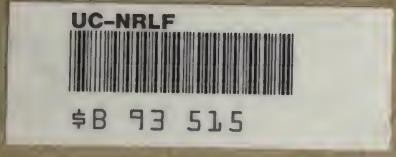

DEPARTMENT OF PVBLIC INSTRVCTION OAKLAND CALIFORNIA

REPORT

of a Survey of the

Organization, Scope, and Finances

of the

PUBLIC SCHOOL SYSTEM

of

Oakland, California

By

ELWOOD P. CUBBERLEY

Professor of Education, Leland Stanford Junior University

BOARD OF EDUCATION BULLETIN

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PRESIDENT'S LETTER.

OAKLAND, CALIFORNIA, June 21, 1915.

TO THE TAXPAYERS OF OAKLAND:

Since the per capita cost of maintenance based on the average daily attendance of the Oakland School Department has increased twenty-two per cent during the last five years, the Board of Education recently decided it to be a point of wisdom to employ a disinterested expert to investigate the reasons for the increased expense and to determine if it were possible to conduct the schools more economically without loss of efficiency.

This investigation was inaugurated at a meeting of the Board of Education held June 1, 1915, at which the following resolution was unanimously passed:

WHEREAS, there has been a considerable annual increase in the school budget for several years past, and

WHEREAS, the Board of Education is desirous of conducting the School Department as economically as possible without lessening its efficiency, be it

Resolved, that Dr. E. P. Cubberley, recognized as one of the foremost authorities on educational administration in the United States, who has conducted school surveys for the cities of Baltimore, Portland, Butte, and Salt Lake City, be employed to investigate the plan of organization of the Oakland School Department, with special reference to the number of employees, their salaries and duties, in order to determine if there be any unnecessary expenditures or if any economy can be effected without injuring the efficiency of the department.

Dr. Cubberley's report is hereby presented to the public. The Board of Education earnestly desires that it be given thoughtful consideration. It represents the judgment of an unbiased expert of wide experience, and as such is worthy of careful study.

In presenting the report to the taxpayers of Oakland, the Board calls attention to the fact that in its administration of the schools there has been a consistent attempt to maintain a progressive and efficient school system, in order to afford the young people of the community the best possible opportunity to secure a good education.

Very respectfully,

A. S. KELLY,

President of Board of Education.

LETTER OF TRANSMITTAL.

To the Board of Education,
Oakland, California.

Ladies and Gentlemen:

I herewith transmit to you my report on the organization, scope, and costs of the Oakland school department, as requested by your resolution of June 1, 1915, directing me to make such a survey of your school system.

In making the report I have divided it into three parts, to cover each of the three main questions I was asked to consider. The first deals with the form of organization of the administrative departments, and the overhead expense of the school department; the second covers the scope and further needs of the school system under your control; and the third considers the financial aspect of the problem, and the ability of the city of Oakland to maintain a good system of schools. I hope that the report as submitted may prove useful to the Board of Education in handling its problems, and to the people of the city as well, in enabling them to understand the magnitude and the importance of the problem with which the Board of Education has to deal.

I desire here to express my appreciation of the assistance rendered me by the officers of the different departments of the administrative organization, without which help it would not have been possible to have made such a survey of conditions and needs in so short a time.

Very respectfully,
ELLWOOD P. CUBBERLEY.

Stanford University, Cal.,
June 12, 1915.

CONTENTS.

PART I.

Form of Organization, and Overhead Expense.

I. The Form of Organization.

Present Form of Organization. An examination of the rules and regulations of the board of education, and of a tabular sheet prepared, showing the present organization and scope of the school system, reveals that the school department of the city of Oakland is at present organized into four separate departments. These are (1), the clerical and auditing department; (2), the educational department; (3), the buildings and grounds department; and (4), the purchasing department. The attendance department is included under the educational department. Each of these four departments is to a certain extent independent of each of the others, the head of each reporting directly to the board of education, which then serves as a coordinating and directing body. This places upon the board of education and its committees numerous duties which, in many other cities, boards of education do not have to handle.

Criticism of the form of organization. Whatever may have been the reasons for the original creation of four separate administrative departments, each more or less distinct from and independent of the other three, the best administrative experience of our American cities would indicate rather clearly the undesirability of continuing such a form of administrative organization. It is too wasteful of time and effort and does not properly centralize authority and responsibility. At present, due in part to the requirements of the rules and regulations of the board of education, and in part to the co-operative spirit shown by the heads of the different departments, a large degree of harmony and co-operation in work seems to prevail. That such a condition will always continue to exist may, however, be seriously doubted.

The public, as well as the board of education itself, looks to the superintendent of schools as the responsible head of the entire school system. If overhead charges become too high; if the school accounts are not properly kept; if reports to the public do not explain operations clearly; if the supplies furnished are

poor or inadequate, or are too lavishly provided; if the buildings are not of the right type, or cost too much, of if they are not properly cared for and made available when needed; if the expense for building upkeep is too high; if proper harmony among the different administrative officers does not prevail; or if a dozen other possible things do or do not come to pass, the public rightly holds the superintendent of schools—the nominal head of the school system—to be the responsible person. In many matters by law under the control of the board of education, the public holds the superintendent of schools, rather than the board of education, as the responsible party.

One head for the entire school system. This should mean that the superintendent of schools should be the responsible head of the whole school department, and that he then should be held to strict accountability for its successful operation. This is the method followed in all successful corporation control. The board of education should represent, as it were, a board of directors for a corporation, and in this case it is a corporation doing a million and a half dollars worth of business each year. As such they should have as one of their most important functions to select the chief executive officer for their business, and, with his co-operation and advice, to select the heads of departments and others for important executive positions. They should also, with the co-operation and advice of their chief executive officer, and such of his subordinates as they may see fit to call into consultation, decide—not individually but as a body—all questions relating to the general policy, expansion, and finance of the business under their control. All matters of detail should be left to the officers of the business to handle; if they cannot carry the responsibility they should be replaced by those who can.

The best experience of cities generally has been that both harmony and efficiency are promoted when the superintendent of schools is made the actual as well as the nominal head of the entire school department, and when the heads of other executive departments report to and through him. This should not mean any subordination of individual subdepartment executives to the extent that their proper work is interfered with, but instead a co-ordination of effort, a unified control of expenditures, and a

distribution of work which probably would result in a more effective expenditure of the funds at hand.

The chief department the educational. It cannot be too clearly understood that the chief end for which the schools exist is the education of children, and that all forms of organization and all administrative machinery exist for the sole purpose of getting teacher and children together under the best possible educational conditions. To this end the clerical business, purchasing, building, and attendance officers all exist for the purpose of aiding the educational department to so get teachers and children together. The purchasing and building departments also exist in part for the purpose of deflecting, into the work of actual instruction, as large a percentage of the funds set apart for annual maintenance as is possible.

With the one possible exception of the clerical department, which is largely in the nature of a department of record, all other departments and subdepartments should be able to prove their usefulness by the savings they effect, the waste their presence prevents, or the increased efficiency of the instruction which their administrative oversight ensures. Every overcharge detected by the auditor, every dollar saved in the purchase of supplies, every economy effected in the erection and repair of buildings, is added money for increasing the effectiveness of the instruction in the schools. It is for this purpose that all these departments have been created, and the only excuse for their existence and continuance lies in their contribution to the saving of funds for purposes of actual instruction.

This being the case, the educational department stands as the chief department of the school system, most deeply interested in and feeling most responsible for the success of the schools, and, within reasonable limits, the other departments or divisions of the school organization should act under its supervision and control. The superintendent of schools should be made to feel that he has supervisory oversight and control over the methods of bookkeeping employed, the expenditures for equipment and supplies, the replacement and betterment projects to be undertaken, and, to a certain limited extent, over the way and the times at which the office and working forces of the different departments do their work, in so far as such con-

cerns the educational work of the schools. If he cannot assume such responsibility and handle it wisely, he should be replaced by some one who can.

II. The Overhead Expense.

The extent and costs for the present overhead administrative organization, together with the salaries paid to each person in the overhead organization, may be seen from the following table:

Table No. 1.

The Overhead Organization and Its Cost.

I. The Board of Education.	
Six members, paid $40 per month for their services, or $480 each per year	$2880
II. Departments Under Board Control.	
1. The Clerical and Auditing Department.	
1 Secretary of the Board	$2700
1 Auditor and Assistant Secretary	2220
1 Assistant to the Secretary	1320
1 Bookkeeper	1260
1 Stenographer at	1020
1 Stenographer at	900
1 Stenographer at	600
Total cost for clerical department	$10,020
2. The Educational Department.	
1 Superintendent of Schools	$ 4000
1 Secretary to the Superintendent	1620
1 Director of Information, Statistics, and Educational Research	1500
2 Stenographers at $900 each	1800
1 Attendance Officer (part time)	1000
1 Attendance Officer	1620
Total cost for department*	$11,540

* The two Assistant Superintendents are not included here, as they devote their time chiefly to the supervision of instruction. They accordingly belong with the school principals, in the overhead cost for school supervision, and are so classified.

