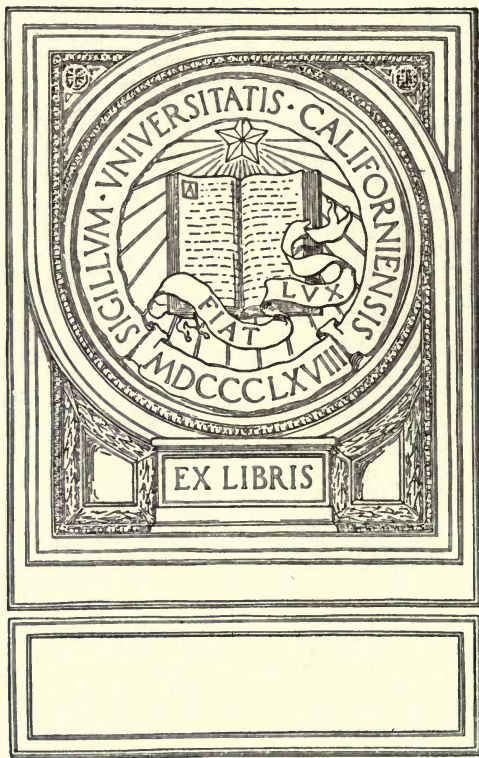
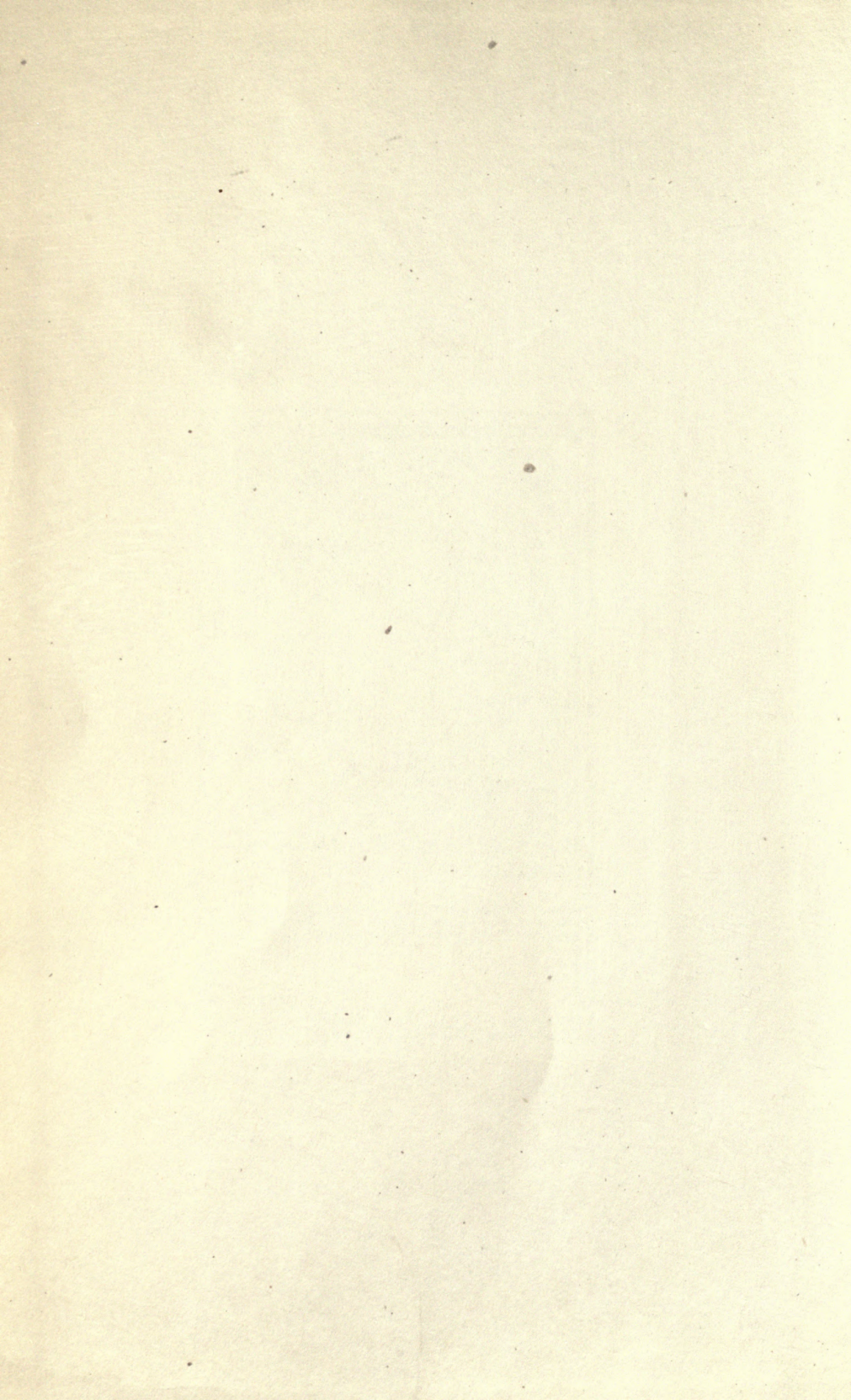


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ROAD LEGISLATION IN IOWA

IOWA ECONOMIC HISTORY SERIES
EDITED BY BENJAMIN F. SHAMBAUGH

HISTORY OF
ROAD LEGISLATION
IN IOWA

BY

JOHN E. BRINDLEY

PUBLISHED AT IOWA CITY IOWA IN 1912 BY
THE STATE HISTORICAL SOCIETY OF IOWA

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HISTORY OF
ROAD LEGISLATION
IN IOWA

BY
W. E. HARRIS

THE IOWA HISTORICAL SOCIETY OF IOWA
PUBLISHED AT IOWA CITY, IOWA, IN 1911



EDITOR'S INTRODUCTION

There is a widespread feeling that highway administration in Iowa is inefficient and that our road legislation needs rewriting. Indeed, the demand for adequate legislation as to roads is quite as general as the demand for tax reform. Moreover, wise legislation in the one case as well as in the other will seek to make advance along the lines of experience. Thus, the history of road legislation must be made the starting point in any well directed effort to inaugurate reform measures. To know what has been done and what is now being done, here and elsewhere, as to highway administration is to know what were best to do in the future.

The history of road legislation in Iowa reveals at every stage the supreme importance of local government in the State's administration. It is evident that the time has come when more attention must be given to administration in the townships and counties; for in the political readjustments which are pending the most extensive redefinition will be along lines of local administration. Moreover, in the redefinition of local institutions and methods of administration history will serve as our most helpful guide.

BENJ. F. SHAMBAUGH

OFFICE OF THE SUPERINTENDENT AND EDITOR
THE STATE HISTORICAL SOCIETY OF IOWA
IOWA CITY 1912

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AUTHOR'S PREFACE

In the preparation of this volume on the *History of Road Legislation in Iowa* the author has endeavored to make that thorough and impartial study of the historical facts and tendencies which is demanded not only for the *Iowa Economic History Series* but for all other publications of The State Historical Society of Iowa. Moreover, since it is now proposed to use the materials of this volume as the basis of a contribution to an applied history series, in which the subject of highways will be discussed in reference to a rational program of constructive legislation, exhaustive investigation and disinterested research are doubly imperative.

In reference to the scope of the present volume, the reader's attention is called to three important considerations. First, the history of road legislation is so closely connected with the history of township and county government that some overlapping in the discussion of these subjects is unavoidable. Second, this history of road legislation in Iowa does not include a concrete or detailed consideration of road and bridge administration for the simple reason that under the forms of local government which have prevailed in Iowa these problems belong primarily to township and county government; and so their detailed treatment may well be left for a county history series. Third, an historical and comparative analysis of the important facts and tendencies in relation to construc-

tive legislation and to administrative reform is not given in this volume for the reason that a paper dealing specifically with those phases of the subject will appear in the *Iowa Applied History Series*.

Where the subject of the present volume touches the history of township and county government the author's researches covered little more than the general history of local administration as recorded in the statutes. In this connection, fortunately, access was had to the as yet unpublished *History of Township Government in Iowa*, by Dr. Clarence R. Aurner, and to certain chapters of Dr. Frank H. Garver's *History of County Government in Iowa*. To both Dr. Aurner and Dr. Garver the author is indebted for valuable information and suggestions. Moreover, Dr. Aurner's *History of Johnson County*, and Mr. Crawford's *The County Judge System with Special Reference to its Workings in Pottawattamie County* are suggestive of the possibilities and the importance of research in the field of local administration in Iowa. Manifestly the history of actual administration in the townships and counties is essential to the proper understanding of problems connected with highways and bridges, the control and supervision of which have always been primarily a function of local administration.

The work of preparing this volume was greatly facilitated in many ways by that most excellent laboratory of historical research, The State Historical Society of Iowa. Under the pressure of numerous duties demanding his attention, the author would have been unable to complete the book for publication at this time had it not been for the invaluable assistance of the Society. In this connection

special acknowledgments are due to the Superintendent, Dr. Benj. F. Shambaugh, and the Assistant Editor, Dr. Dan E. Clark, for carefully editing the monograph and for making some important additions to the text of several of the chapters. The author is under obligation to Dr. Dan E. Clark for the preparation of the index, to Miss Eliza L. Johnson and Miss M. Florence Franzèn for verifying the references from the original sources, and to Professor L. B. Schmidt for a careful reading of the proof sheets. Mention should also be made of the courtesies extended by the Burlington Public Library, the State Law Library, and the Historical Department of Iowa.

JOHN E. BRINDLEY

THE IOWA STATE COLLEGE OF
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I

EARLY ROAD LEGISLATION IN THE TERRITORIES OF MICHIGAN AND WISCONSIN

1833-1838

No sooner had the Sac and Fox Indians vacated the lands which had been ceded to the United States by the treaty of September 21, 1832, than settlers from all parts of the Union began to pour into the Iowa country. Many came by way of the Ohio and Mississippi rivers. But this was by no means the only route by which the early emigrants reached the newly acquired lands west of the Mississippi. Traversing the main thoroughfares of Ohio, Indiana, Illinois, Kentucky, and Missouri in the years immediately following the treaty of 1832 were countless emigrant wagons "slowly wending their way over the broad prairies — the cattle and hogs, men and dogs, and frequently women and children, forming the rear of the van — often ten, twenty, and thirty wagons in company".¹ They were ferried across the Mississippi on flat-boats which were propelled by means of poles and oars or later by steam.

What determined the course of travel for these pioneer settlers on their way to the new country? Established roads, of course, there were none. Indian trails, worn down by the tread of herds of buffaloes, were sometimes encountered; and, although these narrow paths were better adapted to the Indian's single-file mode of travel, the pioneers followed them in not a few instances as the lines of least resistance. The Indians and the buffaloes had instinctively selected the most convenient routes along river banks, upon the ridges, across prairies, and through

timber-land to practicable fording-places in creeks and rivers.² Where no trail of any sort pointed the way, or where trees grew densely or fallen trunks blocked the path, the pioneers selected their own routes. Ridges afforded the best lines of travel for the ox and horse teams and heavy wagons because they shed rain quickly and were swept clean of brush and leaves and snow by the wind.

From 1833 until 1838 there was an almost total absence of public roads and bridges in the Iowa country: thoroughfares from place to place were but little more than what nature and travel made them. An eminent visitor from Europe after riding several miles across a newly settled prairie region in Iowa declared: "Road is, to be honest, mere euphemism here, a figurative expression, a sort of poetic license; as for a highway, there was none or just a trail."³ As a matter of fact the first roadways in Iowa were fairly well suited to travel — at least in dry weather, when streams were also easily fordable. But after a time when wagon wheels had worn deep grooves in the prairie sod, when heavy rains had filled these receptacles on level stretches or had washed deep gullies on the hillsides, and when sloughs and creeks and rivers were rendered dangerous or absolutely impassable in the absence of bridges and proper drainage, the pioneers found themselves face to face with the serious problem of adequate highways. Transportation except by canoe or flat-boat on the larger streams of eastern Iowa was rendered well-nigh impossible.

With hauling absolutely necessary and distances long, whether to village or to mill, the farmers of the Iowa country endured untold hardships. Moreover, transportation by means of slow-moving ox teams was much retarded by the inconvenience of ice and snow in the winter and by mud and rain in the spring. Becoming mired in some mucky slough and thus being indefinitely delayed was no uncommon occurrence. A well-known judge, when starting

on a twelve-mile stage journey to Iowa City in 1840, inquired of the driver how long it would take to make the journey. "About five hours, if we can find the bottom of the road", was the reply. This judge, who rode his circuit several times a year, has preserved for posterity a picture of the difficulties of travel in early Iowa in the following words:

We can hardly realize the trials and hardships of law practice forty years ago. . . . Think of the forded Iowa, the overflowing Cedar, the muddy Turkey, the deceitful English, the quagmire Fox Run, the Skunk and Coon, the Wapsy, and even for the most part the beautiful, placid and gentle Des Moines; and think of them as I have known them, without bridges, without boats, out of their banks and without bottom. Think too of the muddy roads and bottomless sloughs, of the mere blind paths from one village or settlement to another.⁴

The rapid settlement of the country west of the Mississippi River, following the opening of the Black Hawk Purchase, necessitated immediate provision for local government. Accordingly, the Iowa country, which had been without a local constitutional status since the admission of Missouri in 1821, was attached to and made a part of the Territory of Michigan in June, 1834. In September of the same year a system of local government was actually put into operation by the creation of the counties of Dubuque and Demoine, the establishment of the townships of Julien and Flint Hill, and the appointment of a list of local officials by the Governor.⁵ Moreover, the demands for a more adequate administration of local affairs led in 1836 to the establishment of the original Territory of Wisconsin, and in 1838 to the creation of the independent Territory of Iowa. Thus the most logical course of historical development for the local institutions of Iowa was from the Old Northwest through the Territories of Michigan and Wisconsin.

It would, however, be somewhat misleading to assume that the statutes of the Territory of Michigan as adopted or amended by the Legislative Assembly of the original Territory of Wisconsin were reenacted without important changes by the pioneers of Iowa. The fact that Robert Lucas, the first Governor of the Territory of Iowa, had come from Ohio where he had not only served as Governor but for years had occupied a seat in the legislature, would naturally insure attention to the local institutions of that State.⁶ Moreover, when one considers the fact that the early settlers of Iowa came from all parts of the Union — from the South as well as from New England and the Middle States — it is logical to expect to find in the early local government of this Commonwealth a somewhat complex structure, the product of forces and influences of which the origins are difficult to trace.

It is also obvious that any study of roads will of necessity lead far into the history of township and county government, since the care of roads and highways has always been regarded as a function of local administration. Indeed, the problem of the roads is a problem of local government. Furthermore, a study of the history of road legislation in this State must contain a review not only of the laws of Iowa but of the statutes of the earlier jurisdictions of the Old Northwest as well.

In his scholarly monograph on the *History of Township Government in Iowa* Dr. C. R. Aurner compares the first law relative to townships enacted by the Legislative Assembly of the Territory of Iowa with an early law of Ohio dealing with the same subject.⁷ In both of these laws it is made the duty of the township clerk "to record in a book to be provided by him for that purpose, all private roads and cart-ways, by the trustees established" — the compensation for such service being fixed at nine cents per hundred words in Ohio and at ten cents per hundred words in Iowa.⁸

To the student of comparative legislation it will be instructive to note in this connection that "An Act to provide for laying out and opening Territorial Roads", passed by the First Legislative Assembly of the Territory of Iowa, was taken practically verbatim from the statutes of Michigan and Wisconsin;⁹ and that "An Act defining the duties of supervisors of roads and highways" and "An Act for opening and regulating roads and highways", passed by the Second Legislative Assembly of the Territory of Iowa, were copied from the statutes of Ohio.¹⁰ These laws, it is evident, deserve a detailed consideration; but before making this analysis the road laws of the Territory of Michigan and of the original Territory of Wisconsin will be examined.

In 1830 "An Act declaring the roads established by the Government of the United States within the Territory of Michigan public highways, and for other purposes", passed by the Legislative Council of the Territory of Michigan, provided that when such roads were completed and accepted by the general government they should be placed under the jurisdiction of the commissioners and overseers of highways of the several districts and townships through which they passed.¹¹ The commissioners and overseers were, moreover, given the same authority over such roads as over the other public highways of their respective districts or townships. In order to form a clear understanding of the legislation which followed the passage of this act, however, it is necessary to make a brief study of the essential features of the system of local government which prevailed at that time.

By the provisions of a Michigan act approved on July 31, 1830, the township board was composed of the supervisor, the township clerk, and the justices of the peace or a majority of them, who were required to meet at the clerk's office on the first day of January.¹² Moreover, the powers and duties of the township supervisor are outlined in the

provisions of an act approved on April 17, 1833. Briefly stated, he was obliged to receive and disburse all moneys raised in the township for all township purposes, except moneys raised for the support of the poor; and he was required to render a true and complete account of receipts and expenditures, which was to be audited by the justices of the peace and the township clerk.¹³ In fact, the township board in their warrant to the collector of each respective town (township) required him to pay the sums raised and collected for town (township) purposes into the hands of the supervisor of the town (township).¹⁴ Thus it appears that the supervisor from a legislative standpoint was an important county official, while from a fiscal standpoint he was a township official possessing large powers and responsibilities.

From an examination of the statute laws it is apparent that by 1834 a complete system of township organization and government had been established in the Territory of Michigan. The inhabitants of the several townships of the Territory who were qualified to vote for Delegate to Congress had the right to meet annually on the first Monday in April and select the following township officers: one supervisor, one town clerk, not less than three nor more than five assessors, one collector, two directors of the poor, three commissioners of highways, as many constables, fence viewers, and pound-masters as might be necessary, and a number of overseers of highways corresponding to the number of road districts in each of the townships.¹⁵ It is evident that the township had become a very important unit of government with reference to the assessment of property and the collection of taxes on the one hand; and in the laying out, building, and maintaining of roads on the other hand. The influence of New England and New York is clearly seen in this legislation. In fact, the county board of supervisors, composed as it was of representatives from

the civil townships, was modeled after the New York or township-county system. Judged from the important standpoint of representation it was in reality a township rather than a county board.

Now the significance of the legislation enacted by the Territory of Michigan prior to September, 1834, is apparent from the provisions of an act of the Legislative Council approved on September 6, 1834, establishing the counties of Dubuque and Demoine and creating the townships of Julien and Flint Hill west of the Mississippi River. Among other things this act provides that "All laws now in force in the county of Iowa, not locally inapplicable, shall be and hereby are extended to the counties of Dubuque and Demoine, and shall be in force therein".¹⁶ In other words, the acts dealing with the subject of roads passed prior to September, 1834, are directly connected with, indeed form a part of, the early history of road legislation in the Territory of Iowa which will be considered in Chapter II.

Turning now to the more important statutes enacted by the Territory of Michigan on the subject of roads and road administration it appears that "An Act to regulate Highways" approved on April 17, 1833, is very comprehensive and gives a detailed outline of the methods employed in building and maintaining roads and bridges. By the provisions of this act it was made the duty of the commissioners of highways to give directions relative to the repairing of roads and bridges within their townships; to regulate roads already laid out and alter such as a majority of them might deem convenient and desirable; to see that all roads were entered on record in the township clerk's office; to keep in repair all highways and bridges; to see that due and proper notice was given to persons assessed to work on the highways; and to have full power and lawful authority within certain restrictions to lay out new roads, when the same were deemed necessary and proper, and to

discontinue old roads and highways. In other words, the commissioners of highways, who were elected annually, possessed extensive powers of supervision and control in regard to the construction and maintenance of both highways and bridges.¹⁷

In order to carry out the actual work of road administration, the township commissioners of highways or a majority of them were clothed with authority to divide the township into a convenient number of road districts and to assign to each district a resident overseer. This, of course, meant further decentralization in the important work of road supervision — the township being broken up into sub-districts for that purpose.

The general powers and duties of the overseers of highways, as prescribed by the statute under consideration, are defined in these words:

That it shall be the duty of overseers of highways to repair and keep in order the highways within the several districts for which they shall be elected; to warn all persons assessed to work on the highways in their respective districts to come and work, when required to do so by the commissioners or any of them; to collect all commutation money, and to execute all such orders of the commissioners of the township to which they belong, as shall be given them in conformity to law; and if any overseer shall be employed more days in executing the several duties enjoined on him by this act than he is assessed to work on the highways, he shall be paid for the excess at the rate of seventy-five cents per day, and be allowed to retain the same out of the monies which may come into his hands for fines, in conformity to this act, but shall not be permitted to commute for the days he is assessed.¹⁸

All freeholders and every free male inhabitant between the ages of twenty-one and fifty, except clergymen, were required to work on the highways. The commissioners of highways in each township were directed to hold an annual meeting on the fifteenth day of May and to meet as often

thereafter as seemed necessary. At the meeting of the commissioners the township clerk presented a complete list of all the persons residing in the township liable for highway taxes — which list had been received from the various road overseers. On the basis of this list the township commissioners of highways were required to apportion the necessary amount of highway labor among the persons returned by the overseers of the various road districts. The apportionment of work having been made, the township clerk was required to prepare a copy of the lists and after signing and attaching warrants thereto, to deliver the same to the overseers, which lists served as a basis for actual work in each road district.¹⁹ It is thus apparent that the road overseers, the township commissioners of highways, and the township clerk formed a definite local organization for the administration of roads and bridges.

The actual work of the overseers of highways in the sub-districts of the township is clearly outlined in the statute. Among other duties, they were given authority to make an assessment for extra work to be apportioned as nearly as possible on the same basis as regular work and not to exceed one-third of the number of days already assessed in the same year. The overseer also allowed credit for teams and tools as outlined in the statute and received payment in cash when any taxpayer so desired, the money being applied and expended for the improvement of roads and bridges in the same district. Finally, it was the duty of overseers of highways to give at least two days' notice to all persons assessed to work on the highways and, in case of refusal to work or to pay the amount in cash, the overseer was given power by virtue of his warrants to collect the same, together with the penalty prescribed by law.²⁰

The commissioners of highways in the several townships were given authority to assess upon all farms owned by non-residents a due and equitable proportion of the high-

way tax according to the valuation made by the assessor. In case the non-resident failed to have the necessary labor performed or to pay the commutation money in lieu thereof, it was made the duty of the overseer to report the same to the commissioners of highways, who in turn were required to post in some public place an accurate description of the land owned by the non-resident, which description was filed with the treasurer of the county, and the lands thus taxed were made liable in the same manner and under the same penalties as in the case of failure to pay county taxes. The commissioners also had the power to direct the overseer of highways to purchase scrapers and other tools necessary in working the roads.

After the actual work on the roads was completed, it was made the duty of the overseers of highways to "render an account to the commissioners of the township, or any two of them, who shall meet together on that day for the purpose of receiving such returns, of all persons assessed to work on the highways in the district of which he is overseer; of all those who have actually worked on the road or highway, with the number of days they have so worked; of all those who have commuted, of the manner in which the monies arising from commutations have been expended; and shall pay to the said commissioners all monies remaining in his hands unexpended, to be applied in making and improving the roads and bridges in said township, in such manner as they shall direct; and if any overseer shall neglect or refuse to render such account, or, having rendered such account, shall refuse or neglect to pay any balance which may then be payable by him, he shall forfeit the sum of five dollars; which said penalty and balance, so unpaid, shall be recovered by the said commissioners, or the survivor or survivors of them, in their or his name, by action of debt, in any court having cognizance thereof, with costs of suits; and the forfeiture so recovered shall, by the

commissioners, or such survivor or survivors of them, be applied in making and improving the roads and bridges in such township."²¹

Penalties were imposed upon all overseers of highways who neglected or refused to carry out their duties as prescribed by law. In case of any vacancy in the office of overseer, by death or otherwise, the commissioners of the township in which the vacancy occurred were clothed with authority to appoint a successor possessing the same powers, subject to the same orders and liable to the same fines, forfeitures, and penalties as the overseer elected or appointed in the first instance.

The method of laying out roads through improved or orchard land is described in detail by the act, the commissioners of highways being given authority to lay out such a road on application of twelve freeholders of the township certifying that the same was necessary and proper. In case roads were actually laid out through cultivated, improved, or orchard land, the owner was allowed the damages which he had sustained, the same to be determined and assessed by two justices of the peace and by the oath of twelve freeholders not having an interest in the land to be laid out as a road or highway, or by three commissioners appointed by a judge of the circuit court of the county in which the land was situated.²²

In case of a disagreement between the commissioners of different townships in regard to the laying out of a new road, or the alteration of an old road extending into both townships, it was made the duty of the two boards of commissioners to meet together at the request of either board and make their determination upon the subject of their disagreement. It was further provided that roads located upon the line between two townships should be laid out by two or more of the commissioners of highways of each of the townships, the same to be divided into two road dis-

tricts, one to be located in each township. The method of laying out and working private roads was also specifically defined by the statute.²³

By the provisions of the act under consideration, public roads laid out by the township commissioners of highways were required to be not less than four rods wide, while private roads were not to be less than two rods wide. Public roads were to be opened within six years after the passing of the act or within six years from the time the same were laid out, otherwise such roads ceased to be public highways for any purpose whatsoever. Moreover, all public highways laid out according to law and of which a record was kept in the office of the county clerk continued to be public highways unless altered or changed in conformity with the provisions of law.

Penalties were prescribed for the obstructing of any highways; and the money thus obtained was to be paid into the hands of the commissioners of highways and be applied in improving the public roads and bridges of the township where the penalty was imposed. The law also specified the method of removing encroachments from highways, provided necessary penalties in case the same were not removed, and further stipulated the exact method for fixing or determining the penalties.²⁴

The extent to which the administration of roads and bridges was at this time (1833) a township function is apparent when one considers the large powers conferred upon the commissioners of highways at every stage in the progress of the work. The section outlining the nature of the report made by the commissioners of highways at the close of the year for which they were elected reads as follows:

That the commissioners of highways in each of their respective townships shall render to the supervisors, township clerks and justices of the peace, or a majority of them, at their meetings on the Tuesdays preceding the annual township meeting, an account of the

labor assessed and performed on the highways in their respective townships, and of the sums received by them for fines and commutations, and all other monies received under this act, and the improvements which have been made on the roads and bridges in their respective townships during the year immediately preceding such report, together with an account of the state of such roads and bridges, with a statement of the improvements necessary to be made thereon, in any particular road district, and an estimate of the probable expense of making such improvements, beyond what the labor to be assessed in such district in that year will accomplish; and the said supervisor, township clerk and justices, at their meeting as aforesaid, shall examine said account and make out a certificate containing the substance thereof, and deliver the same certificate to the township clerk of said township, to be by him kept on file, for the inspection of any of the inhabitants of said township; and the commissioners shall, under their hands, declare to the supervisor of such township a like statement of the improvements necessary to be made in any particular road district, on the roads or bridges, and that in their opinion the labor to be assessed in such district, in such year, will not be sufficient to make such improvement, but that the inhabitants would be overburthened, to be required to perform the same without aid from the township, and in that statement set forth the sum they would recommend for that object, and the said supervisor shall lay the same before the board of supervisors at their next meeting; and the said board of supervisors are hereby required to cause the same to be assessed, levied, and collected, in such township, in the same manner the other contingent charges are by law directed to be levied and collected, and which sums, when so collected, shall be paid over without delay, by the collector of such township, out of the first monies coming into his hands, except the money raised in such township for the support of the poor thereof; to be paid to the township clerk of such township, and by him to the overseer of the road district where the same is to apply, on the order of one or more of the commissioners of highways of such township: *Provided*, That the monies to be raised as aforesaid, in any one township, and in any one year, for such purpose, shall not exceed one hundred dollars.²⁵

The decentralization of the system providing for the administration of roads and bridges is obvious from a careful reading of the section just quoted. The work of supervision and control was parcelled out among a large group of local officials without any scientific plan or definite purpose. The method, however, of dividing the expense between the township and the road districts concerned, in order that the inhabitants of a certain road district might not be overburdened, is worthy of special mention since it has a direct bearing upon the problem of properly distributing road and bridge taxes between the various units of government — State, county, and local.

In order to prevent the taxpayers of any particular township from being unreasonably overburdened by erecting or repairing any necessary bridge or bridges in such township, the county board of supervisors was given authority to levy a regular county tax to meet all or such part of the expense as they might deem proper for that purpose. The money thus collected was paid over to the commissioners of highways of the township in which the same was to be expended on the order of the supervisor. The purpose of this provision was obviously to bring about a more equitable distribution of road taxes as between county and townships. In other words, the road law under consideration provided a method of apportioning extraordinary burdens, first as between the township and the road district, and second, as between the county and the township.

