects which are to be located in areas where there is little available information concerning current labor supply. It is also true with respect to areas which do not have facilities for absorbing the enormous influx of workers which will ordinarily accompany a project of this type.

The fact that the peak construction period on the Blanding project was less than 6 months probably saved the area from the more serious effects of inadequate housing and sanitation facilities. It was necessary for many of the construction

workers to accept the crude and crowded living conditions for the relatively short period. Such conditions, however, should not be necessary for these workers on similar projects if proper and efficient planning is permitted. In this particular case there had been no time for planning and the resulting conditions must necessarily have been detrimental to both the health and the morale of the workers involved.

It was shown that adequate and satisfactory housing facilities can be provided for a project of this type at a relatively low cost. Approximately 2,500 workers were housed at the site in temporary shelters at a cost of 25 cents per day. These temporary shelters or bunkhouses provided clean, comfortable beds and were serviced by ex-Pullman porters. With proper planning sufficient facilities could have been provided for all workers who found it necessary to obtain housing near the project.

The provision of housing facilities would also tend to reduce the amount of commuting necessary, thereby eliminating many of the transportation problems. It should not be necessary for workers to commute up to 100 miles each way for employment on a project of this type. It was also proven during the Blanding project that adequate transportation facilities can usually be provided at a reasonable expense to the worker. The operation of shuttle trains from Jacksonville provided an excellent method of transportation for many workers who commuted daily from the Jacksonville area. While it cannot be said that this method solved the transportation problem, it was obvious that a great reduction in highway traffic between Jacksonville and the Blanding area did result. The provision of similar facilities from other nearby cities would make possible the housing of more workers in these urban centers without creating a transportation problem. In order to provide such facilities, however, it is necessary that sufficient information be made available with respect to the number of workers to be involved, so that plans for meeting the anticipated problems can be based on reliable facts.

The first major question which has arisen as a result of the study of the Blanding data is a question of the necessity for drawing labor from such great distances. The Blanding data revealed a large supply of locally available workers concerning whom no information had been available prior to the beginning of the project. This available supply was made up largely of agricultural workers and constituted a supply of workers with "invisible" skills. Many of these workers filled jobs in highly skilled classifications. They became available at the project through voluntary application for work. It is quite probable that a similar condition will be found in areas surrounding other major projects which will necessitate an actual survey of the available labor supply before any indication can be obtained as to the number of workers who will need to be imported from great distances. In addition to this, an accurate picture of the local available supply of workers would permit an efficient plan for organized movement of labor to the site of the project, thus avoiding bottle necks at the gate and other unnecessary problems. With such information it would also be much easier for the placement agency to do a much better job of selection in fulfilling the demands of the contractor. The Blanding project represented for the most part a practice of "hiring at the gate" with the workers going through the formality of an employment service registration and a union approval. Except in few instances there was no indication of selective factors entering in the placement process.

Workers are naturally going to migrate to large projects of this type. Such migration, however, might be controlled to some extent with a well organized labor market and an efficient, simplified system of clearance between state employment services. The one prerequisite which is obviously necessary before any of the steps can be taken is advance information concerning projects similar to that concerned in this study. It apparently was not realized that the Blanding contract was being let in a sparsely populated area where there was practically a labor vacuum as far as the anticipated demands of the contractor was concerned. Had the actual needs of the contractor been known, the next consideration should have been the housing question with relation to the number of workers who would necessarily be brought from beyond commuting distances. Having obtained such information, the necessary plans for housing the workers should have been carried out before any migration took place. After providing for the needs of the workers moving into the area, the next question which should have been studied was the question of transportation for those workers who would commute to and from the project. If highway facilities had been found inadequate for the anticipated traffic load, then such plans as necessary should have been made for providing other modes of transportation.

The data studied concerning the Blanding applicants give every indication that this project could have been staffed from within a much closer geographic area. The data showed that while many skilled workers were among those coming great distances, there were local workers with registered skills, and an invisible supply with secondary skills who were never placed. The time element created some question as to whether all of these workers were available prior to the beginning of the project. Since no information had been available concerning these workers, it cannot be stated that they were available for work at that time. However, from the data obtained, there is no justification for assuming that many hundred of them were not available or could not have been reached for employment on this project.

PART VI. Appendix

TABLE I.—Distribution of Blanding applicants by specific area of residence

[Includes towns of 10,000 or more population]

Residence (distance from Blanding)	Total	Under 21		21 to 30		31 to 40		41 to 50		51 to 60		60 and over	
		White	Other	White	Other	White	Other	White	Other	White	Other	White	Other
Total	33,798	2,722	1,765	8,733	3,927	5,761	2,371	3,784	1,352	2,100	600	500	183
Within 25 miles	2,243	279	151	629	245	311	149	228	88	99	41	34	11
26 to 50 miles	9,333	714	825	1,947	1,473	1,245	914	754	551	448	211	114	77
Jacksonville	3,779	298	291	906	519	606	315	328	151	199	65	47	24
Gainesville	743	36	73	108	155	56	120	53	65	27	31	10	9
All other	4,811	380	461	933	799	583	509	373	335	222	145	57	44
51 to 100 miles	4,798	386	309	1,120	692	672	357	500	231	305	109	80	34
Florida	4,636	370	304	1,079	671	619	318	489	227	298	109	79	33
St. Augustine	212	10	13	41	42	31	20	28	17	20	10	10	10
Other	4,414	360	291	1,038	629	618	328	461	210	278	99	69	33
Georgia	142	16	5	41	21	23	9	11	7	7	1	1	1
101 to 175 miles	7,663	612	267	2,274	684	1,493	40	981	211	540	109	123	29
Florida	3,229	214	75	883	265	591	178	457	112	295	57	78	7
Tampa	457	19	3	12	25	96	20	77	10	38	11	11	2
Orlando	198	13	—	47	12	36	9	35	1	34	1	10	—
Daytona Beach	90	2	—	22	5	16	6	20	2	10	3	4	—
Lakeland	311	26	2	101	5	73	7	53	2	29	3	10	—
Tallahassee	63	2	7	18	12	9	2	5	2	1	—	—	—
Sanford	365	1	19	34	89	26	76	16	48	17	22	7	4
Clearwater	75	3	9	7	19	7	8	5	10	4	3	—	—
Other	1,699	142	35	529	99	325	50	266	31	157	15	36	1
Georgia	4,434	398	132	1,391	418	902	222	504	99	249	52	45	22
Waycross	193	15	4	64	9	49	5	22	5	15	1	3	1
Valdosta	395	14	29	57	101	40	56	2	32	17	16	5	6
Brunswick	30	2	—	6	1	11	1	4	1	2	—	1	—
Thomasville	78	4	—	15	14	13	6	8	3	4	3	3	1
Moultrie	332	40	7	117	19	89	7	43	1	16	4	3	1
Other	3,406	323	88	1,132	280	706	147	492	57	195	34	30	12
Over 175 miles	1,429	97	20	430	67	323	35	241	27	121	11	21	2
West Florida	724	67	9	217	30	165	16	115	8	57	3	7	—
Pensacola	143	4	—	41	1	46	—	29	—	18	—	4	—
Panama City	28	2	2	6	8	5	—	3	—	2	—	—	—
Other	553	61	7	200	21	114	16	83	8	37	3	3	—
South Florida	701	30	11	183	37	158	39	136	19	64	8	14	2
Miami	145	7	1	37	4	47	1	26	1	19	1	1	—
St. Petersburg	138	1	3	24	14	28	15	28	5	12	3	4	1
West Palm Beach	29	2	—	10	2	6	3	4	1	—	—	—	—
Fort Lauderdale	13	2	—	4	—	3	—	1	—	—	—	3	—
Sarasota	20	1	—	2	—	6	—	6	—	4	—	1	—
Fort Myers	22	1	2	6	—	4	2	5	—	2	—	—	—
Other	334	16	5	100	17	64	18	66	12	26	4	5	1
Out of State	8,336	634	253	2,342	776	1,717	469	1,070	241	587	89	128	30
Region VII	5,868	416	229	1,414	685	994	397	561	207	273	75	65	22
Georgia (Over 175)	3,284	246	146	859	467	566	263	341	145	146	47	44	14
Alabama	1,290	109	53	387	145	273	72	143	25	71	4	11	3
South Carolina	345	18	25	62	51	47	43	30	25	19	18	3	4
Mississippi	111	8	—	42	7	24	6	13	3	5	1	2	—
Tennessee	332	35	5	94	15	84	13	34	9	32	5	5	1

TABLE I.—Distribution of Blanding applicants by specific area of residence—Con.

Residence (distance from Blanding)	Total	Under 21		21 to 30		31 to 40		41 to 50		51 to 60		60 and over	
		White	Other	White	Other	White	Other	White	Other	White	Other	White	Other
Out of State—Continued.													
Region I.....	210	17	1	87	4	49	.....	30	1	16	.....	5	.....
Connecticut.....	43	1	.....	15	2	11	.....	9	.....	4	.....	1	.....
Maine.....	17	1	.....	8	.....	4	.....	4	.....	.....	.....	.....	.....
Massachusetts.....	123	13	1	53	1	30	.....	13	1	8	.....	3	.....
New Hampshire.....	8	.....	.....	4	.....	1	.....	3	.....	.....	.....	.....	.....
Rhode Island.....	9	1	.....	2	1	2	.....	.....	.....	2	.....	1	.....
Vermont.....	10	1	.....	5	.....	1	.....	1	.....	2	.....	.....	.....
Region II: New York.....	776	37	3	219	10	228	6	165	2	90	.....	16	.....
Region III.....	275	26	2	100	11	61	9	32	6	24	1	3	.....
Delaware.....	7	.....	.....	1	1	1	2	.....	1	1	.....	.....	.....
New Jersey.....	95	10	1	31	4	24	2	12	3	6	1	1	.....
Pennsylvania.....	173	16	1	68	6	36	5	20	2	17	.....	2	.....
Region IV.....	551	47	8	154	35	113	28	79	16	44	11	8	8
District of Columbia.....	26	1	.....	7	2	9	.....	4	.....	3	.....	.....	.....
Maryland.....	47	5	1	16	5	4	4	6	1	4	.....	.....	1
North Carolina.....	296	27	5	72	20	56	21	43	12	22	10	5	3
Virginia.....	114	8	1	36	6	26	3	14	3	11	1	1	4
West Virginia.....	68	6	1	23	2	18	.....	12	.....	4	.....	2	.....
Region V.....	410	27	4	127	5	95	8	72	4	56	1	11	.....
Kentucky.....	122	12	1	38	2	28	1	22	2	14	1	4	.....
Michigan.....	95	6	1	32	.....	25	2	11	1	13	.....	1	.....
Ohio.....	193	9	2	57	3	42	5	39	1	29	.....	6	.....
Region VI.....	225	19	1	58	5	55	1	45	.....	35	.....	6	.....
Illinois.....	106	14	1	25	5	21	1	25	.....	12	.....	2	.....
Indiana.....	86	2	.....	19	.....	29	.....	14	.....	20	.....	2	.....
Wisconsin.....	33	3	.....	14	.....	5	.....	6	.....	3	.....	2	.....
Region VIII.....	69	6	.....	30	1	13	.....	12	.....	7	.....	.....	.....
Iowa.....	21	2	.....	9	1	5	.....	2	.....	2	.....	.....	.....
Minnesota.....	28	3	.....	12	.....	5	.....	5	.....	3	.....	.....	.....
Nebraska.....	11	1	.....	5	.....	2	.....	1	.....	2	.....	.....	.....
North Dakota.....	3	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....
South Dakota.....	6	.....	.....	2	.....	.....	.....	4	.....	.....	.....	.....	.....
Region IX.....	135	16	.....	35	2	41	2	20	.....	14	.....	5	.....
Arkansas.....	27	1	.....	12	2	4	2	4	.....	1	.....	1	.....
Kansas.....	17	2	.....	3	.....	5	.....	1	.....	5	.....	1	.....
Missouri.....	62	10	.....	12	.....	21	.....	9	.....	7	.....	3	.....
Oklahoma.....	29	3	.....	8	.....	11	.....	6	.....	1	.....	.....	.....
Region X.....	139	7	.....	40	5	39	9	27	2	9	.....	1	.....
Louisiana.....	47	2	.....	14	4	10	8	7	1	.....	.....	1	.....
New Mexico.....	5	1	.....	1	.....	1	.....	1	.....	2	.....	.....	.....
Texas.....	87	4	.....	25	1	29	1	19	1	7	.....	.....	.....
Region XI.....	20	1	.....	7	.....	3	.....	5	.....	3	.....	1	.....
Arizona.....	6	1	.....	2	.....	1	.....	1	.....	1	.....	.....	.....
Colorado.....	3	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....
Idaho.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Montana.....	3	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....
Utah.....	5	.....	.....	1	.....	1	.....	2	.....	1	.....	.....	.....
Wyoming.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Region XII.....	50	7	1	16	1	13	.....	8	.....	3	.....	1	.....
California.....	40	7	1	12	.....	11	.....	7	.....	1	.....	1	.....
Nevada.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon.....	5	.....	.....	1	.....	1	.....	1	.....	2	.....	.....	.....
Washington.....	4	.....	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....
Residence unknown.....	108	8	4	25	12	13	9	14	3	13	1	6	.....