3. The Buildings and Grounds Department.	
1 Superintendent of Buildings and Grounds	$ 2700
1 Department Mechanic	2400
1 Department Electrician	1800
1 Draftsman	1080
1 Stenographer	600
Total cost for department	$8,580
4. The Purchasing and Supply Department.	
1 Purchasing Agent	$ 2400
1 Stenographer	900
1 Storekeeper	780
Total cost for department	$4,080
Total overhead charge for administrative salaries	$ 34,220.
Total estimated additional cost for supplies, automobile allowances, printing, postage, etc., 1914-15	5,327.43
Total overhead cost for general control	$ 39,547.43
Total estimated cost for maintenance of school department,§ 1914-15	$1,425,896.19
Percent of total spent for administration #	2.7

Number of employees and salaries. An examination of the roster and salaries paid the office force in the different administrative departments, as well as a study of the percentage of costs devoted to general administration, does not reveal any extravagance in salaries, or any place for important reductions in expenditures. On the contrary, the salaries paid are relatively low.

The only department which possibly seems to be a little overstocked with help is the clerical and auditing department. This,

§ Compiled by the Secretary, and includes all expenses up to date, all June salaries, all outstanding orders, and an estimate of all additional expenses for the 22 days remaining in this fiscal year.

This includes the $2800 paid board members by the city, and not actually coming from school department funds.

however, may not be the case, as the work of this department is of such a nature that one unfamiliar with the principles underlying clerical and business efficiency could hardly pass judgment on this matter. Should it be desired to look further into the number and salaries of the employees of this department, a business expert should be directed to examine into the amount of work and the effectiveness of the employees concerned.

The purchasing and building departments. The purchasing and the buildings-and-grounds departments now have as small working forces as could be expected for the conduct of such departments, and the salaries paid the employees in each are moderate. Each department requires good judgment, honesty, and the ability to transact business with accuracy and dispatch, and such ability cannot be expected for smaller sums.

The administration of these two departments, in 1914-15, cost together but 93-100 of 1% of the cost for maintenance of the school system. The orders for materials and supplies issued by the purchasing department from July 1, 1914 to June 3, 1915, total $396,927.99, and the unexpended balances of the 1914-15 budget will not permit of orders exceeding this sum by more than a very small amount. This means that this department was conducted for 1% of the orders issued. Similarly, the orders and requisitions issued by the superintendent of buildings and grounds for the same period, together with an estimate of additional orders to June 30, total $464,895.53. This means that this department was conducted at a cost of 2.05% of the business transacted. These figures represent low operation costs.

If the purchasing agent saved an average of one percent on the articles purchased, he would save the entire cost of his department. The probabilities are that he saves nearer six to ten percent on purchases, and hence probably saves for the school department from $25,000 to $40,000 a year over and above the cost of his department. As the superintendent of buildings saves six percent in supervising-architect commissions on all construction work carried on in the school department, he also saves from $10,000 to $20,000 a year, varying with the amount of new buildings and repairs to old buildings, above the cost of his department. These two departments, by reason of closer buying, increased efficiency in service obtained, and the

elimination of the need for the employment of experts, save enough each year for the school department to pay the entire cost of all overhead administrative control, and, in addition, leave a balance to be applied to the work of instruction.

The educational department. The working force in the educational department also is not large, and the salaries are very moderate. Judged by the standards of other cities, a salary of $6000 for the superintendent of schools, $2500 for the director of information, statistics, and research, $2000 for the secretary to the superintendent, and twice the force of stenographers and clerks, would not be excessive for a city the size of Oakland. At least one more stenographer should be added to this office, so that the assistant superintendents, attendance officers, and the director of research may have stenographic service for writing letters, sending communications, and similar service. There is no economy in trying to save on stenographers and typewriters.

The secretary to the superintendent renders a very important service in meeting the public, answering questions, sifting out those who should see the superintendent or his assistants, and directing the work of the office. It is using $1620 labor to good advantage to save $4000 time.

The statistical clerk. The director of information, statistics, and research, if the office is properly developed, should in time render a very important service in testing and standardizing educational processes. His present title is inexpressive, and his present services are limited to statistical and clerical work. I would recommend that his title be changed to that of statistician and director of educational investigations, and that the investigation side of his work be gradually expanded. Every school system needs to measure and test its work, from time to time, and the director of such a bureau ought to assist materially the two assistant superintendents and the school principals in testing and measuring the educational results obtained in the schools.

In a number of our cities such an office has recently been established, though elsewhere more emphasis has been placed on the study of the educational work of the schools than upon statistical and clerical service. If our cities are to have any intelligent outlook upon the work they are doing for their children,

and are to be able to justify their expenditures by an exhibition of results, such must be based on careful statistical studies made by those who have time for such work, and who know how to conduct such studies. In the business world efficiency experts are appreciated at their full value; in the educational world they are as yet almost unknown and undeveloped.

The attendance department. The enforcement of compulsory education, which in Oakland is classed under the superintendent's office, represents but a very small expense. A city the size of Oakland, and of its peculiar character, ought to spend three or four times as much money as is now done on the enforcement of the attendance laws, and ought also to maintain, either singly or in combination with Berkeley and Alameda, a parental-home school for boys and one for girls, with large vocational opportunities in each. There being no state school census only emphasizes the need for more accurate information as to the whereabouts and the school attendance of the children of school age than can possibly be obtained from the services of the one and one-half officers now employed. A school-census bureau, one that will compile accurate records as to children and check up attendance at private and parochial schools as well as at public schools, with a proper provision of special-type schools for all irregular cases, is not more than a city such as Oakland should provide. There is no special economy in neglecting youthful waywardness to save a little money, and permitting it later on to add to the criminal and prostitute class. The State of California cannot be expected to permit its larger cities to continue much longer to neglect, in large part, the care and proper education of its truant and wayward and incorrigible children.

Cost of the educational department. The entire overhead cost for the educational department, including here the office of the superintendent of schools, the director of statistics and research, and the compulsory attendance work, represents at total cost of but 94-100 of 1%, which is quite small. It ought to be larger rather than smaller. The compulsory attendance work, or the investigation of educational results, ought to cost that much alone.

Oakland's overhead expense compared. To show that Oakland's overhead expense for schools is not high, a comparison

may be made with a number of western cities where salary costs and other expenses are comparable. In making this comparison all cities west of the Rocky Mountains which in 1910 had 25,000 or more inhabitants have been included, and all but one of these cities also had 5000 or more school children in average daily attendance. The data for Oakland is for the year 1914-15, and as furnished by the secretary and the superintendent of schools. The data for all the other cities is from the last published annual report of the U. S. Commissioner of Education, and is for the fiscal year 1912-13. This puts Oakland at a little disadvantage for purposes of comparison, as costs for all forms of education are increasing almost everywhere. This comparison gives the following result:

TABLE NO. 2.

Cost for Overhead Administrative Control in Western Cities.

City.	Percent of total maintenance cost spent for administrative control
Sacramento, Cal.	1.8
Spokane, Wash.	2.2
Pasadena, Cal.	2.4
Seattle, Wash.	2.6
Oakland, Cal.	**2.7**
Denver, Colo.	2.7
San Diego, Cal.	2.7
Berkeley, Cal.	2.8
Salt Lake City, Utah	3.0
San Jose, Cal.	3.0
Los Angeles, Cal.	3.6
Butte, Mont.	3.8
Tacoma, Wash.	3.9
San Francisco, Cal.	4.3
Colorado Springs, Colo.	4.6
Portland, Ore.	4.9
Average for 16 cities	3.2
Median point for 16 cities	2.9

As will be seen from this table, Oakland's overhead, or administrative expense, is below both the average and the median (the point above which and below which fifty percent of the cases fall) for western cities. If the money paid for services to the members of the board of education were deducted, as pay for such services is not usually granted in American cities, the percentage of expense would be reduced to 2.5%. An expenditure for administration of 3.0% to 3.5% would not be unreasonable in a growing city the size of Oakland.

PART II.

Scope and Needs of the Oakland School System.

The old-type school system. Up to fifteen or twenty years ago communities generally were content to maintain a school system primarily for the instruction of children in the old book subjects. For this an eight-year elementary-school course, based entirely on text-book instruction and the same for all, was considered sufficient. For those who cared to go to the high school, two or three parallel and somewhat similar courses, based largely on text-book work, were offered. The instruction, while perhaps good of its kind, was nevertheless a relatively cheap form of instruction to provide. A room, a stove, some desks, and an inexpensive teacher answered almost all instructional needs. The instruction was book-instruction, and the pupil, in addition, furnished the book.