After stipulating that the township commissioners of highways should cause proper guideposts to be erected²⁶ and be allowed one dollar per day for every day they were employed in carrying out their official duty, the act provides an additional safeguard for the rights of the individual. In case any persons were not satisfied with the determination of the commissioners of highways either in laying out, altering, or discontinuing highways, or with any refusal to

lay out or alter or discontinue any road, they were given the privilege within twenty days thereafter to appeal to the judges of the circuit court, who were required to meet at the earliest convenient date and determine whether the grievance was well founded. It was further provided that roads laid out in accordance with the decision of judges could be changed only by order of the same judges or of their successors in office. Briefly stated, this clause provided for a definite judicial administration of highways under certain conditions, which might protect the rights of the individual, but which did not necessarily insure the efficient administration of law. This provision meant a further decentralization in road administration. In other words, it emphasized individualism at the sacrifice of efficiency.

As a matter of fact, one of the most important characteristics of the Michigan road law of 1833 was the extent to which authority was carefully parcelled out among a group of local officials. Thus it is that in the study of road legislation one meets with the fundamental principle of our constitutional and legal system that the rights of the individual may be best conserved by following to its logical conclusion the so-called doctrine of the separation of powers. Moreover, this principle, which underlies the organization of both the Federal and State governments, has in a large measure been adopted in the field of local government. Thus in the law under consideration there is evident a careful balancing of authority and power between the county, the township, and the road district or subdivision of the township. Not content with dividing up the supervision of highways between the county board of supervisors acting as a county legislative body (each supervisor acting as the legislator of his township), the township commissioners of highways, the sub-district overseers of highways, the juries of freeholders appointed for various

purposes, the township collector, and the township clerk, the Michigan statute provides for an appeal to the judges of the circuit court to guarantee still further the rights or supposed rights of the individual. It should be especially noted that the appeal was not made merely for a judicial purpose, but that the administration of roads under such conditions was actually placed in the hands of the court. Considered from the standpoint of local government the Michigan statute is an example of how the work of administration may be broken up, decentralized, and dismembered so that practically nothing is left except a confused mass of statutory provisions.

Moreover, it should be observed in this connection that while there were laws on the statute books, very little in the way of actual work was done on the roads in the sparsely settled region west of the Mississippi during the years from 1834 to 1836 when the Iowa country was under the jurisdiction of the Territory of Michigan. The settlements for the most part clung to the banks of rivers and creeks, and waterways were the avenues most used for the marketing of farm products. Furthermore, the pioneers were primarily interested during the first years in building houses and clearing the land. Hence it is probable that little effort, official or unofficial, was made to improve the condition of the old Indian trails, which were practically the only roads of that day, except perhaps to throw a few new logs across a muddy creek or to clear a new path through the forest.

The cumbersome and confused system of road administration adopted in the Territory of Michigan was not, however, required by the pioneer conditions which prevailed in the original Territory of Wisconsin. The country was sparsely settled, and for that reason, if for no other, a larger unit of organization and administration seemed to be desirable. And so an act was passed by the Council and House of Representatives of the Territory of Wisconsin

and approved on December 7, 1836, amending a series of Michigan acts, including the one regulating highways which was approved on April 17, 1833. The Wisconsin statute provided that "each county within this Territory now organized or that may be hereafter organized, be and the same is hereby declared one township, for all the purposes of carrying into effect the above recited acts, and that there shall be elected at the annual town meeting in each township three supervisors, who shall perform, in addition to the duties heretofore assigned them as a county board, the duties heretofore performed by the township board."²⁷ The same statute stipulated that the township clerk elected in each county should, in addition to the duties already prescribed, perform the duties of clerk of the board of supervisors. Finally, the sum required to commute for work on the highways was increased to \$1.25 per day. In other words, the basis of local administration was in name the township, but in fact it was the county: the duties heretofore performed by the township board were now placed in the hands of three county supervisors.

By the time the original Territory of Wisconsin was established in 1836 the settlements west of the Mississippi had extended further into the interior, away from the larger rivers and streams, and the need of more adequate roads began to be keenly felt. Moreover, thriving towns had sprung up from one end of the Black Hawk Purchase to the other, and there arose the necessity of routes for overland communication between these towns which would be at least reasonably dependable during all seasons of the year. The financial condition of the people and the fact that the settlements were widely scattered seemed to require something more than laws providing for the laying out and improvement of roads by local authorities. And so the Legislative Assembly established the policy of providing by law for the laying out and opening of what were

known as Territorial roads between the principal towns and settlements of the Territory in order to facilitate trade and travel and promote the settlement of the country, the expense of laying out and caring for such roads being paid by the counties through which they passed.

Thus was inaugurated the practice of establishing Territorial roads in the Iowa country by special acts of the legislature — a custom which was not abandoned until the State of Iowa adopted its second Constitution in 1857. During the two years from 1836 to 1838 three Territorial roads were established in that part of the original Territory of Wisconsin which lay west of the Mississippi River, while others were laid out in what is now the State of Wisconsin.²⁸

The first road mentioned in connection with the Iowa country was provided for by "An Act to locate and establish a territorial road west of the Mississippi", which may be cited as typical of the acts establishing Territorial roads passed during the Wisconsin period. Enacted by the Council and House of Representatives of the Territory of Wisconsin in 1836 this statute provided that Abel Galland, Solomon Perkins, Benjamin Clarke, Adam Sherrill, William Jones, and Henry F. Lander should act as commissioners "to make and lay out a territorial road west of the Mississippi, commencing at Farmington on the Des Moines river, thence to Moffit's mill, thence on the nearest and best route to Burlington, in Des Moines county, thence to Wapello, thence by the nearest and best route to Dubuque, and thence by the nearest and best route to the ferry opposite Prairie du Chien."²⁹ The road thus surveyed and layed out was to be marked "by stakes in the prairie at a reasonable distance apart, and by blazing trees in the timber".

The act provided in detail as to the meeting place of the commissioners, the appointment of competent surveyors

and chain carriers, and for the payment of the same. The surveyor or surveyors were required to "make out, a true and correct plat and field notes by him or them kept in locating said road, within one month from the completion of the survey thereof".³⁰ One copy of the plat and field notes was filed in the office of the clerk of each county through which the contemplated road passed, and the clerks of the various counties were required to record and preserve the same, and the road when completed was to be forever a highway.³¹ Moreover, the road thus provided for was to be kept in repair in the same manner as county roads, but no part of the expenses incurred or damages sustained by any person laying out the same was to be paid out of the Territorial treasury.

The commissioners appointed to lay out this road were required within three months after the completion of the survey to make a report of the manner in which their duties had been discharged, including the estimated cost of constructing the necessary bridges. One copy of this report was to be filed in the office of the clerk of the district court of each county through which the road passed.³²

It was not alone by special acts, however, that provision was made for the laying out of Territorial roads, for on January 3, 1838, there was approved "An Act to provide for laying out and opening territorial roads", which was general in character. In the first section of this act it was stated that all Territorial roads established in the future should "be viewed, surveyed and established, and returns made thereof, agreeably to the provisions of this act, within two years from the passage of the act by which said road or roads may be granted, or authorized to be laid out respectively." The commissioners appointed to establish the road were required to cause a correct survey to be made, to mark the route by stakes or by the blazing of trees, and to set mileposts which should be numbered in regular progression from the beginning to the termination of the road.

Furthermore, the commissioners and the surveyor were required to file with the Secretary of the Territory "a certified return of the survey, and plat, of the whole length of said road, specifying in said return the width, depth and course of all streams, the position of all swamps and marshes, and the face of the country generally, noting when timber, and when prairie, and the distance said road shall have been located in each county." There was also to be deposited with the clerk of the board of county commissioners of each county through which the road passed a similar plat for that portion of the road which was located in the county in question. All Territorial roads were to be sixty-six feet in width, and all expenses incurred in their establishment and maintenance were to be borne by the counties through which they passed on the basis of an equitable apportionment.³³

Turning again to the general history of road legislation it will be noted that in "An Act for opening and repairing or vacating public roads and highways", passed by the Council and House of Representatives of the Territory of Wisconsin and approved on January 15, 1838, there appears a complete and radical change from the township to the county system of road administration.³⁴ As a matter of fact the act of December 7, 1836, by providing for three county supervisors, who were required to perform the duties that had previously been assigned to the township board, paved the way for this important change in local administration. Unfortunately no contemporary evidence aside from the statutes themselves seems to exist in reference to the reasons which prompted this change to the county system of road administration.

By the provisions of an act approved on December 20, 1837, entitled "An Act organizing a board of county commissioners in each county in this territory", county government was placed in the hands of three commissioners who

were elected for a term of three years, one retiring each year.³⁵ The old board of supervisors was required to deliver over all the books and other office records to the newly constituted county commissioners at their first meeting. The commissioners, moreover, were given extensive powers and authority, including the general supervision of roads and bridges. This meant, at least on paper, a large degree of centralization in the work of actual road administration.

In the matter of highways the Wisconsin act of January 15, 1838, provides that "the board of county commissioners shall have authority to make and enforce all orders necessary, as well for establishing and opening new roads, as to change or vacate any public road or part thereof, in their respective counties."³⁶ Applications for new roads were to be made by petition signed by at least fifteen householders of the township in which the road was desired, specifying in detail its location. Notices were posted in three or more public places and the petition was publicly read. After the requirements of law as to petition and notice had been complied with, the board of county commissioners, if they regarded the road necessary, appointed three disinterested electors of the county to act as viewers who were required to lay out the road and file a report of the same.³⁷

After receiving the certified copy of the report submitted by the viewers, the board of county commissioners was clothed with authority to have the proposed road opened and repaired a necessary width, not exceeding sixty-six feet, after which it was considered a public highway. Thus it is apparent that the real power in the matter of laying out and opening roads under the Wisconsin statute was in the hands of the county board — the viewers merely acted as agents of the board for carrying out certain detailed work and filing a report.

While the law thus brought about a considerable measure

of centralization in the work of highway administration, it must not be supposed that the rights and privileges of the individual taxpayer were not carefully safeguarded. As a matter of fact the individual was protected in a great many ways against possible injustice. First of all, if any person "through whose land the said road may run" was not satisfied with the findings of the reviewers and the recommendations of the board, he had the privilege of setting forth his grievances and of making remonstrance. In case such a remonstrance was made it was provided that the board of county commissioners "shall thereupon appoint three disinterested electors and assign a day and place for them to meet."³⁸ The electors thus appointed acted as reviewers of the road in dispute and, after due notice, were required to examine carefully the road, assess the damages, if any, and report the same at the ensuing session of the board. In this way an individual might obtain redress in the case of a road running through his land.

In addition to the right of the individual as such to obtain damages by making a remonstrance to the board of county commissioners, it was provided that if three electors of any township objected to the proposed road as not being of public utility, other reviewers should be appointed by the county board and required to proceed to make a careful examination of conditions, assess damages, and file a report similar to the one already outlined. In other words, the taxpayers were given double protection in regard to the assessment of damages connected with the laying out and opening of public highways.

The statute also carefully outlines the methods by which any person or persons might have the course of a highway changed, in case they desired to cultivate the land where the road in question was located. Two methods of changing the course of a road are specified; but it is provided in the case of Territorial roads that "the old road shall not be

vacated, until the person or persons applying for such alteration shall cut open and repair the new fully equal to the old road."³⁹ In case the road proposed to be changed extended into more than one county the exact method of bringing about such change is outlined in the statute. In short, the rights and privileges of individual taxpayers are protected in the same minute detail both as to the laying out and opening of roads and as to the changing of the same.

The method of vacating any road or highway which is deemed useless is likewise worked out with the same regard for the interests of individuals. A petition signed by fifteen householders of a township asking that a road be vacated must be publicly read on two different days of the session of the county board at which the petition is presented. At the following session it is again publicly read, and if no remonstrance is made the board may proceed to vacate the road in question, the costs being defrayed by the county.⁴⁰ In case remonstrance is made, however, the board is required to appoint reviewers who shall be given the same powers as are granted to the reviewers appointed in the case of the opening and the laying out of new highways.

By the provisions of the same statute a tax for building and maintaining highways and bridges was levied on both persons and property. Every male inhabitant between the ages of twenty-one and fifty years, except those specially exempted by law, were required to work on the roads two days annually — it being the duty of the supervisors to see that this work was performed. The law provides that "all real estate, as well the property of non-residents as residents, shall be subject to be taxed annually, for the purpose of opening and working the public highways, which tax shall not exceed one per cent., and shall be levied by the board of county commissioners, as other taxes are."⁴¹ The board of county commissioners was required to assess this

tax, and copies of the assessment were to be delivered by the sheriff to the supervisors of the various road districts. The taxpayer, however, was given the right to discharge the tax thus imposed by actual labor upon the highways, for which he was allowed the sum of two dollars per day. The method of giving notice, the penalties inflicted, the amount of compensation allowed for furnishing plows, wagons, and horses, and a number of other details may be found in the statute.⁴²

Moreover, the actual work of laying out, opening, and supervising roads and of building and maintaining bridges was placed in the hands of road supervisors appointed by the board of county commissioners, and it was specifically provided that "any householder or elector refusing to accept said appointment of supervisor, or to take the oath required, shall forfeit and pay the sum of six dollars to be recovered by presentment or indictment".⁴³ No person, however, was obliged to accept the appointment as supervisor oftener than once in four years. The board of county commissioners also assigned to each supervisor a definite road district, setting forth the boundaries of the district and allotting the number of hands to be employed. Each supervisor was allowed one dollar and fifty cents per day for all work performed over and above two days for his personal liabilities and the amount required to pay his own road tax. Penalties for neglect of duty were also prescribed by law.⁴⁴

Two methods of bridge building are clearly defined in the Wisconsin statute. The board of county commissioners might direct the road supervisors to build bridges if they considered it expedient; or they might appoint three residents of the proper township to act as superintendents of the building of such bridges. The law further stipulates that the superintendents shall advertise "in the most public places in the county, the time and place they will contract

with some fit person to build such bridge, which contract shall be in writing signed by the parties contracting and filed in the proper clerk's office."⁴⁵

A bond of surety from the bridge contractor was to be approved by the county commissioners, who were also given authority to receive subscriptions and donations from individuals toward the building of such bridge. In special cases where the tax to build a bridge would be unnecessarily burdensome to property holders, and donations and subscriptions could not be obtained, the board of commissioners was authorized to empower any individual or individuals to build the bridge with the understanding that such person or persons should transfer the same to the county at ten per cent on the original cost whenever the board desired to make the purchase. The board was also given the power to appropriate any money in the county treasury belonging to the road funds for the purpose of bridge building.

Finally, the statute specifies the manner in which the supervisors shall direct the actual work on the roads, provides for the method of collecting fines, directs the supervisor to purchase the necessary machinery, stipulates how a road shall be vacated, and contains other additional details relative to the work of practical administration.

Regarding the question of delinquent road taxes, the act contains the following provision:

That in all cases where a supervisor is unable to collect the road tax from any person within his district, from the goods and chattels of such person, or property assessed, agreeably to the foregoing provisions of this act, it shall be the duty of such supervisors to return a list of such delinquents to the board of commissioners of the proper county, which list shall be certified under oath by said supervisor to be correct. And the said commissioners at their next session shall furnish the sheriff of the proper county, with a true copy of the list of all such delinquents, who shall thereupon proceed

to sell any property real or personal upon which such tax has been assessed by said board of commissioners, or so much thereof as will pay the tax and all costs accrued thereon, in the same manner, and under the provisions, that the county revenue is collected in such cases. And when such collection is made, the county commissioners shall order the same to be paid to the supervisor in the district in which such delinquent property has been returned, and said supervisor shall appropriate the money so collected as hereinbefore provided.⁴⁶

In conclusion it may be said that a general knowledge of the system of local government, including the road legislation of the Territory of Michigan and of the original Territory of Wisconsin, is necessary for at least two reasons: first, the Iowa country was for a time a part of these jurisdictions; and second, certain features of the early road laws of the Territory of Iowa were copied directly from the statutes of the Territory of Wisconsin, which in turn were taken from the statute laws of Michigan Territory. In a word, the Territory of Michigan and the original Territory of Wisconsin supplied one of the channels through which the pioneers of Iowa obtained their institutions of local government. Another channel, as will appear later, led directly to the statute books of the State of Ohio.

Under the system of local government which prevailed during the period from 1834 to 1836, when Iowa formed a part of the Territory of Michigan, large powers and authority were vested in the officers of the civil township. In fact, as has been pointed out by Dr. Aurner, the organization of the township preceded that of the county in the Territory of Michigan. Of the numerous local officials clothed with authority in the administration of roads and highways special mention should be made of (1) the township board, composed of the supervisor, the township clerk,

and the justices of the peace, or a majority of them, who acted primarily as a board of audit, (2) three township road commissioners, having the same general powers with reference to the laying out, opening, and maintaining of highways as are now vested in the so-called township board of trustees, (3) a number of road overseers, corresponding to the number of road districts, appointed by the township road commissioners, and (4) the county board of supervisors, composed of one representative from each civil township and vested with substantial authority both from the standpoint of general supervision and finance. Thus it will be seen that there was a somewhat elaborate system of road administration which centered very largely about the civil township, either directly through various township officials or indirectly through representatives of the civil townships who at the same time acted as a county board of supervisors.

During the Wisconsin period of the Territorial history of Iowa (1836-1838) there seems to have been a somewhat marked tendency to make the county rather than the township the important unit in local administration. To what extent this was the outcome, first, of a more or less unconscious adaptation of statutes from older jurisdictions, second, of an actual conflict between the two principles of local government on the basis of concrete fact and argument, and finally, of the necessity from time to time of creating political institutions to meet the demands of pioneer conditions, can not be ascertained except by a thorough comparative and historical study of the whole complex system of local institutions. The pioneers, however, were essentially practical men, thinking very little of broad generalization on the one hand or of a critical study of detailed facts on the other. This being true, the drafting of Territorial statutes was doubtless to a very large extent a matter of more or less hasty adaptation of forms with which the lawmakers themselves were most familiar.

At least two important road laws were enacted by the original Territory of Wisconsin. The first act, passed in 1836, provided for the annual election of three township supervisors who were to act at the same time as a county board of supervisors. In other words, in name the township was the basis of local administration, but in fact the county was to a very large extent the unit of real importance. The statute, however, was evidently a compromise measure and it paved the way for the important act of January 15, 1838, which actually did produce a complete and radical change in the general system of road administration. The board of supervisors, which had been both a township and county body, was superseded by a board of county commissioners elected for a term of three years. The new county board was vested with general supervision over highways — including the right to appoint road supervisors and to assign to each supervisor a definite road district. That is to say, the board of county commissioners created in 1838 possessed powers and duties, which during the Michigan period were parcelled out among a number of local officials, including: first, the so-called township board; second, the township highway commissioners; and third, the county board of supervisors, which was composed of representatives from the civil townships. Under the first Wisconsin law of 1836 these powers and duties were vested very largely in the board of supervisors acting both as a township and a county board.

It should be noted in this connection that the road supervisor appointed by the board of county commissioners under the Wisconsin act of 1838 was the logical successor of the road overseer appointed by the township road commissioners during the Michigan period. Finally, the details of actual road administration including the view and review of proposed roads, the assessment of damages, changes of location and the like have much in common under the different systems of local supervision and control.

II

THE IOWA TERRITORIAL PERIOD 1838-1846

Upon its organization as a separate Territory in July, 1838, Iowa inherited its system of local government, including the administration of roads and bridges, from the original Territory of Wisconsin. This system, it will be remembered, recognized the county rather than the township as the important unit in local administration, although the township had been the dominating factor under the earlier legislation of the Territory of Michigan. Notwithstanding the comprehensive legislation of the original Territory of Wisconsin, Governor Robert Lucas in his first annual message made the following recommendation relative to road legislation:

I would also recommend to your consideration the propriety of adopting a general road system, defining the manner of laying out and establishing Territorial and county roads, and to provide for opening and keeping them in repair.⁴⁷

The Council and House of Representatives of the Territory of Iowa acted with expedition in passing "An Act to provide for laying out and opening Territorial Roads", which was approved on December 29, 1838.⁴⁸ Moreover, a comparative examination reveals the fact that this act is practically an exact copy of the act passed by the original Territory of Wisconsin in January of the same year. Indeed, the only difference is the requirement that under the new measure Territorial roads must be viewed, surveyed, and established within one year rather than two years from the time of the passage of the act establishing the same. In

other words, the method of laying out and opening Territorial roads during the early history of the Territory of Iowa was the same as had prevailed in the original Territory of Wisconsin. Moreover, an examination of the statutes of Ohio shows that a comprehensive law⁴⁹ providing for the laying out and opening of State roads, approved on March 14, 1831, was in a measure at least the basis of the Michigan act of April 23, 1833, the Wisconsin act of January 3, 1838, and the Iowa act of December 29, 1838.

The subject of roads was touched upon in three other acts passed by the First Legislative Assembly. In "An Act concerning Costs and Fees" it was provided that the county surveyor should receive three dollars per day for his services in surveying Territorial and county roads.⁵⁰ The obstructing of public highways or bridges was made punishable by the provisions of section eighty-seven of an act defining crimes and punishments.⁵¹ Finally, on January 24, 1839, there was approved an act which is unique in the history of road legislation during the Territorial period.

This act provided that a number of men, whose names are mentioned, "are hereby created a body politic and corporate, by the name and style of 'The Burlington and Iowa River Turnpike Company,' for the sole purpose of constructing a turnpike road, from Burlington, Des Moines county, to the Iowa river, opposite the town of Black Hawk, in Louisa county." The capital stock of the company was to be one hundred thousand dollars and was to be divided into shares of twenty-five dollars each. As soon as ten thousand dollars had been subscribed to the stock of the company a meeting of the stockholders might be called for the purpose of electing five directors. A definite schedule of toll rates was set forth in the act, and it was provided that the company might charge toll on the basis of one-half the rate prescribed as soon as ten miles of turnpike had been completed.⁵²

It was evidently the intention of the legislature that this act should be the precursor of a series of similar laws, for in the last section it was declared that the act should be "subject to any general law that may be passed hereafter . . . for the regulation of Turnpike companies." But so far as has been discovered no other companies of this character were created by law during the Territorial period. Nevertheless, this act may in a sense be viewed as the forerunner of the laws granting corporations the right to construct plank roads which were enacted during the early years of statehood.

At this point it may be noted that during the period under consideration many special acts were passed providing for the laying out and opening of Territorial roads. Indeed, a very large number of roads were provided for in this manner during the Territorial period and for a number of years after Iowa had been admitted into the Union.⁵³

At each session of the Legislative Assembly laws were enacted for the laying out of Territorial roads, so that by the time Iowa was admitted into the Union in 1846 one hundred and forty-eight such roads had been established by law, and forty-six of them had been re-located.⁵⁴ Many of these roads probably were never actually laid out; while others were no doubt merely opened and marked, and then given but little further attention. In the absence of any definite data on the subject it is safe to state that only a very few of the Territorial roads were kept in such a condition as to be readily traversed in all seasons of the year. Nevertheless, they greatly facilitated intercourse between different parts of the Territory. Seldom following section lines, as do the roads of the present day, winding through the woods and across the prairies, crossing streams at places best adapted to fording or the building of rude bridges, these roads served as adequate highways largely in so far as they were laid out wisely and with attention to the lay of the land.

The exact method of laying out and opening roads provided for by special acts is set forth in the statutes, which maké it the duty of the county commissioners "to order the opening of all Territorial roads, without delay, that are now laid out, or may hereafter be laid out, within this Territory."⁵⁵

At the session of the Legislative Assembly in 1839-1840, the advocates of township organization were able to secure the adoption of a compromise system of local government more favorable to the township — which meant of course that the township was given greater authority in the matter of road administration. In fact, by the legislation of 1839-1840 the establishment and organization of townships was made optional, the board of county commissioners being clothed with authority to submit the question of adopting such government at a general election in the county. Where the proposal to organize townships was adopted the following officers were to be elected: one clerk, three trustees, two overseers of the poor, two fence viewers, a sufficient number of supervisors of highways, two constables, and one township treasurer.⁵⁶

Under the provisions of "An Act to provide for the organization of townships", approved on January 10, 1840, it was made the duty of the township trustees to divide their respective townships into road districts — allotting to each road supervisor one district — and to settle the accounts of the supervisors of highways in the same manner as similar accounts were settled by the board of county commissioners where the county system of road administration prevailed.⁵⁷ The act further specified in detail concerning the actual work of laying out, opening, and maintaining highways under the supervision of the township trustees. Throughout this legislation there is evidence of the same regard for the rights of the individual property holder as existed under the previous acts of the Territory

of Iowa, the original Territory of Wisconsin, and the Territory of Michigan.

Cartways or township roads were established on application made to the township trustees by at least six freeholders of the township residing in the vicinity of the proposed road. The petition being filed and proper notices being given, the board of trustees appointed three disinterested freeholders of the township to act as viewers of the proposed road, and at their next meeting, if the report of the viewers was favorable, the trustees issued an order directing the road supervisors of the proper districts to open the road.⁵⁸ In case of a remonstrance by any person or persons through whose land the proposed cartway or township road passed, however, the trustees were obliged to appoint three disinterested freeholders to examine the complaint, assess the damages, if any, and make a report to the board. If the damages occasioned by the proposed road were greater than the advantages obtained the petitioners were required to pay the damages before the trustees authorized the opening of the road. All the expenses of the viewers and surveyors, both of the first and second view, were required to be paid by the petitioners; and in case they refused to make such payment the treasurer was given authority to commence suit on their bond and prosecute the same to final judgment and execution.

The system of township administration of roads as outlined in the acts of the Second Legislative Assembly being optional and not mandatory, it should be stated that "An act defining the mode of laying out and establishing township roads" passed by the Ohio legislature on March 11, 1831, was not copied by the Iowa lawmakers.⁵⁹ Had the Legislative Assembly of the Territory of Iowa adopted the township system without qualification the act would, no doubt, have been taken literally from the Ohio statutes. In many important points, however, the optional plan as

adopted is substantially the same as the township system which at that time prevailed in Ohio. For example, it appears that both the Iowa and the Ohio statutes provide: first, that applications for township roads should be made by petition to the township trustees; second, that the petition should set forth the place of beginning, the intermediate points, and the place of termination of the proposed road; third, that the trustees should appoint three disinterested persons and a surveyor to act as viewers of the road; and fourth, that the trustees should also be authorized to divide the township into a convenient number of road districts. Thus it is probable that the members of the Second Legislative Assembly who drafted the various sections outlining the optional township system of road administration had before them the laws of Ohio and deliberately copied the provisions as far as practicable in view of the general system of county organization which then prevailed in the Territory.

The influence of the Ohio system of local government becomes even more apparent upon an analysis of the two important road laws passed at the session of 1839-1840. Indeed, "An Act defining the duties of supervisors of roads and highways", approved on January 17, 1840, and "An Act for opening and regulating roads and highways", approved on the same day, appear to have been copied almost literally from the statutes of Ohio.⁶⁰ The only important changes, as seen in the use of the terms "county", "county commissioners", and the like, indicate the influence of the county-township system of local government which prevailed in Wisconsin at the time Iowa was made a separate Territory in 1838, for it should be observed that the township idea prevailed with greater force in the original Ohio statutes. The striking similarity between the Iowa law of January 17, 1840, and the Ohio statute of March 7, 1831, is very apparent when the two acts are placed side by side.

Such a comparison would make it very obvious that the Iowa law was a literal copy of the Ohio statute, except to the extent that it was necessary to take into account the county system of local organization which had been inherited from the original Territory of Wisconsin. The Iowa act of January 17, 1840, was, therefore, in a very real sense a compromise measure. While the wording of the law was taken directly from Ohio, the substance of its provisions, viewed from the standpoint of county government, came from Wisconsin. The simple fact that either the township or the county system of local organization could be adopted suggests the existence of both a New England and a Southern influence in our early legislation arising from the fact that Iowa was settled by people from both sections. This compromise, however, was perhaps not so much the result of any real conflict between the two principles of local government and administration as it was the copying and adaptation from time to time of earlier statutes or parts of statutes to meet the needs of a rapidly developing pioneer community. As has already been observed, the early settlers were practical men who were quite willing to adopt a plan that seemed suitable at the time without making any very close study of detailed facts on the one hand or of underlying principles on the other.