TABLE II.—Residence of Blanding applicants by registered occupation

Residence (distance from Blanding)	Total	Professional and kindred	Sales and clerical	Service workers	Agricultural and kindred	Skilled	Semi-skilled	Unskilled
25 miles or less.....	2,243	15	35	61	714	337	307	774
26 to 50 miles.....	9,333	43	173	392	2,281	1,979	1,433	3,032
51 to 100 miles (Florida).....	4,656	20	70	134	1,669	957	574	1,232
51 to 100 miles (Georgia).....	142	2	2	3	49	28	22	38
101 to 175 miles (Florida).....	3,229	24	58	86	640	1,289	519	613
101 to 175 miles (Georgia).....	4,434	20	61	78	2,129	996	459	691
Over 175 miles (west Florida).....	724	4	9	9	126	325	109	142
Over 175 miles (south Florida).....	701	4	8	12	73	405	123	80
Over 175 miles (all other).....	8,228	62	185	285	1,347	3,319	1,224	1,806
Residence unknown.....	108	1	3	3	13	36	18	34
Total.....	33,798	189	604	1,063	9,041	9,671	4,788	8,442

TABLE III.—Residence of white applicants by age

Residence (miles from project)	Total	Under 21	21 to 30	31 to 40	41 to 50	51 to 60	61 and over
25 or less.....	1,571	279	620	311	228	99	34
26 to 50.....	5,222	714	1,947	1,245	754	448	114
51 to 100.....	3,063	386	1,120	672	500	305	80
101 to 175.....	6,023	612	2,274	1,493	981	540	123
Over 175 (Florida).....	1,243	97	430	323	251	121	21
Out-of-State.....	6,478	634	2,342	1,717	1,070	587	128
Total.....	23,600	2,722	8,733	5,761	3,784	2,100	500

TABLE IV.—Residence of colored applicants by age

Residence (miles from project)	Total	Under 21	21 to 30	31 to 40	41 to 50	51 to 60	61 and over
25 or less.....	672	151	235	146	88	41	11
26 to 50.....	4,111	825	1,473	944	551	241	77
51 to 100.....	1,735	309	692	357	234	109	34
101 to 175.....	1,640	207	684	400	211	109	29
Over 175 (Florida).....	182	20	67	55	27	11	2
Out-of-State.....	1,858	253	776	469	241	89	30
Total.....	10,198	1,765	3,927	2,371	1,352	600	183

TABLE V.—Dependency status of Blanding applicants by residence and whether placed

Residence	Total	Dependency status					
		With		Without		Unknown	
		Placed	Unplaced	Placed	Unplaced	Placed	Unplaced
0 to 25 miles.....	2,243	992	341	497	155	202	56
26 to 50 miles.....	9,333	3,817	1,547	1,734	747	1,109	379
51 to 100 miles (Florida).....	4,656	1,896	888	829	396	487	160
51 to 100 miles (Georgia).....	142	55	38	23	15	9	1
101 to 175 miles (Florida).....	3,229	1,385	663	486	211	354	130
101 to 175 miles (Georgia).....	4,434	1,898	1,074	610	353	333	166
Over 175 miles (west Florida).....	724	370	134	107	55	47	11
Over 175 miles (south Florida).....	701	330	137	120	57	44	13
Over 175 miles (out-of-State).....	8,228	3,385	1,478	1,537	837	747	244
Unknown.....	108	30	9	13	10	34	12
Total.....	33,798	14,158	6,309	5,957	2,836	3,366	1,172

TABLE VI.—Occupational distribution of men placed by area of residence

Miles from project	Total	Occupation on the job					
		Prof- sional and kindred	Sales and clerical	Service	Skilled	Semi- skilled	Unskilled
0 to 25.....	1,691	.....	5	3	251	105	1,327
26 to 50.....	6,660	.....	18	35	1,585	443	4,579
51 to 100 (Florida).....	3,212	2	9	12	778	175	2,336
51 to 100 (Georgia).....	88	.....	.....	1	22	6	59
100 to 175 (Florida).....	2,225	4	9	3	1,001	179	1,029
100 to 175 (Georgia).....	2,841	1	1	16	758	117	1,948
Over 175 (west Florida).....	524	.....	2	.....	291	14	217
Over 175 (south Florida).....	494	.....	2	3	305	46	138
Out-of-State.....	5,669	.....	18	28	2,380	508	2,735
Unknown.....	77	.....	1	.....	28	6	42
Total.....	23,481	7	65	101	7,399	1,599	14,310

TABLE VII.—Residence of married applicants by number of dependents

Miles from project	Total	Number of dependents					
		None	1	2 to 3	4 to 5	Over 5	Unspeci- fied
0 to 25.....	1,130	8	468	375	175	104	0
26 to 50.....	4,750	45	2,398	1,385	637	282	3
51 to 100.....	2,624	20	1,323	723	352	203	3
101 to 175.....	4,711	24	2,518	1,241	625	300	3
Over 175 (Florida).....	893	8	533	247	76	29	0
Out-of-State.....	4,389	26	2,454	1,240	445	222	2
Unknown.....	35	1	19	8	5	2	0
Total.....	18,532	132	9,713	5,219	2,315	1,142	11

TABLE VIII.—Residents of unmarried applicants by number of dependents

Miles from project	Total	Number of dependents					
		None	1	2 to 3	4 to 5	Over 5	Unspeci- fied
0 to 25.....	851	643	77	77	37	17	0
26 to 50.....	3,095	2,435	250	309	67	29	5
51 to 100.....	1,520	1,244	107	136	26	6	1
101 to 175.....	1,969	1,636	118	166	34	15	0
Over 175 (Florida).....	417	331	43	37	6	0	0
Out-of-State.....	2,849	2,347	217	215	52	18	0
Unknown.....	25	22	0	1	2	0	0
Total.....	10,726	8,658	812	941	224	85	6

TABLE IX.—Occupational distribution of white men placed by age

Occupation on the job	Total	Under 21	21 to 30	31 to 40	41 to 50	51 to 60	61 and Over
Professional and kindred.....	7	1	3	.....	3	.....	.....
Sales and clerical.....	65	11	32	16	6	.....	.....
Service.....	39	2	13	14	8	2	.....
Skilled.....	7,122	193	2,033	2,023	1,641	997	235
Semiskilled.....	1,547	158	806	412	120	40	11
Unskilled.....	7,261	1,431	3,135	1,466	848	329	52
Total.....	16,041	1,796	6,022	3,931	2,626	1,368	298

TABLE X.—Occupational distribution of colored men placed by age

Occupation on the job	Total	Under 21	21 to 30	31 to 40	41 to 50	51 to 60	61 and Over
Professional and kindred.....							
Sales and clerical.....							
Service.....	62	10	27	16	6	2	1
Skilled.....	277	21	64	81	68	29	14
Semiskilled.....	52	4	21	17	5	5	
Unskilled.....	7,019	1,227	2,730	1,635	950	396	111
Total.....	7,440	1,262	2,842	1,749	1,029	432	126

TABLE XI.—Distribution of men placed by number of dependents and occupational group (married)

Number of dependents	Total	Occupation of placement					
		Professional and kindred	Clerical	Service	Skilled	Semi-skilled	Unskilled
No dependents.....	107		1		28	3	75
1 dependent.....	6,777	4	14	19	2,698	500	3,542
2 to 3 dependents.....	3,562		8	20	1,472	272	1,790
4 to 5 dependents.....	1,546	1	1	8	606	88	842
More than 5 dependents.....	765			3	287	24	451
Number of dependents unspecified.....	3						3
Total.....	12,760	5	24	50	5,091	887	6,703

TABLE XII.—Distribution of men placed by number of dependents and occupational group (unmarried, widowed, divorced, etc.)