The instruction practically assumed that all children were about alike, and had about the same educational needs. In a sense it was an aristocratic conception of education, as opposed to the more democratic conception of today. The instruction provided was determined largely by the needs of the more intellectual classes of the community,—that is, that class who found it easy to work with ideas and abstractions, and who took somewhat easily to literary knowledge. There was little attention given to anything else. Possible future vocations, home needs, hand and eye training, health and physique, and the world of natural phenomena were largely or entirely neglected by the school. Those who could master the instruction offered were promoted, while those who could not failed and soon dropped from school. Few special teachers and little supervision were required, and the school buildings erected were simple in construction and relatively cheap.

Changes in conception. Within the past two decades a vast change in our conception as to the place and purpose of public education in our national life has taken place, in all parts of the United States. No city or no part of the nation has any monopoly of this new development in public education, though certain cities have naturally made greater progress in the matter than have others.

This change in conception as it relates to public education is only one of the many manifestations of that great social change which has come over our people, and which has everywhere emphasized the importance of child-life and human-welfare work in contrast with the accumulation or saving of money. In education it is no longer a question of merely a school, but of schools properly suited to the needs of each type of child in the whole community. The finger-minded as well as those who can work with ideas are to be trained; hand and eye and sense training are not to be neglected longer; and health and physical development have been given an entirely new emphasis in our educational work. Even play has been discovered to be educational, and valuable in developing character, and has been made a directed subject. In the realm of high-school education, the need of many new courses, and even of new schools, to prepare young people to meet the problems of democracy and the changing economic life of the times better, has been felt and met. Even the irregular, the defective, and the wayward are to be cared for. This calls for new types of teachers, differentiations in instruction, reorganizations and expansions in school work, new and better arranged school buildings, and a marked increase in the expense for public education.

Differentiations and increasing costs. The result has been a marked differentiation in school work, within recent years, better to adapt the schools to the individual needs of the children; the introduction of new types of instruction; the establishment of new types of schools; a demand for better teachers and more skilful supervision; and a popular demand for larger playgrounds and a type of school building better adapted to modern educational and community needs.

The people generally have welcomed these additions and expansions and changes in conception, though the tax-payers have sometimes grumbled at the increased expense. We are, however, a relatively rich people, and we have felt that we can afford to spend a relatively large part of our annual taxes for the improvement of the stock and the better education of the generation which is to take up society's burden when we lay it down.

Oakland's recent educational development. In many of our American cities this new development and expansion of the edu-

cational system of the city began fifteen to twenty-five years ago, and the costs have mounted slowly and gradually with the increasing wealth of the city, and hence have aroused little or no criticism. For many years Oakland has been building an excellent type of school building, and has been in advance of most cities in paying a living wage to teachers, but until quite recently the chief development has been on the building and salary side of the school system.

Within the past half dozen years Oakland has begun a somewhat delayed expansion of its educational work better to adapt its schools to the needs of its children, and this, connected with the many expenses incurred in the equipment of the numerous new buildings required by a rapidly-growing city, has caused an increase in tax rates for schools which has attracted attention. As will be shown further on, however, Oakland is still behind our better school systems in its educational development, and its percentage and per capita costs for education are not as yet really high.

The problem before the board of education and the people of Oakland is a double one, being both educational and financial. In this part or chapter the educational aspect of the problem will be considered; in the following part or chapter the financial aspect of the problem will be presented.

Causes for the recent increase in costs. As was just stated, Oakland has only recently begun the educational expansion of its school system, and the result has naturally been an increase in costs. What many other cities have been fifteen or twenty years in doing, gradually increasing their costs for instruction, Oakland has done largely in the past five or six years, with a resultant jump in school expenditures.

The increased salaries for teachers; the large increase in the number of teachers employed; the recent rapid introduction of kindergarten instruction; the additions to the supervisory force; the organization of new high schools, and new departments in these schools; the reorganization of a number of the elementary schools, for instruction along department lines; the addition of new subjects of instruction in the elementary schools, and of new departments in the high schools, such as domestic science and home economics; an excellent reorganization and

expansion of the work in music; the organization of a department for health-development and sanitation; the better organization of the work in physical training, and the provision of directed school playgrounds; the organization of a department of child study, the classes for the instruction of atypical children; the organization of a vocational school; the extension of the courses in the evening high schools; and the beginnings of an evening lecture system,—these represent the chief causes of the recent rise in the expenditures for education in Oakland.

The increase in cost due to these newer additions can at any time be largely eleminated, if the people so desire, by abandoning any or all of them and going back to the school system of ten or fifteen years ago. This, though, no intelligent and progressive city is willing to do, and such action Oakland does not need to take.

An examination of these additions, item by item, will reveal their purpose and the desirability or undesirability of the expense involved.

1. **Increased salaries for teachers.** As from sixty to seventy percent of the annual cost for maintenance of a school system usually goes for teachers' salaries, any increase in this item naturally causes the total to amount up rapidly. The tax-payer sees the total sum as printed in the newspapers, notes any increase in the tax rate, forgets that for decades our teachers have been the most poorly paid of all city employees representing any large degree of education and professional skill, and begins to object to the large amount so expended. The total expended for teachers' salaries in Oakland during 1914-15, $925,707.70, does look large, but this is because so many teachers are required to teach the 32,697 children who were enrolled in the schools.

The salaries paid teachers in Oakland, however, are not high, and are not more than men and women of similar education and professional skill should be paid. Averaged up for all teachers employed, the above total sum equals $1,176.25 for each teacher. The salaries paid to teachers in Oakland easily stand comparison with the salaries paid in other city departments, as is shown by the following table.

Table No. 3.

Comparing Salaries in Different City Departments.

Position.	Salary		Years of service to reach maximum.
	Minimum	Maximum	
I. TEACHERS.			
Kindergarten teachers	$ 780.00	$1200.00	10
Elementary school teachers	780.00	1200.00	10
Intermediate school teachers	1200.00	1260.00	....
High school teachers			
Assistants	1020.00	1260.00	3
Instructors	1320.00	1680.00	7
Heads of departments	1800.00	2100.00	....
Sub-heads of departments	1740.00	1740.00	....
Special teachers			
Domestic science	1200.00	1200.00	....
Manual training	1200.00	1200.00	....
Skilled mechanics	1500.00	1500.00	....
II. OTHER CITY EMPLOYEES.			
School janitors	$ 900.00	$1200.00	....
City Hall janitors	780.00	1200.00	....
City Hall elevator operators	840.00	840.00	....
Policemen	1200.00	1380.00	3
Firemen	1200.00	1380.00	3
Junior stenographers	780.00	1080.00	4
Senior clerks	1200.00	1500.00	4

The salaries paid teachers in Oakland are not higher than are paid in adjacent cities with which Oakland has to compete, or higher than in most other large western cities.

It would of course be possible to find "home girls" who would be willing to take places in the schools and work for smaller "wages," but Oakland has for a long time followed the much wiser policy of paying about what the best schools in the vicinity pay, and then trying to attract to its service the best trained men and women of the state who are willing to apply. With the constantly increasing complexity of the educational process, the constantly increasing demand for better trained teachers, and the constantly increasing costs for living, this is no time to depart from such a well-established policy.

That the salaries offered are not too high, in view of the quality of teachers obtained and the increased cost of living in a city of Oakland's size, may be seen from the statement that in the elections to the preferred lists for 1915-16, 26 high-school teachers elected averaged a monthly increase over previous positions of but $9.00, while some came for no increase at all; 28 departmental teachers for seventh and eight grades averaged a

monthly increase of but $3.30, and some came with no increase; and 83 elementary-school teachers averaged a monthly increase of $21.90. The surprising thing is that Oakland could secure good teachers at so small an increase in salary.

2. Increased number of teachers. That the number of teachers employed has increased is but natural. Until Oakland ceases to grow, either in population or in its conception of education, this will always be the case. That the increase in number of teachers has not been out of proportion to the growth of the city may be seen from the following table.

TABLE NO. 4.

Number of Pupils per Class Teacher, by Departments.

Based on Average Daily Attendance.

Type of school.	1910-11	1911-12	1912-13	1913-14	1914-15
Elementary school	38.6	39.4	38.2	39.0	36.6
High school	20.7	25.4	23.0	22.6	21.1
Evening school	16.3	17.4	16.5	21.8	19.2
Kindergartens	27.6	30.6	29.0	30.0	35.2
Average for all schools	34.2	36.1	34.7	35.1	32.8

In 1883-84 the average for all schools was 32.6; in 1893-94 it was 38.6; and in 1903-04 it was 36.8.

While our better school systems have been gradually reducing the number of children per teacher, cutting the maximum number in an elementary-school class down from 50 or 55 thirty years ago to 30 to 35 today, Oakland, over a period of thirty years, has scarcely held even. The apparent large reduction during 1914-15 was due in part to the employment of many new teachers incident to the opening of the new Technical High School, and will be offset by the much smaller number of new teachers employed for 1915-16, and the certain increase in the number of children next year.

If we consider 35 pupils in average daily attendance in elementary schools as a maximum beyond which it is not desirable to go, as is now done in our better school systems, then a number of the elementary schools of Oakland are still inadequately supplied with teachers, as may be seen from the following table.

Table No. 5.