Thus the Iowa law provided for two distinct systems of local organization. In counties without township government the board of county commissioners was given authority to appoint annually a suitable number of road supervisors and to fill any vacancies that might occur from time to time. But in counties which voted to adopt the township system road supervisors were elected annually by the people at the regular township election. The powers and duties of district road supervisors whether appointed by the county commissioners or elected by the people in civil townships were, however, substantially the same.

A reading of the statute will reveal the fact that the powers and duties of the road supervisors were very extensive. Among other services, the supervisor was required to call out any person to work out either his personal or property road tax, to impose and collect fines for failure to perform duty, and to pay the same into the township or county treasury—depending upon the system of local government which prevailed in that particular county. The supervisor was also given authority to exempt persons unable to perform road work, and to exercise all other reasonable powers necessary for an efficient administration of highways and bridges. The extent to which a dual system of local road administration was established is especially noticeable in the sections dealing with the formation of road districts and the collection of fines.

Briefly stated, it appears that where the township-county system prevailed the board of township trustees was the all important body—first, as to the appointment of road supervisors; second, as to the formation of road districts; and third, as to the handling of finances. Thus, the adoption of the township-county system meant that the substance of authority and power was transferred from the county to the township, and decentralization in the work of road administration was the result. It will be important as well as interesting to observe the development of the two principles of supervision from the standpoint of both legislation and administration.

On the same day that the act defining the duties of supervisors of roads and highways was approved, another law, entitled "An Act for opening and regulating roads and highways", was signed by the Governor. This measure seems also to have been copied from a law of Ohio bearing the same title and approved on March 14, 1831, the general outlines of which may be traced to an earlier statute of the same State approved on February 17, 1804.⁶¹ Now the

Iowa act provided "That all county and territorial roads which have been or may hereafter be laid out and established agreeably to law within this territory, shall be opened and kept in repair in the manner hereinafter provided; and all county roads shall hereafter be laid out and established agreeably to the provisions of this act, and all county roads shall be sixty feet wide."⁶²

It was further provided that all applications for the laying out or altering of any county road should be made by petition to the county commissioners, signed by at least twelve householders of the county residing in the vicinity of the proposed road. After due notice had been given, the commissioners were required to appoint three disinterested householders of the county to act as viewers of the road. The duties of the viewers are substantially the same as noted in earlier acts, except that they are perhaps outlined in greater detail. With the assistance of surveyors the viewers were required to make a complete survey of the proposed road and file a copy of the plat and field notes with the clerk of the board of county commissioners.⁶³ After the report was made and the legal notice given, no application for a review of the road or a petition for damages being filed, it was made the duty of the commissioners to direct the opening of the road which was thenceforth to be considered a public highway.

In this statute, however, as in earlier legislation the rights of the individual property-holder were carefully safeguarded against possible injustice.⁶⁴ In the first place any landholder of the county could apply to the commissioners for a review of the road by petition signed by at least twelve householders residing in that part of the county in which the road was established. If satisfied that the petition was just and reasonable, the board of county commissioners appointed five disinterested voters of the county to view the road and make a report on the same. If the

viewers reported in favor of the establishment of the road, it was to be promptly opened by the commissioners, but in case the report was against the establishment of the road it was not opened, and the persons executing the first bond were required to pay into the county treasury the amount of the costs and expenses of the first view and survey and also of the review of the road.⁶⁵

In the second place it is provided that "if any person or persons through whose land any territorial or county road may be laid out shall feel injured thereby, such person or persons may make complaint thereof to the county commissioners".⁶⁶ Thereupon the board of commissioners proceeded to appoint three disinterested householders of the county to examine the road, assess and determine the damages, if any, and file a report. In case damages were allowed and the commissioners regarded the road of sufficient importance to the public the damages were ordered to be paid; but if in their opinion the road was not of sufficient importance to the public to compensate for the payment of the damages, the board of county commissioners was given authority to refuse to establish the proposed road as a public highway unless the damages and expenses were paid by the petitioners.

The act further specifies the method of abolishing a road when no longer needed. In such instances the viewers and reviewers possessed substantially the same powers and authority as noted in the case of the opening and the laying out of roads.⁶⁷ Moreover, the method of determining the true course of any Territorial or county road when the same was a matter of dispute is also prescribed in the statute. Finally, in case any person or persons through whose land any Territorial or county road was established desired to change the course thereof, the method of doing so is described in the same detail as in the case of the laying out and opening of roads or the assessing of damages. If, how-

ever, the board of county commissioners changed the course of the road, the person or persons desiring the alteration were obliged to pay all the costs of the view and survey.

After providing penalties in case any viewer, reviewer, or surveyor refused or neglected to perform the duties required by law, and outlining in detail the compensation allowed in each case, the act further specifies the method of establishing roads on county lines. The extent to which even minute details of administration are provided for on the one hand, and the complicated nature of the dual system of township and county organization on the other, are apparent from an examination of this portion of the statute. It is provided that "when any road is located under the provisions of the twelfth and thirteenth sections of this act, it shall be the duty of the county commissioners or trustees of townships adjoining such road to select one from their number whose duty it shall be to meet at some convenient place near the line of the same (the time and place to be appointed by the commissioners or trustees of the oldest county or township interested) previous to the time appointed by law for apportioning labor to their respective road districts, and shall assign a sufficient number of persons, if practicable, to open such road and keep the same in repair, dividing the road in such manner that the persons so assigned may work under the orders of the supervisors in the county or township to which they belong, and the supervisors and persons so assigned shall be governed by the provisions of the act entitled 'An act defining the duties of supervisors of roads and highways' ".⁶⁸ This section is certainly a good illustration of the method of laying out and opening highways by the mere enactment of law.

Finally, the statute under consideration provides that any person making application for a view, review, alteration, or vacation of any road, or the assessment of damages, shall be required to deposit a bond with one or more sufficient

securities, made payable to the county treasurer and approved by the county commissioners. The applicant, moreover, was required to pay all costs and expenses incurred thereby in case his application was not granted and the proposed road not established. On the whole, this Iowa act is much more logical, definite, and systematic, both in general arrangement and in statement of detail, than the statutes of the Territory of Michigan and the original Territory of Wisconsin which were considered above in Chapter I.

Two important tendencies are now manifest in the legislation providing for road administration during the Territorial period: first, the growth of the township principle of local government; and second, a more definite and concrete statement of the law itself. At the same time a considerable body of special legislation was being enacted.⁶⁹ For example, an act was approved on July 29, 1840, providing for the survey of a Territorial road from the city of Burlington to the Indian boundary line,⁷⁰ according to the provisions of which the Governor of the Territory was authorized to appoint a surveyor or engineer to survey the proposed road. In January of the next year, however, an amendatory act was passed by the Legislative Assembly providing "that the duties incumbent upon said surveyor or engineer under the act to which this is amendatory shall be performed and executed by three disinterested commissioners, one of whom shall act in the capacity of a surveyor and commissioner".⁷¹ This law, which specifies the names of the commissioners, is instructive, in the first place, as an example of special road legislation, and in the second place, because it shows a tendency to limit the appointive power of the Governor.

The growth of the township-county principle of organization at this time is indicated by an amendatory act approved on January 15, 1841,⁷² by which it was provided that the board of county commissioners in each county not yet divided into townships, or in which there had been no elec-

tion authorizing the organization of townships, were required to divide the county into townships as soon as they were of the opinion that the people of the county desired that form of local government. While this law is not mandatory, its provisions are certainly more explicit than those of the earlier act regarding the desirability and necessity of township organization.

It has already been noted that under a former act providing for the laying out, opening, and maintaining of roads, a personal tax of three days' labor was required.⁷³ Moreover, up to this time the law regarding the exact amount of property tax and the manner in which assessments should be made had not been very clear and specific. An examination of the limited source material available reveals the fact that there was a growing sentiment in favor of property taxes for road purposes. On November 11, 1840, a resolution was introduced in the House of Representatives instructing the Committee on Roads and Highways to inquire into the expediency of so amending the road laws "as to require persons to perform labor on the public highways, in proportion to the valuation of their property."⁷⁴ At the same time an additional resolution was passed, instructing the same committee "to inquire into the expediency of revising or modifying such portions of the road law, whereby it will be more effectual in its application to the improvement of roads and highways, and report by bill or otherwise."⁷⁵ Nothing of importance, however, was done along these lines during this session of the Legislative Assembly.

At the following session, however, in addition to a large amount of special road legislation at least three important general acts were passed: (1) "An Act to provide for levying a tax on real and personal property for road purposes", approved on February 16, 1842;⁷⁶ (2) "An Act amending an act defining the duties of Supervisors of roads and high-

ways", approved on February 2, 1842;⁷⁷ and (3) "An Act to amend an act entitled 'An Act for opening and regulating roads and highways', approved January 17, 1840", approved on February 2, 1842.⁷⁸ In addition to this important body of road legislation, a law was also passed strengthening the township principle of local government by requiring the board of county commissioners to organize townships when in their opinion a majority of the people so desired, and providing further that townships should be formed into bodies corporate, capable of suing and being sued.⁷⁹

Furthermore, on December 14, 1841, the House of Representatives passed a resolution requesting the Committee on Roads and Highways "to inquire into the expediency of so amending the present Road Law that it may bear less unequally in its provisions, and also to inquire into the expediency of levying a tax on real and personal property, for road purposes."⁸⁰ A few days later, on January 4th, Mr. William Patterson from the Committee on Roads and Highways reported a bill to provide for levying a tax on real and personal property for road purposes. From the nature of some of the amendments to this bill which were proposed one would infer that there was considerable discussion regarding the comparative amount of personal and property taxes for road purposes. For example, certain members of the House desired to have the bill amended so as to require only one day's work in the form of a personal road tax, instead of two days.⁸¹ While this amendment was lost, it is instructive as showing the reaction against the earlier law which had required three days' work as a personal road tax. The fact that a number of members of the House of Representatives desired a heavier property tax is apparent from another amendment requiring a maximum property tax of fifty cents on every one hundred dollars of valuation. The amendment, however, was lost and the maximum tax was fixed at twenty-five cents on each one hundred dollars.

The act providing for levying a tax on real and personal property for road purposes approved on February 16, 1842, represents a substantial improvement on any previous legislation dealing with road finances.⁸² The board of county commissioners, at the time of making the regular levy of taxes for county purposes, was required to fix a percentage on real and personal property for road purposes of not less than five cents nor more than twenty-five cents on every one hundred dollars of assessed valuation. This tax was imposed on all real and personal property made taxable by the revenue laws of the Territory and was either to be paid in cash to the supervisors or worked out on the roads. When the bill was under consideration it appears that an amendment was introduced to strike out the words "and personal", the purpose of which was to place all of the road tax on real estate.⁸³ While the amendment did not prevail, it nevertheless represents a tendency to place the bulk of taxes on real estate, thus favoring improvements and perhaps discriminating in a measure against non-resident landholders.⁸⁴

By this statute of 1842 it was made the duty of each road supervisor to furnish the board of county commissioners with a complete list of individuals subject to taxation in his road district — "particularly specifying those who are the owners of real estate".⁸⁵ The list having been received, the board of county commissioners furnished the road supervisors with a statement of the road tax assessed, and the supervisors in turn were required to collect the same in cash or have it worked out on the roads, allowing one dollar for each day's labor. Special provision was made for non-residents in order to give them an opportunity to work out their tax.⁸⁶

As already observed that portion of the law dealing with the duty of road supervisors to call out persons to work on the road and determining the amount of personal tax to be

imposed was the subject of considerable debate in the Legislative Assembly. The act as approved provides for a personal or poll tax of two days' road work; and it further specifies that "in all other duties said supervisors shall be governed by the road laws now in force in this Territory."⁸⁷ In this connection it may be noted that a substitute had been introduced by Mr. James K. Moss, prescribing heavy penalties and giving the road supervisors the power, in case the regular road tax proved insufficient, "to order out every person in his district, subject to labor on roads, as many days, as in his opinion, shall be necessary to put such road or roads in good repair." The Legislative Assembly, however, was apparently not striving to bring about the actual enforcement of law and so the substitute did not prevail.⁸⁸

Of the two additional road laws enacted by the Legislative Assembly in 1841-1842, the one amending the law defining the duties of road supervisors provided that "upon the trial of any action against any person or persons liable to work on the public roads, for the recovery of any penalty, fine or forfeiture, for refusal or neglect to work on a public road, or for any other delinquency", each supervisor "shall be a competent witness to prove the warning or notice given such person, and any other fact or facts necessary to establish such delinquency".⁸⁹

The other law, which was amendatory to an act entitled "An Act for opening and regulating roads and highways",⁹⁰ passed in 1840, is significant from two standpoints: first, it is much briefer, but more definite and systematic in outlining the method of laying out and opening roads than were earlier acts; and second, it places larger powers in the hands of the board of county commissioners. A petition for laying out or relocating any county road must be "signed by at least twenty legal voters, residing within three miles of where said road is to be laid out or relocated".⁹¹ In cases where it was not signed by twenty

legal voters the granting of the petition was optional with the board. Moreover, the board of commissioners was clothed with authority to order at their discretion the establishment of a road or roads without an actual survey in cases where it could be conveniently located on township or section lines.

As a limitation upon the powers of the board the act provides that "in no case shall the prayer of such petitioners be granted where there is a greater number remonstrating against the re-location or establishment of any such road or roads." In the matter of bridge building an additional example of the greater authority provided for in the new act is to be found in the fact that county commissioners were given under certain conditions the power at their discretion "to contract and agree for the building, keeping and repairing of such bridge, and to pay for the same out of any money in the county treasury not otherwise specially appropriated."⁹²

A careful study of the law under consideration in comparison with earlier acts therefore reveals a tendency to remove at least some of the purely statutory safeguards of individual rights and place larger administrative responsibilities in the hands of the county board. The pioneers of Iowa, however, were not disposed to vest large powers even in elected officials, and so it is no cause for surprise to note evidence of a reaction from time to time against such tendencies.⁹³

Aside from a number of special acts for the laying out and opening of Territorial roads,⁹⁴ the next general law in reference to highways is to be found in the *Revised Statutes of the Territory of Iowa, 1842-1843*.⁹⁵ That the subject of road administration was of some importance during the legislative session of 1842-1843 is suggested by the following editorial comment in the *Iowa Standard*:

By our reports of proceedings, the reader will perceive that during the last week but one bill of any great importance has been passed by the Legislature,—viz: that conferring upon the Boards [of] County Commissioners power over the location of Territorial roads.⁹⁶

Moreover, the existence of a sentiment which demanded a complete change in the road laws is clearly expressed by an editorial entitled “Revision of The Laws”, which appeared in the *Iowa Capitol Reporter* early in the session. The editor says:

In connection with this subject, our legislators should be reminded that some laws in the statute book most deplorably need a revision and new modeling. The act creating the county commissioners and prescribing their duties is prominent among them and should be wholly remodeled. This body has very great and unwonted powers conferred upon them, while they have no accountability to any tribunal, no checks, no return of their doings, no bonds, no penalties, unless for such criminal misconduct as will subject them individually to indictment. If we cannot have a general revision of the statutes it is to be hoped at least, that the legislature will take in hand a few of the most obnoxious laws and put them into better shape.⁹⁷

In “An Act for opening and regulating Roads and Highways”, approved on February 1, 1843, there are, however, very few if any important changes in the regulation of road administration. The boards of county commissioners are left with substantially the same powers as under earlier acts, except that they do not possess the authority previously granted to them to build bridges under certain conditions and to lay out roads on township or section lines at their own discretion. As has already been observed, the pioneers of Iowa were very jealous of their individual rights and hesitated to delegate them even to elected officials except when absolutely necessary.

It could hardly be said that the *Revised Statutes* are remarkable for clearness, brevity, and logical arrangement,

but many unnecessary details and a number of duplications of statement are eliminated — which always indicates progress in the profession of law-making. At the same time the general machinery of administration remained essentially the same under the provisions of the new law. The methods of making application for laying out and opening roads, changing the course of a road, vacating a road, providing for roads on county or township lines, or assessing damages were not changed. Nor were the details of the statute concerning viewing, reviewing, surveying, and the making of plats and field notes modified in any important way. The penalties prescribed for the neglect of duty and the compensation allowed are also substantially the same as under the provisions of the earlier statutes.

Furthermore, no important change was made in the provisions regarding the organization and functions of township government.⁹⁸ The township trustees were given practically the same supervision and control of cartways and private roads as the board of county commissioners had exercised over county and Territorial roads. Applications for laying out any cartway or private road were made to the board of township trustees, and the appointment of viewers or reviewers for cartways or private roads was also placed in their hands. In other words, there appears in the *Revised Statutes* a fairly clear line of demarcation between cartways or private roads, which were under the jurisdiction of the township trustees, and county and Territorial roads, which were under the supervision and control of the boards of county commissioners. While this distinction existed in a measure under earlier acts, it had not been marked with the same clearness and precision as in the provisions of the *Revised Statutes*.⁹⁹ From the standpoint both of efficient road administration and the necessity of maintaining at all times the largest possible measure of local self-government, it is an important distinction and one which has a direct

bearing upon necessary reforms in road legislation at the present time.¹⁰⁰

At the following (1843-1844) session of the Legislative Assembly no important legislation was enacted with reference to roads and road administration, aside from a number of special acts laying out and opening Territorial roads.¹⁰¹ The maximum amount of road tax to be levied was, however, reduced from twenty-five cents to fifteen cents on each one hundred dollars of valuation on all property made taxable by the revenue laws of the Territory;¹⁰² and it was provided that such tax might be worked out on the road at the rate of one dollar per day.

At the special session of the legislature in 1844 an amendatory act was passed, providing that boards of county commissioners were not obliged to lay out and open a road unless they were first satisfied that the public convenience would be served thereby.¹⁰³ Two or three additional Territorial roads were provided for by special acts of the Assembly.¹⁰⁴

At the regular session of the Legislative Assembly in May, 1845, three laws were enacted having a direct and important bearing on the subject of roads and highways: (1) an act to amend the law providing for levying a tax on real and personal property for road purposes, approved on June 10, 1845;¹⁰⁵ (2) an act to prevent the obstruction of roads and highways, approved on June 11, 1845;¹⁰⁶ and (3) an amendment to the law providing for township organization, approved on June 5, 1845.¹⁰⁷ The demand for a more complete and definite system of township government with special reference to the administration of roads is apparent from the following resolution which was offered in the House of Representatives by Mr. Ebenezer W. Davis early in the session:

Resolved, That the Committee on Roads and Highways, be instructed to inquire into the expediency of so amending the present

law of this Territory, prescribing the powers and duties of Township Trustees, as to authorize the Trustees of the different Townships to lay out and establish Township Roads. Also, to enquire into the expediency of so amending the present law of this Territory, prescribing the duties of Supervisors of roads, as to authorize said Supervisors, to open and work Township roads.¹⁰⁸

Under the provisions of earlier acts the township trustees were given authority over cartways and private roads.¹⁰⁹ In the statute of June 5, 1845, it was enacted that "the trustees of townships shall have power, and it is made their duty to establish township roads of width not to exceed forty feet nor less than twenty feet, as in their judgment shall be deemed convenient".¹¹⁰ They were not, however, permitted to locate any township road, except on section and quarter section lines, without the consent of the owner or owners of the land through which the road passed. It was made the duty of the township clerk to record all township roads established by the trustees; while the method of viewing, reviewing, assessing damages, or changing the course of a township road remained substantially the same as had been previously provided. In short, the township trustees were given practically the same powers with reference to township roads as the board of county commissioners possessed in the case of county and Territorial roads. Thus, for the first time there was provided the necessary township machinery for the administration of what were distinctly known as township roads.

The act of June 10, 1845, amending the law providing for levying a tax on real and personal property for road purposes, conferred upon road supervisors and county treasurers authority in the matter of collecting delinquent taxes. It was made the duty of the supervisor to prepare a list of delinquents, attach his certificate thereto, and deliver the same to the county treasurer; but in case no personal property could be found, out of which to obtain the delinquent

road tax, the treasurer was authorized to sell a portion of the real estate for that purpose.¹¹¹ In some of its provisions the statute is very drastic and there is some reason for doubt as to its constitutionality. For instance, the treasurer is given authority to make out a deed conveying the real estate in fee simple to the purchaser, which deed so executed shall be prima facie evidence of the regularity of all proceedings, and "no person shall ever question the title of the purchaser to the real estate so purchased, in any Court of law or equity, either as plaintiff or defendant, or complainant or defendant, unless he shall have paid or offered to the purchaser of said real estate, or his assigns, the sum so paid for said real estate, with fifty *per centum per annum*, from the date of such sale and the costs of such sale and deed."¹¹² To say the least, this is an unusual provision, which was probably directed against non-resident property holders, and which, it would seem, would logically result in the taking of private property without due process of law.

Finally, during this session of the Legislative Assembly, in addition to a number of special acts of the kind already noted,¹¹³ the penalties for obstructing public roads and highways were made somewhat more severe. The amount of the penalties in the case of such obstructions and the method of road supervision are prescribed in the statute. It was made a duty of the sheriff to see that the law in this respect was enforced.¹¹⁴

At the last session of the Legislative Assembly of the Territory of Iowa, which was held during the winter of 1845-1846, three brief acts were passed dealing with the subject of roads: one, approved on January 19, 1846, had to do with the relocation of Territorial and county roads;¹¹⁵ another, approved on January 2, 1846, was concerned with legalizing Territorial and county roads;¹¹⁶ and the third, approved on January 1, 1846, amended the law prescribing

the punishment for obstructing roads and highways.¹¹⁷ A number of special acts were also passed at this session.¹¹⁸ Of the three acts mentioned the one legalizing Territorial and county roads is perhaps the most important. It provides among other things that "it shall be the duty of the board of commissioners of the respective counties within this Territory, to furnish their clerks with suitable record books, to be kept for the purpose of recording all roads, and alterations thereof, which may be made within their respective counties." It is made the duty of the county clerks upon the receipt of the record books "to record all the surveyor's plats of roads on file in their offices, and which roads have not been vacated".¹¹⁹ The act of January 2, 1846, therefore, provides for the keeping of definite records and at the same time prescribes definite rules for determining the legality of Territorial and county roads.

Finally, any discussion of the road legislation of the Iowa Territorial period would be incomplete without some mention of an act of Congress appropriating money for the laying out of what were termed "military roads" in the Iowa country. This act, which was approved on March 3, 1839, appropriated the sum of twenty thousand dollars for "the opening and construction of a road in Iowa Territory, from Dubuque on Mississippi River to such point on the northern boundary of the State of Missouri as may be best suited for its future extension by that State to the cities of Jefferson and St. Louis". In laying out the road an effort was to be made as far as practicable to accommodate the seats of justice of the counties through which the road would pass and to choose the best sites for bridges and ferries over rivers and creeks. Furthermore, in the same act an appropriation of five thousand dollars was made for "opening and constructing a road from Burlington through the counties of Des Moines, Henry and Van Buren towards the seat of Indian Agency on the River Des Moines".¹²⁰

These roads were carefully surveyed and laid out by government engineers, and later Congress made an additional appropriation for keeping them in repair and for making improvements.¹²¹ In contrast, therefore, to a majority of the other roads of the Territory, the two military roads "were worked and graded and the most of the streams were bridged. The bridges were built in a good, substantial manner and greatly benefited the people in the first occupation of the country. The facilities of travel, therefore, were much improved, and it was only natural that these two roads were, in comparison with others in the Territory, extensively used."¹²²

The method employed in marking a portion of one of these roads — namely the one from Dubuque to the Missouri line — is especially interesting. When the road had been surveyed as far south as Iowa City, Lyman Dillon was employed to plow a furrow between the two towns, a distance of about one hundred miles, chiefly it seems, for the guidance of contractors in building the road. "This is believed to be the longest furrow on record", says one writer, "and served as a guide to travelers, and a well beaten road was soon made along side of Dillon's furrow."¹²³

By way of summary, it should be borne in mind that the road legislation enacted by the Legislative Assembly of the Territory of Iowa should be judged from the standpoint of pioneer conditions. The early settlers needed roads, just as they required a system of public schools and a method of raising public revenue. Little thought, however, was given by them to establishing any of these fundamental institutions along what are now understood to be scientific lines. The pioneer had a wilderness to conquer in making a home for himself and family. While he was obliged to lay out and open some means of communication in order to market

his produce, attend church, and send his children to school, in doing this he almost invariably followed the lines of least resistance. The laying out and opening of a road in early Iowa frequently consisted in plowing a furrow across the open prairies. As a general rule, the viewers followed the high ground, so as to avoid low, swampy places and running streams. Where a road passed through the woods axemen were employed to blaze the trees and cut away the underbrush. Streams in many places were forded: bridges constructed with rough hewn logs were few.

In his *History of Johnson County* Dr. C. R. Aurner has devoted considerable space to the subject of roads during the Territorial period. In fact, the general field of road administration viewed from a practical standpoint is primarily a problem in the history of the workings of township and county government. While it is possible to outline the forms of local government and administration by an historical and comparative study of the statutes, it is nevertheless true that the actual operation and workings of these forms in practice can be understood only through the study of local history. For example, the history of road administration in a particular county, or to be more concrete, the history of the expenditure of road and bridge funds in typical counties or townships would form a valuable supplement to the general history of road legislation. This is true for the obvious reason that the actual administration of the road laws has always been primarily a function of local government, including the county, the township, and the so-called road district.

Dr. Aurner suggests that the construction of roads was one of the first problems that came before the county commissioners; traces in detail the laying out and opening of a number of highways that radiated from the Old Stone Capitol; refers to the division of the county into four road districts in 1840 and into fifteen road districts in 1843; out-

lines by concrete instances the methods of viewing, reviewing, laying out, and constructing roads; discusses the assessment of damages and the changes in the location of highways; and in fact, writes a brief history of the actual administration of the road laws. Moreover, Johnson County affords an excellent opportunity for the study of the history of specific highways, largely because the Old Capitol was connected at an early date by thoroughfares with the principal towns on the Mississippi River, including Dubuque, Muscatine, Davenport, and Burlington. The chapter dealing with the history of these particular roads emphasizes the fact that county histories when properly written are not only worth while from the standpoint of general history, but are especially valuable when dealing with the important group of problems which belong almost entirely in the field of local administration.¹²⁴

A careful examination of the road legislation enacted during the Territorial period shows that the early laws were more or less hastily adopted from the statutes of older jurisdictions. The act to provide for the laying out and the opening of Territorial roads passed in 1838 was evidently copied from the laws of the original Territory of Wisconsin. Wisconsin in turn appears to have copied the same statute from the laws of the Territory of Michigan; while the lawmakers of Michigan had access to the codes of older States, including Ohio.

During the second session of the Legislative Assembly of the Territory of Iowa the statutes of Ohio were an important factor in shaping road legislation. Thus the Iowa act providing for the organization of townships was modeled very largely on the Ohio plan — except that the system was optional and not mandatory. The act for defining the duties of supervisors of roads and highways and the act for opening and regulating roads and highways were both taken almost literally from the statutes of Ohio. In fact, the only

important changes made in copying the statutes of Ohio was in the use of such terms as "county" and "county commissioners", thus indicating the influence of the county-township system of local government which had prevailed in the original Territory of Wisconsin. Briefly stated, the form of the road laws enacted during the second session of the Legislative Assembly of the Territory of Iowa was taken largely from Ohio; but with only slight verbal changes the substance was partly borrowed from Wisconsin. Consequently the legislation of 1839-1840 provided for two distinct systems of road administration: that of the county, which was basic and was adopted from the Wisconsin laws; and that of the township which was optional and was adopted from the Ohio laws.

But in Iowa the township was destined to become a more and more important unit of local government from the standpoint of road supervision and control. This tendency may be discerned even in the later legislation of the Territorial period. Between 1840 and 1846 the township principle was greatly strengthened — in fact, had become firmly established. At the same time the powers of the board of county commissioners were increasing, especially with reference to the laying out and opening of roads and the jurisdiction which was conferred upon them in the case of so-called Territorial roads. In fact, objection from time to time was made against the arbitrary powers exercised by the county board, it being alleged, for example, that this body had great and unwarranted powers conferred upon it which ought to be parcelled out among smaller units of government in order to bring the administration of the laws closer to the people.