Number of dependents	Total	Occupation of placement					
		Professional and kindred	Clerical	Service	Skilled	Semi-skilled	Unskilled
No dependents.....	5,848		28	39	970	415	4,396
1 dependent.....	594		2	4	138	47	403
2 to 3 dependents.....	679			1	167	63	448
4 to 5 dependents.....	159			1	27	7	124
More than 5 dependents.....	64				11		53
Number of dependents unspecified.....	3,377	2	11	6	995	180	2,183
Total.....	10,721	2	41	51	2,308	712	7,607

TABLE XIII.—Occupational grouping of Blanding registrants by color, union status, and whether placed

Registered occupation	Grand total	White				Other			
		Union		Nonunion		Union		Nonunion	
		Placed	Not placed	Placed	Not placed	Placed	Not placed	Placed	Not placed
Professional and kindred.....	189	14	4	71	84			11	5
Clerical and sales.....	604	10	4	275	282			23	10
Service workers.....	1,063	57	3	225	197	12	2	350	217
Agricultural and kindred.....	9,041	44	12	3,897	1,774	16	3	2,424	871
Skilled.....	9,671	1,897	300	4,482	2,473	59	11	283	166
Semiskilled.....	4,788	305	24	2,108	1,360	15	2	661	313
Unskilled.....	8,442	116	16	2,540	1,026	50	9	3,536	1,149
Total.....	33,798	2,443	363	13,598	7,196	152	27	7,288	2,731

TABLE XIV.—*Distribution of men placed by registered occupation, color, and union status*

Registered occupation	Total	Per-cent	White				Other			
			Union	Per-cent	Non-union	Per-cent	Union	Per-cent	Non-union	Per-cent
Professional and kindred	96	0.4	14	0.6	71	0.5	-----	-----	11	0.2
Clerical and sales	308	1.3	10	.4	275	2.0	-----	-----	23	.3
Service workers	644	2.7	57	2.3	225	1.6	12	7.9	350	4.8
Agricultural and kindred	6,381	27.2	44	1.8	3,897	28.7	16	10.5	2,424	33.2
Skilled	6,721	28.6	1,897	77.7	4,482	33.0	59	38.8	283	3.9
Semiskilled	3,089	13.2	305	12.5	2,108	15.5	15	9.9	661	9.1
Unskilled	6,242	26.6	116	4.7	2,540	18.7	50	32.9	3,536	48.5
Total	23,481	100.0	2,443	100.0	13,598	100.0	152	100.0	7,288	100.0

TABLE XV.—*Table showing relation between occupations at Blanding and primary registered occupations for all applicants placed*

Occupation	Total	Profes-sional and kindred	Clerical and sales	Service	Agricultural and kind	Skilled	Semi-skilled	Unskilled
Professional and managerial	7	5	-----	-----	1	-----	1	-----
Clerical and sales	65	3	33	11	2	7	4	5
Service	101	1	-----	32	17	8	15	28
Agriculture and kindred	7,399	41	77	129	709	5,579	455	409
Skilled	1,599	6	32	26	161	217	972	182
Semiskilled	14,310	40	166	446	5,488	910	1,642	5,618
Total	23,481	96	308	644	6,381	6,721	3,089	6,242

TABLE XVI.—*New applications and placements by weeks September 23 through February 28*

Period	Actual		Cumulative	
	New appli-cations	Place-ments	New appli-cations	Place-ments
Sept. 23-28	1,217	765	1,217	765
Sept. 30-Oct. 5	1,884	1,060	3,101	1,825
Oct. 7-12	1,589	765	4,690	2,590
Oct. 14-19	1,019	997	5,709	3,587
Oct. 21-26	2,125	705	7,834	4,292
Oct. 28-Nov. 2	3,003	1,242	10,927	5,534
Nov. 4-9	4,950	1,335	15,877	6,968
Nov. 11-16	4,568	6,907	20,445	13,776
Nov. 18-23	4,238	3,039	24,683	16,815
Nov. 25-30	495	1,655	25,178	18,470
Dec. 2-7	1,475	1,854	26,653	20,324
Dec. 9-14	1,391	1,450	28,044	21,774
Dec. 16-21	681	1,354	28,625	23,128
Dec. 23-28	1,030	962	29,755	24,090
Dec. 30-Jan. 4	1,019	875	30,774	24,965
Jan. 6-11	1,137	926	31,911	25,890
Jan. 13-18	820	968	32,731	26,858
Jan. 20-25	561	498	33,292	27,356
Jan. 27-Feb. 1	477	404	33,769	27,760
Feb. 3-8	218	361	33,987	28,121
Feb. 10-15	146	282	34,133	28,403
Feb. 17-22	50	270	34,183	28,673
Feb. 24-28	29	136	34,212	28,809

TABLE XVII.—*Distribution of Blanding placements, by occupations*

	<i>Number place- ments</i>
PROFESSIONAL AND MANAGERIAL	
Accountant, public (professional and kindred).....	1
Auditor (professional and kindred).....	1
Architect, building (professional and kindred).....	1
Civil engineer (professional and kindred).....	1
Draftsman, architectural (professional and kindred).....	1
SALES AND CLERICAL	
Material clerk (clerical).....	1
Clerk, general (clerical).....	3
Clerk, general office.....	3
Timekeeper.....	12
Stenographer (clerical).....	1
Stock clerk II (clerical).....	1
Sales clerk (retail trade).....	44
SERVICE WORKERS	
Cook, short order (hotel and restaurant).....	4
Waiter, informal (hotel and restaurant).....	1
Bus boy (hotel and restaurant).....	9
Gateman IV (any industry).....	26
Watchman I (any industry).....	5
Detective (any industry).....	1
Janitor I (any industry).....	1
Porter II (any industry).....	54
SKILLED	
Machinist II (machine shop).....	5
Sheet metal worker II (sheet metal).....	150
Structural steel worker (construction).....	8
Welder, arc (any industry).....	2
Welder, acetylene (any industry).....	1
Blacksmith II (forging).....	2
Electrician (any industry).....	240
Form builder I (auto manufacturing).....	8
Concrete mixer operator II (construction).....	12
Operating engineer IV (construction).....	12
Bricklayer II (construction).....	114
Carpenter I (construction).....	5, 517
Carpenter, finish (construction).....	248
Carpenter, rough II (construction).....	65
Form builder II (construction).....	1
Timberman II (construction).....	1
Cement finisher II (construction).....	151
Building foreman (construction).....	99
Cement finisher, highways and streets (construction).....	1
Painter I (construction).....	428
Painter, boat, finish (ship and boat building and repairing).....	1
Plumber (construction).....	14
Steam fitter (construction).....	1
Lather, metal (construction).....	42
Asbestos worker, general (construction).....	7
Lineman IV (light, heat, power).....	127
Power-shovel operator (any industry).....	18
Dragline operator (any industry).....	33
Hoisting engineer II (any industry).....	15
Blaster I (anthracite coal mining; bituminous coal mining).....	5
Automobile mechanic (auto service).....	5
Maintenance mechanic II (any industry).....	18
Rigger III (cement; construction).....	47
Highway foreman (construction).....	1

TABLE XVII.—*Distribution of Blanding placements, by occupations—Continued*

SEMISKILLED		Number place- ments
Lumber checker I (planing mill).....		1
Saw operator (brick and tile).....		1
Pipe threading machine operator (any industry).....		6
Conveyor man II (anthracite coal mining).....		1
Lampman I (anthracite coal mining; bituminous coal mining).....		1
Blade-grader operator (construction).....		3
Motor-grader operator (construction).....		3
Bulldozer operator I (construction).....		39
Scraper operator V (construction).....		30
Concrete mixer operator I (construction).....		1
Winchman, pile driving (construction).....		1
Road roller operator (construction).....		17
Painter, rough (construction).....		1
Roofer, composition (construction).....		85
Asphalt raker (construction).....		1
Reinforcing iron worker (construction).....		221
Pipe layer I (construction).....		71
Pipe calker (construction).....		28
Well-point pumpman (construction).....		23
Pipe-fitter helper (construction).....		1
Steam-fitter helper (construction).....		1
Truck-driver, heavy (any industry).....		3
Truck driver, light (any industry).....		853
Tractor operator (any industry).....		16
Automobile service station attendant (auto service).....		4
Lineman, junior (telephone and telegraph).....		50
Fireman, stationary boiler (any industry).....		2
Pumpman VII (petroleum-refining).....		129
Saw filer, hand (any industry).....		4
Saw filer, machine (any industry).....		1
Sheet-metal worker, apprentice (sheet metal).....		1
UNSKILLED		
Laborer, process (machine shop).....		3
Laborer, building (construction).....	14,215	
Laborer, highway (construction).....		2
Laborer, railroad (construction).....		1
Laborer (light, heat, power).....		12
Oiler I (any industry).....		77
Grand total.....		23,481

TABLE XVIII.—*Registered occupation of Blanding applicants who were not placed*

PROFESSIONAL AND MANAGERIAL		Number appli- cants
General accountant.....		1
Script writer (radiobroadcast).....		1
News editor (printing and publishing).....		1
Reporter (printing and publishing).....		1
Public-relations man.....		1
Clergyman.....		2
Civil engineer.....		4
Electrical engineer.....		2
Librarian.....		1
Instrumental musician.....		3
Social worker.....		1
Vocational training teacher.....		2
Americanization teacher.....		4
Forester.....		1
Entomologist.....		1
Hand-sign writer.....		1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

PROFESSIONAL AND MANAGERIAL—continued	Number applicants
Architectural draftsman.....	1
Commercial photographer.....	1
Portrait photographer.....	1
News photographer.....	1
Athlete.....	1
Clerk of sales (amusement and recreation).....	1
Radio operator.....	1
Master of ceremonies (amusement and recreation).....	1
Surveyor.....	3
Instrument man.....	3
Tree surgeon.....	1
Announcer (amusement and recreation).....	1
Hotel manager.....	3
Cafeteria manager.....	2
Restaurant manager.....	4
Retail shoe manager.....	1
Retail automotive service manager.....	1
Retail food manager.....	9
Retail general merchandise manager.....	1
Retail liquor manager.....	2
Retail store manager.....	2
Wholesaler.....	1
Mate (water transportation).....	1
Chief marine engineer.....	1
Tugboat engineer.....	1
Ship pilot.....	2
Customs collector.....	1
Customs inspector.....	1
Production manager.....	2
Sales manager.....	3
Bank cashier.....	1
Recreation establishment manager.....	4
Construction superintendent.....	3
Contractor (construction).....	3
Jobber (logging).....	1
SALES AND CLERICAL	
Bookkeeper.....	7
Food controller (hotel and restaurant).....	4
Material clerk (clerical).....	1
Cashier (clerical).....	1
Checker (clerical).....	2
General clerk (clerical).....	41
Distribution clerk (banking).....	1
Collector (clerical).....	4
Mail clerk (clerical).....	5
Employment clerk (clerical).....	1
Collection clerk (clerical).....	1
Librarian (retail trade).....	2
Telegraph operator (telephone and telegraph).....	1
Commission man (wholesale agricultural products).....	2
House-to-house salesman (retail trade).....	1
Insurance salesman.....	6
Real estate salesman.....	1
Sales clerk (retail trade).....	93
Shoe salesperson (retail trade).....	1
Garden supplies salesperson (retail and wholesale).....	1
Furniture salesperson (retail and wholesale).....	2
Messenger (clerical).....	3
Delivery boy (hotel and restaurant).....	1
Paymaster (clerical).....	1
Timekeeper (clerical).....	50

TABLE XVIII.—Registered occupation of *Blanding* applicants who were not placed—
Continued