Average Daily Attendance per Teacher at Elementary Schools for the Year 1914-15.

School.	Average Number of teachers	Teacher average	School.	Average Number of teachers	Teacher average
Allendale	9.	37.7	Jefferson	13.	38.1
Bay	16.5	37.5	Lafayette	26.3	39.6
Beulah	1.	17.	Lakeview	14.5	35.8
Campbell	6.	32.7	Laurel	4.5	30.7
Claremont	16.3	39.5	Lazear	8.5	37.5
Clawson	14.5	36.3	Lincoln	23.	36.6
Cleveland	4.	35.	Lockwood	13.	28.5
Cole	18.	36.7	Longfellow	17.	37.8
Dewey	9.	39.3	Manzanita	8.	40.3
Durant	20.	38.2	McChesney	10.5	38.2
Elmhurst	16.	39.	Melrose	9.9	33.8
Emerson	19.5	37.5	Melrose Hts.	9.5	40.8
Franklin	19.	38.7	Peralta	4.	26.7
Frick	3.5	31.4	Piedmont	13.8	33.2
Fruitvale	11.	32.4	Prescott	21.5	36.8
Garfield	19.5	38.1	Santa Fe	8.5	34.4
Grant	23.4	36.7	Sequoia	6.	33.5
Harrison	3.5	32.3	Tompkins	10.	31.8
Hawthorne	12.	37.9	Washington	18.5	39.9
Highland	10.5	36.8	University	5.	28.2
Intermediate	15.	33.9	Vocational	6.5	14.

Comparing Oakland with the same fifteen other cities used in Table No. 2, we get the following table:

Table No. 6.

Number of Pupils in Average Daily Attendance per Teacher in All Schools

City.	Teacher average	City.	Teacher average
Pasadena, Cal.	20.	Colorado Springs, Colo.	29.
Berkeley, Cal.	21.	Salt Lake City, Utah	29.
Los Angeles, Cal.	25.	Portland, Ore.	29.
Sacramento, Cal.	25.	San Jose, Cal.	31.
Denver, Colo.	26.	Spokane, Wash.	32.
Seattle, Wash.	26.	**Oakland, Cal.**	**32.8**
Butte, Mont.	27.	Tacoma, Wash.	33.
San Diego, Cal.	27.	San Francisco, Cal.	34.
Average for the group.	28.	Median for the group.	28.

3. Kindergartens. These have now been established in 29 of the 42 elementary schools maintained in Oakland, and the average daily attendance in them in the five months since January 4, 1915, when 17 new kindergartens were opened was 982 children. This is an average of 33.8 children per school. In 8 schools the average daily attendance exceeded 40, and in one,

reached 53. The average daily attendance in the first grade for the same period was approximately 4100. This makes the average daily attendance in the kindergartens approximately 24% of that in the first grade. In a city such as Oakland, judged by the standards in cities having made good provisions for kindergarten instruction, it ought to be between 40% and 50%. This would indicate the need of more kindergartens, and probably one should be established in connection with each school of four or more rooms in the city. It is probable that there are 2000 children in Oakland, between the ages of five and six, who would attend school for kindergarten instruction if full opportunity for such attendance were provided. Many cities provide for the admission of kindergarten children at four and one-half, and a few as early as four.

The value of good kindergarten instruction for children has become so well established that it is not deemed necessary to present any arguments in favor of this form of instruction. In cost it should average about 1⅓ times that for elementary-school instruction.

4. Additions to the supervisory force. The supervisory force for 1914-15 consisted of the following persons, and at the salaries stated:

2	Assistant Superintendents, at	$3,600.00	$ 7,200.00
1	Supervisor of primary work	1,800.00	1,800.00
1	Director of vocal and instrumental music	3,000.00	3,000.00
1	Director of bands and orchestras	1,500.00	1,500.00
3	Directors of vocal music, at	1,500.00	4,500.00
1	Director of drawing (part time)	1,200.00	1,200.00
1	Supervisor of drawing	1,800.00	1,800.00
1	Supervisor of drawing	1,500.00	1,500.00
1	Supervisor of manual training	2,400.00	2,400.00
1	Director of home economics	2,000.00	2,000.00
1	Director of the child-study laboratory	1,800.00	1,800.00
4	Language Supervisors (part time), at	240.00	960.00
	Total for special supervision		$ 29,960.00
3	High school principals, at	$3,300.00	9,9000.00
1	Principal of vocational school	2,000.00	2,000.00
1	Principal of evening school	1,400.00	1,400.00
15	Elementary school principals, at	2,400.00	36,000.00
3	Elementary school principals, at	2,100.00	6,300.00
11	Elementary school principals, at	2,000.00	22,000.00
3	Elementary school principals, at	1,800.00	5,400.00
	Total for all supervision		$112,960.00
	Percent of total maintenance cost spent for supervision		7.9

That Oakland again is not high in the amount spent for supervision may be seen by comparison with the same fifteen other cities used in Table No. 2, which gives the following result:

TABLE NO. 7.

Percentage of Total Maintenance Costs Spent for Supervision.

City.	Percent	City.	Percent
Seattle, Wash	3.4	San Francisco, Cal	9.7
Pasadena, Cal	4.9	Salt Lake City, Utah	9.9
Butte, Mont	5.0	Colorado Springs, Colo	10.2
Spokane, Wash	7.6	San Diego, Cal	10.2
Oakland, Cal	**7.9**	Portland, Ore	10.4
Denver, Colo	9.2	Sacramento, Cal	11.1
Tacoma, Wash	9.3	Los Angeles, Cal	11.1
Berkeley, Cal	9.3	San Jose, Cal	15.3
Average for the group	9.0	Median for the group	9.3

That Oakland also is not overstocked with supervisory officers, compared with other cities of its class, may also be seen from the following table, giving the number of supervisory officers per teacher in the different cities compared in Table No. 2.

TABLE NO. 8.

Number of Pupils in Average Daily Attendance for Each Supervisory Officer.

City.	Pupils per supervisory officer	City.	Pupils per supervisory officer
Colorado Springs, Colo	208	Spokane, Wash	369
Sacramento, Cal	252	San Francisco, Cal	397
Pasadena, Cal	262	Seattle, Wash	400
San Diego, Cal	283	Salt Lake City, Utah	403
Butte, Mont	296	Denver, Colo	423
Tacoma, Wash	331	Berkeley, Cal	433
Los Angeles, Cal	333	**Oakland, Cal**	**445**
San Jose, Cal	365	Portland, Ore	513
Average for the group	357	Median for the group	367

Tables 7 and 8 combined show clearly that Oakland is securing its supervision in large units and at a very economical rate.

The question as to the efficiency of this special supervision is one which cannot be answered without a careful educational survey of the schools. Oakland would be a marked exception to the general rule, though, if all of it were highly efficient. Generally speaking, the principalships of our American city school

systems contain more dead wood than any other part of the school systems, and it would be surprising if Oakland did not have some such dead wood in such positions. Principals and supervisors not infrequently become mere inspectors and record keepers, rather than helpful supervisors, and it should be one of the particular services of the two assistant superintendents to see that the principals, in particular, are kept alive, and that they render helpful service to their teachers and to the com munities they serve. By showing them how to hold helpful teachers' meetings, how to measure and test results in their schools, and how to assist and direct their teachers, the two assistant superintendents can render a very significant service to the school department.

Assuming that the supervision is good, however, Oakland has not too much, nor is it too expensive. Nothing pays so well as plenty of good leadership at the top. Money spent for mere inspection is to a large degree money wasted, but money spent for helpful leadership is money which gives large educational returns.

The supervision now provided might even be extended, with advantage to the schools. The plan of part-time supervision of language instruction in the departmental grammar schools might be extended to the work in history, geography, and English. Unless the teachers of Oakland are better trained in science than is true of most city school systems, a good supervisor of nature study and science instruction could be added with advantage. A supervisor of school gardening would also be very useful in such a city. A vocational guidance director for the school system, with a teacher in each high school giving some time to the subject, might also be an important addition to the supervisory corps.*

5. New high schools and new departments. The increase in enrollment in the high schools in the past five years from 2480 to 4045, and in average daily attendance from 2170 to 3089 in the same period, is evidence that the additional high-school instruction provided was needed. The surprising thing is that

* In the Technical High School, two teachers now devote part of their time to courses in "Survey of Vocations" and to advising students in regard to courses of study suitable to prepare them for the vocations they desire to enter.

the number has not been greater. In 1910-11 the average daily attendance in the high schools represented 12.7% of the total in all schools, and in 1914-15 it had increased to but 13.3%. In most cities the increase has been more marked than this.

The reorganization of the instruction in the two upper elementary-school grades along departmental lines ought to add still more to the number who desire to go further with their studies. The opening of the new Technical High School, with its varied courses of instruction along practical lines, may also be expected to add to the number and to the percentage of those who desire a high school education. If the growth of the city continues at its present rate, however, and no increase in the percentage enrolled in the high schools takes place, there will be over 4800 high school students by 1920, and if the city is to meet the needs of its children a new high school will probably need to be provided for within a relatively short time.