In this connection it has been well said that the ultimate end of all government is to secure popular control plus efficient administration. Democracy in general, and our pioneer democracy in particular, has been concerned pri-

marily with the question of obtaining popular control. The chief argument against what was called arbitrary administration on the part of boards of county commissioners, and on the part of township trustees more than one-half a century later, was the necessity of popular control — that is, the bringing of the government as close as possible to the taxpayers. In 1840 the desire for popular control resulted in the adoption of the principle of township organization, while in our own time the same argument is repeatedly used to retain the small sub-district system of local road administration.

Other problems emphasized during the Territorial period were the following: (1) the necessity, under both the township and county plans of organization, of protecting individual rights, which resulted in a division of authority along the whole line of actual road administration and a final appeal to the courts; (2) the relative amounts of property and personal taxes which should be levied for road purposes; (3) the question whether or not road taxes should be paid in money or labor; and (4) the desirability of imposing relatively larger burdens on real estate, as compared with improvements, for the benefit of actual settlers.

III

THE GRADED AND PLANK ROAD SYSTEM

1846-1851

Between 1846 and 1851 little was added to the general body of road legislation. The new State inherited the system of local government, and with it the machinery of road administration, which had been created during the Territorial period. State roads continued to be authorized by special acts of the General Assembly.¹²⁵ Indeed, the only new feature of any real significance in the road legislation of this period was a tendency on the part of the General Assembly to grant to private corporations the privilege of building plank and graded roads and charging for their use tolls to be fixed by the boards of county commissioners. The demand for better transportation facilities before the coming of the railroad made this type of road a necessity.

The only general law of importance dealing with the subject of roads enacted at the regular session of the First General Assembly was "An Act regulating State Roads", approved on February 24, 1847.¹²⁶ In this act it was provided that before any petition asking for a State road could be presented to the General Assembly, notice must be given in each county and in two public places in each township through which the road passed, specifying the place of beginning, the intermediate points, if any, and the termination of the road. After adequate proof of notice had been obtained and the petition had been presented in due form, the General Assembly, in case no remonstrance was made within a certain time, might pass an act for the location and establishment of the desired road and appoint commission-

ers to lay out the same. Moreover, county commissioners were given power to alter or re-locate any Territorial or State road. This law, however, did not remain long on the statute books: for reasons which the writer has been unable to discover, at the extra session of 1848 a law was enacted which repealed all the provisions of the act of 1847.¹²⁷

At this point it may be well to note that, following the practice inaugurated during the Territorial period, a large number of State roads were established by special acts of the legislature between 1846 and 1857, when special legislation of this character was prohibited by the new Constitution. In fact, during this period two hundred and sixty-four State roads were established, and twenty-eight of them were re-located.¹²⁸ At the same time it should be borne in mind that establishment by law did not in every case mean the laying out of roads that were really serviceable. Indeed, it would seem from the following description that motives other than a desire to provide more and better means of communication oftentimes prompted the enactment of special acts establishing State roads.

These inchoate highways would seem legitimately to have had but one purpose—that of facilitating travel and intercourse between different portions of the Territory or State. But in time their establishment became an abuse which the makers of our constitution did well to suppress. Candidates for the legislature were ready and even eager to promise to secure the establishment of these roads, in order to obtain support in securing nominations, as well as votes at the election. The carrying out of pledges was generally easy, for as a rule these projects met with very little opposition in the legislature. Then, these laws provided not a little patronage in the appointment of commissioners to locate the roads, who were also generally authorized to appoint one or more practical engineers and surveyors. A team, a tent, and other camp equipage, one or more common laborers, and subsistence for the party, were also required. The location of some roads required several weeks, and as the work was for the most part undertaken

as early in the season as animals could subsist on prairie grass, they were real junketing, "picnicing" excursions. Nothing could be pleasanter than going out to perform such official duties. The pay was sufficient in those "days of small things" to make the position of commissioner a very welcome appointment. The appointments seldom went a-begging.¹²⁹

As already stated, it was during the period under consideration that the General Assembly instituted the policy of authorizing the construction of plank and graded toll roads. Since all of the laws relative to such roads were substantially of the same character, an analysis of one or two typical acts will be sufficient. Thus, the Second General Assembly (1848-1849) granted to one James Weed and his associates the right of way and the privilege of constructing a road from Bloomington in Muscatine County via Tipton in Cedar County to the county seat of Benton County.¹³⁰ The law provided that the grade of the road should not be less than thirty feet wide and that the company should commence the work of construction within six months after the passage of the act. Provision was also made that no person or persons could, by refusing to give their consent to the location of the road, prevent its construction. In cases where land owners considered themselves aggrieved each party appointed a disinterested resident freeholder; and the two thus chosen, after selecting a third person, were required to make a personal survey of the premises, assess any damages that might be sustained by the owner, and report in writing to the clerk of the district court. The report thus submitted was considered as a final adjudication between the parties; and in case James Weed and his associates paid the amount of damages assessed within thirty days after the filing of the report, they were to be given the complete right of constructing the proposed highway. Special provision was made for the notification of non-resident land owners.¹³¹

As soon as twenty-five miles of the graded road were con-

structed the company might erect toll-houses and gates and "exact such tolls as the County Commissioners of each county through which said road may be located, may determine, for the length of said road in each county respectively: *Provided*, That the said commissioners shall establish reasonable rates of toll, and such as will render to the said James Weed and his associates a reasonable interest on the amount of funds invested in said road, and protect, mutually, the said James Weed and his associates, and the public from imposition."¹³² This provision is especially interesting since it indicates a definite plan on the part of the State to regulate toll charges through the boards of county commissioners. That is to say, it was recognized to be the duty of the State: first, to require efficient service and thus protect the public from imposition, and second, to guarantee a reasonable profit on honest investment for the purpose of protecting the corporation from what might amount to a confiscation of its property. It will be observed that in this provision may be found a clear statement of the general idea which prevails at the present time concerning the proper method of regulating railroads and similar public service corporations. If it was desirable and proper for the State to authorize the construction of a plank and graded road and regulate the toll charges for its use, by a similar course of reasoning it would also be legitimate for the State to authorize the construction of a railroad and provide for the regulation of freight and passenger rates.

The purpose of the law, judged from the standpoint of efficient service on the one hand and of legitimate property rights on the other, is made especially clear in the following provision:

It is hereby declared to be the intention of this act to establish a graded road, between the points mentioned in the first section of this act, for the convenience and interest of the public, and at the same time to protect the said James Weed and his associates in the

construction of said road; and for that purpose the right of way is hereby granted to the said James Weed and his associates for the term of twenty years.¹³³

As an additional protection to those who invested money in the proposed graded road the law provided that if at the expiration of the twenty year period "a joint convention of the Boards of Commissioners of the several counties through which the said road may pass shall be made satisfied that the tolls received on said road have not amounted to a sum sufficient to cover the expenses of building and keeping said road in repair, and the incidental expenses thereto pertaining, and a reasonable interest on the amount invested, then the said Boards of Commissioners may grant to the said James Weed and his associates the right to exact tolls upon said road for such further and longer term as they may deem proper." The law further provided for the posting of the rates of toll established by the boards of commissioners, the method of collecting toll in cases of refusal to pay, and the punishment of any person or persons for injuring or defacing the road or any property belonging thereto.

This graded road company, which was required to be organized under the provisions of the general incorporation act,¹³⁴ was granted the privilege, when it should be deemed necessary for the interest of the public, of constructing a plank road not less than eight feet in width and of receiving such additional toll as might be fixed by the boards of commissioners. Finally, in case no additional time was allowed to the grantees by the county commissioners, the act provided that at the expiration of the twenty year period for which the right of way was granted the road should be "deemed a public highway, and under the immediate control of the Boards of Commissioners of the several counties through which the same may pass".¹³⁵

An example of the laws providing for plank roads is to be

found in an act granting a right of way to the Burlington and Toolsborough Plank Road Company.¹³⁶ The act stipulated, among other things, that the land to be taken as a roadway should not exceed sixty feet in width and that no private property could be taken without making just compensation to the owner. Moreover, the method of determining the amount of damages sustained by the owners of land through which the road passed was fully set forth in the statute. For the purpose of assessing such damages provision was made for the selection of a jury of three persons, who were required to examine the ground, and decide upon the amount of damages, if any, that should be paid by the company. Upon the payment of the damages thus ascertained, the company was entitled to a deed for the right of way — with the proviso that an appeal might still be taken to the district court.

In the event of such an appeal, however, the company, after paying or offering to pay the amount determined upon by the jury, could commence work upon the proposed road. But it was provided that “in no case shall the company be liable for costs on an appeal, unless the appellant recover a greater amount of damages than first awarded.”¹³⁷ It should also be noted in this connection that the right of way thus acquired could not be used except for the purposes contemplated in the articles of incorporation of the company. Thus the law under consideration represents a definite plan and purpose to safeguard the rights both of the stockholders and of the public.

During the period from 1846 to 1851 rights of way were granted for the construction of thirteen graded or plank roads by special acts of the General Assembly similar to those above outlined.¹³⁸ Unfortunately, however, owing to the absence of any definite data on the subject, it is not possible to state how many of these roads were actually constructed and put into operation. It seems quite certain

that a plank road was completed between Burlington and Mt. Pleasant,¹³⁹ and that a similar road was constructed from Keokuk a distance of twelve or fifteen miles up the valley of the Des Moines River.¹⁴⁰ But aside from these two instances it is doubtful whether any of the plank roads provided for by law were actually built; although it is probable that several graded toll roads were laid out and operated by the corporations to whom rights of way were granted. The laws, in nearly every case, authorized the companies to construct graded roads and gave them the privilege of changing to the plank road system at any time if such a change seemed desirable. But it is probable that the high cost of construction tended to discourage the companies from undertaking the building of plank roads.

The period from 1846 to 1851 was, therefore, one of special legislation from two standpoints: first, with reference to the laying out and opening of ordinary State roads; and second, in the authority granted to private individuals or corporations for building graded and plank toll roads.¹⁴¹ Better transportation facilities were being constantly demanded by the people — especially by the inhabitants of the larger cities who were competing for the trade of the rural districts. Before the coming of railways it was necessary to have some kind of permanent wagon roads which would be open for traffic during all seasons of the year; and so the plank road seemed to be especially adapted to the conditions and needs of pioneer Iowa.

Nor was the plank road looked upon as a competitor of the railroad, but rather as a supplementary means of transportation. Many people declared that such roads would tend greatly to increase both the wealth and population of every county through which they passed, because the surplus produce of the rural districts "instead of rotting in the fields, or bringing half the farmers in debt at the end of the year, would thus find its way to a convenient and profit-

able market.”¹⁴² And it was pointed out that such roads were in reality “farmers’ railroads”, which could be built without resorting to Congress for donations, and that if the population and business along the road continued to increase so as to demand the greater facilities afforded by railroads “it will be but a small job to tear up the planks and lay down the rails.”¹⁴³

In other words, the plank road was regarded by the pioneers of Iowa in the first place, as necessary in itself to the full development of the population and wealth of the State; in the second place, as a method of transportation supplementary to the railroad; and in the third place, as a connecting link between the old type of bottomless wagon roads and the railroad. The people were, in fact, very enthusiastic for the development of all means and methods of transportation, because transportation was rightly considered absolutely essential to real economic progress. The current newspapers contain many references to the enthusiasm of the early settlers along this line. The following extract from a communication in the *Burlington Tri-Weekly Telegraph*, signed “Anti-Corduroy”, is characteristic of the period and shows at least one phase of what has been so frequently termed the West in the growth of American democracy:

This is a progressive age — Rail roads, Plank roads, and Steam boats have taken the place of the more staid and sober method of traveling pursued by our forefathers, and although there are many more lives lost now than at any former period, yet this is an age of improvement — we are born in a hurry — educated in a hurry — get rich and poor in a hurry — live in a hurry — die in a hurry and get our reward in a hurry. . . . In the good old days of the primitive fathers, a journey of an hundred miles was a much greater undertaking than a trip to England or California now.¹⁴⁴

It is interesting to speculate as to what “Anti-Corduroy” would think of the present system of railway transporta-

tion, which represents vastly more than a fulfillment of his enthusiastic dreams.

The demand for plank roads soon became so urgent that many taxpayers considered it advisable to enact a general plank road law to take the place of the special acts. The whole system of constructing plank roads was, however, still new — having been first introduced into Canada and later into the State of New York, where the first plank road was opened to the public on the twenty-sixth day of July, 1846.¹⁴⁵ Between 1846 and 1850 it appears that under the general plank road law of New York twenty-six hundred miles of plank roads had been constructed, representing an investment of approximately \$4,500,000.¹⁴⁶ In the absence of a general law on the subject, the legislature of Ohio had during the session of 1849–1850 granted charters to forty-eight companies to construct plank roads; and in addition several other charters were granted for the construction of turnpike roads with the permission to use planks if found desirable. In short, there was an important movement in many States for the building of plank and turnpike roads under special acts; but following the example of New York, there was also a growing public sentiment in favor of a general law on the subject.

Moreover, it was repeatedly insisted in this connection that the system of building plank roads should become general because the whole economic progress and prosperity of the State depended upon adequate transportation facilities. "Here we have all the elements of national prosperity — remunerating employment supplied; profit-bringing business called into existence; forest lands reclaimed; real estate made valuable; the productions of the earth increased, both in quantity and value."¹⁴⁷ Many concrete estimates made at that time regarding the value of such roads to farmers by enabling them to market their produce with greater economy and efficiency might be enumerated.¹⁴⁸

It was claimed by the friends of the plank road system that "what is now but the part of a single road, will soon become common throughout the State as a general system, traversing every county and connecting every section."¹⁴⁹ Accordingly many progressive citizens urged the General Assembly to adopt a law on the subject, "carefully guarding individual rights but giving such powers and privileges as will encourage the construction of such roads, and insure protection after their completion." Thus it is evident that the pioneer legislators of Iowa clearly understood the problem of regulating public service corporations: on the one hand private property was not to be taken for public convenience or use without just compensation to the owner; while on the other hand, the rights both of the public and of individuals investing their money in such enterprises were to be alike carefully safeguarded.

It was of course recognized that a private corporation engaged in strictly private business could not take the property of others even by paying a reasonable price. In order to comply with the constitutional provision which requires that "private property shall not be taken for public use without just compensation",¹⁵⁰ the argument was advanced that the proposed roads should be considered as public property from the standpoint of use, that is, the companies constructing these roads should be regarded as public service or quasi-public corporations. The advocates of the plank road system suggested that if the State itself had the power to collect tolls on any public improvement it logically followed that this right might be granted to any company incorporated under general law to construct a public road.

The statement was frequently made that public service corporations of this kind would tend to become monopolies, but the friends of the plank road system held that a monopoly would be impossible "so long as there are so many public highways". In this connection the following pointed

statement appeared in the *Burlington Tri-Weekly Telegraph*:

It is too frequently the case that objections, such as we have been considering, spring from ignorance, from long seated and blind prejudice, from envy, and sometimes from a most despicable spirit of demagogueism. It is the province of wisdom to sift the chaff from the wheat — and it is the duty of honest legislators to pursue an enlightened policy and follow the light of sound reason.¹⁵¹

In connection with the agitation for the plank road system at least three important points should be noted: first, the fact that companies building and maintaining such roads were public service corporations and therefore should be entitled to take private property for their use (which meant, in reality, for public use), by paying just compensation; second, that individuals investing their money in this class of corporations should be guaranteed a reasonable return on their investment; and third, that the public itself should be protected against possible injustice or fraud.

A method of assessing damages in the case of plank roads was suggested in an editorial entitled "General Plank Road Law", which appeared in the *Burlington Tri-Weekly Telegraph* on December 21, 1858. Among other things the writer urged that the amount of such damages ought to be determined by a jury selected for the purpose, and that in assessing damages the jury should be sworn to take into consideration any inconvenience sustained by the owner, including the building of additional fences, as well as the benefits to be derived by the owner from the proposed road, including the "increased value of his land and greater facilities in getting to market."¹⁵²

No general law, however, was enacted by the General Assembly. In lieu thereof a number of special acts were again passed providing for the building of plank roads.

In promoting the agitation for plank roads there were several important factors. In the first place there was the

desire of the farmers of the interior counties to obtain a market for their produce. Then there was the competition of leading cities, especially along the Mississippi, to secure this market. Just as New York, Philadelphia, and Baltimore were each striving at this time to obtain the lion's share of the extensive trade of the Upper Mississippi Valley, so Burlington, Keokuk, Muscatine, and other cities of Iowa were endeavoring on a less extensive scale to win the trade of the interior counties. This fact becomes apparent when one examines the record of any one of the important road companies of the time. For example, it is urged in the *Burlington Tri-Weekly Telegraph* that unless the citizens of Burlington make liberal subscriptions to the stock of this class of companies, the excellent market along the Iowa River will fall into the hands of the city of Muscatine. An editorial in the same paper entitled, "Burlington and Louisa County Plank Road", contains the following instructive suggestion:

In view therefore, of the importance of not only retaining the trade we now have, but of opening up channels of communication with the interior, by which it may be greatly augmented, we think it behooves the people of Burlington to be up and doing, lest ere while they wake up and find the surplus products of a large and growing scope of country flowing into other channels, to increase the wealth and population of other and rival towns.¹⁵³

Again it was claimed for the proposed plank road extending from Burlington westward that it would have the same influence in enhancing the value of land and of other property and in the building up of towns as railroads would have — and at about one-fourth of the expense. Indeed, one notes the same arguments in favor of plank roads as were made later to promote the building of railroads, and the same tendency both on the part of cities and rural districts to invest liberally in the stock of such enterprises.¹⁵⁴

On the one hand the plank road system was recognized to

be a necessity from the standpoint of securing business for a particular city, and on the other hand plank roads were considered of even greater value to the farming community. If the farmers depended on the old type of roads they were frequently compelled to hold their surplus product until midsummer when navigation was partially, if not wholly, suspended, freight rates high, the markets glutted, and prices low. Plank roads, on the contrary, afforded a dry, smooth, and easy means of access to the river at those seasons of the year when the navigation was good, freight rates low, and prices at their highest point. The amount which the farmer invariably lost on account of high freights and low prices represented the substantial economic basis of the so-called plank road system. Under the conditions of poor transportation the farmers as a class lost heavily in two respects: first, by being compelled to accept low prices for their own produce; and second, by being forced to pay high prices for all manufactured articles required on the farm. It was alleged repeatedly that "Plank roads would relieve them of both these heavy and discouraging drawbacks upon their industry, and afford them such facilities and advantages as to secure them ample fortunes where they now derived but a scanty living."¹⁵⁵

It is apparent that the importance of efficient transportation — which included or was soon to include railroads, rivers and canals, graded and plank roads, and ordinary wagon roads — was coming more and more to be realized by the pioneers of Iowa. Plank roads, canals, and railways were regarded as "the three great inscriptions graven on the earth by the hand of modern science, never to be obliterated, but to grow deeper and deeper, as channels of comfort and prosperity." The fact that these methods of transportation were looked upon as supplementary and not as antagonistic to each other is apparent from even a superficial examination of contemporary sources. On this point the following comment is suggestive:

Railways, with all their value, and they are of priceless worth to man, are yet the thoroughfare for the citizen away from his home — for the journey, the travel, the tour; but the plank road is for the home use — for the transit which is begun and ended in a day, or its fraction — which gives to him who uses it a double value or occupation for the hours of the day — which increases the happiness and comfort and profit of the farm, that foundation of all the institutions of society.¹⁵⁶

A discussion of the subject of graded and plank roads would, however, be incomplete without some reference to the rigid constitutional provisions dealing with the general subject of corporations and the reaction which was taking place in favor of more liberal laws along this line. At that time, for example, the Constitution of Iowa absolutely prohibited the establishment of banks with power to issue notes to circulate as money. The prohibition is stated in the following terms:

No corporate body shall hereafter be created, renewed, or extended, with the privilege of making, issuing, or putting in circulation, any bill, check, ticket, certificate, promissory note, or other paper, or the paper of any bank, to circulate as money. The General Assembly of this State shall prohibit, by law, any person or persons, association, company or corporation, from exercising the privileges of banking, or creating paper to circulate as money.¹⁵⁷

The same instrument also prohibited the establishment of corporations by special laws, "except for political or municipal purposes", the General Assembly being authorized to provide by general laws for the organization of all corporations except those with banking privileges. Finally, the Constitution stipulated that "the stock holders shall be subject to such liabilities and restrictions as shall be provided by law. The State shall not directly or indirectly, become a stockholder in any corporation."¹⁵⁸

The early part of the period under consideration was characterized by a rigid construction of constitutional pro-

visions in matters pertaining to the general subject of corporations — which meant that there was a tendency on the part of the General Assembly to keep a large amount of authority directly in their own hands, granting charters by special acts rather than permitting them to be issued under a general law. It appears that there had not only been a marked tendency to enact special laws along many lines, including the laying out and opening of State roads; but the General Assembly had also been so rigid and strict in the application of the general laws of incorporation that in the judgment of many well informed men the legitimate and normal development of business enterprises had been discouraged. Very soon, however, there appeared a marked reaction against both of these tendencies — a reaction which was partially responsible for the drafting of a new State Constitution in 1857. When the provisions of the *Code of 1851* dealing with the subject of private corporations were under consideration, this reaction in favor of such corporations had already become a very positive force.

In regard to the question of individual liability, some people held that persons forming a corporation should be liable only to the extent of the amount of capital stock subscribed. This was the liberal view of men who believed in encouraging the growth of capitalism in Iowa. Others, however, felt that individuals organizing corporations should be liable to the full extent of all their property. This was the rigid view of the constitutional provision which a considerable group of thinking men considered detrimental to the general welfare of the State — it being alleged by the opponents of the individual liability principle that a man worth a thousand dollars might be quite willing to commit fifty dollars worth of stock to the judicious control and management of a board of directors in order to aid in the construction of some necessary improvement, when that same person would not give over the management of all

his property to any man or set of men however great might be the necessity of a given improvement.¹⁵⁹ For this reason it was claimed that the enactment of more liberal laws regarding the formation of companies "for the construction of rail roads, plank roads, bridges, turnpikes, &c., and for insurance purposes",¹⁶⁰ would tend to foster and promote the economic development of the Commonwealth.

An examination of the newspaper files for the first decade following the admission of Iowa into the Union reveals the fact that the people generally did not appear to understand the real nature of corporations. What was meant or ought to be understood by individual liability? In what respect should a corporation be considered a legal person with power to sue and be sued in the courts? What was the real difference between a corporation and a partnership, and in what respect did the business conducted by a corporation differ from that carried on by individuals? If charters were to be granted giving certain special privileges to corporations what regulations and restrictions should be made to protect the interests of the stockholders on the one hand and the public on the other? These were some of the questions about which the people generally — including many leading men — knew but very little in 1850. There was a general feeling, however, that in order to encourage the introduction of foreign capital and develop the State, more liberal constitutional provisions and more liberal laws were necessary. Now the chartering of companies for the building of graded and plank roads was a phase of the general subject of corporate organization, regulation, and control.¹⁶¹

As time went on the feeling became stronger and stronger that the Constitution of 1846, which prohibited the State from entering into a system of internal improvements, should either be redrafted or interpreted according to more liberal principles. While it was conceded that the State should not engage directly in a system of internal improve-

ments or become a stockholder in general corporations, many persons held that the General Assembly should provide by law for the formation of companies to carry on this important work. Plank roads, railroads, and turnpike roads were all needed; but it was difficult to induce capital to seek investment in these enterprises when the companies were granted no protection. In 1851, as at the present time, some people believed in liberal and others in rigid legislation on the subject of private corporations. Regarding the very timely question as to whether the government shall regulate the corporations or the corporations control the government, the following statement is both interesting and instructive:

Whenever it becomes a question whether the capitalists shall use the public, or the public the capitalists, we think all discerning men will be found to take ground on the side of the public.¹⁶²

The reaction against special legislation by the General Assembly and against the rigid constitutional and statutory provisions relating to private corporations led to important changes in the State Constitution. Among other things, the fundamental law as redrafted in 1857 prohibited the General Assembly from passing local or special laws "for the assessment and collection of taxes for State, County, or road purposes."¹⁶³ Thus it would no longer be possible to lay out and open State roads under special acts of the General Assembly as was the practice prior to 1857. The new Constitution also provided for the creation of banking associations, authorized the establishment of a State bank with branches, provided rules and regulations regarding the enactment of a general banking law, stipulated the responsibility of stockholders, and prohibited the suspension of specie payments. While private corporations could no longer be created by special laws, the General Assembly was clothed with large authority to provide for their establishment by the enactment of general laws.¹⁶⁴

The period which intervened between the admission of Iowa into the Union in 1846 and the enactment of the *Code of 1861* was not characterized by any important change in the general system of road administration. The relative powers vested in the township and county remained substantially the same as outlined during the Territorial period. But other important movements and problems had appeared. These included: first, the building of plank and graded toll roads, which served as connecting links between the ordinary wagon road on the one hand, and the railroad of a later time on the other; second, the question of whether a liberal or a rigid application should be made of the constitutional provisions and the statute laws governing the organization of corporations; and finally, the problem of regulating what even at that early date were clearly understood to be public service corporations.

Iowa had but few navigable rivers, and these were useful as agencies of transportation only during certain months of the year. The pioneers in pushing on into the interior and western counties found it more and more difficult to market their produce. Roads were impassable during those seasons of the year when navigation was possible and thus it was very difficult for the farmer to get his produce to market in time to secure the advantage of high prices. As a logical result of economic conditions, therefore, the demand for a more permanent system of highways connecting the Mississippi River with the principal market centers and farms of the interior counties became imperative. The settlers early recognized that without efficient means of transportation the economic progress of the new Commonwealth would be greatly retarded.

The plank and graded toll roads were, therefore, a necessity during the period immediately preceding the introduction of railroads. Such roads would enable the farmer not only to haul much heavier loads, but also to take his

produce to market at the proper time from the standpoint of navigation and high prices. The graded toll roads, together with one or two plank roads, constituted the principal channels of transportation and were the logical precursors of the railroads, serving much the same purpose during the decade immediately following the admission of Iowa into the Union that roads of steel served at a later period.

Moreover, largely as a result of economic necessity, these permanent roads were very generally constructed by private corporations and operated as private enterprises: it was not practicable for the early settlers to undertake their construction as a function of either State or local government. This being true, the private ownership and operation of transportation agencies, which were recognized to be public in character judged from the standpoint of service rendered, called up for the first time in Iowa history the important question of State regulation and State control. Furthermore, in reference to this important problem the pioneers of Iowa clearly recognized the following facts: first, that the right to charter corporations of this class logically carried with it the right of supervision and control; second, that private property could not under any circumstances be taken for private use even by paying a just compensation, and when taken for public use, not only a reasonable price should be paid but the right of supervision and control on the part of the public ought to be made secure; and third, that a corporation might be private from the standpoint of ownership and management, and public from the equally important standpoint of the service rendered.

Under the pioneer conditions of early Iowa and in the face of the considerations above outlined, it logically followed that some men would adopt what were generally understood to be liberal views, while others would hold

more rigid ideas as to the extent of regulation and control which should be exercised by the State. Largely as a result of the "wild-cat" banking schemes of the period immediately preceding the admission of Iowa into the Union, the Constitution of 1846 was very rigid in its provisions relative to the chartering of private corporations. This being true, graded and plank road companies, and other similar corporations were chartered by special acts rather than under a general law. It was believed, however, by many well informed men that the absence of liberal constitutional provisions and liberal legislation along this line was greatly retarding the economic progress of the new State. The period from 1846 to 1851 marked the beginnings of an agitation for State regulation and control of public service corporations which, continuing to the present day, has come to include the whole field not only of so-called public service corporations, but of certain great producing corporations as well. Indeed, the demand of the early settlers of Iowa for State regulation and control of plank and graded toll roads is based on the same fundamental principles as is the demand which is frequently made at the present time for the regulation of the Standard Oil Company, the United States Steel Corporation, and the American Tobacco Trust.

IV

ADMINISTRATIVE CENTRALIZATION: THE COUNTY ROAD SUPERVISOR 1851-1853

It is generally conceded that the *Code of 1851* is from many standpoints the most important compilation of laws ever adopted by the General Assembly of Iowa. The three commissioners who drafted the revision were all men of the highest order of ability, possessing special knowledge along political, legal, and constitutional lines.¹⁶⁵ It was assumed that they would not change the substance of the statutes then in force, but would merely reduce the laws of the State to a logical and orderly system. At the same time it appears that the statutes which had been handed down by the Legislative Assembly of the Territory and later amended by the General Assembly of the State were productive of so much confusion and were so disconnected that thorough and systematic revision meant a more or less complete re-drafting of the whole body of the law. Accordingly the Code Commission went beyond the original purpose of the General Assembly and prepared a new and vastly more logical compilation of the laws of the Commonwealth.