	Number applicants
SALES AND CLERICAL—continued	
Secretary (clerical).....	1
Delivery clerk (clerical).....	1
Receiving clerk (clerical).....	2
Shipping clerk (clerical).....	3
Stenographer (clerical).....	1
Telegraphic-typewriter operator (clerk).....	1
Stock clerk (clerical).....	18
General sales person (retail trade).....	4
General salesman (retail trade).....	14
Motor vehicles and supplies salesman (wholesale trade).....	1
Beverages salesman (wholesale trade).....	1
Foodstuff salesman (wholesale trade).....	5
Chemical and drugs salesman (wholesale trade).....	2
Footwear salesman (wholesale trade).....	1
Drug goods salesman (wholesale trade).....	1
Household equipment salesman (wholesale trade).....	2
Building and construction-equipment supplies salesman (wholesale trade).....	1
Hardware supplies salesman (wholesale trade).....	1
Paper and paper-products salesman (wholesale trade).....	1
Nursery products salesman (wholesale trade).....	1
Advertising salesman (printing and publishing).....	1
SERVICE WORKERS	
Houseman (domestic service).....	2
Yardman (domestic service).....	50
Cook (domestic service).....	1
Cook helper (domestic service).....	1
Bartender (hotel and restaurant).....	10
Bellman (hotel and restaurant).....	1
Boarding-house manager (hotel and restaurant).....	1
Tourist camp manager (hotel and restaurant).....	1
Service superintendent (hotel and restaurant).....	1
Steward (hotel and restaurant).....	2
Vegetable cook (hotel and restaurant).....	1
Chef (hotel and restaurant).....	1
Cook (hotel and restaurant).....	30
Short-order cook (hotel and restaurant).....	20
Headwaiter (hotel and restaurant).....	1
Formal waiter (hotel and restaurant).....	1
Informal waiter (hotel and restaurant).....	9
Lunchroom counterman.....	3
Cafeteria counterman.....	14
Soda dispenser.....	18
Chief steward (water transportation).....	1
Pantryman (hotel and restaurant).....	1
Sandwich man (hotel and restaurant).....	1
Bus boy (hotel and restaurant).....	10
Hand dishwasher (hotel and restaurant).....	30
Machine dishwasher (hotel and restaurant).....	2
Kitchen helper (hotel and restaurant).....	6
Barber (personal service).....	9
Hairdresser (amusement and recreation; motion picture).....	1
Bootblack (personal services).....	7
First-aid attendant (any industry).....	1
Pin boy (amusement and recreation).....	2
Concession attendant (amusement and recreation).....	2
Ride operator (amusement and recreation).....	1
Recreational facility attendant (amusement and recreation).....	1
Gambling dealer (amusement and recreation).....	1
Ticket taker (amusement and recreation).....	1
Orderly (medical service).....	4
Nurse aide (medical service).....	1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

SERVICE WORKERS—continued	Number applicants
Usher (amusement and recreation).....	1
Gateman (any industry).....	27
Watchman (any industry).....	31
Institution guard.....	9
Crossing watchman (any industry).....	1
Fireman (Government service).....	1
Fire marshal (any industry).....	2
Police officer (Government service).....	1
Detective (Government service).....	1
Policeman (Government service).....	6
Patrol driver (Government service).....	2
Bailiff (Government service).....	1
Soldier (Government service).....	2
Sailor (Government service).....	3
Window cleaner (any industry).....	3
Janitor (any industry).....	8
Porter (any industry).....	67
Porter (railroad).....	2
Passenger-elevator operator.....	1
AGRICULTURAL AND KINDRED	
Crop specialty farmer.....	2
Dairy farmer.....	1
General farmer.....	806
Truck farmer.....	4
Farm hand (cotton).....	2
Farm hand (tobacco).....	1
Harvest hand (crop specialty).....	2
Farm hand (dairy).....	12
Farm hand (fruit).....	33
Farm hand (general).....	1,667
Harvest hand (general).....	3
Farm hand (animal and livestock).....	2
Harvest hand (vegetable).....	2
Packing hand (fruit).....	19
Packing hand (vegetable).....	5
Irrigation laborer.....	1
Farm manager.....	2
Farm foreman.....	2
Nursery operator (agricultural and horticultural service).....	1
Nursery man (agricultural and horticultural service).....	1
Nursery laborer (agricultural and horticultural service).....	5
Gardner (domestic service).....	3
Gardner helper (domestic service).....	1
Grounds keeper (any industry).....	2
Landscape gardner (professional and kindred).....	2
Tree pruner (agricultural).....	4
Stableman (any industry).....	1
Cotton ginner (agricultural and horticultural).....	2
Moss picker (agricultural and horticultural).....	2
Net fisherman.....	27
Line fisherman.....	5
Oyster fisherman.....	1
Fish-dressing-gang worker.....	1
Chipper (turpentine and rosin).....	16
SKILLED	
Baker (bakery products).....	9
Cistern-room operator (distilling liquors).....	3
Candy maker (confectioner).....	1
Miller (grain and feed mill).....	1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

SKILLED—continued	Number applicants
Beef cutter (slaughter and meat packing).....	1
Cigar maker (tobacco).....	2
Knitting machine operator (knit goods).....	1
Hand knitting machine operator (knit goods).....	5
Weaver (textile).....	1
Cloth printer (textile).....	1
Tailor (garment; retail trade).....	1
Canvas worker (canvas goods; ship and boat building).....	1
Grader (woodworking).....	1
Planer operator (woodworking).....	1
Cabinet maker (woodworking).....	6
Millman (woodworking).....	4
Mattress renovator (mattress and bedspring).....	1
Furniture repairman (any industry).....	1
Upholsterer (furniture; ship, and boat building and repairing).....	1
Mattress maker (mattress and bedspring).....	1
Cooper.....	1
Compositor (printing and publishing).....	2
Form-builder (auto manufacturing).....	5
Linotype operator (printing and publishing).....	1
Shoe repairman (personal service).....	1
Cobbler (boot and shoe).....	3
Lining vamber (boot and shoe).....	1
Custom-made shoe fitter.....	1
Inspector (boot and shoe).....	1
Stone carver (construction; stonework).....	1
Machinist (machine shop).....	8
Bench machinist (machine shop).....	4
Engine-lathe operator (machine shop).....	1
Sheet metal worker.....	27
Bench molder (foundry).....	2
Finish molder (foundry).....	1
Structural steel worker (construction).....	14
Pneumatic riveter (construction; ship, and boat building).....	1
Arc welder (any industry).....	1
Acetylene welder (any industry).....	6
Combination welder (any industry).....	6
Blacksmith (forging).....	14
Electrician (any industry).....	82
Electrical repairman (any industry).....	9
Power-house electrician (light, heat, and power).....	2
Caterpillar crane operator (any industry).....	4
Power shovel operator (any industry).....	1
Ship fitter (ship, boat building, and repair).....	1
Miner (anthracite and bituminous coal mining).....	11
Pick miner (anthracite and bituminous coal mining).....	1
Dredge leverman (construction).....	1
Concrete mixer operator (construction).....	2
Pile driver operator (construction).....	4
Bricklayer (construction).....	24
Bricklayer (brick and tile).....	13
Bricklayer (glass manufacturing).....	2
Stone mason (construction).....	2
Tile setter (construction).....	1
Carpenter (construction).....	819
Finish carpenter (construction).....	123
Wood shingle roofer (construction).....	1
Rough carpenter (construction).....	702
Form builder (construction).....	12
Timberman (construction).....	2
Shop carpenter (motion picture).....	4
Wood boatbuilder (ship and boat building and repair).....	2
Ship carpenter (ship and boat building and repair).....	4

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

	Number applicants
SKILLED—continued	
Maintenance carpenter (any industry)	5
Cement finisher (construction)	34
Highways and streets cement finisher (construction)	27
Painter (construction)	35
Structural steel painter (construction)	2
Sign painter (any industry)	7
Plasterer (construction)	11
Pipe fitter (construction)	44
Plumber (construction)	62
Steam fitter (construction)	11
Metal lather (construction)	5
Wood lather (construction)	4
Bus driver (motor transportation)	12
Locomotive engineer (railroad)	2
Industrial locomotive operator (any industry)	1
Locomotive fireman (railroad)	1
Industrial locomotive fireman (any industry)	4
Power-house engineer (any industry)	2
Lineman (light, heat, and power)	14
Motion picture projectionist (recreation and amusement)	1
Property man (amusement and recreation)	1
Dry-cleaner (cleaning, dyeing, and pressing)	1
Meat butcher (hotel and restaurant)	19
Dragline operator (any industry)	29
Engineer (logging)	3
Hoisting engineer (any industry)	2
Blaster (construction)	1
Machine driller (anthracite and bituminous coal)	1
Hand driller (anthracite and metal mining)	1
Millwright (any industry)	3
Automobile mechanic (auto service)	126
Truck mechanic (auto service)	3
Tractor mechanic (any industry)	4
Brake-drum-lathe operator (auto service)	1
Automobile generator repairman (auto service)	1
Automotive electrician (auto service)	2
(Metal) automobile-body repairman (auto service)	3
Automobile radiator man (auto service)	1
Automobile motor mechanic (auto manufacturing)	3
Oil-burner installation and service man (any industry)	1
Adding machine service man (any industry)	1
Radio repairman (any industry)	4
Electric-motor repairman	1
Locksmith (any industry)	1
Building maintenance man (any industry)	3
Factory or mill maintenance man (any industry)	1
Maintenance mechanic (any industry)	9
Diesel mechanic (any industry)	2
Refrigeration mechanic (any industry)	1
Rigger (cement; construction)	5
Crane rigger (ship and boat building)	1
Foreman (slaughter and meat packing)	1
Foreman (grain and feed mill)	1
Foreman (confection)	2
Foreman (tobacco)	1
Foreman (logging)	4
Foreman (sawmill)	5
Foreman (veneer)	1
Foreman (printing and publishing)	1
Foreman (paint and varnish)	1
Foreman (turpentine and rosin)	8
Foreman (agricultural equipment)	1
Foreman (machine shop)	1
Foreman (anthracite coal mining)	1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