It is good for the institutions of democracy that a larger and larger percentage of pupils should be attracted to the secondary schools, and that courses which will interest a large variety of types of young people should be offered there. The introduction of commercial courses, home-economics courses, and technical courses to supplement the literary and general-science course, is to be commended. All such new work, however, adds materially to the costs for instruction, and this the city must be prepared to meet. Secondary-school instruction costs more than elementary-school instruction, and laboratory and technical instruction costs more than literary and book instruction. For many pupils, though, it is instruction of very large value, and well repays its larger cost.

6. Seventh and eighth grade reorganization. The process of reorganizing the two upper grades along departmental lines, thereby offering a better quality of instruction, and instruction along new lines, represents a very commendable beginning of the junior high-school idea. The weakest point in grade instruction has for long been in these two upper grades, due in part to the inability of teachers to be proficient in the advanced work of so many studies, and in part to the fact that the children themselves are changing, and the grade plan of instruction is no longer so well adapted to their educational needs. The

slight increase in the salary schedule for the teachers in these schools is moderate, and thoroughly justifiable, and the fact that the two upper grades can be reorganized after a departmental plan at an increased expense of from 8% to 10% speaks well for the plan from a financial point of view.

This expense, however, is too low, and ultimately more money should be spent on these schools. Before long, as the elementary-school buildings become more and more crowded and the high-school attendance increases, the best arrangement from an educational point of view, as well as the most economical plan from a school building point of view, would be to build five or six or possibly more new buildings, at central locations, designed especially for junior high school work. Into these the seventh and eighth grades from a number of adjacent elementary schools, and the ninth grade from the high school of the district, should be placed and taught along departmental lines. This would provide a superior grade of instruction, permit of a differentiation of courses to meet different needs which is not now possible, and give building relief in all parts of the city to both elementary and secondary schools.

The expense for such instruction, when properly organized, should lie about half way between the cost for elementary and secondary schools. The educational results obtainable under such a plan of instruction are much larger than can now be obtained in grade work. The evidence as to the greater efficiency of the junior high school is practically unanimous wherever it has been tried.

7. Expansion of the work in music. The band and orchestra work in the Oakland schools is, I think, regarded generally as among the best to be found in our city school systems. In very few cities in the United States are so many pupils interested in some form of self-expression along musical lines. In education, self-expression is what really counts.

The cost, in comparison with the returns, has been exceedingly small. The entire annual expense for musical supervision is but $9000 out of a total of $1,105,321 for instruction and $1,425,896.19 for total maintenance, or .0063% of the total. If anything like the same results in other subjects could be obtained from a similar expenditure of money, it would be short-sighted

economy not to spend it. Drawing, which is another form of self-expression, ought to be similarly expanded. The ultimate results would be an artistic and a musical city. Both subjects also possess high moral values.

8. New subjects of instruction. To improve the instruction in manual training, to add instruction in domestic science, to improve and expand the drawing, to add millinery and sewing, and similar lines of work, not only adds to the cost of instruction but requires more building space and equipment for the work. All such work naturally increases the percapita cost for instruction. It is no longer necessary to argue that such instruction has in it large educational value, and that for some boys and for many girls it is the most valuable work they do.

The expense for such work is at first markedly increased by the need for the employment of both supervisors and special teachers. This was once true of penmanship and of music and drawing,—subjects now usually taught by grade teachers. In time these newer subjects can be in large part so provided for. The present plan of the superintendent, providing for a reorganization of the domestic-science instruction along such lines, will effect a saving in special teachers of $18,000 during next year, and without impairing the value of the work. In time probably other sums can be so saved in this work and in manual training.

9. The department of health. Viewed from the standpoint of human welfare and happiness, this department should be classed with the supply and building departments as another money maker for the people. The chief difference is that in the case of the purchasing and building departments the savings are visible, and can be used to maintain other work, while in case of the health-development work the savings in otherwise wasted human life and vitality are personal, and cannot be cashed in to the school-department treasury.

There are two phases of this work. One relates to medical inspection, and aims chiefly at the detection and prevention of contagious diseases. This is valuable work, but it represents but a very limited field of activity, and ordinarily concerns only about 3% of the school children in any one year. The other goes much further and aims at the correction of developmental

defects. This brings the work to from 50% to 65% of the school children.

The number of school children in any city who are in need of examination, advice, and personal attention from physicians and nurses is so large as to surprise one unacquainted with school room conditions. Teachers, even, are often unaware of what exists under their very eyes. Of the 32,697 children enrolled in the Oakland schools last year, about 10% were poorly nourished and anemic, 50% had seriously defective teeth, 15% suffered from obstructed nasal breathing, 10% had enlarged cervical glands, 10% probably will die from tuberculosis, 10% had vision defective enough to require correction by glasses, 1% were nine-tenths deaf, 2% had organic heart disease, 5% were predisposed to nervous disorders, 1% to 2% had speech defects which should have been remedied, 10% to 20% had toothache frequently, 20% obtained from one to two hours too little sleep each night, and 50% were improperly nourished. To contribute to the elimination of these harmful developmental defects, to improve the work of hygiene teaching in the schools, and to see that sanitary conditions are provided, are very important functions of such a department. Not only is human physical welfare promoted, but the effectiveness of the ordinary instruction in the schools is increased as a result of attention to such developmental defects.

The present department for health work is doing good work, but there ought to be additions to its staff. The part-time assistant director should be replaced by another full-time examining physician, or by two half-time physicians. There should also be added a full-time woman physician, chiefly for high school girls; an eye, ear, nose, and throat specialist, on at least half-time; and a school dentist*, for full time. Two school nurses and a half-time school physician should be added for every 6000 increase in school children enrolled. The salaries paid at present are not high.

10. Physical training and school play-grounds. This work seems well organized, for both boys and girls, and appears to be under good direction. The salaries paid are not large. The

*Dr. Cubberley was not informed that the county now provides in the city of Oakland two school dentists.

records show that very valuable work in the elimination of developmental defects in children and in improving posture and body carriage are being done. The physical examination of the children and the prescribing of individual corrective work for each, with the organization of the physical-training work into groups suited to individual needs, are excellent features of the work.

Instead of costing too much, this work is costing too little. The staff of assistants is too small to handle the work properly, and the work now imposed on the teachers is much beyond what the board of education has any right to expect for the salaries it pays. With the organization of the upper grades along departmental lines, there should be a better organization and supervision of the physical training work in these grades. This will demand additional special assistance, though it may be possible to effect economies here, as in domestic science, by selecting departmental teachers who can also direct the physical training.

That Oakland may be doing as much as other cities are now doing is hardly a valid argument. The neglect of health and physique for the puzzles of arithmetic and the intricacies of technical grammar has long been a fundamental weakness of our schools.

The play-ground work is also a work of much importance for any large city, and the amount of it that is to be taken up is to be limited only by the desire of the city to provide directed play for its children, and the city's ability to provide playgrounds and play teachers. Money spent on this work represents money saved in the future on juvenile courts and police and jails.

11. Schools for atypical children; ungraded rooms. Careful studies made in many American cities, as well as studies made abroad, show that every city has its share of children whose mental capacity is such that they do not and can not profit by the instruction of the ordinary school. If kept in the grade rooms, they not only make no satisfactory progress, but they rob the brighter pupils by absorbing in wasted effort an undue proportion of the teacher's time. In every city not less than 1% of the school children are so mentally backward that their in-

telligence will never go beyond that which is normal for a twelve-year-old child, while an additional 2% would be very materially helped in their school progress by some form of special instruction for at least a portion of their school life.

At present Oakland provides a director for this work, at a salary about half of what is paid for similar service in eastern cities, and seven teachers of special classes. Each teacher for such work needs both teaching experience and special training, and should receive at least an equivalent of the special salaries provided for teachers of manual training and domestic science. Instead, Oakland pays them only the ordinary grade-teacher salary schedule. Judged by standards in cities which have properly developed this work, Oakland is getting a good service at a very low rate.

The classes provided, however, are not sufficient to meet the needs of the city. There are at least 300 children in Oakland who should be in classes for atypical children. A few should be in a state institution for the care of those of the lowest grade of intellect. As 15 such children is about a maximum for a teacher, it can be seen that the present provision represents about 40% of what is needed by the present school system. Again here, as in the work in physical training, the fact that Oakland is now making as good provision for the education of such children as other cities are making is not pertinent. Every year more and more cities are seeing that it is not economical to try to handle such children in the regular classes, and are making special provision for their education. The good work which Oakland has begun should be continued until all are properly provided for.