Anyone who makes a careful study of the history of taxation in Iowa must necessarily be impressed with the progress along fiscal lines which was made in the provisions of the *Code of 1851*.¹⁶⁶ And the same improvement is apparent in the case of road legislation and administration. In fact the whole machinery of township and county government was simplified and made more efficient — especially from the standpoint of actual administration — by the pro-

visions of the new code. What had been a complicated network of disconnected laws was reduced to a logical system. What had been a hopelessly decentralized and inefficient system of local administration was made more centralized and therefore more economical and efficient. The number of local officers was somewhat reduced; the authority of the county as a unit of local government was greatly enlarged, and the powers heretofore exercised by the board of county commissioners were placed in the hands of the county judge. In the assessment of property and the equalization, levy, and collection of taxes, in the administration and control of roads and bridges — in fact, along all the important lines of local activity — the county was not only vested with additional power and authority, but such power and authority was placed in the hands of fewer officials who were made more directly responsible for their acts. In other words, the *Code of 1851* stood for at least three things: first, simplicity and therefore economy; second, logical and systematic arrangement; and finally, more direct and efficient administration of law.

Before making an analysis of the road legislation contained in the *Code of 1851* it may be well to examine with some care the forces which brought about such radical changes. Why, for example, was the board of county commissioners abolished and its powers vested in the county judge? Why was the former decentralized local organization for the administration of roads abolished and a county road supervisor provided? What were the motives which caused so large an amount of fiscal authority along practically all lines to be transferred from the township to the county? Unfortunately the available source materials for the history of the period do not contain sufficient information to warrant absolutely positive conclusions. At the same time by making a careful intrinsic study of the road legislation of the *Code of 1851* in comparison with earlier

laws, both Territorial and State, and by supplementing this study with such documentary and newspaper materials as are available it is possible to give at least partially satisfactory answers to these questions.

Moreover, in this connection, and also from the standpoint of scientific reform along the line of road legislation and administration, it is especially desirable to consider the arguments which were made for and against the system of administrative centralization which characterizes the local government provisions of the *Code of 1851*. Indeed, it is true that in a large measure the arguments which were used against the county road supervisor, and in fact against the whole plan of a more central administrative control at that time, are substantially the same as continue to be advanced against similar reforms which from time to time have been brought before the General Assembly. Furthermore, it may safely be alleged that the considerations which in 1851 were urged in favor of a larger measure of administrative centralization in local government and administration apply with greater force under present economic conditions. And so, an analysis of the arguments and motives which resulted in the legislation of 1851 may have a direct and most important bearing upon reforms which are now being proposed for the more economical and efficient administration of roads and bridges. The *Code of 1851* was far in advance of anything which preceded it or which has been adopted since that time along the lines of simplicity, economy, and efficiency; and so desirable reforms—for example, provision for a county road engineer—may be secured by practically reënacting certain parts of that earlier law. This is only another way of saying that during the last sixty years there has been a backward movement in the administration of roads as well as in the assessment and collection of taxes.¹⁶⁷

As has already been pointed out, the administration of

roads and bridges is a function of township and county government.¹⁶⁸ This being true, it is quite impossible, or at least very difficult, to understand the new methods of road administration without knowing, at least in a general way, the fundamental changes made in the system of local government and the reasons which brought about these changes. For example, it is difficult for one fully to appreciate why the decentralized system of local road supervision was abolished and the office of county road supervisor created unless he understands why the board of county commissioners was at the same time abolished and its powers given to the county judge. Nor is it possible to grasp fully the meaning of the radical changes made in the system of road administration unless one understands the modifications which were made in the powers and authority of township trustees and other local township officials. And in this connection it should always be borne in mind that local government is like an organism all of the parts of which are so closely inter-related that any important change made in one part thereof necessarily affects the whole.

The columns of the *Burlington Tri-Weekly Telegraph* and of one or two other contemporary newspapers contain instructive materials bearing upon the *Code of 1851*.¹⁶⁹ An analysis of these materials in connection with an internal study of the code itself, as has been pointed out, may have a direct bearing upon the present good roads movement, simply because the success of any good roads movement depends in so large a measure upon the character of local administration and control.

In a contribution entitled "The New County Organization", signed "J. W. G." there appears a very clear statement of some of the arguments advanced in favor of reducing the number of local offices and establishing a more efficient, economical, and centralized plan of local government. The writer states that the business of his county

was being conducted by eight officers — a judge of probate, a district clerk, a school fund commissioner, three county commissioners, a recorder of deeds who was also treasurer and collector, and a county commissioner's clerk — while the code under consideration proposed to reduce this number to three — a county judge, a county clerk, and a recorder who at the same time was to act as ex officio county treasurer, thus saving his county \$1,530, which in addition to probate fees paid into the county treasury would amount to a total annual saving of \$2,250.¹⁷⁰ Thus the argument of greater economy was a favorite one. At the same time it was pointed out that the inducement to charge exorbitant or illegal fees was removed by providing that such fees should be paid into the county treasury.

To the objection that the powers conferred upon the county judge were too great to be vested in any one man, it was pointed out that he had no greater authority than was then possessed by the county commissioners, fund commissioner, and probate judge. "Instead of having three men from remote parts of the county meeting once in three months, and holding a session of three days", it is urged that "we will have an officer who will devote his whole time and attention to county business. He will become familiar with the county finances. The same accounts will not be likely to be audited and paid a second time."¹⁷¹ A strong point was also made of the fact that the county court would be a permanent organization, in session all the time attending to the wants and needs of the people.

In reply to the argument that the plan of greater centralization was undemocratic, it was suggested that from the standpoint of true democratic government, economy and efficiency were quite as essential as a multiplicity of local officials. The argument was frequently advanced with much force that to elect but few officials, pay them fairly well, and hold them directly responsible for an honest,

economical administration was in itself the very essence of real democracy. These statements are mentioned for the special reason that they are quite as applicable under existing conditions as during the period under consideration.

In a communication signed "A County Officer" an attempt was made to reply to the arguments of "J. W. G." The accuracy of the estimated saving under the new system was questioned, and it was suggested with no little sarcasm that "this is not the first time economy has been preached from the closets of lawyers, and figures have been dogmatically given, without the slightest foundation in truth, in favor of changes, which, when made, have universally been disastrous to the tax paying public."¹⁷² Objection was emphatically made to the centralization of power in the hands of only two or three county officers, as provided in the proposed new code. The fact that three officers were to perform the duties exercised by eight under the old system irritated the democratic sensibilities of "A County Officer". And so he says: "Why not make His Eminence, the County JUDGE, perform them all, and ring the Town Bell into the bargain?" In this way a much greater saving would be realized. Moreover, it was alleged that the new system proposed to farm out the county offices by paying a regular salary and then appropriating the fees for the benefit of the public. If the public officers could do this, the county might also "sell goods, buy pork, build plank roads, and go into a general system of making money."¹⁷³

Criticism was also lodged against the anti-democratic features of the new system — especially the office of county judge. Among other statements "A County Officer" contends that "the principle that representation and taxation should go together, is one which has been fought for centuries ago, and to which all parties now give a willing assent. If one officer can supplant three in administering county matters, why can it not be done in legislatures. . . .

Why should not 'North of Flint' and 'South' too have a voice in county business, as well as the town?"¹⁷⁴

It therefore appears that some people contended that the different parts of the county should be represented in order that justice might be done to all sections and especially that the interests of the rural districts as distinguished from the towns and cities might better be conserved. While the spirit in which this argument was brought forward is no doubt open to criticism, the argument itself possesses real merit and has exerted an important influence in determining the character of the organization of county government.

The two communications of which an analysis has just been made are typical of the arguments used for and against the system of county government proposed by the commissioners who drafted the *Code of 1851*. Those who favored the county judge system argued that it would be more economical and efficient than the old system and that it was equally democratic. In fact, the question of democracy was the main point of contention between the supporters and opponents of the proposed plan of local government. The advocates of the plan declared that the board of county commissioners under the old system was primarily an executive rather than a legislative body, and that there was no more reason for selecting three commissioners than for choosing five or six Governors or as many sheriffs. They also argued that after all, representative government does not depend upon the election of numerous officers, but rather upon giving the people the right to vote for their own representatives who are held responsible for their acts. That is to say, county government with three officials would be just as representative, or perhaps more so, than county government with six or seven or perhaps a dozen officials.¹⁷⁵ For instance, one writer declared:

I understand everyone is *represented* within the meaning of the phrase which your correspondent so grossly misunderstands, when

he has the opportunity of voting for those who are to make or administer the laws under which he lives, whether the number of such persons be few or many, and the town or county have an equal right to vote for the County Judge, Clerk, or Recorder.

I do not understand that there is anything in the democratic principle which requires offices to be created for the benefit of the officer, which requires seven men to be kept in pay to perform the labor that three men would perform better and cheaper. Economy is the handmaiden of democracy, and efficiency is not its antagonist. . . . If the labor is more than one man can perform, give the supervision to one, give him the means necessary to go through with it, and make him responsible for its performance.¹⁷⁶

On the other hand, the opponents of the proposed system insisted that altogether too much power was conferred upon the county judge. It was declared that he might draw money out of the treasury for his own private purposes without any "possibility of detection"; and that the "political party that has the hardihood to father such a bill of abominations, will soon be beyond the aid of either doctors or lawyers."¹⁷⁷ Another writer, who signed himself "T", called attention to the fact that the machinery of local government had been changed at least three times during the last few years, and that when these changes were made the people were "tantalized with profound calculations of the great economy", which had never been realized in practice. In fact, the main arguments against the county judge system were summed up by this writer as follows:

1. It gives to one county officer unheard of authority and power, not only over his brother officers, but over the people, and elects him for an unprecedented length of time.
2. It places all the other officers entirely under the control of this officer, and renders everybody and everything subservient to his beck and nod.
3. It deprives two-thirds of the people of their rightful representation and voice in administering their own internal and local affairs.

4. By a system of speculation, by the county, upon the fees of the officers, it renders the county more than liable to the ordinary results of speculation of private individuals, to lose more than it will gain.

5. By this system, it threatens to make every county office a direct burden upon the county treasury, to be supported only by increased taxation of the people.

6. By this system, based upon the false estimate of population instead of work, the county officers will be crowded with more work than they can possibly perform, and the people will be hampered at every step in the transaction of public business.

7. That the figures given to you as [to] the proposed extent of saving to each county and to each tax payer, are void of any foundation in truth, and that there cannot possibly be any saving effected under it, but on the contrary an increased expenditure.¹⁷⁸

In this connection it may not be altogether irrelevant to observe that American democracy does not yet seem to fully understand the fact that real representative government does not consist in creating offices for the benefit of office-holders. Nor is there an adequate appreciation of the importance of efficiency in administration — which frequently means more centralization in the administration of the affairs of government, national, State, and local. It is the old question of individualism and the pursuit of individual gain for its own sake as contrasted with the higher civic ideal of public service which after all is the real basis of just and efficient government.

Pioneer democracy in Iowa, as well as in other jurisdictions, tended to over-emphasize the importance, first, of the elective principle, and second, of the multiplicity of offices filled by men supposed to be directly responsible to the wishes of the people. The contention that if it is impossible for one man to direct the work (for example, to look after all the roads in a certain county) he should be given general supervision over the men who do the actual work, in the interests of uniformity, economy, and efficiency, is a well

recognized principle of political science; and at the present time there is some recognition of the importance of this principle in the movement for good roads. It is interesting to observe that this is exactly the point made in the communication above referred to and which aroused such strenuous objection on the part of the opponents of the proposed system. Indeed, as has already been said, the arguments presented both for and against the *Code of 1851*, because it provided for a more central type of administration, are almost exactly the same as those advanced at the present time in favor of or in opposition to the good roads movement.

It would be repetitious to review other newspaper sources dealing with the code, since they consist in the main of a restatement of the facts, suggestions, and arguments already outlined. It is only necessary to add that the temptation on the part of the legislators to make slight amendments to practically every section of the code, provided it could be accomplished "without doing too much damage", did not pass unnoticed. This frailty of the average legislator is well characterized in an editorial in the *Muscatine Journal*.¹⁷⁹

The code as adopted by the General Assembly in 1851 provided for the following county officers: a county judge, a clerk of the district court, a county attorney, a recorder, a sheriff, a surveyor, a coroner, and a supervisor of roads, all elected for a term of two years except the county judge who was elected for four years. It will be observed that after all the debate and discussions about abolishing offices the number was left substantially the same as before—except that a county judge was provided, in lieu of the board of county commissioners, and was made the "accounting officer and general agent of the county."¹⁸⁰ Thus the county judge was given essentially the same power and authority with reference to the administration of roads and

bridges as had formerly been exercised by the board of county commissioners.

Among other provisions the code stipulates that "the county court has the general supervision over the highways in the county with power to establish and change them as herein provided and to see that the laws in relation to them are carried into effect."¹⁸¹ It is further provided that county and State roads should be sixty-six feet in width — but for good reasons the court is given authority to fix a different width, not less than thirty-three feet. Among the additional powers conferred upon the county court in the matter of roads mention may be made of the authority of prohibiting any person from riding or driving faster than a walk across certain bridges, and of acting as the fiscal and accounting agent of the county in the administration of highways.

The road law of the *Code of 1851*, which is much more logical and systematic than any preceding statute, is arranged under the following headings: (1) general provisions, (2) manner of establishing county roads, (3) establishment and alteration of State roads, (4) road taxes, (5) making and repairing roads, and (6) manner of conducting the fiscal operations connected with the road tax. The subject matter under each title or heading is placed in consecutive form, and all unnecessary details are eliminated. Indeed, from the standpoint of brevity, logical form, and systematic arrangement, as well as in the matter of centralized responsible administration, the *Code of 1851* in general, and the road provisions in particular, represent the high water mark of constructive legislation in Iowa — a fact which is largely, perhaps almost entirely, due to the high character and ability of the three Code Commissioners.

The provisions of the new code dealing with the manner of establishing county roads are in a large measure a condensed statement of the requirements found in the earlier

statutes. Thus, four weeks notice at the court house and in three public places in each township through which the proposed road is to pass is required before the petition asking for its establishment is presented to the county court. It is further specified that such notice must state the principal points through which the road is to pass and the time at which application will be made to the county court for the appointing of a commissioner to examine and report upon the desirability of establishing the road.¹⁸² The security required is much the same as in former acts, but it is provided that if the proposed road is less than five miles in length security must be given for the absolute payment of all necessary expenses.

After the notice is posted and the necessary security has been given, the court, that is the county judge, "shall proceed to the consideration of the case, and if satisfied that the above mentioned prerequisites have been complied with shall appoint some suitable and disinterested inhabitant of the county a commissioner to examine into the expediency of the proposed road and to report accordingly."¹⁸³ It is made the duty of this commissioner to view the road; but in doing so he is not "confined to the precise matter of the petition but may inquire and determine whether that or any road in the vicinity answering the same purpose and in substance the same be required",¹⁸⁴ taking into consideration both the public and the private convenience and inconvenience and at the same time making a careful estimate of the expense of the proposed highway. In case his report is adverse, there are no further proceedings; but in case it is favorable, the county judge is clothed with authority to receive claims for damages and appoint appraisers to adjudicate the same prior to the actual laying out and opening of the road. If the circumstances are favorable, the commissioner may proceed at once to lay out the road; but if the precise location of the road can not be readily ascer-

tained "he must call to his aid a competent surveyor and the necessary assistants and cause the line of the road to be accurately surveyed and plainly marked out." Other details concerning the duties of the special commissioner, including his per diem allowance, are contained in the law.¹⁸⁵

After the filing of the special commissioner's report in favor of the road, it is made the duty of the court to appoint a day for acting upon the same, which shall not be less than sixty nor more than ninety days from the time of receiving the report. All claims for damages must be in writing and filed in the county office within a certain specified time. The appointment and duties of appraisers are thus explained: "Upon the filing of such claim the court must appoint three suitable and disinterested voters of the county as appraisers to view the ground on a day fixed by the court and report upon the amount of damages sustained by the claimant after deducting therefrom the benefit he will receive from said road."¹⁸⁶

The large amount of power and discretion vested in the county judge is apparent from a careful examination of the section dealing with the hearing of testimony and the actual establishment or rejection of the proposed road. First of all, it matters not whether an application for damages has actually been made, for in any event "the court may hear testimony and receive petitions for and against the establishment of such road." That is to say, the county judge may appoint appraisers, and later on other appraisers, if necessary; but in the end he may receive evidence himself and perform all the duties required to be performed by appraisers. In order to make the law still more elastic and clothe the county judge with additional authority and discretion, it is provided that the court "may establish or reject the road absolutely or it may make such establishment conditional upon the payment in whole or in part of the damages awarded or the expenses incurred in relation

thereto, as the public good may seem to require."¹⁸⁷ In other words, the question as to whether a road shall be established or not established, and all matters incident thereto, are in the last analysis placed in the hands of the county court.

It would seem, however, that the code provides certain definite safeguards against the possible abuse of the large and somewhat arbitrary powers of the county court. In case money is advanced for the opening of a road a memorandum of the same must be made, and the clerk is required to issue a certificate to the person making such payment. If the road is discontinued at any time thereafter, the money thus paid is refunded to him or his legal representatives. Finally, when damages have been paid by the county or by an individual, the amount of such damages must be refunded in case the road is discontinued. Claims of this character are made liens upon the land which may be sold to liquidate the debt.

Some other minor facts concerning the establishment of county roads are instructive. After the road is established the plat and field notes are filed by the clerk, and then it is the duty of the county supervisor of roads to open and work the new highway according to law. In case all of the owners of the land to be used in opening a certain road give their written consent the proposed highway may be established without the appointment of a commissioner. Finally, when roads are laid out either along or across a county line concurrent action of the respective county courts is necessary and the commissioners must take action together. In all such cases the proposed road will not be considered as established in one county until it has been established in both.

That portion of the *Code of 1851* dealing with the administration of roads also provides certain general rules for the laying out and opening of State roads, which are much

the same as those observed in the laying out and opening of county roads. Thus, it is provided that the report of the commissioners named in the special acts of the General Assembly should be filed in the office of the Secretary of State within six months from the time of the passage of the law authorizing the road. A plat of the proposed road together with a copy of the field notes must be attached to the report; and the Secretary of State is required to transmit copies of the plat and field notes of the portion of the road located in each county to the proper county authorities, where they are filed and recorded as in the case of county roads. In fact, State roads after being established are treated in all respects the same as county roads, except that they can not be discontinued or in any way changed by order of the county court. Indeed, it would seem that the principal difference between State and county roads under the *Code of 1851* was that the former were authorized by special acts of the General Assembly, while the latter were established by order of the county court. After being once established, State and county roads were on essentially the same basis so far as their practical administration was concerned.

Regarding the important matter of road taxes the code provisions stipulate that every person "liable to pay a county poll tax must pay a road tax of such an amount as is fixed by the county court, which shall not be less than one nor more than two dollars annually." This again allows a considerable amount of discretion to the county judge. While fixing the rate of poll tax, which may be worked out on the road at the rate of one dollar a day, the county court is also required to determine upon the property tax for roads and bridges, "which shall not be less than one nor more than three mills on the dollar on the amount of the county assessment".¹⁸⁸ A higher rate may, however, be levied by vote of the people of the county upon the question

being submitted according to law. In addition, a special property tax of not more than one mill on the dollar in any one year may be levied for the building of a bridge too expensive to be constructed out of the ordinary road fund. Unless otherwise provided road taxes are to be considered a part of the county tax and collected in the same manner, except that ordinary county warrants are not receivable for that purpose.

Those provisions of the road law dealing with the making and repairing of roads are especially instructive because they reveal to what degree the administration of roads was actually placed in the hands of the county supervisor and county court. The simplicity, the clearness, and the direct logical arrangement of these sections are apparent to the critical reader. The powers and authority of the county road supervisor and his relations to the county court were carefully set forth. The township was regarded as a minor administrative division, the deputy in each township being appointed by the county road supervisor and subject at all times to his orders. In other words, the county, by virtue of the extensive powers vested in the county road supervisor and the county judge, was the important unit of local government from the standpoint of road administration. In fact, it is believed that the General Assembly in dealing with present conditions might obtain from this system of responsible, efficient, centralized supervision and control of roads and bridges valuable suggestions for the solution of current problems in road administration.

Among the specific provisions for road supervision it is, first of all, made the duty of the county road supervisor to "provide himself with a map of his county on a scale of not less than one inch and a half to the mile, which shall be carefully kept and transmitted to his successor in office."¹⁸⁹ This map must show all of the roads established in the county, and any new roads that are laid out must be added

from time to time. In case a road is established along a county line, it is made the duty of the supervisors of the respective counties to apportion that part of the road upon the county line either by agreement or by lot; and after the same has been apportioned, the road which falls to either county "shall belong to and be kept in repair by it." With the approval of the county court the supervisor is granted the additional authority to hire or purchase the necessary implements required to keep the roads of his county in proper condition. Regarding the expenditure of funds by the supervisor it is provided that "he must annually expend within each surveyed township or fractional township containing any portion of an established road at least one half of the ordinary road tax levied on real estate within such township." With the approval of the county court the remaining one-half might be expended in the construction of bridges or in the making of other necessary improvements in any part of the county — a provision which again shows to what extent the supervision of roads was considered a county function and furnishes at the same time additional evidence of the power and discretion vested in the county court.

The provision, however, which reveals most clearly the true character of the system of local administration provided in the code is that which makes it the duty of the county road supervisor to appoint one deputy in each organized township of his county. The deputy thus appointed is made directly responsible to the principal and may be removed from office at the pleasure of the principal. The compensation of the deputy must, however, be approved by the county judge — which indicates to what extent the powers of the county road supervisor and county judge were woven into a complete system of county road administration.

In this connection it should be borne in mind that the ex-

tensive powers of the road supervisor were not granted without at the same time providing for a reasonably clear and definite account of all work done and money expended. Thus he was required to "keep an accurate account of the amount of labor expended and the amount of money paid, showing how much has been paid to each individual and for what services or other consideration, how much on each road or bridge and how much within each township, which account must be verified by his oath and returned annually to the county court on the first Monday in July."¹⁹⁰

The manner of conducting the fiscal operations connected with the road tax is the last, but by no means the least important, portion of the road law as set forth in the *Code of 1851*. Here again space will not permit a consideration of minute details, which may best be obtained by consulting the provisions of the law itself.¹⁹¹ In this connection it is perhaps sufficient to observe that two classes of road certificates were issued by the county supervisor: first, general certificates given to persons entitled to payment from the county for labor or materials furnished at the request of the supervisor or growing out of contracts with him, which were receivable generally at the treasury in payment of road taxes and redeemable out of any money belonging to the road fund; and second, special certificates issued to persons for voluntary labor or labor in payment of their poll or personal road tax and receivable at the treasury on that basis. The treasurer was required to open a distinct account with the whole road tax fund, charging that fund with the amount of warrants paid in and cancelled. Moreover, the books of the treasurer and the county road supervisor must correspond and, as already noted, the county judge was made the general accounting officer of the county.

As additional proof of the administrative centralization inaugurated by the *Code of 1851* it may be noted that the Census Board, which corresponds to the present Executive

Council, was clothed with authority to make "any supplemental regulations . . . which may be found necessary to carry out the full spirit and intent of this chapter, and which regulations shall be obligatory throughout the state."¹⁹² Finally, the county court might also make certain additional regulations, "subject to any regulation made by the statute or by the census board as above provided."

In conclusion it may be stated that the period under consideration, judged from an administrative standpoint, was unique in the history of Iowa road legislation. From July 1, 1851, when the *Code of 1851* went into effect, until February 2, 1853, when the system of district road supervisors was established, the administration of roads and bridges was under the joint supervision and control of a county road supervisor elected by the people for a term of two years and the county judge elected by the people for a term of four years. The county road supervisor had jurisdiction over all the roads of his county, but was made responsible to the county judge who had inherited the powers and authority previously vested in the board of county commissioners and was at the same time the auditing officer of the county. From the standpoint of finance, responsibility was vested chiefly in the county judge; but from the standpoint of field work and actual supervision of the laying out, opening, and maintenance of roads, the county road supervisor was clothed with extensive power and authority.

For the first (and perhaps the last) time in the history of Iowa since its admission into the Union, the township as a unit of local government having substantial supervision of highways was practically blotted out. Indeed, in road administration the civil township was reduced to the status of a minor administrative division in charge of a deputy appointed by and directly responsible to the county road supervisor who, as has already been suggested, was himself

responsible to the county judge. The degree of administrative centralization represented by this system, which made the county the one unit of local administration in road and bridge matters, will be understood by the critical reader when contrasted with the reforms now being urged by the advocates of the good roads movement.

At the present time it is quite generally admitted that township trustees should have the right to appoint the township road superintendent and have practically complete jurisdiction over the dragging of public highways. Under existing conditions no one would seriously advocate the appointment of township road superintendents and township superintendents of dragging by the county board of supervisors, for the obvious reason that such a plan would justly be regarded as an unwarranted usurpation of powers and duties which may wisely be vested in the civil township. While authorities on road legislation and administration agree that the supervision and control of roads and bridges should rest partly with the State and partly with the county, the fact that a substantial amount of power may at the same time be wisely exercised by the duly elected representatives of the township rests upon an equally secure foundation.

If, however, the *Code of 1851* viewed from the standpoint of township government, represented a degree of administrative centralization which was not absolutely necessary and which would probably not be tolerated at the present time, its provisions relative to the office of county road supervisor are suggestive when considered in connection with the present movement for the creation of the office of county road engineer. Indeed, according to the proposed plan the county road engineer is to be given jurisdiction over the highways of his county similar to that possessed by the county road supervisor in 1851, and he is also to be made responsible to the county board of supervisors in much the same way that the county road supervisor was

made responsible to the county judge. By way of contrast, however, the following differences should be noted: first, the proposed county engineer would be appointed by the county board of supervisors and not elected by the people, as was the case with the county road supervisor in 1851; second, he would be an expert civil engineer and a practical road builder, requirements which for obvious reasons did not appear in the *Code of 1851*; and finally, he would not be clothed with authority to appoint township road superintendents, since the granting of such authority would be an invasion of the legitimate and proper sphere of township government. In short, the county road supervisor of 1851 possessed certain powers and authority which are now wisely placed under the jurisdiction of the township trustees and which therefore need not and should not be vested in the proposed county road engineer.

When the *Code of 1851* was pending before the General Assembly the following arguments were frequently advanced against the county judge system, including the provision for a county road supervisor: first, the contention that the whole general plan was arbitrary, undemocratic, and un-American, vesting unwarranted powers in the hands of certain officers without making them directly responsible to the wishes of the people; second, it was alleged that the proposed scheme of county government was not based on the representative principle for the reason that the county judge and the county road supervisor, coming from one section of the county might ignore the interests of other parts of the county; and third, it was declared to be highly dangerous to clothe any one official with such large financial responsibility without providing greater checks and safeguards to prevent the waste and misuse of the public funds.

In reply to these criticisms, the Code Commissioners and other friends of the more centralized plan of administration contended, in the first place, that public offices were created

for the purpose of rendering public service and not for the special benefit of any army of office seekers; in the second place, that representative government in the last analysis does not consist in the needless multiplication of official positions, but rather in clothing the people of a given unit of government, be it township, county, or State, with the right to elect and control their representatives; in the third place, that the simplified plan provided in the code would be more economical and efficient; and finally, that financial responsibility could be obtained quite as well through a few as through many public officials.