SKILLED—continued		Number applicants
Stationary engineer (any industry).....		2
Refrigerating engineer (any industry).....		2
Hot-metal-crane operator (foundry, iron and steel).....		1
Railroad foreman (construction).....		1
Sewer and waterworks foreman (construction).....		3
Foreman (railroad transportation).....		6
Foreman (pipe lines).....		1
Foreman (nonmetal mining).....		1
Bridge foreman (construction).....		3
Building foreman (construction).....		65
Highway foreman (construction).....		33
Foreman (light, heat, and power).....		2
Foreman (laundry).....		1
Foreman (amusement and recreation).....		6
Route supervisor (any industry).....		1
SEMISKILLED		
Fish-meal drier and grinder (canning and preserving).....		1
Grader (canning and preserving).....		1
Sterilizer (canning and preserving).....		1
Mill operator.....		1
Calf skinner (slaughter and meat packing).....		1
Skinner (slaughter and meat packing).....		1
Steam roller or crusher operator (tobacco).....		2
Cigar packer (tobacco).....		1
Cigarette-making-machine operator (tobacco).....		1
Card tender (asbestos products; textile).....		1
Frame spinner (textile).....		1
Thrower (rayon and allied products).....		1
Dry-cans operator (textile).....		2
Die cutter (any industry).....		2
Cloth hand-trimmer (textile).....		1
Lumber checker (planing mill).....		4
Timber hewer (logging).....		23
Wood chopper (logging).....		15
Fallers (logging).....		12
Gang sawyer (sawmill).....		1
Trimmer man (sawmill).....		1
Block setter (sawmill).....		1
Log turner (sawmill).....		1
Band rip saw operator (woodworking).....		4
Cut-off-saw operator (woodworking).....		2
Variety-saw operator (woodworking).....		1
Boring machine operator (woodworking).....		1
Molder operator (woodworking).....		1
Nailing machine operator (any industry).....		1
Repairman (furniture).....		1
Machine slat-basket maker (basketry).....		2
Box-blank-machine operator (wood box).....		1
Wood box maker (any industry).....		3
Body maker (morticians' goods).....		2
Block sorter (wood preserving).....		1
Pole framer (light, heat, and power telephone and telegraph, wood pres.).....		4
Hand cutter (boot and shoe).....		1
Hand cementer (boot and shoe).....		3
Lime slaker (brick and tile).....		1
Hand molder (brick and tile).....		1
Mixer tender (cement).....		1
Buffer and polisher (any industry).....		1
Roller operator (auto manufacturing).....		1
Guide grinder (iron and steel).....		4
Circular-sawing-machine operator (machine shop).....		1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

	Number applicants
SEMISKILLED—continued	
Sand drier (foundry).....	1
Molder helper (foundry).....	1
River catcher (construction).....	1
Acetylene burner operator (any industry).....	1
Annealer (foundry; heat treating).....	1
Power shear operator (any industry).....	1
Bearing inspector (machine manufacturing).....	2
Subassembler (auto manufacturing).....	1
Screw driver man (auto manufacturing).....	2
Rubber (furniture mirror and picture frames).....	1
Spray painter (any industry).....	3
Crusher man (anthracite and bituminous coal mining).....	1
Blade-grader operator (construction).....	1
Motor-grader operator (construction).....	3
Bulldozer operator (construction).....	28
Scraper operator (construction).....	8
Concrete mixer operator (construction).....	22
Road-roller operator (construction).....	3
Firebrick bricklayer (any industry).....	1
Cement and concrete finisher (construction).....	1
Rough painter (construction).....	4
Composition roofer (construction).....	35
Metal roofer (construction).....	1
Asphalt, tar and gravel roofer (construction).....	11
Slate roofer (construction).....	1
Candlemaker (candle).....	1
Treater helper (petroleum refining).....	1
Coal handler (ore dressing, smelting, and refining).....	1
Reinforcing-iron worker (construction).....	36
Pipe layer (construction).....	24
Pipe calker (construction).....	15
Well-point pumpman (construction).....	1
Pipe fitter helper (construction).....	7
Plumber helper (construction).....	28
Steam fitter helper (construction).....	3
Well digger (construction).....	1
Signalman (construction).....	1
Routeman (any industry).....	74
Chauffeur (any industry).....	2
Taxi driver (motor transportation).....	7
Chauffeur (domestic service).....	3
Dump truck driver (any industry).....	89
Trailer truck driver (any industry).....	26
Heavy truck driver (any industry).....	166
Light truck driver (any industry).....	569
Tractor operator (any industry).....	122
Teamster (any industry).....	1
Motorman (any industry).....	1
Stevedore (water transportation).....	9
Able seaman (water transportation).....	5
Junior lineman (telephone and telegraph).....	2
Hand dry cleaner (cleaning, dyeing, and pressing).....	1
Machine presser (any industry).....	4
Hand laundryman (laundry).....	5
Ice station attendant (retail trade).....	1
Parking lot attendant (auto service).....	2
Automobile-service-station attendant (auto service).....	85
Machinery and equipment cleaners.....	3
Bottle filler (dairy products).....	2
Filling machine operator (any industry).....	1
Capper operator (paint and varnish).....	1
Double-seamer operator (canning and preserving).....	1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

SEMISKILLED—continued		Number applicants
Stone carver apprentice (construction; stonework).....		1
Painter apprentice (construction; stonework).....		1
Welder apprentice (any industry).....		1
Tile and terra cotta roofer (construction).....		9
Mortar mixer (construction).....		2
Concrete-pump operator (construction).....		1
Cement pump operator (construction).....		1
Asphalt mixer man (construction).....		2
Stationary boiler fireman (any industry).....		11
Machinery oiler (any industry).....		25
Marine oiler (water transportation).....		1
Pumpman (any industry).....		32
Dredge pumpman (construction).....		1
Portable crane operator (ship and boat building).....		1
Log handler (sawmill).....		1
Blaster (brick and tile).....		5
Blaster (fertilizer).....		1
Powder monkey (construction; quarry).....		1
Hand driller (anthracite and bituminous coal mining; brick and tile).....		1
Glazier (planing mill).....		1
Car inspector (locomotive and car building and repair).....		1
Streetcar repairman (car building and repair).....		1
Automobile mechanic helper (auto service).....		4
Hand saw filer (any industry).....		12
Machine saw filer (any industry).....		1
Greaser (auto service).....		6
Photographic process occupation.....		1
Rodman (any industry).....		8
Surveying chainman (any industry).....		1
Loader operator (any industry).....		1
Cooler man (ice cream).....		1
Cable splicer (any industry).....		1
Automobile painter helper (auto service).....		1
Tire vulcanizer (auto service).....		1
Carpenter apprentice (construction; locomotive and car building).....		3
Machinist apprentice (machine shop).....		1
Plumber apprentice (construction).....		2
Sheet-metal worker apprentice (sheet metal).....		1
Plasterer apprentice (construction; stonework).....		1
Roofer apprentice (construction; stonework).....		2
UNSKILLED		
Process laborer (bakery products).....		1
Process laborer (nonalcoholic beverages).....		1
Process laborer (canning and preserving).....		7
Process laborer (dairy products).....		1
Process laborer (grain and feed mill).....		5
Process laborer (slaughter and meat packing).....		2
Process laborer (nut process).....		1
Process laborer (ice).....		3
Process laborer (sugar).....		1
Process laborer (cooperage).....		7
Process laborer (basketry).....		1
Process laborer (wood box).....		5
Process laborer (paper and pulp).....		5
Process laborer (fertilizer).....		7
Process laborer (turpentine and rosin).....		23
Process laborer (wood distillate and charcoal).....		1
Process laborer (brick and tile).....		3
Process laborer (concrete products).....		1
Process laborer (machine shop).....		2
Process laborer (iron and steel).....		1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

UNSKILLED—continued		Number applicants
Process laborer (ore dressing, smelting, and refining).....		2
Process laborer (stone).....		1
Process laborer (forging).....		1
Process laborer (sheet metal).....		1
Process laborer (electrical equipment).....		1
Process laborer (auto manufacturing).....		2
Laborer (anthracite coal mining).....		2
Laborer (bituminous coal mining).....		1
Laborer (quarry).....		11
Building laborer (construction).....		779
Building wrecking laborer (construction).....		1
Highway laborer (construction).....		355
Pipe line laborer (construction).....		7
Railroad laborer (construction).....		69
River and harbor laborer (construction).....		2
Sewer and waterworks laborer (construction).....		36
Routeman helper (any industry).....		3
Longshoreman (water transportation).....		19
Deckhand (construction water transportation).....		15
Laborer (water transportation).....		3
Laborer (motor transportation).....		2
Laborer (railroad transportation).....		2
Laborer (pipe lines).....		1
Process laborer (tobacco).....		8
Process laborer (textile).....		17
Process laborer (cotton small wares).....		1
Process laborer (logging).....		43
Process laborer (saw mill).....		53
Process laborer (woodworking).....		2
Machine operator (planing mill).....		1
Process laborer (furniture).....		2
Process laborer (mattress and bedspring).....		1
Laborer (retail trade).....		7
Laborer (wholesale trade).....		1
Laborer (hotel and restaurant).....		1
Municipal service laborer (Government service).....		3
Laborer (slaughter and meat packing).....		5
Laborer (canning and preserving).....		4
Laborer (corn products).....		1
Laborer (ice).....		2
Laborer (nut process).....		1
Laborer (tobacco).....		11
Laborer (textile).....		2
Laborer (cotton small wares).....		1
Laborer (house furnishing).....		1
Laborer (sawmill).....		431
Laborer (vencer).....		6
Laborer (woodworking).....		4
Laborer (basketry).....		1
Laborer (wood box).....		22
Laborer (shaped wood articles).....		1
Laborer (paper and pulp).....		14
Laborer (printing and publishing).....		1
Laborer (cottonseed products).....		1
Laborer (turpentine and rosin).....		58
Laborer (fertilizer).....		4
Laborer (chemical).....		4
Laborer (brick and tile).....		1
Laborer (lime).....		6
Laborer (sheet metal work).....		1
Laborer (locomotive and carriage building and repairing).....		1
Laborer (electrical equipment).....		1
Laborer (agricultural equipment).....		1

TABLE XVIII.—Registered occupation of Blanding applicants who were not placed—
Continued

UNSKILLED—continued		Number applicants
Laborer (cleaning, dyeing, and pressing).....		1
Laborer (laundry).....		1
Oiler (any industry).....		22
Laborer (light, heat, and power).....		43
Laborer (telephone and telegraph).....		4
Laborer (amusement and recreation).....		3
Process laborer (cleaning, dyeing, and pressing).....		1
Process laborer (laundry).....		1
Automobile washer (auto service).....		3
UNKNOWN.....		1
Grand total.....		10, 317

TABLE XIX.—Registered occupation of Blanding applicants who were placed

PROFESSIONAL AND MANAGERIAL		Number applicants
Building architect.....		1
Clergyman.....		4
Public accountant.....		2
Auditor.....		1
Civil engineer.....		3
Landscape engineer.....		1
Mining engineer.....		1
Musical specialist.....		1
Instrumental musician.....		4
Orchestra leader.....		1
Music teacher.....		1
Pharmacist.....		2
Grammar school teacher.....		1
Vocational training teacher.....		2
Americanization teacher.....		1
District forest ranger.....		1
Interior decorator.....		1
Architectural draftsman.....		1
Construction draftsman.....		1
Map draftsman.....		1
Assistant chemist.....		1
Dairy tester.....		1
Portrait photographer.....		3
Athlete.....		2
Dog trainer.....		2
Surveyor.....		2
Light and sound technician.....		1
Fire lookout.....		1
Hotel manager.....		3
Restaurant manager.....		2
Retail food manager.....		3
Wholesaler.....		1
Buyer.....		3
Merchandise manager.....		1
Floor manager.....		1
Building superintendent.....		1
Ship captain.....		1
Dredge captain.....		3
Dredge mate.....		1
Marine engineer.....		2
Ship pilot.....		1
Passenger car conductor.....		1
Freight conductor.....		1