In addition to these atypical children, there are probably 500 to 600 more who are slow, and who need the help of an ungraded room, managed by a skillful coach teacher. With the large classes at present handled by the grade teachers (See Tables 5 and 6), and the tendency to increase their size* with the growth of the city, at least one ungraded room should be organized in each of the larger schools for the special instruc-

* An examination of the reports filed by school principals on June 2nd, estimating the size of each class for the opening of schools in August, indicates a steady growth in population and many large classes for next year.

tion of these laggards in the grades. Such rooms exist in most of our cities, and it is something of a surprise to find but seven such rooms in so large a city as Oakland. At least thirty additional ones should be opened. It is uneconomical to try to educate such children in a class of normal children. They are either neglected by the teacher or use up an abnormally large part of the teacher's time and energy, at the expense of the normal children. In the interests of economy and efficiency they should be segregated and given special help.

12. The vocational school. The organization of the vocational school, in the old Technical High School building, was an important addition last year to the school work of Oakland. Such schools have passed the experimental stage in eastern cities, and are now recognized as occupying an important place in a city's educational system. In a sense they are institutions for saving and making useful what has heretofore been regarded as waste product. Many boys and girls, to whom the ordinary literary work of the upper grades and of the high school meant little or nothing, and who formerly dropped from school at the earliest possible opportunity, find in such schools work that appeals to the best there is in them, and there lay the basis of useful, moral, and economically-profitable lives.

Such schools naturally cost more money than the traditional type of school instruction, and the thoughtless tax-payer is likely to complain in consequence. It is, however, possible, in a number of lines of the work taught, so to conduct such schools as to reduce materially the costs, and in some cases, even to render a profit on the instruction. This is particularly true of the work in printing, bookbinding, and cabinet making. However this may be, viewed from the standpoint of twenty years hence, they probably are wealth producers and tax reducers, as well as being moral institutions of a high order. In time Oakland will need a second school of this type.

13. Evening school extension. Oakland has here begun, very recently, what eastern cities have been developing for the past two decades. An examination of the work listed as offered would indicate that only a good beginning has as yet been made. The opening of the Panama Canal is certain to result in the development, for our western coast cities, of a foreign-born

problem such as our eastern cities have been trying for some time to solve. In the assimilation of these foreign people the schools must play the leading part.

This will involve a general reorganization and expansion of the evening school work, the establishment of "neighborhood schools" for the education of mothers, and the development of a public-school lecture system, including illustrated lectures and educational moving pictures. This will in time cost much money, but it will be a necessary city work. In the end it probably will prove to be, as all good education does, a money-making and a citizen-producing service, which will be manifest in the greater productive capacity and moral strength of the people.

The very small expense that Oakland has so far incurred in this direction may be regarded as only the merest beginning.

14. Desirable additions not yet developed. In addition to the special types of education and schools so far mentioned, there are other types of schools which have not as yet been developed, or at most have only been begun, and which a city the size of Oakland might reasonably be expected to provide. A mere mention of these is all that need be made here. These include better provision for the oral instruction of deaf children, too young to be sent to the state institution (the instruction of such children should begin at about three years of age); schools for non-English speaking children, youths, and adults; separate schools for the instruction of children three or four years or more over-age; special disciplinary classes for troublesome children; parental-home schools for the more acute cases; vacation schools; schools for children with marked speech defects; and neighborhood schools for the education of mothers in the care of children and the management of homes.

All these types of schools will add to the cost for schools, but they will give large educational returns. It may be confidently expected that in the near future the people will demand their establishment. In the process of changing public education from a class to a mass institution, provision must be made for types of education adapted to the needs of all classes which compose the mass.

Where to economize. A careful examination of the scope and needs of the Oakland school system does not reveal any place where any important economy is possible, if the school system is to continue to serve the needs of the children of the community. On the contrary, many places where additional amounts should be spent have been pointed out. Of course, if economies had to be made, it would be possible to abolish any one or more of the new lines of work just considered, such as kindergartens, domestic science, manual training, the vocational school, the technical high school, etc., or even all of them, and strip the school system down to what it was fifteen or twenty years ago. Still more money could be saved by abolishing the public schools entirely, and turning the whole business over to the private and parochial schools to handle. No progressive American city desires to do any of these things however, and the people will not long stand any unnecessary curtailment of the public school system. Having once tasted of its advantages, they want to continue to enjoy them.

In the part or chapter which follows, the problem will be considered from the financial side, and it will be shown that there is no need for any curtailment of the public school system in Oakland.

PART III.

The Financial Phase of the Oakland School Problem.

There now remains to be considered that phase of the educational problem which relates to the increasing cost for education in Oakland, and the city's ability to pay for a good school system.

Increase in maintenance costs. That the total costs for almost every item of city administration must increase in a growing city may be considered as self evident. The increase in population makes new demands, which must be met by additional appropriations for maintenance and for betterments. In a city that has increased as rapidly as has Oakland since 1906, any actual cutting down in the total sum appropriated for any department of government is hardly possible, unless the proper development of that department is to be seriously interfered with. Any period of rapid growth in any city calls for an expenditure of funds for extensions and betterments, which, in the total at least, appear to mount up very rapidly. Within recent years all expense items in every city department have been further complicated by the increasing cost of every form of labor and almost every item of supply or equipment furnished. That the school department has only shared with other city departments in this general increase of expenses may be seen from the statement that, during the past five years, the following appromixate increases in total annual maintenance costs have taken place.

Fire department	82%
Police department	60%
Street department	3%
Parks and boulevards	64%
Playgrounds	400%
School department	64%
Schools, per capita cost based on average daily attendance	22%

It is perfectly natural, with these rising costs for all forms of municipal service and with all municipal departments materially

increasing their expenditures, that the tax-payer should begin to complain, and should vote for a reduction in expenditures.#

Total costs, however, or even precentages of increase in the total costs, are not proper measure of development. Totals may be increasing, even somewhat rapidly, while the cost per capita or per unit of service may be decreasing. The real measure is to be found in the tax rate, based on real instead of assessed valuation, or in the per-capita-of-the-population costs.

Increase in tax rate in Oakland. To determine in how far increases in operating costs have been reflected in the tax rate, a study of the increases in both the city and the county tax rate has been made. As most of the school money comes from the county school tax, and as Oakland probably gets back nearly as much of this as it pays, the county and city tax rates for schools and for other purposes have been combined. The following table gives the results of the study.

TABLE No. 9.

Combined City and County Tax Rates for Schools and for Other Purposes Compared.

(NOTE.—This table is for the "original city," and does not include the annexed territory.)

Years.	City, District and County tax rate combined				Percent of total for annual school maintenance
	For school maintenance	For int. & redempt. sch. bonds	For other purposes	Total rates	
1905-06	.458	.16	$2.142	$2.76	16.6
1906-07	.48	.21	2.19	2.88	16.6
1907-08	.45	.09	2.15	2.69	16.7
1908-09	.4575	.10	2.0725	2.63	17.4
1909-10	.48	.10	2.12	2.70	17.9
1910-11	.74	.11	2.21	3.06	24.1
1911-12	.585	.165	2.51	3.26	17.9
1912-13	.58	.174	2.2726	2.97	19.5
1913-14	.69	.1656	2.2244	3.08	22.4
1914-15	1.09†	.2197*	2.3703	3.68	29.6

Our cities, as well as individuals, have recently come to feel that they can afford many luxuries. What the tax rate will not provide bonds have been voted for. City buildings, parks, waterfront improvements, boulevards, and other more or less non-productive acquisitions and betterments have been acquired, with a resulting added tax cost for their care and upkeep. To meet the interest charge and sinking-fund requirements on the borrowed money requires quite a large annual sum. In Oakland, in 1914-15, it required a property tax of 51 cents on the $100 to meet the interest and redemption charges on bonds issued by the city, and 5 cents additional for school district bonds. Together this equalled 44% of the total tax rate of ten years ago.

† Approximately 25 cents of this amount was due to betterments or new expenditures for land, buildings, etc., mentioned above.

* Includes a city tax of 2½ cents for new buildings, in lieu of bonding.

Represented graphically, the foregoing table gives the curves shown in the following diagram:

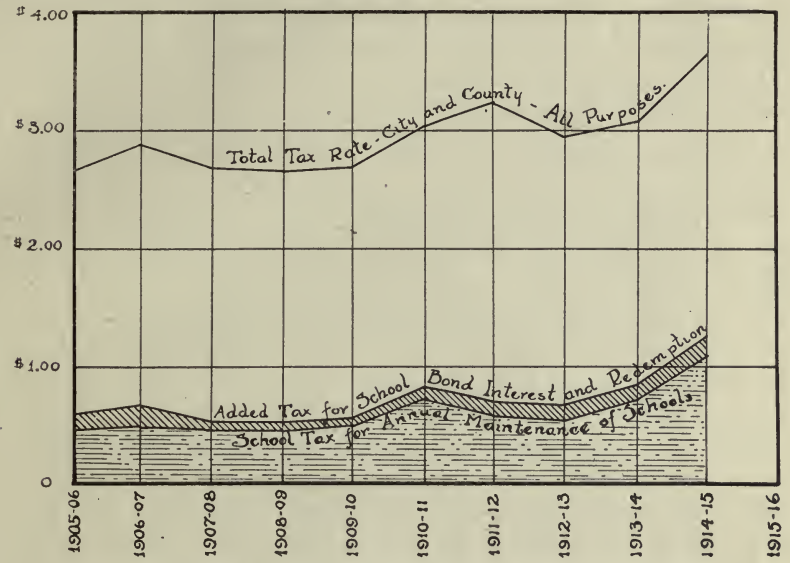

Fig. 1. Taxes for Schools and Total Tax Rate Compared.