The actual success or failure of the so-called "County Judge System" is a problem in political science on the one hand and of the history of county government on the other. In this connection it may be observed that Mr. Nelson Antrim Crawford, Jr., of Council Bluffs has published a very scholarly article entitled *The County Judge System of Iowa with Special Reference to Its Workings in Pottawattamie County*. His conclusions regarding the practical workings and efficiency of the system are as follows:

The reason that first comes to mind for the relative difference in the successful operation of the two systems is naturally the same argument that was used by Iowa newspapers opposed to the county judge system, namely, that it employed the autocratic and unrepublican method of one-man rule. To be added to this reason, however, is the fact that Iowa had no wealthy men to elect to office. The salary of a County Judge was exceedingly small, and the duties were exceedingly numerous. This would readily tend to one of two results: the duties of the office would be neglected; or graft would occur. And these, while not present in all counties of the State, were the two chief evil results of the system. Again, in Iowa, in contrast to Virginia, there was strong political rivalry, and an office like that of County Judge could easily be prostituted for political purposes. It is these underlying circumstances, the writer believes, which led to the extraordinary condition of affairs in Pottawattamie County, and which made the county judge system intolerable to the mass of the people of Iowa.¹⁹³

V

ADMINISTRATIVE DECENTRALIZATION: THE DISTRICT ROAD SUPERVISOR 1853-1860

The system of centralization established by the provisions of the *Code of 1851*, so far as it was related directly to the administration of roads, remained in force less than two years. It is true that the county judge system was not abolished until July 4, 1860; but the office of county supervisor of roads was discontinued on February 1, 1853, and the powers which that officer had exercised were transferred to district road supervisors. Moreover, a large amount of authority over roads which under the *Code of 1851* had been possessed by the county judge was transferred to the township trustees. Thus the general supervision of roads became in a large measure a township rather than a county function. At the same time the actual direction of road work became a district function, each township being divided into a number of road districts.

From the very beginning there seems to have been serious objection to the county road supervisor. It was felt that he represented too much centralized control and that the supervision of roads could be made more successful by employing local officers more closely in touch with actual conditions. Petitions were addressed to the General Assembly asking that the office of county road supervisor be abolished because it was "injurious to the prosperity of the State." One of these petitions, signed by twenty-three citizens of Davenport, reads in part as follows:

We therefore pray that the law creating a County Supervisor be repealed and that the County Judge be authorized to district the

County into road districts, by Congressional Township lines,— or by such boundaries as he may think most convenient and proper; and the citizens of each Congressional Township or road District be authorized to elect one of their number to act as supervisor.¹⁹⁴

The forces tending toward administrative decentralization appear to have been in control in the General Assembly; and so “An Act providing for the election of supervisors and defining their duties”, was approved on January 22, 1853.¹⁹⁵ According to the provisions of this act it was made the duty of the township trustees in all of the counties of the State to meet on the first Monday in March, 1853, for the purpose of dividing their respective townships into such number of road districts as might be deemed necessary for the public good. One resident supervisor was to be elected annually for each district.

The actual direction of highway work, which under the *Code of 1851* had been a township function in the hands of a deputy appointed by the county road supervisor, was now made a road district function, the officers being elected by the people. In other words, two important changes were made in the immediate supervision and control of road work: in the first place, the size of the district was reduced; and in the second place, the appointive principle gave way to the method of election. In both respects this was a decided movement away from a system of administrative efficiency. This, in addition to the fact that under the new act the township trustees possessed the authority formerly exercised by the county road supervisor and at the same time absorbed a large part of the power and authority originally given to the county judge under the provisions of the *Code of 1851*, makes the changes appear revolutionary from the standpoint of administration.

Moreover, the township clerk now became a local official with substantial authority, being authorized to give notice

of their election to the various road supervisors in his township, who must appear before him, give bond, and be sworn into office. The amount of the bond and the security required was in each case determined by the township trustees and not by the county judge, as had been the rule under the former system.¹⁹⁶ In case of vacancies in the office of road supervisor, it was the duty of the township trustees to fill the vacancies by appointment.¹⁹⁷

As an index of the authority which the county judge still possessed in the supervision and control of roads, it may be noted that the act of 1853 required the township clerk of each township to give bond to be approved by the judge in the sum of twice the amount of the road tax in his township. Subject to the supervision of the county judge, the financial responsibilities of the township clerk are outlined by the statute in the following words:

The county judge shall give an order to said clerk on the county treasurer for all moneys collected by him as road tax upon all property and polls within and for his township, upon the payment of which, by the treasurer, he shall take from said township clerk duplicate receipts for the sum thus paid him, one of which receipts said treasurer shall deliver over to the county judge, to be filed by him among the papers of his office, and said judge shall charge the same to the account of the said clerk upon the "road book".¹⁹⁸

That the real substance of fiscal authority in the administration of roads and bridges had been transferred from the county to the township is, however, apparent from a careful examination of the powers and duties of the township trustees. After the money on the order of the county judge had been paid over by the county treasurer to the various township clerks, thus forming a township road fund, the township trustees distributed the same on a basis deemed expedient for the public interest. The township clerk in turn was required, at least once in each year, to make a statement to the county judge accompanied with

vouchers specifying in detail the things for which money was paid out. Briefly stated, the county court gave the order transferring road taxes from the county treasury to the various road funds and at the same time examined the expenditures of the township clerks; but the actual paying out of money from the township road fund and the actual distribution of money among the various road districts of the township — functions vastly more vital and important — were exercised by the township trustees. Indeed, it appears that the act of 1853 was in fact a compromise between the county-township and the township-county systems of local government in which the substance of power passed to the township, while the form of authority remained with the county.

The character of the annual report submitted by the district road supervisor to the township trustees — which also represents an important township function — is outlined in the statute as follows:

The supervisor shall be required to report to the township trustees between the first and fifteenth day of October, which report shall embrace the amount of labor performed, the amount of money expended, and in what way expended, and the number of days he was employed in the faithful discharge of his duties, as well as the condition of the roads in his district, which report shall be signed and sworn to by said supervisor.¹⁹⁹

Other details regarding the method of directing road work, the removal of fences, the planting of hedges, the erection of guideboards, and the like, may be ascertained by consulting the statute.²⁰⁰ Mention may be made, however, of the fact that the county treasurer was required to make out a list of the names of all persons liable to pay road taxes, together with the amount of personal, real, and poll tax assessed against each person, and deliver the same to the clerks of the various townships in his county.

Finally, the new law made it necessary to repeal a great

many sections of the road legislation contained in the *Code of 1851*. The office of county road supervisor being abolished, the outgoing officer was required to "make a settlement with the county judge of his county, before the first day of April next, and deliver to him all books, papers and implements in his hands or under his control; and the county judge shall apportion the same between the several townships, as equally as practicable."²⁰¹

At the same session of the General Assembly (1852-1853), a long list of State roads was provided for by "An Act in relation to certain State roads therein named"—the three commissioners to review and establish each road being named in the act.²⁰² The commissioners appointed in each case were to meet on the first Monday in April, 1853, or within nine months thereafter, and taking with them a surveyor and other necessary assistants were to proceed to discharge their duties according to law. No part of the expense for the laying out and opening of State roads, however, was paid by the State, but such cost was distributed among the counties through which the road passed.

In his second biennial message, Governor Stephen Hempstead, under date of December 8, 1854, wrote as follows in regard to the subject of road legislation and administration:

In this connection permit me to speak of the common roads of our State, and to urge upon you the necessity of again reinstating the law which required the election of a County Supervisor. That officer had the charge and supervision of all the roads in the county. Then there was uniformity in the opening and work done upon them—now in some townships the roads are kept in order, and in others nothing is done; and the consequence is, that there is no system or regularity upon a subject which is of the greatest importance and interest to every inhabitant of the State.²⁰³

Thus the question of the proper method of road administration was again brought before the General Assembly. Should the township and road district be given a larger

measure of supervision and control of roads and bridges, and if so, what authority should be vested in the county? The sentiment among the people, in spite of the recommendations of Governor Hempstead, seemed to be in favor of the township rather than the county system. In other words, there was a marked tendency toward still greater administrative decentralization — a fact which is apparent from an examination of the journals of the Senate and the House of Representatives. Thus, when a number of road bills were up for consideration, Senator George W. Lucas from the Committee on Roads introduced a substitute bill and recommended its passage. Senator A. C. Fulton of the same committee presented the following minority report:

Having had under consideration, in committee, an act to provide for the election of township Supervisors, and defining their duties, I report against said bill as uncalled for, and recommend its indefinite postponement.²⁰⁴

A motion by Senator Nathan Udell to indefinitely postpone the bill and also the substitute was lost, after which the Senator moved to amend the first section by striking out the word "township" and inserting the words "road district". This seems to indicate that he was in favor of enlarging the functions of the road district as a unit of road administration — a plan which of course represents extreme decentralized supervision and control. On the other hand, in order to increase the sphere of county jurisdiction, Senator J. D. Test moved to amend the amendment by inserting the word "county". This motion suggests a deliberate effort to distribute authority over roads between the road district, the township, and the county — the amount of power to be vested in each depending upon the attitude of the legislator toward the general problem of local government.

The amendment presented by Senator Test was lost by a very decisive vote, only two members voting in the affirma-

tive — a fact which indicates that there was at that time but very little sentiment in the General Assembly favorable to the system of centralization in the control and administration of highways which had been created by the *Code of 1851*. Moreover, the amendment by Senator Udell to strike out the word “township” and insert the words “road district” was adopted, there being only nine dissenting votes.

That the majority of the members were determined to retain the substance of authority over highways in the local district is even more apparent from certain minor amendments that were introduced. For example, the second section of the bill was amended by striking out the words “County Judge” and inserting “Township Clerk in each township”.²⁰⁵ Another section was amended by striking out the words “County Judge” and inserting “Trustees, to be approved by the Clerk”, and by striking out “County Judge” and inserting “Township Clerk”. The fourth section was amended by striking out the word “township” and inserting the word “district”. Finally, the seventh section was amended by striking out the words “county judge” and inserting “trustees of the township”.²⁰⁶ It is therefore obvious from a careful reading of the *Senate Journal* that a deliberate effort was made to transfer powers from the county judge, first, to the township trustees; second, to the township clerk; and finally, to the district road supervisors. After some additional debate, the bill under consideration was indefinitely postponed, and nothing of importance was accomplished in the line of road legislation during the session of 1854–1855.²⁰⁷

Another bill which indicates the temper of the General Assembly regarding the subject of local administration was introduced for the purpose of clothing the county judge with authority to appropriate county funds toward repairing roads and building bridges without a vote of the people. As a reason for granting this large amount of discretionary

power, it was stated that in many cases the expense of taking a vote amounted to more than the total cost of repairing the road or building the bridge. In fact, there were many townships and road districts throughout the State where the road tax was insufficient to construct works of even moderate expense. The bill was defeated largely for the reason that "a majority of the House, however, were fearful of the fidelity of their County Judges, and so expressed themselves, stating that this law would give the Judges too much power, and that it would be a dangerous act."²⁰⁸

Aside from a long list of special acts laying out State roads,²⁰⁹ but two brief laws relating to public highways were enacted by the Fifth General Assembly. The first was an act supplemental to the earlier law providing for the election of supervisors and defining their duties. By its provisions the local road supervisor was given the additional power of bringing suits before any justice of the peace against any person failing to work out his road taxes or pay the necessary commutation money.²¹⁰ The second act made both general and special road certificates receivable in payment of county taxes the same as county warrants, whereas up to this time only general certificates had been accepted in payment of county taxes.

At the following session of the General Assembly (1856-1857) a law was passed authorizing the resurvey of roads.²¹¹ Where the field notes of the original survey were lost or destroyed, or if the survey had been defective, it was made the duty of the county judge to cause the road to be resurveyed, platted, and recorded in the manner provided by law. Notices were posted by the county judge, who also possessed authority to hear and determine appeals on account of any injury or damage caused by the resurvey—after which the road was declared established on the basis of the new survey and the plat and field notes were filed according to law.

At this session of the legislature an unusually large number of State roads (eighty in all) were provided for by special acts, a practice which was prohibited by the new Constitution adopted in August, 1857. In fact, judging from the following statement, it would seem that a desire to meet the needs of a growing and expanding community was not the sole motive of the General Assembly of 1856-1857 in establishing so many State roads:

It not only became apparent that this work [the laying out of State roads] had too often degenerated into mere schemes of politicians, either to acquire influence and votes, or to pay off debts already incurred, but that railroads then rapidly extending westward, would largely obviate the necessity for even genuine State roads. So the convention of 1857, in Article III, Section 30, of the present constitution, prohibited the general assembly from "laying out, opening, and working roads or highways." The summer of that year saw the last parties engaged in laying out State Roads. The legislature of 1856, however, had been so industrious in the establishment of State roads, that it takes almost three pages in the index merely to name the various laws or sections in which they were decreed. The commissioners in the summer of that year were very active and "made hay while the sun shone," well knowing that the laws would provide for no more such roads. And so this usage — so pleasant to its beneficiaries — came to an end.²¹²

As has already been indicated, the provisions of the Constitution of 1857 were more liberal in the matter of chartering private corporations than were the provisions of the Constitution of 1846. At the same time many forms of special legislation were prohibited²¹³— a subject to which Governor Grimes referred in his second biennial message as follows:

All the general laws of the State require some modifications to adapt them to the provisions of the New Constitution. Several new acts of a general character will also be necessary. Special legislation is opposed to the true theory of a Republican government, and is the source of great corruption. The New Constitution inculcates

most strongly the duty of general legislation, and declares that "in all cases where a general law can be made applicable, all laws shall be general, and of uniform operation throughout the States."²¹⁴

As a matter of fact, special legislation for the assessment and collection of taxes for State, county, or road purposes; and for the laying out, opening, and working of roads and highways was prohibited in express terms by the new Constitution.²¹⁵ It was also provided that "No corporations shall be created by special laws"; but corporations including banks with the privilege of note issue might be established by general laws.²¹⁶ Thus the new instrument was made more elastic and therefore more responsive to the rapidly developing economic life of the Commonwealth.

In the same message Governor Grimes also called the attention of the General Assembly to the act of Congress admitting Iowa into the Union, which act declared "that five per cent. of the net proceeds of sales of all public lands lying within the said State, which have been or shall be sold by Congress from and after the admission of said State, after deducting all the expenses incident to the same, shall be appropriated for making public roads and canals within the said State, as the Legislature may direct."²¹⁷ This act had been accepted by the State, according to the Governor, with the understanding, however, that five per cent of the net proceeds of the sales of all public lands within the State should be used to support the common schools.²¹⁸

Governor Grimes explained that at the time this contract was made between the State and the United States, Congress disposed of the public lands in no other way than by bona fide sales for money; and this obligation was based upon a similar obligation on the part of the State that lands owned by the general government should not be taxed and that the lands of non-residents should not be taxed higher than the lands of residents. The policy on the part of the United States of selling public lands for cash, however, had

not been continued; but large tracts of land had been entered by holders of military land warrants, thus destroying the trust the Federal government held for the State in the matter of supporting common schools and making public roads and canals. Governor Grimes estimated that on June 30, 1856, military land warrants located in the State covered 10,929,692.3 acres — the amount due the State being \$682,980.20. "I recommend", said the Governor, "that Congress be again memorialized on this subject, and that suit be authorized to be instituted against the United States for the recovery of the amount due, in the Court of Claims."²¹⁹

The agitation against the county judge system and in favor of a more decentralized plan of local government resulted in a number of bills being brought before the General Assembly in 1858. Moreover, while there appears to have been general opposition to any plan of centralized administration, specific objections were made to the conferring of so much power on the county judge. To be sure, much of the authority possessed by that official according to the provisions of the *Code of 1851* had already been transferred to various township officers — especially to the township clerk and board of trustees. These changes, however, were not sufficient and a large number of taxpayers insisted upon more sweeping measures.

Since it is not possible to understand the administration of highways and bridges without having a general knowledge of the whole system of local government, the necessity from time to time of making a brief presentation of important changes in township and county organization will be apparent to the critical reader. Thus, if the abolition of the county judge system would change both the spirit and form of the administration of highways in Iowa, it is obvious that the reasons and motives producing such a change ought to be clearly understood. In the last analysis the

same forces which oppose efficient, centralized administration in one department of local government will be found to operate throughout the system as a whole; for as already suggested the system of local government is like an organism with its various parts and functions closely related.²²⁰

The objections urged with so much force against the county judge system of local government are clearly stated in a petition presented to the General Assembly in 1858, which reads in part as follows:

1st, The powers now conferred upon that officer are almost unlimited in extent. Against their improper use no checks or safeguards have been provided, that are adequate to prevent or speedily correct official peculation, oppression or fraud. They constitute their possessor a petty Autocrat, by whom they may be, and too frequently are wielded in a tyrannical manner, and in direct opposition to the wishes and interests of the people whose servant he should be.

2nd, The centralization of such unlimited powers in the hands of a single individual, particularly the power of levying taxes at will, without the expressed or implied consent of the payers — of binding them, as their financial agent, in contracts of which they are ignorant or do not approve — and of arbitrarily expending the public revenue as his personal interest or caprice may direct — is a policy inconsistent with the fundamental principles of republican government, at all times dangerous, and never expedient.

3rd, The will of the majority can be better carried out, and the public business more faithfully transacted under a system of government based on representation from different parts of a county, than any other that can be adopted, while at the same time it creates among the people an interest in the management of their public affairs that tends to prevent extortion, embezzlement and mal-administration in office.

Your petitioners therefore pray your Honorable bodies to abolish entirely said office of County Judge, and to substitute therefor —

1st. The office of Probate Judge in name and effect, the duties of which shall be of a probate character only, with appellate jurisdiction of criminal actions within the jurisdiction of a Justice of the Peace, and

2nd, A Board of Supervisors, similar to that elected under the Township organization of New York, Wisconsin or Illinois; or a Board of Commissioners and County Auditor, such as obtain in Ohio, Pennsylvania or Indiana.²²¹

People, however, were by no means of one opinion as to the proper system of county and township government. There were some who desired to return to the county road supervisor as provided for in the *Code of 1851*. On the other hand, a considerable number believed that the township should be made an even more important unit of local administration. Between these extreme views almost every shade of opinion could be found in the General Assembly of 1858.

It was on January 19th that Mr. Dennis A. Mahoney presented a resolution in the House of Representatives which, among other things, provided that a system of township and county organization should be adopted which should include "the abrogation of the office of County Judge; the creation of the office of County Supervisor of roads who shall have jurisdiction of road matters, or, by law may be provided the creation of a fiscal agent in each county under whose authority county funds shall be disbursed".²²² In other words, Mr. Mahoney, while objecting very seriously to the county judge system, nevertheless believed in the necessity of a county supervisor of roads.

A few days later Senator Jonathan W. Cattell of the Committee on Township and County Organization introduced in the Senate a series of resolutions which provided for the abrogation of the office of county judge and the establishment of a board of county commissioners or township supervisors, and which at the same time made provision for the levy, collection, and disbursement of taxes for road and township purposes by the proper township officers.²²³ Among the instructive features of this resolution was the proposal to establish the office of county assessor

to assess real property once in four years, leaving to township assessors the annual assessment of personal property. The resolution by the committee thus represented a strange mixture of the township and county principles of local administration. The majority favored abolishing the office of county judge; but there appears to have been no agreement regarding a desirable substitute—some preferring the commissioner system and others a county board of township supervisors. On being put to a vote, however, the county judge was retained by a small majority, indicating that the modified system of centralization still enjoyed considerable support in the General Assembly.²²⁴ At the same time it is evident that while no definite general plan of action was perfected in 1858, forces existed which were to produce substantial changes at the succeeding session of the General Assembly.

A few days after the defeat of Senator Cattell's resolution Mr. Lincoln Clark of Dubuque offered a resolution in the House of Representatives for the appointment of a commission of three persons learned in the law for the purpose of revising the laws then in force, and drafting a new system of laws to embrace the following features:

1st. A township organization for the assessment of property and the collection of revenue.

2d. The separation of the offices of County Recorder and Treasurer, and that they be held by different persons.

3d. The retention of the office of County Judge, with jurisdiction in orphans, administrative and probate matters.

4th. The establishment of a Commissioners Court, to be composed of the County Judge and two or more persons, which court shall have jurisdiction of roads, public buildings and revenue, so far as the latter shall not come within the scope of the powers of the township officers.

5th. The establishment of a Court to be denominated the Court of Common Pleas, which shall have jurisdiction co-extensive with the District Court, except in capital cases. This system to embrace

every county in the State which has a population of over ——— thousand. Said Court to be of the character of a Circuit Court, and to embrace not less than four counties in one circuit, and to have one Judge for each circuit, whose salary shall be fixed by law, but shall in no case exceed that of a Judge of the District Court.

6th. The creation of the office of County Auditor, a fiscal agent for the county.

7th. The office of Supervisor of roads, whose duty it shall be to open and keep in repair all roads in the county in such manner as shall be provided by law.²²⁵

A careful reading of this resolution in connection with the earlier one referred to suggests to the critical reader that at that time, the General Assembly was simply groping in the dark as to the proper steps which should be taken in reorganizing the system of local government. The Clark resolution seems to accentuate the importance of the county principle; but it is evident that its author believed that the county judge acting alone should not be intrusted with such large powers—in other words that two or more persons should be associated with him as a commissioners court to have jurisdiction over roads, public buildings, and revenue. Again it is obvious that there was a compromise between those who believed that the county judge system should be abolished entirely and those who felt that it ought to be retained without any substantial change.

In this connection the following brief statement in *The Daily Gate City* (Keokuk) regarding proposed changes in the system of local government with special reference to the subject of county finances is suggestive:

Different plans are suggested for the management of county finances. One wishes a county auditor vested with all the financial powers now in the hands of the County Judge—another would have a board of three commissioners, and yet another suggests a board of supervisors composed of one from each township, after the New York plan. Several radical changes will be made in the organization of counties.²²⁶

The House was decidedly in favor of abolishing the office of county judge, but the Senate by a small majority held the opposite view. And so no important change was accomplished by the Seventh General Assembly in the matter of reorganizing the system of county and township government. Indeed, the period was one of agitation and discussion — a work which must always precede the task of constructive statesmanship.

Road legislation in 1858 consisted of two acts: one providing for making and repairing public highways and prescribing the duties of township officers; and the other defining the mode of laying out, establishing, changing, and vacating State roads.²²⁷ The first provided nothing essentially different from the organization of local administration already described; but the second provided a general plan or system of laying out and opening State roads in lieu of the numerous special acts which had been passed prior to the formation of the new State Constitution in 1857.

“An Act to provide for the making and repairing of public highways, and prescribing the duties of township officers in certain cases”, approved on March 23, 1858, continued the system of annually elected district road supervisors — the boundaries of the road districts being determined by the township trustees.²²⁸ It was made the duty of the township clerk to notify the district supervisor of his election, penalties were prescribed for refusing to qualify, and the road supervisor was required to give bond “in such sum and with such security as the township Clerk may deem requisite, conditioned that he will faithfully and impartially perform all the duties devolving upon him, and appropriate all moneys that may come into his hands by virtue of his office according to law”.²²⁹ Able-bodied men between the ages of twenty-one and forty-five were obliged to perform two days labor on the public roads between the

first day of April and the first day of July. The district road supervisor had general supervision over the actual road work, gave notices as required by law, and saw that all necessary tools were provided, allowing due credit for the same.

An illustration of the compromise system of district, township, and county road administration is to be found in the interesting fact that in order to enable the road supervisors to determine the precise location of the various roads in their districts, it was made the duty of the county judge of each county to furnish the township clerks with a map of their respective townships, "on which map shall be plainly marked all roads which are at the time of making such map legal roads, which map shall be carefully preserved among the papers of his office."

Immediately after the establishing of any new road the county judge was required to notify the township clerks of the townships in which the road was located, furnishing also a copy of the field notes — the clerk being required to record the road on his map. In like manner it was the duty of the township clerk to furnish each road supervisor of his township with a map of his particular district, showing all the legal roads in such district, "and when any new road shall have been established, it shall be the duty of the township Clerk to notify each of the Supervisors whose district is affected by said new road, and also to furnish a copy of the field notes of the same, which new road shall be immediately marked on the map of said district in his possession." Thus it appears that the responsibility of providing adequate and satisfactory road maps was parcelled out among the following officers: the county judges, the township clerks, and the district road supervisors.²³⁰

The actual levy of taxes for roads, bridges, plows, and scrapers was vested in the township trustees, subject to the statutory limitation that such levy "shall not be less than

one nor more than three mills on the dollar on the amount of the township assessment of that year.”²³¹ This limitation, however, did not apply to cities forming separate road districts — in which case the tax levy was made by the city council. The making out of the tax list for road purposes on the basis of the assessment as returned by the local assessor was placed in the hands of the township clerk, who was required to make entry “upon such tax list showing what it is, for what road district and for what year, and shall attach to the list his warrant under his hand, in general terms requiring the Supervisor of such district to collect the taxes therein charged”.²³² The tax lists, after being made out, were given to the supervisor who was required to collect the tax either in labor or in money.²³³

The extent to which administrative decentralization prevailed in the actual supervision of road work while the county judge system was still in force will be apparent to the reader when he examines the report that district road supervisors were required to submit to the township clerk. This report embraced the following items:

1st. The names of all persons in his district required by section six of this act to perform labor on the public highway, and the amount performed by each.

2d. The names of all persons against whom suits have been brought, as required by section eight of this act, and the amount collected of each.

3d. The names of all persons who have paid their property road tax in labor, and the amount paid by each.

4th. The names of all persons against whom suits have been brought for the collection of road taxes, and the amount collected from each.

5th. The names of all persons who have paid their road tax in money, and the amount paid by each.

6th. A correct list of all non-resident lands and town lots on which the road tax has been paid, and the amount paid on each.

7th. A correct list of all non-resident lands and town lots on

which the road tax has not been paid, and the amount of tax on each piece.

8th. The amount of all moneys coming into his hands by virtue of his office, and from what sources.

9th. The manner in which the moneys coming into his hands by virtue of his office has been expended, and the amount, if any, in his possession.

10th. The number of days he has been faithfully employed in the discharge of his duty.

11th. The condition of the roads in his district, and such other items and suggestions as said Supervisor may wish to make, which report shall be signed and sworn to by said Supervisor and filed by the Township Clerk among the papers of his office.²³⁴

It is apparent that this report was much more logical, complete, and systematic than that provided under earlier acts. One especially instructive feature of the report is the provision for listing the land and town lots of non-residents — information which was particularly important in order to prevent evasion of road taxes. After the reports of the various district road supervisors were filed, the township clerk proceeded to make out a correct list of all non-resident lands and town lots on which the road taxes had not been paid. A certified copy of this list of non-resident taxpayers was transmitted to the county judge and by him was immediately placed in the hands of the county treasurer, who was required to collect such delinquent tax in the same manner in which ordinary taxes were collected.

Other miscellaneous provisions of the act under consideration refer to penalties, the time of working roads, the neglect of road supervisors to perform their duties, timber and shade trees, damages in the case of unsafe bridges, the growing of hedges, and the removal of obstructions.²³⁵ The district road supervisor was obliged to keep the roads in the best condition that the funds at his disposal would permit and make an annual settlement with the township trustees, who in turn distributed the road fund remaining in the

hands of the township clerk as they might deem expedient. It should be noted, however, that the township clerk was financially responsible not only to the township trustees but also to the county judge, being required to pay out money as ordered by the trustees and at the same time "to make settlement with the County Judge, producing vouchers for all moneys paid out by him, specifying for what, and to whom paid."²³⁶

Thus the financial responsibilities of the township clerk represent in a very unique manner the real nature of the compromise between the township and county principles of road administration. While the act under consideration vested the substance of authority for the most part in township officials, the county judge, nevertheless, retained a small measure of supervision even in the management of finances. The great power and authority which that official had exercised under the *Code of 1851* had, however, been gradually taken away and was to disappear entirely two years later in the *Revision of 1860*.

As has already been noted, the Constitution of 1857 prohibited special legislation for the laying out, opening, and maintaining of roads. This being true, it was necessary for the General Assembly to pass general legislation for this purpose. And so "An Act defining the mode of laying out, establishing, changing and vacating State roads", approved on March 23, 1858, took the place of the numerous special laws which had been passed up to that time for the same purpose.²³⁷

The county court, after receiving a petition signed by at least twenty freeholders of the county asking for the establishment of a State road, was clothed with authority to appoint a commissioner to view and survey the proposed route. Prior to the granting of such an order, however, it was necessary to file a bond satisfactory to the county court, "payable to the State of Iowa, and conditioned for the pay-

ment of all expenses which may accrue in the location of said road, in case the same shall not be established a public highway".²³⁸

In the matter of the laying out and opening of State roads a substantial amount of authority was given to the county judge. In fact, he possessed much more power along this line than in the making and repairing of ordinary public highways. The commissioners appointed in each county to survey a given State road were required to meet in accordance with the order of the county court of each county, employ a competent surveyor, chain carriers, and other assistants, if necessary, and proceed to discharge all the duties outlined by law. Moreover, it is further stipulated that "each State road shall be laid out from the place of beginning to the place of termination on the most practicable route, always having regard to suitable ground, improvements already existing, section lines and intermediate points, if any, and all State roads that shall hereafter be established, agreeable to the provisions of this act shall be opened and considered public highways, sixty-six feet wide."²³⁹

The report of the commissioner or commissioners, after being completed and properly signed, was deposited in the office of the county judge of each county in which any part of the proposed road was situated. In case the commissioner or commissioners reported in favor of establishing the road, the county court of the counties concerned, gave due notice either by publication or by the posting of written notices as to the time and place of a meeting held for the purpose of hearing parties in favor of or against the laying out and opening of the proposed highway. Any person or persons considering themselves aggrieved by the opening of a State road through his or their lands, were granted the privilege of filing with the county judge a petition in writing, setting forth their claims for damages. After the filing

of the petition the judge appointed a jury of three disinterested freeholders who were required to view the road for the entire distance and make a complete report thereon.