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con

	<i>Number applicants</i>
PROFESSIONAL AND MANAGERIAL—continued	
Office manager.....	2
Industrial organization manager.....	1
Production manager.....	3
Insurance office manager.....	4
Recreation establishment manager.....	6
Yardmaster (railroad).....	1
Construction superintendent.....	5
Contractor (construction).....	2
Property manager (real estate).....	3
SALES AND CLERICAL	
Bookkeeper.....	12
Food controller (hotel and restaurant).....	3
Inventory clerk (clerical).....	1
Material clerk (clerical).....	1
Cashier (clerical).....	3
Kitchen clerk (hotel and restaurant).....	1
General clerk (clerical).....	18
General office clerk.....	12
Room clerk (hotel and restaurant).....	2
Railway express clerk.....	1
Yard clerk (railroad transportation).....	1
Post-office clerk.....	1
Collector (clerical).....	7
File clerk (clerical).....	1
Mail clerk (clerical).....	1
Collection clerk (clerical).....	3
Office boy (clerical).....	2
Messenger (clerical).....	6
Delivery boy (hotel and restaurant).....	5
Computing-machine operator.....	1
Pay-roll clerk (clerical).....	1
Timekeeper (clerical).....	35
Express messenger (railroad).....	1
Doctor's office assistant.....	1
Shipping clerk (clerical).....	8
Statistical clerk (clerical).....	1
Stenographer (clerical).....	1
Stock clerk (clerical).....	14
Tool clerk (clerical).....	3
Telegraph operator (telephone and telegraph).....	1
Baggageman (railroad).....	1
Station agent (railroad).....	1
Field clerk (construction).....	1
Commission man, agricultural produce (wholesale).....	1
Insurance salesman.....	8
Newsboy (printing and publishing).....	4
Peddler (retail trade).....	2
Sales clerk (retail trade).....	84
Furniture salesperson (retail).....	2
General salesperson (retail).....	8
General salesman (retail trade).....	18
Automobile goods salesman (wholesale).....	7
Foodstuffs salesman (wholesale).....	10
Drygoods salesman (wholesale).....	2
Fuel salesman (wholesale).....	2
Building and construction supplies salesman (wholesale).....	3
Salesman of machinery equipment and supplies.....	3
Petroleum products salesman (wholesale).....	1
Publications salesman (wholesale).....	2

TABLE XIX.—Registered occupation of Blinding applicants who were placed—Con.

	Number applicants
SERVICE WORKERS	
Day worker (domestic service)	2
Houseman (domestic service)	10
Yardman (domestic service)	64
Cook (domestic service)	1
Butler (domestic service)	2
Bartender (hotel and restaurant)	11
Bellman (hotel and restaurant)	7
Tourist camp manager (hotel and restaurant)	1
Houseman (hotel and restaurant)	2
Steward (hotel and restaurant)	4
Cook (large hotel and restaurant)	4
Cook (small hotel and restaurant)	79
Camp cook	5
Hotel waiter	22
Cafeteria counterman	5
Soda dispenser	80
Mess boy (water transportation)	3
Ship steward (water transportation)	6
Kitchen helper (hotel and restaurant)	6
Bus boy (hotel and restaurant)	17
Hand dishwasher (hotel and restaurant)	58
Garbage man (hotel and restaurant)	1
Barber (personal service)	5
Bootblack (personal service)	5
Travel guide (personal service)	3
Caddie (amusement and recreation)	1
Pin boy (amusement and recreation)	8
Concession attendant (amusement and recreation)	3
Ride operator (amusement and recreation)	4
Orderly (medical service)	6
Funeral attendant (personal service)	1
Doorman (any industry)	1
Usher (amusement and recreation)	2
Gateman (any industry)	44
Watchman (any industry)	37
Institution guard	6
Crossing watchman (any industry)	1
Bridge operator (railroads)	1
Fireman (Government service)	3
Police officer (Government service)	1
Police chief (Government service)	1
Patrolman (Government service)	3
Soldier (Government service)	6
Sailor (Government service)	3
Janitor (any industry)	27
Porter (any industry)	78
Pullman porter (railroad transportation)	1
Baggage porter (railroad transportation)	2
Freight elevator operator	1
AGRICULTURAL AND KINDRED	
Crop specialty farmer	1
General farmer	1, 519
Livestock farmer	2
Beekeeper	1
Poultry farmer	1
Truck farmer	1
Farm hand (cotton)	9
Farm hand (crop specialty)	10
Farm hand (dairy)	28
Farm hand (fruit)	103
Farm hand (general)	4, 482

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

AGRICULTURAL AND KINDRED—continued		Number applicants
Farm hand (animal and livestock).....		6
Farm hand (poultry).....		3
Farm hand (vegetable).....		10
Packing, hand (fruit).....		23
Packing, hand (vegetable).....		25
Farm mechanic.....		2
Farm manager.....		1
Farm foreman.....		26
Farm caretaker.....		1
Nurseryman (agricultural and horticultural service).....		21
Gardner (domestic service).....		17
Stableman (any industry).....		1
Cotton ginner (agricultural and horticultural service).....		8
Moss picker (agricultural and horticultural service).....		4
Net fisherman.....		31
Chipper (turpentine and rosin).....		41
Trapper (agriculture).....		4
SKILLED		
Bakery (bakery products).....		4
Cistern room operator (distilling liquors).....		2
Candy maker (confection).....		1
Beef cutter (slaughter and meat packing).....		4
Chemist, mixer (flavor extract and sirup).....		1
Hand-roller (tobacco).....		1
Knitting machine operator (knit goods).....		1
Weaver (textile).....		3
Textile printing foreman.....		1
Grader (woodworking).....		3
Cabinetmaker (woodworking).....		10
Planer operator (woodworking).....		2
Millman (woodworking).....		1
Furniture repairman (any industry).....		1
Mattress maker (mattress and bedspring).....		2
Furniture finish patcher.....		1
Cooper.....		1
Compositor (printing and publishing).....		2
Stereotyper (printing and publishing).....		1
Photoengraver.....		1
Bookbinder.....		1
Shoe repairman (personal service).....		2
Cobbler (boot and shoe).....		3
Stone carver (construction stonework).....		1
Watchmaker (any industry).....		1
Machinist (machine shop).....		11
Machine filer.....		1
Sheet-metal worker.....		143
Pattern molder.....		1
Structural steel worker (construction).....		61
Welder (any industry).....		10
Blacksmith (forging).....		14
Cupola tender (foundry).....		1
Stone moulder.....		1
Testing-machine operator (firearms).....		1
Electrician (any industry).....		252
Electrical repairman (any industry).....		2
Painters (except construction and maintenance).....		4
Form builder (auto manufacturing).....		8
Miner (anthracite and bituminous coal mining).....		8
Timberman (mining).....		1
Concrete-paver operator (construction).....		1
Pile-driver operator (construction).....		7

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

	Number applicants
SKILLED—continued	
Operating engineer (construction).....	8
Bricklayer (construction).....	46
Stonemason (construction).....	1
Tile setter (construction).....	2
Carpenter (construction).....	2,944
Shop carpenter (motion picture).....	4
Locomotive carpenter.....	2
Ship carpenter (ship and boat building and repairs).....	12
Maintenance carpenter (any industry).....	8
Cement finisher (construction).....	155
Painter (construction).....	501
Ship painter.....	2
Sign painter.....	7
Plasterer (construction).....	14
Pipe fitter (construction).....	39
Plumber (construction).....	36
Steam fitter (construction).....	4
Metal lather (construction).....	12
Wood lather (construction).....	28
Asbestos worker (construction).....	3
Passenger vehicle driver.....	19
Brakeman, passenger train (railroad transportation).....	1
Locomotive engineer (railroad transportation).....	6
Locomotive fireman (railroad transportation).....	5
Lineman (light, heat, and power).....	96
Motion picture projectionist (amusement and recreation).....	1
Meat butcher (hotel and restaurant).....	28
Stationary engineer (any industry).....	4
Diesel engine operator.....	1
Refrigerating engineer (any industry).....	4
Crane operator (any industry).....	19
Power shovel operator (any industry).....	5
Dragline operator (any industry).....	44
Engineer (logging).....	15
Hoisting engineer (any industry).....	4
Blaster (construction).....	5
Well-drill operator (construction).....	4
Churn-drill operator (mining).....	1
Hand-driller (anthracite and metal mining).....	2
Fire boss (mining).....	1
Glazier (construction).....	2
Millwright (any industry).....	8
Railroad and car shop mechanic.....	3
Auto mechanic (general auto service).....	109
Auto body repairman (auto service).....	5
Auto mechanic, motor (auto service).....	2
Auto repair serviceman (auto service).....	2
Electric refrigerator serviceman.....	1
Typewriter serviceman.....	1
Radio repairman (any industry).....	2
Electric motor repairman.....	1
Building maintenance man (any industry).....	3
Factory or mill maintenance man (any industry).....	3
Maintenance mechanic (any industry).....	15
Diesel mechanic (any industry).....	1
Tool sharpener and dresser (any industry).....	1
Rigger (cement; construction).....	13
Crane rigger (ship and boat building).....	1
Foreman (food and beverage manufacturing).....	6
Foreman (tobacco manufacturing).....	1
Foreman (logging).....	8
Foreman (sawmill).....	5

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

	Number applicants
SKILLED—continued	
Foreman (turpentine and rosin).....	13
Foreman (fertilizer).....	1
Foreman (brick and tile).....	2
Foreman (structure and ornamental metal work).....	1
Foreman (engine and turbine).....	1
Foreman (auto manufacturing).....	2
Foreman (metal mining).....	1
Foreman (bituminous coal mining).....	1
Foreman (nonmetal mining).....	1
Foreman (quarry).....	1
Building foreman (construction).....	82
Building wrecking foreman (construction).....	1
Highway foreman (construction).....	22
Foreman (railroad transportation).....	5
Foreman (pile lines).....	1
Foreman (utilities).....	4
Foreman (amusement and recreation).....	13
Foreman (wholesale trade).....	2
Rough carpenter (construction).....	1, 675
Form builder (construction).....	22
Timberman (construction).....	6
SEMISKILLED	
Fruit inspector (bakery products).....	1
Baker helper (bakery products; hotel and restaurant).....	1
Ice-cream maker (hotel and restaurant).....	1
Roll tender (grain and feed mill).....	1
Small-stock facer (meat packing).....	1
Sausage maker (meat packing).....	1
Cigar packer (tobacco).....	1
Textile manufacturing.....	8
Dressmaker (garment).....	1
Sewing-machine operator (garment).....	2
Rigger (canvas goods manufacturing).....	1
Lumber checker (production lumber).....	5
Timber hewer (logging).....	55
Wood chopper (logging).....	7
Faller (logging).....	26
Log transporting.....	2
Dragsaw operator (sawmill).....	2
Cordwood saw operator.....	1
Edger-man (sawmill).....	1
Trimmer-man (sawmill).....	1
Band-ripsaw operator (woodworking).....	5
Cut-off saw operator (woodworking).....	2
Molder operator (woodworking).....	1
Frame maker (planing mill).....	1
Furniture assembler (furniture manufacturing).....	1
Repairman (furniture).....	1
Wood box maker (any industry).....	7
Body maker (mortician's goods).....	1
Box maker (mortician's goods).....	2
Pole framer (light, heat and power wood preserving).....	3
Scaler (paper and pulp manufacturing).....	1
Bag-making-machine operator (paper bags, manufacturing).....	2
Inspector (rayon and allied products).....	1
Mixer (fertilizer products).....	1
Gager (petroleum refining).....	1
Breaker-wheel operator (leather manufacturing).....	1
Bottle-making machine operator (glass manufacturing).....	1
Grinder (brick and tile).....	2