An examination of both the table and the curves will show that the school rate has not increased during the period any more rapidly than has the general city and county tax rates combined. Only during the last year has the school rate increased at all rapidly. The increase during 1914-15 has been due in part to the fact that a building tax of 2½ cents was levied, for the first time; in part to the expenditure of the unusual sum of $345,235.78 (a sum over three times that of the preceding year) from the proceeds of taxation, for land, new buildings, and equipment.*

* During 1914-15, the following amounts, derived from taxation, have been so spent.

For land	$ 2,461.30
On new buildings	25,944.55
Alterations of old buildings	53,889.31
Equipment of new buildings	134,539.31
Equipment of old builldings	128,401.31
Total	$345,235.78
In 1913-14 the amount so spent was	$110,626.39
In 1912-13 the amount so spent was	$ 59,749.69

As this expense for buildings was incurred in part to put the school plant in good condition for the exposition year and the meeting in Oakland in August of the National Education Association, there is every probability that both the school tax rate and the percentage of all taxes devoted to school purposes will materially decrease in 1915-16.

Property valuation and school increase compared. There is another phase of the tax rate question that needs to be considered, and it is this: Are the city and county valuations increasing properly with the growth of the city? If not, tax rates must necessarily increase, even though the rate of expenditure remains the same. A tax rate of $3.60 on a 50% valuation is the same as a tax rate of $3.00 on a 60% valuation.

An examination of the city and county assessment totals for the past five years reveals the fact that the assessors have been increasing the property valuations but very slowly, while the county assessment on city property, upon which 87% of the school tax is raised, has increased but 15% in the last five years. The number of children in average daily attendance in the schools, however, has increased 34% in the meantime, and the number of teachers needed to teach these children has increased 39%. This would naturally increase the tax rate for schools approximately 15%, even though the per capita cost for education remained the same. This may be seen from the following table.

TABLE NO. 10.

City and County Assessments, and Growth of Schools Compared.

Year.	City Assessment	County Assessment	%of total school tax levied on county assessment	Children in average daily attendance	Average number class teachers employed
1910-11	$126,920,650	$117,344,224	96	17,332	507
1911-12	116,881,725	109,124,037	86	18,337	508
1912-13	129,467,400	127,156,828	92	19,175	552
1913-14	137,727,750	133,823,778	87	21,201	604
1914-15	141,691,600	135,592,527	87	23,216	707

The results shown in this table are also shown graphically in the following diagram:

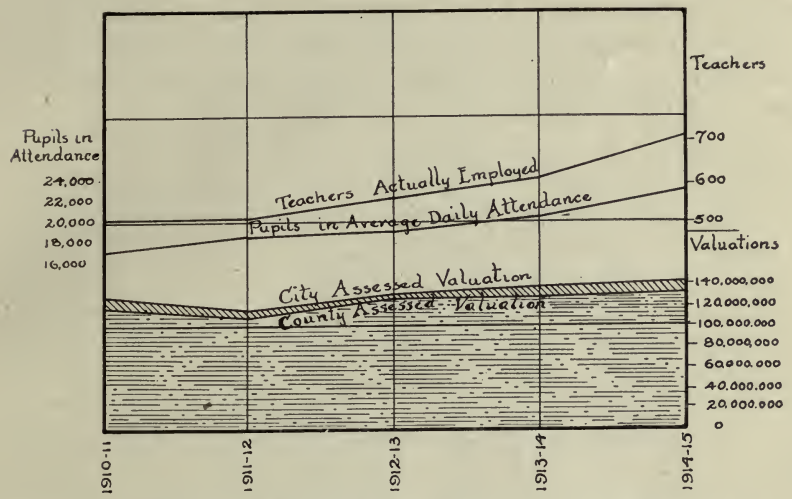

Fig. 2. Valuations, Attendance, and Teachers Employed Compared.

It will be seen from the table and diagram just given that the school tax rates, given in Table 9, have increased much more rapidly in appearance than in reality, and for the simple reason that the county assessment has not increased in the same ratio as the school attendance. The 19% jump in the combined city and county tax rate for 1914-15 can be in part accounted for by the increase of only 1.3% in the county assessment for the same year.

Percentage of taxes for schools compared. While the percentage of the total taxes devoted to public education in Oakland has increased rather rapidly during the past half dozen years, as shown in Table No. 9, due largely to the educational expansion of the school system during this period, as analysed in the preceding part of this report, it remains to be seen whether or not Oakland is even now expending a larger proportion of the total available taxes for education than ought to be the case. Perhaps, after all, the rise in percentage spent for schools has been in large part because the school department has only recently come into possession of its own.

Taking again the same sixteen western cities used in Table No. 2, and calculating from data given in the U. S. Census Bureau "Statistics of Cities for 1913," we get the table which

follows. Here again we are comparing Oakland for 1914-15 with the other cities for 1912-13, the last year for which statistics have as yet been published. This places Oakland somewhat at a disadvantage.

TABLE NO. 11.

Percentage of Total Local Taxes Devoted to the Maintenance of Education.

City.	Percent for schools	City.	Percent for schools
San Francisco, Cal.	12.7	Portland, Ore.	38.0
Denver, Colo.	29.4	Spokane, Wash.	39.1
Oakland, Cal.	**29.6**	Los Angeles, Cal.	39.4
San Diego, Cal.	31.4	San Jose, Cal.	45.3
Seattle, Wash.	31.5	Colorado Springs, Colo.	46.1
Butte, Mont.	34.2	Pasadena, Cal.	48.4
Sacramento, Cal.	34.3	Salt Lake City, Utah.	48.4
Tacoma, Wash.	36.7	Berkeley, Cal.	54.7
Average for the group.	37.8	Median for the group.	37.4

This table shows that Oakland is still below both the average and the median of all western cities of 25,000 or more inhabitants in the percentage of taxes devoted to public education. If San Francisco were omitted from the calculation the average would be raised to 39.5 per cent and the median to 38.0 per cent.

Can Oakland afford good schools? There yet remains the question, can Oakland afford to provide good schools for its children? This can be answered most easily by an examination of its assessed and real wealth per capita, and its per capita tax rate compared with all other cities we have previously used. The United States Census figures for 1912-13 will again be used, for the reason that these represent the most recent and the most reliable figures we now have in print with reference to city maintenance costs. Oakland's expenses have of course materially increased since 1912-13, but so have those in practically all the other cities. If the figures for 1914-15 were at hand for each city used for comparison, it is probable that the cities would not show any marked change in position.

TABLE NO. 12.

Actual Wealth and Tax Rates Compared, per Capita of the Total Population.

City.	Assessed wealth per capita	Average basis of Assmnt.	Real wealth per capita	City tax rate per $100 of real wealth	Tax rate per capita total population
Butte, Mont.	$ 596.91	75%	$ 795.88	$1.59	$12.65
San Jose, Cal.	648.61	60	1081.02	.929	10.07
Denver, Colo.	543.25	50	1126.50	1.538	17.33
Colorado Springs, Colo.	400.77	33	1202.31	1.155	14.71
Tacoma, Wash.	742.33	60	1237.22	1.049	13.13
Berkeley, Cal.	822.68	60	1371.13	.871	12.00
Oakland, Cal.	**738.96**	**50**	**1477.92**	**1.03**	**15.23**
Seattle, Wash.	721.24	45	1602.77	.908	14.59
Spokane, Wash.	699.77	42	1666.12	.735	12.28
Salt Lake City, Utah	589.23	35	1683.52	.794	13.38
Sacramento, Cal.	1042.03	58	1796.60	.956	17.18
Pasadena, Cal.	1280.94	66	1921.41	1.311	25.46
Portland, Ore.	1212.40	63	1924.44	.901	17.54
Los Angeles, Cal.	888.20	46	1930.87	1.413	27.63
San Francisco, Cal.	1193.32	45	2561.82	.99	26.25
San Diego, Cal.	1051.05	39	2695.00	.792	21.35
Average for group			$1629.66	1.06	$16.87

Perhaps Oakland's position may be seen still better if we give the real wealth per capita for a number of eastern and middle-western cities which are generally regarded as cities of wealth and as cities which maintain good school systems.

These eastern and middle-western cities show the following distribution of real wealth per capita of the total population.