If the county court considered the amount determined upon by the jury to be just and equitable, and that the road was of sufficient importance to cause the damages to be paid out of the county treasury, the county might pay the same; but if the court believed that the road was not of sufficient importance to have the damages paid by the public, it might refuse to establish the highway, unless the damages and expenses were paid by the petitioners desiring the establishment of the road; or in case no application for damages had been filed, the court proceeded to establish the road as a regular public highway.

It should be stated, however, that the rights of individuals were still further protected by the act under consideration and that the county court was not the final arbiter in awarding damages. Within a certain specified time and under certain conditions an appeal might be made to the district court. But in such cases of appeal from the decision of the county court, the appellant was required to pay all costs of the same, "unless the judgment in the District Court shall exceed in amount the award rendered by the jury appointed by the County Court."²⁴⁰

The county court, however, was given still further discretion in the matter of laying out and opening State roads. If the district court granted more damages than had been allowed by the jury originally appointed by the county court, the county judge might still refuse to establish the road "unless the parties interested in the location of said road shall pay or cause to be paid before the opening of said road, to the satisfaction of the County Court in case said road is established as a highway, all expenses incurred and damages assessed." Finally, the county court was given authority to record and establish a certain part of the pro-

posed road when deemed of public utility and at the same time refuse to establish the remainder.

Other minor details are provided for in the statute. The amount of fees allowed, the method of reducing the width of roads, and the appointment of road viewers in certain cases may be mentioned in this connection. After the establishment of a State road as provided by law, the act finally stipulates that the portion of the road lying in any particular county should be regarded in all respects as a county road, to be changed or altered in the same manner as other county roads. In other words, the local administration of State roads after being once established was exactly the same as the local administration of county roads.²⁴¹

At this point, at least three decisions of the Supreme Court should be mentioned because of their direct and important bearing upon the subject of road legislation and administration. In *McCrory v. Griswold, et al.*²⁴² it was held that in case appraisers appointed to assess damages returned too small an amount or failed to award damages and the county court refused to set aside the report, the petitioner might take an appeal to the district court and have his damages assessed by a jury. This appeal, however, could not be taken except in due, legal form and for just cause, as the county court was clothed with a large amount of authority and discretion in the matter of establishing a road when the public convenience and necessity seemed to require its establishment. In fact, the county court might establish a road without any reference to the question of compensation to the owners of property taken for that purpose.

The Supreme Court thus recognized the force of that provision of the Bill of Rights, which declares that "Private property shall not be taken for public use without just compensation first being made, or secured to be made to the owner thereof, as soon as the damages shall be assessed by

a jury, who shall not take into consideration any advantages that may result to said owner on account of the improvement for which it is taken."²⁴³ At the same time it was also held that before damages could be paid they must be assessed in the regular form prescribed by law. The case under consideration is, however, somewhat vague and indefinite and indicates that the court was not clear in its own mind regarding the proper method of allowing damages to petitioners in connection with the laying out and opening of public roads.

In the State of Iowa *v. Beneke and White v. Road District No. 1*²⁴⁴ the opinion of the lower court was reversed, it being held that according to the provisions of Chapter 48 of the *Laws of Iowa, 1853*, a road district was not a regular corporation, which could sue and be sued in the courts. Among other observations, Justice Wright declared:

Nor is there any provision as to how they are to be made responsible for the damages sustained in consequence of defects in roads and bridges. Under such circumstances, we are of the opinion that a road district cannot become a party in a court of justice in this State.²⁴⁵

In the City of Dubuque *v. Maloney*²⁴⁶ the question of the exact legal status of land used for the purpose of roads, streets, and alleys came up for adjudication. In this case it was held that the acts of Congress, approved on July 2, 1836, and March 3, 1837,²⁴⁷ laying off the land where the city of Dubuque is located into lots, streets, avenues, and public squares for the public use, provided that the legal title to the soil subject to the public easement was vested in the owners of the lots on each side of the street, and that when lots were sold to purchasers such purchaser accepted every easement, privilege, and advantage represented by the official plat as belonging to the lots. An easement was defined by the court to be "An advantage or privilege in lands, without profit, existing distinct from an ownership in

the soil''.²⁴⁸ In other words, a street or highway was considered to be merely an easement, the actual fee simple remaining in the hands of the owners of adjacent lots. The city as such could simply regulate the public use of streets, alleys, and squares. The court maintained that "neither the ownership of the soil nor of the easement is in the corporation."²⁴⁹

The county judge system established by the *Code of 1851* became operative on July 1st of that year and remained in force until July 4, 1860. It should not be assumed, however, that the county judge continued to possess the very extensive and somewhat arbitrary powers originally granted by the provisions of the code. It is a well known maxim of political science that forms of government frequently persist long after the substance of authority has disappeared or has been transferred. This was in a large measure true of the office of the county judge during the period under consideration. Beginning with February 2, 1853, when the law creating district road supervisors went into effect, the county judge was rapidly shorn of much of the unusual power which had been granted to him in 1851. Indeed, following the session of 1858 the office became but a shadow of its former self. For example, the jurisdiction which the county judge originally possessed over roads and highways was for the most part gradually transferred to the township clerk, the township trustees, and the district road supervisors.

Partly as a reaction against the arbitrary authority of the county judge, but more largely as the result of the character, training, and temperament of the early settlers, one of the most distinctive tendencies of the period from 1851 to 1853 was the rapid growth of sentiment in favor of the township-county principle of local government. In the matter of roads and bridges the township trustees and

township clerk were gradually clothed with authority that had been vested in the county judge or county road supervisor. Indeed, the return to the township system of assessment in 1858, together with the large powers granted to the township trustees in matters of taxation and road administration, gave the civil township a dignified and worthy position in the realm of local government. In the realm of local finance, its authority had come to be practically supreme. Aside from a levy of not more than one mill by the county for the making and repairing of bridges after the same had been approved by a vote of the people, the township possessed the exclusive right to make the actual levy of taxes for roads, bridges, plows, and scrapers subject, however, to the statutory limitation that the levy must not be less than one nor more than three mills on the dollar. In a word, the substance of financial power was now placed in the hands of township trustees and was therefore brought into closer touch with the people.

The transfer of authority from the county to the township, however, was by no means the only instance of administrative decentralization during the period from 1851 to 1860. While the general supervision of roads and bridges, together with the power to levy taxes for their support, became almost wholly a township rather than a county function, the actual direction of road work was placed in the hands of district road supervisors. Each township was divided into road districts by the township trustees and a road supervisor elected by the people in each district. In other words, authority which from July 1, 1851, to February 2, 1853, had been vested in a township deputy, appointed by the county road supervisor, was now placed in the hands of officials elected in road districts which represented subdivisions of the township. Briefly stated, the size of the district was reduced and the appointive principle was superseded by that of election.

It is evident that the period under review witnessed important changes in the character of our local institutions: it was a period of transition and compromise, in which authority was divided between the county, the township, and the road district which was a sub-division of the township; and at the same time powers of administration were parcelled out among a long list of officials, including the county judge, the township trustees, the township clerk, the district road supervisor, and the district court. The township clerk represented a sort of connecting link between the district road supervisors and township trustees on the one hand, and between the county judge and the township trustees on the other. He did, indeed, represent the cementing principle of the local administrative organization, composed of the road district, the township, and the county, in much the same way that a county engineer under present conditions would form a bond of union for township, county, and State authority — giving vitality, elasticity, and purpose to the whole system of administration.

VI
THE COUNTY BOARD OF TOWNSHIP
SUPERVISORS
1860-1870

The opposition to the county judge system assumed a more definite form and purpose after the session of 1858. As a matter of fact, the powers of the county court, especially in road administration and in the supervision of finances, had been gradually decreasing until the county judge possessed nothing like the authority which was given him in 1851. Moreover, it will be recalled that this power or a large part of it had been transferred to the district road supervisors, the township clerk, and the township board of trustees. But even with the office divested of the greater portion of its real authority, the people still objected to what was termed arbitrary, one-man power. And so the demand for the abolition of the county judge system except from a judicial standpoint became more and more urgent.

For reasons already suggested, it is necessary to make a brief analysis of the causes which resulted in the overthrow of the one-man system and the establishment in its place of a county board of township supervisors modeled upon the Wisconsin and New York plans of local government.²⁵⁰ Again let it be observed that the administration of highways and bridges is so closely woven into the very substance of township and county organization that it is quite impossible to understand the road question except as a part, and indeed a very important part, of the larger problem of State and local administration — more especially the latter. From the standpoint of the efficient control and supervision

of roads and bridges the General Assembly of Iowa had been moving backward since 1851. The machinery of local administration, including the management of roads, had been broken up and dismembered, and was now without any responsible head possessing a sufficient amount of real authority. The final step was to be taken by removing the nominal head of the system, which was the county judge, and establishing a county board of supervisors made up of officials elected in the civil townships. In other words, the General Assembly passed from one extreme to the other in the organization of county government — from authority vested in one man to authority parcelled out among a large group of men who were strictly local or township officials.

When the General Assembly convened in 1860 a great many petitions were presented asking that the county judge system be abolished. Among the numerous arguments advanced against the system, it was claimed that to vest so much power in the hands of any one man was undemocratic. Certain citizens of Monona County considered the system to be “undemocratic, unjust and oppressive in its operation, fostering favoritism and corruption”;²⁵¹ while petitioners from Delaware County believed in a system of township organization similar to that of New York or Wisconsin, which meant a county board of township supervisors. But the real objections to the system were more clearly stated in a petition signed by thirty-eight electors of Bremer County. This very instructive document reads as follows:

The undersigned Electors of Bremer County, respectfully petition your Honorable body, and represent that the present system of County Government in this State is, in the estimation of your petitioners very unwise & injudicious and wholly fails to meet the wants and requirements of the people of our State. It too often places in the hands of designing men powers for the commission of Public Grievances wholly incompatible with the System

of a Republican Government with the County funds wholly under his control coupled with the power to make that fund as large almost as he may wish, there is no balance save the County Judge's own sense of rectitude to regulate the expenditures of the County.

And the County is liable at any moment to be plunged ruinously in debt for Public works, which are too often wholly unsuitable to the condition of the people and located for the accommodation of private interests rather than that of the Public.

The affairs over which the County Judge at present supremely presides too nearly and extensively effect our dearest interests to be submitted to the control of one man, however pure he may be in principle or sound in judgment. These considerations among many others have induced the undersigned to request the present Legislature to materially curtail the power of County Judge, and to give to the people a more direct and complete representation in the management of the affairs of their respective Counties.²⁵²

Thus it appears that the chief objections to the county judge system were: first, the great danger or supposed danger involved in placing so much power in the hands of one man; and second, the special danger believed to exist in giving one individual so much discretion and authority in the important matter of finances. While the management of road taxes had been transferred in a large measure to township trustees, the county judge still (in 1860) retained a very substantial control over the general finances of the county. The argument of centralized authority and arbitrary power made against the county judge had also been made against the county road supervisor provided for in the *Code of 1851*. In fact these considerations have always been advanced in the past against any system of efficient, responsible administration, and largely for that reason one may expect them to be urged in the future against any plan of constructive statesmanship for the supervision and control of highways and bridges or the assessment and collection of taxes. The remaining petitions merely emphasize points already suggested, but do not add anything of substantial value to the narrative.²⁵³

A number of bills were introduced both in the House of Representatives and in the Senate, dealing with the question of township and county government and therefore with the problem of road administration. On January 27, 1860, Mr. Chauncey Gillett presented a bill providing for the reorganization of counties and townships;²⁵⁴ while a few days prior to this time Mr. John E. Blackford had introduced a bill relating to the organization of new counties, which was referred to the Committee on Township and County Organization.²⁵⁵ A third bill, creating a new system of township and county organization, was introduced by Mr. James McQuinn;²⁵⁶ and a fourth bill was presented by Mr. Charles Paulk to establish a board of supervisors.²⁵⁷ The debate in the Senate with reference to the question of township and county organization was for the most part postponed until the bill dealing with that subject had been transmitted from the House.²⁵⁸ The measure, however, which became the storm center of the session was that introduced by Mr. Chauncey Gillett in the House and entitled "An Act for the re-organization of counties and townships".²⁵⁹

In order to understand the arguments for and against the system of administrative decentralization supported by a majority of the members of the General Assembly it is necessary to make a brief study of this important bill. The fact that highway administration is an organized part of the general field of local government was recognized by the men who enacted the *Revision of 1860*. It was clearly stipulated that the statute relating to roads and bridges must be read by substituting "board of supervisors" or "clerk of board of supervisors" in place of the words "court" or "judge" as the case may be, thus indicating that the two acts, one outlining a method of road administration and the other devising a new plan of township and county organization, were parts of one system of local government.

The bill under consideration provided for a board of

superfvisors to be elected by the legal voters of each civil township. And should "the population of any such Township exceed four thousand inhabitants and is less than 8,000 there shall be elected one additional supervisor from such township or townships and one additional supervisor for each 4000 inhabitants over and above 8000."²⁶⁰

Among the powers conferred upon the proposed board of supervisors the following relate directly to the subject of roads: first, the appointment of commissioners to act with similar commissioners appointed in other counties, authorizing them to lay out, alter or discontinue any road extending through their own and one or more other counties, subject to the ratification of the board; second, to lay out, establish, alter, or discontinue any county road within their respective counties; third, to provide for the building of all necessary bridges and keep the same in such repair as the public convenience might require; and fourth, to have and exercise the general financial authority and power to audit bills and accounts which had heretofore been vested in the county judge. Consequently, if this bill became a law, it would mean a complete and radical change in the whole system of supervising highways and bridges and in the general management of local finances. The bill especially stipulated that "After the taking effect of this act neither the County Judge nor County Court, shall have or exercise any of the powers hereby conferred upon the Board of Supervisors."²⁶¹

Mr. Gillett's bill providing for the reorganization of counties and townships²⁶² was ordered printed and referred to the Committee on Township and County Organization.²⁶³ On February 17th this committee reported that in connection with a similar committee of the Senate they had considered the bill and had agreed upon a substitute embracing most of the principles embodied in the original

bill.²⁶⁴ A few days earlier the Senate Committee on Township and County Organization had reported a substitute for various bills dealing with the same subject.²⁶⁵ The whole question, in fact, had been thoroughly discussed in the Senate and the committee in presenting the substitute also submitted a report embracing the chief objections to the county judge system.

This Senate report goes to the very heart of the whole question of local government and local administration and therefore has a close and vital relation to every problem which in the last analysis must depend for its solution upon the character of township and county organization. The committee in their report referred to the county judge system as one "not adapted to or consistent with the genius of our institutions, tending as it does to centralize rather than diffuse political power." The committee frankly granted the efficiency of the centralized plan, but with the following important qualification and exception: "We cannot concede that it places power where it will always secure the rights of the people by whom it is delegated." In other words, it was felt that the county judge was in some respects placed beyond the immediate reach of the people, thus making his power all the more dangerous. Believing that all political power is "inherent in the people" and should be delegated only in accordance with the theory of checks and balances, the committee concluded that the power of the county judge was a dangerous one and "so far as it pertains to the finances of a county, should be taken from him, and vested in agents more immediately from the body of the people."²⁶⁶

These objections, no doubt, possessed some real merit at that time. They certainly appear to be very modern. Indeed, they sound much like the objections which are frequently made at the present time against any bill to create the office of county road engineer or to render more efficient

in some other way the general system of road administration.

Between February 13th and March 14th the whole question of township and county organization was thoroughly debated in both the House and the Senate. After passing the House on March 2nd by a vote of forty-seven to thirty-four,²⁶⁷ the bill under consideration was messaged over to the Senate and referred to the Committee on Township and County Organization.²⁶⁸ Here it appears that Senator W. H. M. Pusey from the committee made a minority report in which it was alleged that the proposed board of supervisors would be cumbersome, inefficient, much more expensive, and in various other ways less representative than the old system.²⁶⁹ It was during the discussion of the minority report of the committee that the different plans or methods of reforming township and county government were presented on the floor of the Senate.

The arguments and plans of reform outlined during this debate are of vital interest to the student of local administration, for almost every shade of opinion regarding the nature and scope of what would constitute the most desirable system of township and county organization was expressed. Some members believed in the minimum amount of change or perhaps no important change, holding that the county judge system had proved to be satisfactory. Others held that it would be wise to associate with the county judge certain other officials, especially in the consideration of financial matters;²⁷⁰ but they did not feel that it was necessary or desirable to multiply offices and therefore increase expense. As the debate proceeded, however, it became more and more evident that the majority of members both in the Senate and in the House favored revolutionary changes.

Aside from the provision that additional supervisors should be elected from the civil townships on the basis of population, no important amendment was adopted by the

Senate.²⁷¹ The bill finally passed by a vote of twenty-three to twenty,²⁷² and was returned to the House where the Senate amendments were adopted.²⁷³ Thus, on March 14th after weeks of prolonged debate regarding the fundamental principles of local government the most important measure of the session of 1860 was finally enacted into law.

The fact that there was a very general and comprehensive discussion throughout the State of the whole question of township and county organization is apparent from an examination of the contemporary newspaper files. The *Muscatine Daily Journal* and the *Iowa Democratic Enquirer* of Muscatine, *The Daily Gate City* of Keokuk, *The Burlington Hawk-Eye*, *The Iowa State Journal* of Des Moines, and other contemporary papers contain a substantial amount of important first-hand material with reference to this question. The arguments for and against the proposed decentralized system of local administration are presented with a great deal of force. These arguments in the main have already been noted in tracing the history of the bill through the General Assembly.

Perhaps the most important consideration which was repeatedly urged in favor of the county board of township supervisors was the necessity of placing power, especially the control of finances, closer to the people. And so the proposed system was looked upon as thoroughly democratic and in harmony alike with the spirit of the Constitution and the demands of the people.

A writer in *The Daily Gate City* makes an especially strong statement of the arguments in favor of the new system in the following terms: "It subverts and dethrones just as many little kings or petty despots or *possible* despots, as there are Counties in the State"; "It restores that principle and system of *local self-government* which was the germ of our municipal Republican institutions, and, in all ages of English civilization, the bulwark of individual lib-

erty”; “The system is essentially democratic in the true sense of the term. . . . As the people become acquainted with the system, they will like it, and will rejoice that the ‘County King’ is dethroned.”²⁷⁴

There is no possibility of misunderstanding the nature and purpose of these observations. The forces of centralization and arbitrary authority — or what was supposed to be arbitrary and irresponsible authority — were brought face to face with the forces of administrative decentralization, or what was believed by a majority of the people at the time to be a more democratic and responsible system of local self-government. Moreover, these considerations necessarily go to the very foundation principles of all government — more especially local government and administration — and therefore must be thoroughly understood before the practical statesman is able to formulate a constructive program of reform along the line of taxation, roads and bridges, the public school system, or any similar question.

On the other hand, the most important arguments urged against the proposed system were the needless multiplicity of offices, the increase of expenses, and the impossibility, or at least impracticability, of holding any one official responsible for honest, efficient public service. It was also alleged that the new system was not necessarily more democratic than the old; that is to say, the question whether a government is or is not democratic does not depend upon the size of the administrative unit, but rather upon the extent to which officers are actually representative and held directly responsible to the electorate. Nor can it be doubted that these contentions were worthy of serious thought in 1860 or that they have a great deal of force under present political and economic conditions.

Early in the session it became obvious that the county judge system would undergo some very substantial changes.

This being true, at least three different plans might be adopted: first, the retention of the county judge as a part of a board either composed of two or more commissioners or of the clerks of the various civil townships, or some other compromise along similar lines; second, the commissioner system substantially the same as that which now prevails in Iowa; and third, a county board of township supervisors, following the New York and Wisconsin plans.

But the forces which were working for a more radical change were in the majority. While a substantial minority was in favor of a compromise and many were inclined to favor the commissioner system, it is apparent that the majority of the members of both the House and the Senate were willing to experiment with a decentralized system of township and county organization, thinking that such a system was closer to the people, more democratic, and therefore more in harmony with the spirit of the Constitution. By having the government close to the people many believed that public officials would be held more strictly accountable for their acts and that all public service would be placed on a more efficient basis. The considerations which doubtless had great weight with the members of the General Assembly are stated by one correspondent as follows:

It is not the legitimate compensation of officers, under any system of county government, however high their salaries may be, that makes a government burdensome and odious to the people, but it is the robbery practiced under color of law, or the contracts made upon inadequate information or incompetent judgment.²⁷⁵

The radical changes in local administration above outlined had a direct and important bearing upon the whole question of roads and bridges. The *Revision of 1860* contains the various statutes relating to roads which had been enacted since the adoption of the *Code of 1851*, including some legislation along the same line enacted by the General

Assembly in 1860.²⁷⁶ The machinery of road administration outlined in these acts has already been described in the previous chapter. With the exception of "An Act in relation to Roads and Highways", approved on April 2, 1860,²⁷⁷ and "An Act for the regulation of State and County Roads within Towns and Cities", approved on March 30, 1860,²⁷⁸ the road legislation outlined in the *Revision of 1860* consists simply of the statute laws which had been enacted subsequent to the *Code of 1851*, revised and brought up to date. The wording is exactly the same; but it is expressly stated that throughout the chapter the words "court" and "judge" shall be changed to "board of supervisors" or "clerk of the board of supervisors", as the sense might require. In other words, the *Revision of 1860* had been drafted before the enactment of the law which produced so radical a change in the general system of township and county organization.

Moreover, the change in the wording of the road legislation in the *Revision of 1860* was necessary not only as a result of the complete change in government, but it appears that an act in relation to roads and highways expressly provided that "the board of supervisors shall have the same power, and perform the same duties in relation to roads and highways in their respective counties, as have been exercised under previous laws by county judges and county courts, subject to such modifications as shall be or have been made at the present session of the legislature."²⁷⁹ The same act also stipulated that in case certain duties could not be performed by the board of supervisors without too much delay or inconvenience, the board might confer this power upon the clerk of the district court, acting as the clerk of the board.

Thus it is apparent that the machinery of road administration, as it existed in 1860 and was outlined in the *Revision* of that year, can not be understood except as studied

in connection with the new system of local government provided for in "An Act creating a County Board of Supervisors, defining their duties, and the duties of certain County Officers."²⁸⁰ Each organized county was declared to be a body politic and corporate with such powers and immunities as were established by law. The county board of township supervisors was composed of one supervisor elected from each civil township — unless the population of the township exceeded four thousand inhabitants, in which case one additional supervisor was allowed for each additional four thousand inhabitants, the number of inhabitants to be determined by the last preceding State or federal census. The method of classification, the term of office, and other details of the new system are the same as have already been described in connection with the original bill, introduced in the General Assembly by Mr. Chauncey Gillett.²⁸¹ The powers conferred upon this new board included as a matter of course the general supervision of roads, highways, and bridges and the management of county finances.²⁸² And so it appears that since the *Code of 1851* had been adopted the State had been gradually moving away from administrative centralization and official responsibility toward a system of administrative decentralization and, what logically follows, administrative inefficiency and needless additional expense.

It will be recalled that the road laws of 1858 specifically deprived the township trustees of the right to levy road taxes in incorporated cities and placed this power in the hands of the proper municipal authorities.²⁸³ The meaning and intent of this clause of the statute came up for adjudication in the case of *Hawley, Street Commissioner, v. Hoops*.²⁸⁴ The city of Muscatine, situated within Bloomington township, having been formed into a separate road district, the question arose as to whether the board of trustees of the township of Bloomington had the right to

levy road taxes against property situated within the corporate limits of the city of Muscatine. On the points involved the court held: first, that the construction of the statute was very plain and could not be misunderstood, the obvious intent being to clothe the proper municipal authorities with the full power to levy road taxes within their own jurisdiction; second, that the problem of improving the streets of a city was essentially different from the care and maintenance of ordinary roads and therefore should be under the control of the city as such; third, that if the privilege of levying road taxes within the city was granted both to the township trustees and to the city council, it would be impossible, or at least impracticable, for the latter to adopt any permanent system of improvement; fourth, that the township trustees possessed no intimate knowledge of conditions in the city and therefore a levy made under their authority might be wholly inadequate for, or in excess of, the amount required; and fifth, that any compromise system of divided authority would create an unnecessary antagonism between the rural districts and the city and would be burdensome and expensive in its operation.²⁸⁵

Governor Samuel J. Kirkwood in a special message dated September 3, 1862, called the attention of the General Assembly to the fact that the regiments of troops sent into the field contained a very large part of the population required by law to perform labor on highways. He stated that the roads must be kept in repair and that this could be done only by supplying the deficiency of labor which resulted from enlistments by requiring labor of those ordinarily exempt. "I therefore recommend", said the Governor, "that the law be so amended that all able bodied male residents of the State between the ages of eighteen and sixty be made liable to perform labor on our highways."²⁸⁶ No action, however, appears to have been taken along this line by the General Assembly.

It will be recalled that very serious objection was made in 1860 to the adoption of the so-called supervisor or New York system of county government. In fact, a substantial minority voted against it both in the House and in the Senate. As predicted at that time, the new system was scarcely in operation before a great many taxpayers were again demanding a change. Some believed that the county judge system should be reëstablished; but the majority of those who were opposed to the decentralized system of township and county organization preferred the commissioner system of county government.

A petition signed by four hundred and twenty-two citizens of Decatur County asked for the repeal of the act creating a county board of supervisors and that the county judge system be reëstablished for the following reasons:

1st, In the matter of economy the present System has cost our County at least Seventy five per cent more than the County Judge System;

2nd, It is far more inconvenient in its practical working, requiring persons having claims against the County to make several trips to the County Seat, and in many instances to employ Attorneys to get their just claims allowed;

3rd, It is entirely too slow to meet the wants of paupers and others who require immediate action.

These are only a few of the reasons that induce us to ask this favor at your hands.²⁸⁷

Other petitions along the same line were introduced; but for the most part the petitioners were either willing to accept the commissioner system or actually preferred it to the county court as provided for in the *Code of 1851*.²⁸⁸

From a study of contemporary sources it is apparent that a considerable minority favored the commissioner system, that is, a form of county government in which authority is vested in three or four commissioners elected either from the county at large or on the district plan. This was in

reality a compromise between the highly centralized system of administration in which authority was vested in a county judge, on the one hand, and the plan of electing supervisors in the various civil townships on the other. It had been the form of county government in Iowa prior to the *Code of 1851*, and was destined to be reëstablished in 1870. The General Assembly which adopted the *Code of 1851* went to the extreme of centralization. On the other hand, the *Revision of 1860* represents the opposite extreme of decentralization. The commissioner system, being a compromise between the two, was believed by many taxpayers to be the most practicable and desirable.

The War between the States was now in progress and the problems connected with it occupied the public mind. Accordingly no fundamental changes were made in the system of road administration during the regular session of the General Assembly in 1862. Two minor acts, however, were passed: one, entitled "An Act amendatory to an act entitled an Act to provide for the making and repairing of public highways and prescribing the further duties of Township officers in certain cases. Approved March 23rd, 1858",²⁸⁹ and the other "An Act prescribing the duties of Township Trustees and Road Supervisors in certain cases."²⁹⁰

The first of these acts made it the duty of the district road supervisors to keep the roads in as good condition as the funds at their disposal would permit; and it stipulated in greater detail concerning the placing of guideboards, requiring that such boards should "be made out of good timber, the same to be well painted and lettered, and placed upon good substantial hard wood posts, to be set four feet in the ground, and shall be at least eight feet above ground."²⁹¹ The expense of putting up guideboards was defrayed by a property tax which was levied by the township trustees and required to be paid in money. The town-

ship clerk in making up the tax list for each road district was also required to carry out the amount of tax paid in money due from each individual in a separate column in order to distinguish the amount of tax paid in money from that paid in labor.²⁹²

The second measure, prescribing the duties of township trustees and road supervisors, clothed the former with authority to "determine upon the amount of property tax to be levied for roads, bridges, plows and scrapers, and for payment of any indebtedness previously contracted by such township for road purposes, and levy the same, which shall not be more than three mills on the dollar on the amount of the Township assessment for that year".²⁹³ The same measure also gave the trustees the important authority to determine what proportion of the road tax, not exceeding one mill on the dollar, in the various road districts of their townships should be paid in money and what proportion should be paid in labor. That is to say, the township trustees at their discretion might require one-third of the road tax to be paid in money. This act is important for two reasons: in the first place, it represented a movement away from the payment of road taxes in labor to the payment of the same in money; and in the second place, it vested a large measure of financial power in the civil townships.