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

SEMISKILLED—continued		Number applicants
Filter-press operator (clay products manufacturing).....		1
Band-sawing machine operator (machine shop).....		1
Drying-tunnel man (brick and tile).....		1
Molder helper (foundry).....		2
Forging-press operator (forging).....		1
Forming-press operator (any industry).....		1
Testing-machine operator (tinware manufacturing).....		1
Sheet-metal worker helper.....		1
Awning-frame worker (canvas goods).....		1
Spray-painter (any industry).....		2
Switcher (petroleum products).....		1
Miner helper (anthracite coal mining).....		1
Machine loader (mining).....		1
Crusher operator (construction).....		1
Blade-grader operator (construction).....		3
Motor-grader operator (construction).....		15
Bulldozer operator (construction).....		39
Scraper operator (construction).....		25
Concrete-mixer operator (construction).....		30
Road roller operator (construction).....		13
Monument setter (stonework).....		1
Rough painter (construction).....		13
Rough-boat painter.....		2
Roofers and slaters (construction).....		94
Steel form setters (construction).....		2
Mortar mixer (construction).....		9
Reinforcing-iron worker (construction).....		191
Pipe layer (pipe and sewer laying).....		80
Pipe calker (construction).....		40
Tile setter, sewer-liner plate (construction).....		2
Pipe-driving leadsmen (construction).....		2
Marble and tile setter helper (construction).....		2
Well-point pumpman (construction).....		4
Floor-sanding-machine operator.....		3
Pipe-fitter helper (construction).....		4
Plumber-helper (construction).....		29
Steam-fitter helper (construction).....		3
Asbestos and insulation workers.....		1
Routeman (any industry).....		102
Chauffeur (any industry).....		3
Funeral car chauffeur (personal service).....		1
Taxi driver (motor transportation).....		13
Chauffeur (domestic service).....		16
Concrete-mixing-truck driver (construction).....		2
Dump truck driver (any industry).....		176
Road-oiling-truck driver (construction).....		5
Trailer-truck driver (any industry).....		45
Heavy-truck driver (any industry).....		238
Tractor operator (any industry).....		164
Light truck driver (any industry).....		1, 059
Hand riveter (construction).....		1
Spot welder (any industry).....		1
Able seaman (water transportation).....		5
Ordinary seaman (water transportation).....		4
Lineman (air transportation).....		5
Motorboat operator.....		2
Junior lineman (telephone and telegraph).....		21
Hand dry cleaner (cleaning, dyeing and pressing).....		1
Machine washer (dry cleaning and laundry).....		1
Hand presser (any industry).....		1
Machine presser (any industry).....		3
Hand rug-cleaner (cleaning, dyeing and pressing).....		1

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

SEMISKILLED—continued	Number applicants
Hand laundryman (laundry).....	10
Fish butcher.....	1
Linoleum layer.....	1
Billposter (business service).....	1
Parking-lot attendant (auto service).....	3
Automobile service station attendant (auto service).....	145
Machinery and equipment cleaners.....	3
Bottle filler (dairy products).....	1
Filling-machine operator (flavoring extract and sirup).....	1
Filling-machine operator (bag and sack fillers).....	1
Machine labeler.....	1
Stationary boiler fireman (any industry).....	39
Portable boiler fireman (any industry).....	1
Machinery Oiler (any industry).....	55
Pumpman (any industry).....	71
Dredge pumpman (construction).....	1
Blasters.....	4
Powder monkey (construction; quarry).....	2
Machine driller (quarry).....	1
Hand-driller (anthracite and bituminous coal mining; brick and tile).....	1
Stone grader (quarry).....	1
Automobile mechanic helper (auto service).....	10
Gas appliance service man.....	1
Repairman (mine equipment).....	1
Hand saw-filer (any industry).....	10
Greaser (auto service).....	18
Tire changer (auto service).....	1
Blueprint trimmer.....	4
Rodman (any industry).....	12
Chainman, surveying (any industry).....	7
Lumber-carrier driver.....	1
Cable splicer (any industry).....	2
Teamster (any industry).....	2
Freight brakeman (railroad transportation).....	1
Stevedore (water transportation).....	7
Paperhanger apprentice (contractor).....	1
Glazier steel worker apprentice (any industry).....	1
Structural steel worker apprentice (any industry).....	3
Maintenance mechanic apprentice (any industry).....	1
Tire builder (auto service).....	1
Carpenter apprentice (construction; locomotive and car building).....	3
Machinist apprentice (machine shop).....	1
Electrician apprentice.....	3
Stone carver apprentice (construction stonework).....	2
Plasterer apprentice (construction stonework).....	1
Painter apprentice (construction stonework).....	3
Acetylene welder apprentice (any industry).....	1
Arc welder apprentice (any industry).....	1
UNSKILLED	
Process laborer (bakery products).....	1
Process laborer (nonalcoholic beverage).....	4
Process laborer (canning and preserving).....	16
Process laborer (ice-cream products).....	4
Process laborer (dairy products).....	1
Process laborer (grain and feed mill).....	2
Process laborer (slaughter and meat packing).....	3
Process laborer (coffee, tea, and spice).....	1
Process laborer (flavor, extract, and sirup).....	1
Process laborer (macaroni and related products).....	1
Process laborer (nut processing).....	2

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

UNSKILLED—continued		Number applicants
Process laborer (manufacturing of ice).....		1
Process laborer (tobacco).....		24
Process laborer (hosiery).....		1
Process laborer (textile).....		15
Process laborer (logging).....		149
Process laborer (sawmill).....		73
Process laborer (woodworking).....		1
Machine operator, planing mill.....		2
Process laborer (furniture).....		3
Process laborer (mattress and bedspring).....		2
Process laborer (cooperage).....		10
Process laborer (wooden boxes).....		10
Process laborer (wood preserving).....		2
Process laborer (veneer).....		13
Process laborer (paper and pulp).....		12
Process laborer (fertilizer).....		11
Process laborer (chemical).....		1
Process laborer (drug preparations and related products).....		1
Process laborer (turpentine and rosin).....		46
Process laborer (petroleum refining).....		3
Process laborer (brick and tile).....		7
Process laborer (machine manufacturing).....		1
Process laborer (miscellaneous electrical equipment).....		2
Process laborer (auto manufacturing).....		1
Laborer (petroleum production).....		1
Laborer (bituminous-coal mining).....		2
Laborer (nonmetal mining).....		25
Laborer (salt production).....		1
Laborer (quarry).....		43
Laborer (construction occupations).....		3, 975
Routeman helper (any industry).....		12
Longshoreman (water transportation).....		24
Dockman.....		1
Dockman helper.....		1
Deckhand (construction; water transportation).....		28
Laborer (water transportation).....		4
Laborer (motor transportation).....		2
Laborer (light, heat, and power).....		113
Laborer (railroad transportation).....		16
Laborer (pipe lines).....		6
Laborer (telegraph and telephone).....		10
Laborer (water works).....		1
Laborer (amusement and recreation).....		4
Process laborer (cleaning, dyeing, and pressing).....		1
Process laborer (laundry).....		1
Laborer (retail trade).....		39
Laborer (wholesale trade).....		3
Laborer (hotel and restaurant).....		1
Laborer (real estate).....		1
Laborer (municipal service).....		14
Laborer (slaughter and meat packing).....		3
Laborer (dairy products).....		1
Laborer (canning and preserving).....		15
Laborer (grain and feed mill).....		1
Laborer (sugar).....		1
Process laborer (machine shop).....		3
Process laborer (foundry).....		1
Process laborer (iron and steel).....		1
Process laborer (nonferrous metals and alloys).....		4
Process laborer (boilermaking).....		1
Process laborer (forging).....		1
Process laborer (sheet metal).....		1

TABLE XIX.—Registered occupation of Blanding applicants who were placed—Con.

	Number applicants
UNSKILLED—continued	
Laborer (paper and pulp).....	91
Laborer (paper goods).....	2
Laborer (printing and publishing).....	1
Laborer (paint and varnish).....	2
Laborer (cottonseed production).....	1
Laborer (wood distillation and charcoal).....	1
Laborer (turpentine and rosin).....	186
Laborer (fertilizer).....	18
Laborer (chemicals).....	5
Laborer (petroleum refining).....	1
Laborer (fuel briquettes).....	1
Laborer (brick and tile).....	14
Laborer (pottery and procelain).....	1
Laborer (lime).....	16
Laborer (iron and steel).....	1
Laborer (foundry).....	3
Laborer (boilermaking).....	1
Laborer (structural and ornamental metal work).....	1
Laborer (ship and boat building and repair).....	1
Laborer (agricultural equipment).....	13
Laborer (machine manufacture).....	1
Laborer (confection).....	2
Laborer (nonalcoholic beverage).....	3
Laborer (corn production).....	2
Laborer (cooperage).....	4
Laborer (excelsior).....	1
Laborer (lasts and related forms).....	2
Laborer (machine shop).....	1
Laborer (artificial flower).....	1
Laborer (broom).....	1
Laborer (fur dressing).....	1
Laborer (cleaning, dyeing, and pressing).....	1
Laborer (laundry).....	1
Oiler, machinery.....	20
Automobile washer (auto service).....	5
Laborer (ice).....	4
Laborer (tobacco).....	8
Laborer (textile).....	6
Laborer (cotton small wares).....	1
Laborer (cord and twine).....	1
Laborer (garment).....	1
Laborer (sawmill).....	955
Laborer (veneer).....	16
Laborer (planing mill).....	1
Laborer (woodworking).....	22
Laborer (furniture).....	1
Laborer (mattress and bedspring).....	5
Laborer (basketry).....	3
Laborer (wooden box).....	23
Grand total.....	23, 481

(This report was received too late for insertion in the St. Louis hearing (part 23) and is printed here for reference.)

EXHIBIT 3.—DEFENSE OUT-MIGRATION OF IOWA N. Y. A. YOUTH

REPORT BY THEODORE P. ESICK, STATE YOUTH ADMINISTRATOR, NATIONAL YOUTH ADMINISTRATION FOR IOWA

A check through our termination records shows that of 1,906 National Youth Administration youth who left our program during a 3-month period, July, August, and September of this year, to take private employment, 178 went out of the State to take defense employment in other States. This number of National Youth Administration youth taking defense jobs in other States was roughly 8 percent of the total gaining private employment in the indicated 3-month period.