I. Selected Eastern Cities

Jersey City, N. J.	$ 895.50
Yonkers, N. Y.	965.00
Worcester, Mass.	993.18
Newark, N. J.	1,012.27
Cambridge, Mass.	1,063.20
New Haven, Conn.	1,094.40
Syracuse, N. Y.	1,213.33
Pittsburg, Pa.	1,414.62
Oakland, Cal.	**1,477.92**
Washington, D. C.	1,523.97
Springfield, Mass.	1,556.11
Hartford, Conn.	1,715.10
Newton, Mass.	1,915.90
Boston, Mass.	2,061.84

II. Selected Middle Western Cities

Des Moines, Ia.	$ 932.60
Omaha, Neb.	1,249.10
Milwaukee, Wis.	1,252.12
Cincinnati, Ohio	1,319.67
Kansas City, Mo.	1,411.58
Indianapolis, Ind.	1,432.63
Oakland, Cal.	**1,477.92**
Duluth, Minn.	1,480.00
St. Louis, Mo.	1,698.51
Minneapolis, Minn.	1,872.44

These tables reveal Oakland as a city of average wealth among western cities and of much more than average wealth as compared with wealthy eastern and middle-western cities. The main table also shows that Oakland's tax rate per capita is somewhat less than the average for the group.

Per capita costs for maintenance. Another measure of Oakland's ability to maintain good schools is to be found in the per capita costs for maintaining the city government and the schools compared with other cities of its class. Such a comparison, based on the U. S. census figures for 1912-13, gives the following table.

TABLE NO. 13.

Costs per Capita for City Maintenance and Schools.

City.	Costs per capita of total population		Cost for schools per pupil in av. daily attend.
	For city maintenance	For schools	
Portland, Ore.	$12.60	$ 4.73	$49.95
Tacoma, Wash.	13.49	4.95	43.92
San Jose, Cal.	13.82	6.26	48.16
Spokane, Wash.	13.83	5.41	54.94
Salt Lake City, Utah	13.86	6.71	44.81
Berkeley, Cal.	13.90	7.60	62.20
Seattle, Wash.	16.05	5.06	60.50
Oakland, Cal.	**16.20**	**5.74**	**52.33**
Colorado Springs, Colo.	16.59	7.64	52.65
Sacramento, Cal.	16.67	5.72	64.75
Butte, Mont.	16.68	5.71	63.45
San Diego, Cal.	19.12	6.01	59.90
Denver, Colo.	19.48	5.72	48.07
Pasadena, Cal.	20.91	10.11	86.87
Los Angeles, Cal.	22.01	8.66	68.03
San Francisco, Cal.	22.43	4.27	44.86
Average for the group	$17.35	$ 6.27	$56.58
Median for the group	$16.40	$ 5.72	$53.80

Comparing the same selected groups of eastern and middle western cities used above as to cost per capita for schools, we get the following distribution.

I. Selected Eastern Cities

Syracuse, N. Y.	$4.52
New Haven, Conn.	5.03
Jersey City, N. J.	5.05
Cambridge, Mass.	5.14
Oakland, Cal.	**5.74**
Worcester, Mass.	5.90
Yonkers, N. Y.	6.22
Hartford, Conn.	6.26
Pittsburg, Pa.	6.26
Newark, N. J.	6.48
Washington, D. C.	6.56
Boston, Mass.	6.78
Springfield, Mass.	7.07
Newton, Mass.	8.72

II. Selected Middle Western Cities.

Indianapolis, Ind.	$4.51
Milwaukee, Wis.	4.59
St. Louis, Mo.	4.69
Omaha, Neb.	4.99
Duluth, Minn.	5.24
Cincinnati, Ohio	5.26
Minneapolis, Minn.	5.26
Kansas City, Mo.	5.58
Oakland, Cal.	**5.74**
Des Moines, Iowa	7.26

When we remember that in most of these eastern cities the salary schedule for teachers is lower than in Oakland, the position of Oakland in the matter of per capita costs is not unfavorable. To be sure Oakland's costs for 1914-15 would be somewhat higher, but the same would be true in nearly all the other cities of the list. The per capita costs in Oakland for 1914-15, too, would hardly be a fair measure of what the city would ordinarily spend. due to the large jump in expenses due to the organization of the new Technical High School in the middle of the year. The year 1913-14 would be a better measure of what the year 1915-16 will be.

Oakland's position in the matter of school expenses. Reviewing all the tables presented bearing on the costs for the Oakland system, and after making all due allowances for decreasing valuations of property and increasing costs in all other city departments, there is no denying that the expenditures for education in Oakland have materially increased within recent years. The educational expansion of the past half dozen years, as analyzed in part two, could not have been made without a marked increase in maintenance costs. Considering all that has been added and the educational value of the additions, the increase in costs for public education have been reasonable. Even now, Oakland is not spending as much for education, either in

percentage of total city expenditures or per capita of the population, as are other cities of its class. The rise in cost, too, has been in part an artificial rise, due to but slowly increasing property valuations. As was pointed out in the preceding part of this report, still more needs to be done if the schools of Oakland are to be made highly efficient community institutions, and if Oakland is to retain the position of prominence in educational work which the city at present holds. To stand still, even for a few years, means to drop toward the rear in the matter of public education.

Possible economies. Suppose, though, that it be urged that the people demand economies in their government, and that the cost for the schools must be reduced. Such an economy in money costs can always be made by cutting somewhere, though cutting in public education is quite a different matter from cutting in park development, street work, sewer extensions, or in the number of policemen. A child has but one chance for a good education, and what he is deprived of at the proper period can never be added later on. Still, if the people of Oakland think it of more importance that their taxes be reduced than that they continue to provide a good and a rich education for their children, and if they think that such a policy is a wise one to pursue from a real estate and a city welfare point of view, they of course have the right to order their representatives to cut the school system and save (?) money for the city.

Should it be decided to follow such a policy care should be taken to make cuts which will really reduce expenditures. To cut off a supervisor here, to take out a few special teachers there, or to cut a few salaries at different points, will not accomplish a saving of any importance. After all has been done perhaps a saving of not to exceed 1% of the cost of maintenance may be made by such means, but with a resulting loss of efficiency larger than the saving made. To achieve a really fundamental economy something large and important must be cut. The Technical High School, for example, might be closed, as the education given there is quite costly, largely because it is very good education. The Vocational School is also likely to prove somewhat costly, and this might be closed, even though it probably does more to make useful men out of irregular and

delinquent boys than anything else in the city. The health and development work and all work in physical training might be abandoned, on the ground that schools exist to impart information, and are not concerned with the health or physical welfare of the pupils. The domestic science and household arts work might also be abandoned with quite a saving, carrying out the theory that schools are not maintained to help make intelligent women or well-managed homes. These are types of really fundamental cuts. Such cuts, though, Oakland does not want made, and would not permit its board of education to make.

The only place in the school department where expenses may be cut down without seriously impairing the efficiency of the schools is in the building and maintenance of the plant. Less elaborate and less costly repairs may be made, less expensive school buildings may be erected, and the so-called "portables" may be made to serve for a time until the city is better able to erect new permanent buildings. In the work of administration and actual instruction, however, cuts should be made only as a last resort.

The real place for economies in city administration, however, lies in other departments than that which deals with the education of its future citizens. The school department should be the last to be affected. In a city with as large per capita wealth and as small a percentage of children of school age as Oakland, (14.1% between the ages of 5 and 14, as against an average of 17.4% for the United States as a whole), there is little reason why it cannot care for all its children, and provide them with an education which shall be one of the best offered by our American cities. A city that can afford a million dollar city auditorium and a two million dollar city hall, that is able to engage in expensive public improvements, and that can spend as much money on general city maintenance as does Oakland, can certainly afford to give its children the best educational opportunities.

APPENDIX A.

Estimated Expenditures of the Oakland School Department for the Fiscal Year 1914-1915, by Totals and Percentages.

Items, numbered as in Fiscal Schedule	Expense		Percentage Distribution
1-6, 9 Board of Education and Business Offices	$ 26,164.26		1.83
7-8 Superintendent's Office	13,383.17		.94
10 **Total Overhead Charges**		$ 39,547.43	2.77
11-12 Salaries and Expenses of Supervisors	33,032.78		2.33
13-14 Salaries and Expenses of Principals and Clerks	88,018.55		6.15
15 Salaries of Teachers	925,707.70		64.9
16-18 Other Expenses of Instruction	58,561.97		4.11
19 **Total Expenses of Instruction**		1,105,321.00	77.49
20 Wages of Janitors	$ 72,459.40		5.08
21-25 Other Expenses of Operation	36,692.86		2.57
26 **Total for Operation**		109,152.26	7.65
27-31 **Total for Maintenance**		129,203.87	9.1
32-39 **Total for Auxiliary Agencies**		34,818.63	2.44
40-46 **Total Miscellaneous Expenses**		7,853.00	.55
1-46 **Total Expenses**		$1,425,896.19	
Estimated Outlays or Betterments (Capital Acquisition and Construction)			
Land	$ 2,461.30		
New Buildings	25,944.55		
Alterations of Old Buildings	53,889.31		
Equipment of New Buildings and Grounds	134,539.31		
Equipment of Old Buildings and Grounds	128,401.31		
Total Outlays		345,235.78	
Total Expenses and Outlays		$1,771,131.97	