A tabulated report on this out-State migration of National Youth Administration youth into defense jobs is enclosed for your study. It includes data on both the number of rural and urban youth participating in this migration. In order that you may locate counties involved in the report, we are also enclosing a mimeographed map of the State of Iowa which you may find useful.

It is interesting to note in connection with the report that of the 178 who went into defense jobs in other States, 108, or 61 percent, took employment in aircraft factories. One hundred and four of this number located in California, 3 in Maryland, and only 1 in Missouri.

Of the 228 National Youth Administration youth who entered public employment during the July, August, and September period, 64 left the State. Most of these went into military duty with our armed forces; some took civil-service employment at the Rock Island Arsenal in Illinois; a few gained civil-service appointments in clerical fields.

The number of rural youth being drawn into National Youth Administration resident centers or projects in Iowa, as set forth on page 4 of our manuscript, is a negligible amount in comparison to our whole employed youth group, which remain stabilized in home communities. In the main they represent no migratory groups, except for a portion of the youth workers who enter our Milford and Fairport resident project for boys.

Milford resident center, located in Dickinson County, in the extreme northwestern portion of Iowa, is the only National Youth Administration project site which experiences a noticeable outgo of youth into defense employment in other States. The average enrollment strength at Milford is 130 youth, and the turnover there into private industry in other States averages 15 youth per month.

Fairport resident center, in Muscatine County in southeastern Iowa, the only other resident center for boys in operation in the State at the present time, has an enrollment strength at present of 60 youth. An average of 5 youth leave there each month to take defense employment in other States.

Toledo resident center, located in Tama County in central Iowa, has an enrollment strength of 40 female youth, none of whom has been securing defense employment in other States.

We contemplate opening a resident center for boys in the near future at Clinton (Clinton County) in eastern Iowa. It is anticipated that when this center starts operations, the migration from it to other States will equal that from our Milford resident center at the present time.

Throughout 1940, no transportation was provided National Youth Administration youth from their home communities to project sites. Many youth, however, from rural communities throughout the State, provided their own transportation to project sites which were located from 10 to 30 miles from their home communities. This movement would not represent migration, due to the fact that the youth involved always returned to their homes at the end of the work day. The movement of youth to project sites outside their communities, in their own cars or in the cars of other National Youth Administration youth, is still in effect today.

This year there are some cases, however, where our agency is providing transportation for youth in scattered parts of the State. This occurs in the following instances: 30 youth from Missouri Valley (Harrison County) to Council Bluffs (Pottawattamie County); 30 youth from scattered points in Monroe County to Chariton (Lucas County); 40 youth from scattered points in Lee County to Burlington (Des Moines County); 40 youth from scattered points in Scott County to Clinton (Clinton County); 20 youth from Maquoketa (Jackson County) to Clinton (Clinton County); 30 youth from outlying points in Black Hawk County to Waterloo (Black Hawk County). All of these youth are employed in National Youth Administration defense projects in the communities to which they are transported and from which they return home at the close of each workday.

From what we can ascertain in a general way, there has always been some migration of youth in Iowa from rural to urban areas in the State. We have found, however, that statistical data on this type of migration is not readily available. Out-State migration of Iowa National Youth Administration youth (and this probably applies to other youth in the State, too) occurred very seldom prior to the present emergency.

RECAPITULATION¹

July, August, September, 1941

Youth from Iowa to Aircraft industry:	
Iowa to California aircraft firms.....	104
Iowa to Maryland aircraft firms.....	3
Iowa to Missouri aircraft firms.....	1
Total.....	108
Total youth of rural origin in Iowa to aircraft industry.....	48
Total youth of urban origin in Iowa to aircraft industry.....	60
Total.....	108
Total youth of rural origin in Iowa through resident centers to aircraft industry.....	19
Total.....	19
Youth from Iowa to Nebraska:	
Milford resident center to Omaha Steel Co.....	18
Pottawattamie County to Omaha Bomber Plant.....	2
Pottawattamie County to Omaha Sheet Metal Works.....	3
Plymouth County to Omaha Steel Co.....	2
Total.....	25
Total youth of rural origin in Iowa to Nebraska.....	20
Total youth of urban origin in Iowa to Nebraska.....	5
Total.....	25
Youth from Iowa to Illinois:	
Milford resident center to Ceco Manufacturing Co., Chicago.....	1
Milford resident center to Western Electric, Chicago.....	1
Milford resident center to John Deere, Moline, Ill.....	3
Buena Vista County to North Western Electric, Chicago.....	1
Crawford County to Freeport Furniture Co., Freeport, Ill.....	1
Plymouth County to Quartermasters Headquarters, Chicago.....	1
Van Buren County to Chicago, Rock Island, Pacific R. R., Chicago.....	1
Scott County to Rock Island Arsenal, Rock Island, Ill.....	20
Scott County to International Harvester Co., Rock Island, Ill.....	2
Total.....	31
Total youth of rural origin in Iowa to Illinois.....	8
Total youth of urban origin in Iowa to Illinois.....	23
Total.....	31
Youth from Iowa to various Eastern States:	
Dubuque County to Dupont Co., Anderson, Ind.....	1
Dubuque County to Goodyear Co., Akron, Ohio.....	1
Van Buren County to Pittsburgh Steel Co., Pittsburgh, Pa.....	1
Wright County to War Department, Munitions, Washington, D. C.....	1
Wright County to General Motors Corporation, Detroit, Mich.....	1
Plymouth County to Grand Rapids Furniture, Grand Rapids, Mich.....	1
Total.....	6
Total youth of rural origin in Iowa to various Eastern States.....	4
Total youth of urban origin in Iowa to various Eastern States.....	2
Total.....	6

¹ This tabulation does not contain figures on youth placed in defense firms in the immediate vicinity of the youth's home.

RECAPITULATION—continued

July, August, September, 1941—Continued

Youth from Iowa to various Western States:	
Pottawattamie County to Advertising Co., Mitchell, S. Dak.....	1
Shelby County to Milwaukee R. R., Montana.....	4
Ida County to Seattle Ship Yards, Seattle, Wash.....	1
Crawford County to Northwestern Lumber Co., Seattle, Wash.....	1
Sioux County to construction of Army Camp, Idaho.....	1
Total.....	8
Total youth of rural origin in Iowa to various Western States.....	7
Total youth of urban origin in Iowa to various Western States.....	1
Total.....	8
Youth from rural counties within Iowa to urban defense counties:	
Van Buren County to Lee County.....	1
Van Buren County to Des Moines County.....	3
Ringgold County to Des Moines County.....	1
Page County to Des Moines County.....	1
Mahaska County to Des Moines County.....	1
Dubuque County to Des Moines County.....	1
Total.....	8

INDEX

This book is the first of two books dealing with the subject of Manpower in War Production. Each is indexed separately, but the reader is asked to refer to both indexes (Part 27 and 28), especially to locate testimony and material on the following subjects: Defense Migration; Employment Service; Housing; Manpower; Recommendations; Selective Service System; Surveys; Vocational Education; Women Workers.

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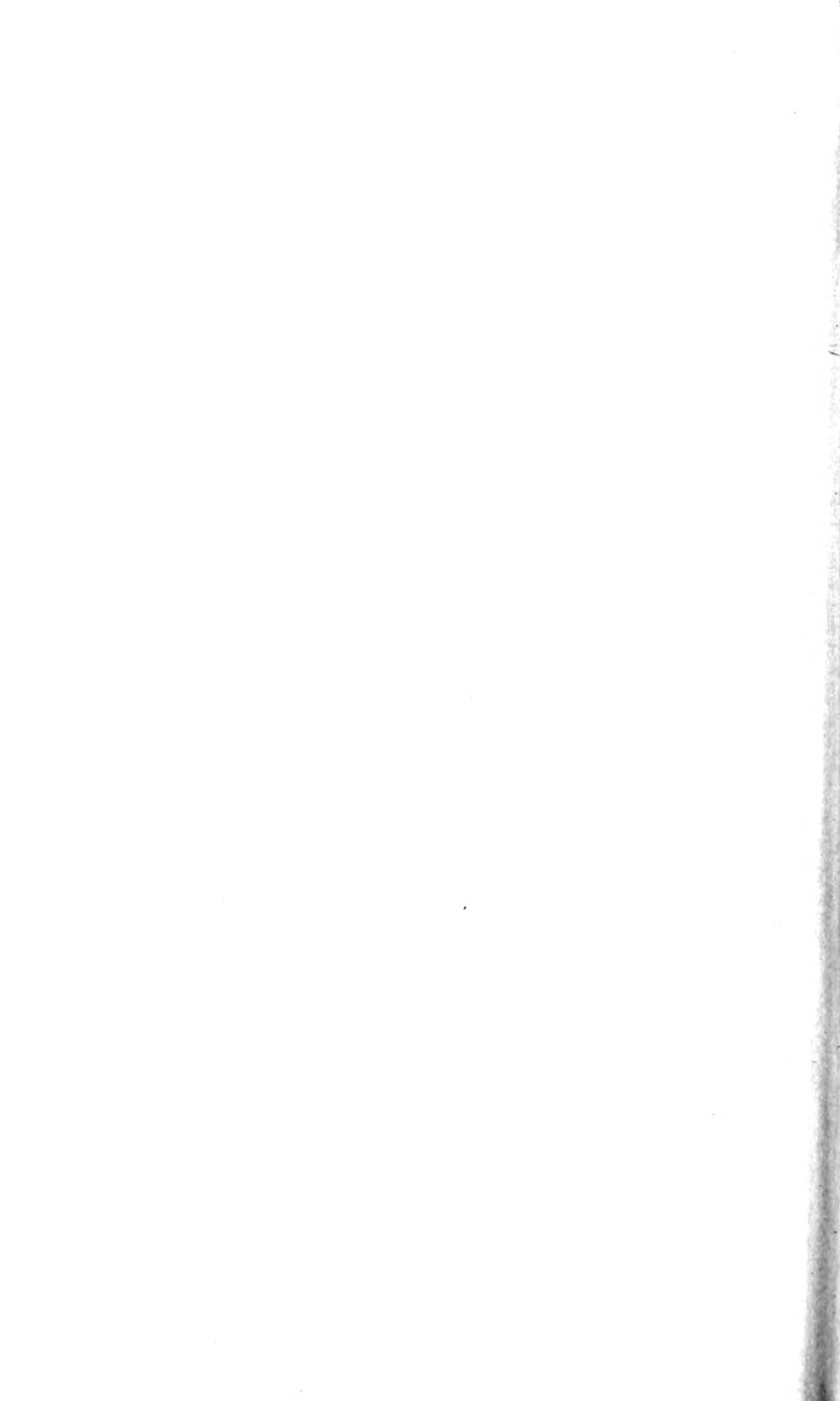
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