Certain other provisions of the same statute should also be mentioned in this connection. First, incorporated cities were considered as road districts and, following the proviso of the road law of 1858 already noted,²⁹⁴ were vested with authority to levy road taxes within their own jurisdiction. In the second place, road supervisors were required to post notices, stipulating in each case the amount of road tax to be paid in money and the amount to be paid in labor and specifying also the time when such labor should be performed. Finally, an excellent example of the degree to which not only the levy but the expenditure of road funds

had become decentralized is to be found in the fact that the law provided that no part of the tax levied for highway purposes in one road district should be "paid out or expended for the benefit of any other road district in the township."²⁹⁵ Thus, it was made impossible for money raised in one road district of a township to be used in meeting extraordinary expenditures for bridges or other purposes in another district of the same township,—a provision which, if not undesirable, is an altogether needless limitation on the management of road finances.

The war continued to absorb the attention of the public, and consequently little was done along the line of reforming road administration. During the legislative session of 1864 practically nothing appears in the messages of the Governor or in contemporary newspaper files. Only two minor acts were passed dealing with the subject of roads: one, fixing the per diem of road supervisors; and the other providing for the compilation and publication of the road laws.²⁹⁶ The compensation of road supervisors was fixed at one dollar and fifty cents for each day spent in the discharge of their official duties; and each supervisor was authorized to require all able-bodied male residents of his district between the ages of twenty-one and fifty to perform two days labor upon the public highways. The second law simply provided for the publication in pamphlet form of 20,000 copies of the road laws, which were to be distributed by the Secretary of State to the various clerks of the county boards of supervisors, and by such clerks among the township clerks, who in turn were required to supply a copy to each district road supervisor.²⁹⁷

At the close of the war serious interest was again taken in State and local problems, including the question of township and county organization. Bills were introduced in both the Senate and House during the session of 1866 providing for changes in the system of local government.²⁹⁸

On January 23rd the following resolution was presented by Mr. Joel Brown of Van Buren County:

WHEREAS, There seems to be manifest objections to the present system of County Government, and

WHEREAS, It seems to be a question whether a Board of Commissioners would not be less expensive, and more efficient in the transaction of County business.

Therefore be it resolved by the House of Representatives of the State of Iowa, That we deem it expedient to take action at an early period of this session, looking to an absolute and radical change, Article II, Chapter 22, Revision of 1860.²⁹⁹

This resolution called forth a general discussion of the relative merits of the different plans of local administration. Mr. Brown, the author of the resolution, stated that its principal object was to test the sense of the House, suggesting that the existing system of county government was unsatisfactory to the people of his community. It was cumbersome, inefficient, and represented conflicting local interests which frequently rendered definite action practically impossible. He believed that no supervisor should owe his election to any one township, but rather to the county at large. Mr. Winslow T. Barker held similar views, claiming that a smaller number of men could do the work more efficiently and that a system of representation could be prescribed which would insure a square deal to the rural districts as well as to the cities.

The majority, however, were not ready for a change of this character. Mr. John McKean preferred an old law which was well understood, claiming that the supervisor system had worked well not only in Iowa but in other States. He stated also that the people had tried both the commissioner and the county judge system and had become dissatisfied with both. Admitting that the supervisor system might be more expensive, he held that it was safer and less easily corrupted. "The one-man power is stronger, more

efficient, and cheaper than any other government if the right man is in power", said Mr. McKean. "But politicians are not to be trusted. Hence it is necessary to have all sections of the county represented, and to have a tolerably numerous representation so that one may watch the rest."³⁰⁰ It would be very difficult, indeed, to find a more definite statement of implicit faith in the doctrine of checks and balances in government. The decentralized system of county representation was considered by Mr. William Hale to be "the nearest perfect of any system ever devised", and to be strictly in harmony with the spirit of our institutions. It was a government in which each section of the county had a representative to look after its own interests. In the course of the debate these considerations prevailed,³⁰¹ and the resolution was laid on the table.³⁰²

The General Assembly, however, enacted two measures dealing with the subject of road administration during the session of 1866. "An Act to amend Sections 710 and 312 of the Revision of 1860" provided that not more than three mills on the dollar should be levied for the making and repairing of roads and bridges.³⁰³ Under the *Revision of 1860* the board of supervisors was not allowed to order the erection of a bridge nor purchase real estate for county purposes in excess of two thousand dollars "until a proposition therefor shall have been first submitted to the legal voters of the county, and voted for by a majority of all voting for and against such proposition, at a general election".³⁰⁴ This amount, however, was increased to five thousand dollars, with the proviso that the board of supervisors could not purchase real estate in excess of two thousand dollars without the previous approval of the legal voters of the county.³⁰⁵

The other measure dealing with the subject of highways which was passed in 1866 was "An Act to provide for establishing private roads in the State of Iowa."³⁰⁶ By its

provisions private roads might be established in the same way that county roads were established by law, and all laws governing the establishment of county roads should also apply in the case of private roads so far as applicable.

Prior to the appointment of a commissioner to view and make a report on the proposed private road, it was made the duty of the petitioner to file a bond with the board of supervisors "in a penal sum to be fixed by them, payable to the county, with such sureties as may be approved by said Board, for the use of the parties injured by the establishment of such private road, with conditions that the applicant will pay all the cost resulting from such application and will pay all the assessed damages to the owners of the land over which such a road may be established, and comply with all other conditions upon which such road is established".³⁰⁷ These conditions, however, did not apply in case the road was not accepted.

No private road could be established, however, until the applicant paid all damages and costs and complied with all the other conditions of the law. In case of failure to comply with such conditions, the applicant forfeited all his rights with reference to the proposed private road. At the final hearing, whether an application for damages had been filed or not, the board of supervisors was vested with authority to hear testimony, receive petitions for and against the laying out and opening of such private road, establish the road upon such conditions as to damages, costs, the building of fences, and the like, as they might consider just and equitable. Or they might refuse absolutely to establish the same.

This is the first law on the statute books of Iowa dealing with the subject of private roads. It therefore established a new class of roads — at least from the standpoint of law. Moreover, it is a significant fact that the authority to lay out and open roads of this character was vested in the

county board of supervisors and not in the various boards of township trustees. This arrangement, however, may be partially explained by the real character of the county board, which under the *Revision of 1860* was distinctly a local township body. In other words, the fact that the county board as such was given the power to lay out and open private roads did not mean any important degree of centralized administration and control.

When in *McCullom v. Black Hawk County*³⁰⁸ the question as to the liability of the county for damages caused by defective bridges situated within the corporate limits of the city came up for adjudication, the court held that the county was liable for damages until the city was organized and had elected a separate group of responsible officials to look after its own interests. In this case the change from county to city jurisdiction had been completed by the election of city councilmen and other officers. The views of the court were stated in the following terms:

It would not do to give two distinct sets of officers control over the same bridge. There would be, or might be, conflict of jurisdiction. The money and means they expend come from different sources, and cannot be applicable to the same objects. Therefore, when the liability of the city attached, that of the county ended, and that of the city attached when its organization was complete; and an existence of its own began when it had agents and officers of its own to exercise and execute its corporate powers and faculties.³⁰⁹

At the following session of the General Assembly (1868), the subject of township and county organization was again taken up for consideration as the result of dissatisfaction with the supervisor or township plan of representation which had become more general and pronounced. An examination of the Senate and House journals reveals the fact that a great many petitions dealing with local government were presented to the General Assembly at this time. These petitions, which have been preserved and are on file

in the Department of Public Archives at Des Moines, indicate that the petitioners for the most part desired a change to the general form of county and township organization which had existed prior to the *Code of 1851*—namely, the commissioner system.

In the first place, it was alleged that the township plan of county representation was expensive and cumbersome, and that the business of the county could be transacted more efficiently with three or four or at least not more than eight or ten commissioners. The citizens of Jefferson County were content, however, to resolve merely that the supervisor system was a “sublime humbug”. Several citizens of Dallas County characterized the supervisor system as being “cumbersome, expensive and inefficient.” A number of petitioners from Appanoose County also desired a law providing for three county commissioners; but if that proved to be impossible, they considered that the plan should at least be made optional—the question to be decided by a majority of the legal voters in each county.³¹⁰

A more detailed petition was submitted by the board of supervisors of Harrison County, who were in favor of a system of three commissioners and the division of the county into three districts following original township lines and having a population as nearly equal as possible. Members were to be elected from the districts thus formed, and their pay was limited to twenty days in each year at three dollars per day. The petitioners desired that this system be made optional so that any county in the State at the following general election might adopt it if it so desired.³¹¹

In the House of Representatives at least four bills were presented dealing with the question of local government. All were referred to the Committee on Township and County Organization.³¹² “A bill for an act to change the number and manner of electing County Supervisors”, introduced by Mr. Charles Dudley, and on file in the Department of Public

Archives,³¹³ simply provided for a board of supervisors to consist of three members in all organized counties having less than twenty thousand inhabitants. Counties of twenty thousand and less than twenty-five thousand inhabitants were to have a board of four members, one additional supervisor to be allowed for every additional ten thousand inhabitants. In other words, the bill, which was in reality an attempt at a compromise between the commissioner system and the supervisor system as those terms are most frequently understood, required that counties be separated into supervisor districts as nearly equal in population as possible and of contiguous territory without dividing any organized township, and further stipulated that "the said board of County Supervisors shall be elected in the County at large, no two being residents of the same district except in counties having less than three organized townships." None of these bills were enacted into law, however, and similar bills in the Senate met the same fate.³¹⁴

Some changes were made, nevertheless, in the general body of road legislation by the Twelfth General Assembly. For example, an act to legalize the establishment of county roads, approved on March 17, 1868,³¹⁵ was made necessary by a decision of the Supreme Court holding that the board of supervisors did not have the power under the law to delegate to their clerks the authority to establish roads.³¹⁶ The act simply stipulated that all county roads theretofore established by the clerks of the county boards of supervisors were declared legal and valid, the same as if they had been established in the regular manner provided by law. The new measure, however, did not apply to cases then pending in the district court to the injury of the litigants.

A second act so amended the *Revision of 1860* as to prohibit the laying out and opening of a road "through any garden, orchard or ornamental ground contiguous to any

dwelling-house, so as to cause the removal of any dwelling-house or other building, without the consent of the owner; *provided*, that such garden, orchard or grounds are of more than two years' establishment or growth."³¹⁷

A third measure related to the road taxes of non-residents.³¹⁸ The *Revision of 1860*, it will be recalled, required the township clerk to make out a correct list of all non-resident lands and town lots on which road taxes had not been paid and the amount of tax charged in each case, and transmit a certified copy of the same to the county judge of the proper county — the county treasurer being required to collect the tax.³¹⁹ By the provisions of this amendatory act the lists made by the township clerks were required to be transmitted to the clerk of the board of supervisors of the proper county — a change representing an additional step in depriving the county judge of his authority over the administration of roads and bridges. It should be noted in this connection that at this same session of the General Assembly the office of county judge was abolished and the office of county auditor established.³²⁰

A fourth law, prescribing the duties of township trustees and road supervisors in certain cases and providing for the levying and collection of road taxes, was from some standpoints the most important measure of the session. The law then in operation clothed the township trustees with authority to levy road taxes within certain limitations, stipulating the amount to be levied in money. The earlier measure also required that all money raised within a certain road district should be expended in that district and not in any other part of the township. The new act gave the township trustees authority to determine "whether any of said tax shall be paid in labor, and if they determine that any part may be paid in labor, determine what part may be so paid".³²¹ Moreover, the trustees were granted the additional power of determining whether any part of the road

tax should be made a general township fund to purchase plows, scrapers, or other implements, and to promote general road work in the township — which provision was a step away from the extreme system of administrative decentralization represented by the local road district. The township, which was a larger administrative unit than the road district, was to be made the basis of a certain portion of the expenditure for road purposes.

Certain other provisions of the same statute should be mentioned in this connection. Thus, in cases of failure to pay the road tax by the first Monday of October as required by law, it was made the duty of the road supervisor to report all cases of delinquency to the township trustees. Money not set apart in the general township fund was required to be expended in the road district in which it was levied. Finally, the township clerk was obliged to give additional bond for the safe-keeping of the general township fund, and either he or a member of the board of township trustees was required to take charge of and properly preserve the tools, implements, and machinery purchased therefrom.³²²

Two other laws relating to the subject of road administration were enacted in 1868: one prohibited the laying out or opening of roads across certain lands reserved by the State for its various institutions and stipulated that public roads which had already been laid out across such lands should be vacated;³²³ and the second made all public streets in towns and villages not incorporated a part of the regular public highway.³²⁴ The laying out and the opening of public roads through land reserved by the State for its institutions required the express consent of the General Assembly. Finally, it should be noted that the law establishing circuit courts gave such tribunals jurisdiction concurrent with the district court in a great many different cases including “all appeals in special proceed-

ings for the assessment of damages on the establishment or location of highways".³²⁵

This chapter, however, would be incomplete without making a brief reference to at least one very important decision of the Supreme Court declaring "An Act to provide for establishing private roads in the State of Iowa",³²⁶ unconstitutional and void. In *Bankhead et al v. Brown et al*³²⁷ a number of important questions regarding the general subject of road administration were considered, the court holding: (1) that the bill of rights prohibited by implication the taking of private property for any private use whatever without the consent of the owner; (2) that it also prohibited the taking of private property except for public use and even then only after just compensation assessed by a jury had been made; (3) that the General Assembly possessed the sole authority to determine when it was necessary and proper to take private property for public use after making just compensation; and (4) that whether or not a road was public or private did not depend upon the length of the road, the number of persons served, or the number of taxpayers through whose land the road passed. It was further held by the court that roads opened in pursuance of the act of 1866 differed in no respect from ordinary highways except in the manner of their establishment.

Following these principles the majority of the court, as above stated, declared that the act providing for the laying out and opening of private roads was plainly contrary to the spirit and intent of the bill of rights. According to the view of the court "the material inquiry is whether land compulsorily taken under act of 1866, is taken for public, as distinguished from private use, within the meaning of the bill of rights? If taken for public use the act is constitutional — otherwise, if taken for private use. . . . With respect to the act of 1866, we are of opinion that roads thereunder established are *essentially private*, that is, are

the private property of the applicant therefor".³²⁸ The decision, in a word, prohibited the General Assembly from establishing a separate class of highways known as private roads.

In the case of Kennedy *et al*, Trustees, etc., v. The Dubuque C. & M. R. R. Co.,³²⁹ the court reviewed the whole question of the jurisdiction of the county board of supervisors in the administration of highways; and after quoting the various statutes bearing upon that subject it held that the jurisdiction of the circuit court was limited to *ad quod damnum* proceedings, while in all other matters relating to roads the county board of supervisors possessed exclusive jurisdiction. The court reached this important and what would seem to be obvious decision largely on the basis of "An Act in relation to Roads and Highways", approved on April 2, 1860, which provided that "the board of supervisors shall have the same power, and perform the same duties in relation to roads and highways in their respective counties, as have been exercised under previous laws by county judges and county courts, subject to such modifications as shall be or have been made at the present session of the legislature."³³⁰

By way of general summary it should be stated in the first place that the county board of township supervisors was itself the most distinctive feature of local government in Iowa during the period from 1860 to 1870. Power and authority which had been vested in one man, the county judge, was now placed under the jurisdiction of a group of men representing civil townships. This change, however, was not so revolutionary in character as might at first be assumed, for the reason that the county judge had gradually been deprived of a large part of his original power before the complete change of system was finally made. In other words, the repeal of the county judge system did not

really take place in 1860, but was gradually effected by a process of elimination during the period from 1853 to 1860.

Under the new plan the township and county functions of local government were so blended and interwoven into one complex system as to remove any clear line of demarcation between the two. The township supervisor, representing as he did the civil township, had more in common with the township trustees and the township clerk than would be possible in the case of a member of the county board elected from a larger jurisdiction. This being true, there was no longer any reason why the county board of township supervisors should not exercise a much larger supervision over roads and highways and a greater control of finances than the people had been willing to grant to the county court. Under the reorganized system the control of finances by the county board meant its control in the last analysis by township officials close to the people and therefore familiar with local conditions. The reasons for depriving the county judge of fiscal authority during the period from 1851 to 1860 did not apply to the county board of township supervisors in the decade from 1860 to 1870. Not only was this movement checked, but it will be recalled that the laying out and opening of private roads was placed under the jurisdiction of the new county board rather than of the township trustees.

The arguments for and against the new system of county government were substantially the same as those outlined above in Chapter V. It was alleged again and again with much force that the county judge system was arbitrary, undemocratic, and placed too much power, especially financial power, in the hands of one man. The friends of the township-county plan of local government maintained that their system was more representative in character and, by placing government in closer touch with the people, insured a more rigid control of the public purse.

While the bills were pending before the General Assembly in 1866 and again in 1868 for the reorganization of county government almost every form of compromise between the contending principles of centralization and decentralization in local administration was suggested. Some desired the reestablishment of the county judge system; others preferred the commissioner system; and still others advocated various forms of compromise.

The district road supervisor, elected by the people in a subdivision of the civil township, was retained. This fact, taken in connection with the organization of the county board on a township basis, makes the period from 1860 to 1870 distinctly one of administrative decentralization. The fact, however, that a part of the local road tax was placed in a general township fund for certain purposes represents a movement in the opposite direction in favor of a more efficient system of supervision and control.

Finally, the payment of a part of the road tax in money, the enactment of a law providing for the laying out and opening of private roads (which was later repealed as the result of an adverse decision of the Supreme Court), and the judicial determination of the scope and nature of the powers possessed by the county board of supervisors in relation to roads and bridges were elements in the history of road legislation during the period from 1860 to 1870.

VII

PERIOD OF TRANSITION

1870-1884

The supervisor system of county government as established in 1860 had not been altogether satisfactory to the people of Iowa. Following the close of the War between the States public attention was again directed to the solution of State and local problems, including the important question of township and county organization. In fact, the advantages of the commissioner system were emphasized at the legislative sessions of 1866 and 1868.

When the General Assembly met in 1870 public sentiment had become crystalized and was sufficiently definite to result in practical legislation. To accomplish results required agitation and persistent effort — indeed, the history of any leading reform movement has established the fact that it takes at least four or five and sometimes ten years to make any such fundamental reform as a change in the system of local government. When it is recalled that nearly ten years were employed in the gradual repeal of the county judge system it is not surprising that five sessions of the General Assembly were taken up with the problem of effecting the change from the supervisor to the commissioner system.

Early in the session of 1870 numerous petitions were addressed to the General Assembly asking for the establishment of the commissioner system of county organization. The objection to the old plan most frequently made was that it had proved "onerous, Expensive, and entirely disqualified to the wants of the people."³³¹ Again, the super-

visor system was spoken of as "cumbersome, unwieldy, and greatly inferior to the old system of transacting the business by the County Judge". Some petitioners merely desired that the number of supervisors be reduced and that population be made the basis of representation. A petition signed by a large number of citizens of Monroe County asked for the enactment of a law "reducing the number of members on Boards of Supervisors to three in each County; to be elected by the County at large."³³²

Early in the session two bills were presented in the Senate: one by Senator Benjamin F. Murray providing for reorganizing the boards of supervisors and defining their duties and the manner of their election;³³³ and a second by Senator Frank T. Campbell creating a board of county commissioners and prescribing their powers and duties.³³⁴ The bill by Senator Murray, introduced on January 17, 1870, required the boards of supervisors to "divide their respective counties into districts of 5000 population each as near as practicable, and at the regular election in October 1870, there shall be elected by the qualified voters of such district a member of the Board of Supervisors as hereinafter provided." It was further stipulated, however, that counties having less than fifteen thousand inhabitants should be divided into three districts, each district being entitled to a supervisor.³³⁵

The bill introduced by Senator Campbell provided definitely for creating a board of county commissioners. It proposed a somewhat radical change, stipulating that "the System of County Supervisors is hereby abolished, and in lieu thereof a Board of County Commissioners is hereinafter provided for." In counties having not more than thirty thousand inhabitants, it was made the duty of the board of supervisors to establish three districts which were not subject to alteration oftener than every three years, "each of which Districts shall be entitled to a Commission-

er, to be elected by the qualified voters of the county at large". Counties having more than thirty thousand inhabitants were granted an additional commissioner for every ten thousand exceeding that number, the districts being established on an equitable basis.³³⁶

On January 25th Senator N. B. Moore from the Committee on County and Township Organization submitted a substitute bill providing for a new system of county government and recommended its passage.³³⁷ Then followed a somewhat prolonged debate regarding the relative merits of the various systems of township and county organization.³³⁸ Senator Joseph Dysart offered a substitute for the first section, giving counties authority to select either the commissioner or the supervisor system. This substitute, however, met with strenuous and successful opposition, the majority of the Senators believing that it would only complicate matters when it should come to a fair vote on the question of either abolishing or retaining the old board of supervisors. Senator Samuel H. Fairall maintained that the Constitution plainly required that all laws of a general nature should be uniform in their operation and that if the proposed plan was made optional "some counties would want the old system of County Judges, others the Board of Supervisors, and still others County Commissioners."³³⁹

Senator John N. Dixon, who objected to any "mongrel system", voiced the sentiment of those desiring a change when he suggested that under the old system "each Supervisor paid more attention to his township than to the general good." As a striking example of this point Senator John G. Patterson referred to his home county, where three expensive bridges had been constructed across the Shell Rock River and only one across the Cedar River, the result being that the citizens of St. Charles township, who paid about one-third of the whole county tax, had been compelled to build a bridge across the Cedar River by private

subscriptions.³⁴⁰ The Senator was satisfied that three good men selected from various parts of the county would prevent this log-rolling process and do justice to all the taxpayers. Senator West held a similar view, stating that the Board of Supervisors in many of the counties had erected monuments of their wisdom. He remembered one just now. On a frequented road they had erected an iron bridge, the ends of which it was impossible to reach except with a ladder.

Numerous amendments were offered, but practically all of them were voted down. Almost every shade of opinion prevailed in the Senate regarding the proper method of township and county organization. Some believed in a radical change; others favored a compromise on the basis of five or seven supervisors; and still others considered that the old system of township representatives had proved satisfactory. Senator Samuel McNutt of Muscatine was the leader of those who objected to a change of system, holding that every section of the county was entitled to representation. In case a change was made, he preferred the optional system and would vote for the substitute offered by Senator Charles Beardsley. The bill, however, passed the Senate on February 3rd without any important amendments,³⁴¹ was messaged over to the House, and referred to the Committee on County and Township Organization.³⁴²

After weeks of earnest debate regarding the strong and weak points of the different systems of township and county government, the victory as might have been expected was not wholly with either side. The system adopted was a compromise and was in a measure optional, giving each county the right to determine whether the number of its supervisors might be increased to five or seven.³⁴³ It should not be forgotten, however, that the township system of representation was definitely abolished and that the real victory was therefore gained by the advocates of the

commissioner system. The name "board of supervisors" was still retained; but it was provided that said board "shall consist of three persons, and no ballot shall be cast at such election for two residents of the same township, or if so cast shall not be counted."³⁴⁴ If any county desired to increase the number to five or seven it was given the privilege of doing so by submitting the question to a majority of the people as already explained. In other words, the new law created a commissioner system in fact, retaining, however, the name of the old organization.³⁴⁵

The fundamental and radical change thus produced in the whole machinery of county government is well stated in an editorial entitled "The County Commissioner Bill", which appeared in the *Dubuque Daily Herald*. The editor who believed that every section of the county was entitled to representation wrote in part as follows:

The senate on Thursday passed a bill, ostensibly to reduce the number of county supervisors, but really to abolish the supervisor system and substitute for it the system of commissioners. It is a return to the old commissioner system of county government. We think the experience of the people of Iowa has sufficiently established the fact that the commissioner system is not so good as that of supervisors, in any respect. It was abolished in this state because it was found to lack the essential requirements of good county government. The supervisor system may not have embraced all of these requirements, and amendments may have been desirable, but it certainly is a much better system than that of commissioners. It is based upon the correct principle that all portions of the county shall be represented in the government, a principle no less important in the government of a county than in that of a state.³⁴⁶

Aside from the general change in county organization already outlined, the General Assembly passed the following laws dealing with the subject of highways and bridges: "An Act to Amend Section 2, Chapter 100, of the Laws of the Twelfth General Assembly";³⁴⁷ "An Act Authorizing

Counties to Build Bridges”;³⁴⁸ “An Act to Authorize and Empower Cities to build and maintain Toll-Bridges, and to provide therefor”;³⁴⁹ “An Act to Provide for the Compilation and Publication of the Road-Laws, and the Distribution of the same”;³⁵⁰ “An Act to Repeal Chapter 127, of the Acts of the Eleventh General Assembly of the State of Iowa”;³⁵¹ and finally, “An Act to Legalize the Laying-out of Roads under Section 840, of the Revision of 1860.”³⁵² These statutes were for the most part amendatory, not representing changes of a fundamental character.

The measure passed at an earlier session providing for the establishment of private roads was repealed, although it had already been declared unconstitutional by the Supreme Court. Additional power was granted to the board of supervisors in the matter of appropriating money for the building of bridges. In counties having a population of fifteen thousand, the board might appropriate the sum of ten thousand dollars for the construction of a bridge and two thousand dollars more for each additional five thousand inhabitants.³⁵³

Nor should the most important provisions of the law authorizing and empowering cities to build and maintain toll bridges be overlooked in this place. The city council was clothed with authority to build and maintain toll bridges, providing the same did not affect “the vested rights of any person or corporation now existing in or to any toll-bridge franchise.” Bonds issued for that purpose were limited in amount at any one time to five per cent of the assessed valuation of the taxable property within the city. Tolls collected for the use of a bridge were set aside as a separate fund for the liquidation and payment of the bonded debt. Finally, it was stipulated that after the liquidation of all the debt the bridge should be free to the public.³⁵⁴

Governor Samuel Merrill in his second biennial message

and Governor Cyrus C. Carpenter in his first inaugural each referred to the subject of road legislation. Among other things, Governor Merrill stated that "much complaint is made of the inefficiency of our present road laws" and suggested that one-fourth of the \$268,137.46, exclusive of poll taxes, judiciously expended for road purposes "would effect more permanent improvement than can be accomplished under the present wasteful management." As a remedy for these conditions the Governor declared that "the abolition of the existing road-districts, with township supervision under an officer selected for the purpose, who would be enabled to systematize the work upon the roads, would, it is thought, give us much better roads with smaller expenditure."³⁵⁵

Governor Carpenter stated that turnpike roads and common roads were everywhere rapidly going into disuse, except for mere local purposes—in other words, the old type of graded turnpike roads had become a thing of the past. Reference has already been made to the fact that graded and plank roads were a connecting link between the ordinary wagon road and the railroad.³⁵⁶ With the coming of the railroad, according to the Governor, people were obliged to intrust their persons and property "in moving from point to point, to a transportation monopoly."³⁵⁷ On the one hand, the administration of wagon roads and bridges had become almost entirely a township and county problem, and on the other, the regulation of railroads as common carriers was soon destined to become a public necessity.

No fundamental changes, however, in the general system of road administration were made in 1872. A number of minor acts, for the most part amendatory in character and referring especially to the construction of bridges, were passed. "An Act Authorizing the Appropriation of Money to build Bridges" clothed the board of supervisors of any

county having a population of more than fifteen thousand with authority to appropriate "for the construction of any one bridge which is, or may hereafter become, a county charge, within the limits of said county, such sum as may be necessary, not exceeding the sum of forty dollars per lineal foot".³⁵⁸ The maximum amount to be appropriated for such purpose, however, was fixed at twenty-five thousand dollars. By the provisions of the same act, the common council of any incorporated city was likewise granted authority to appropriate a sum not to exceed ten dollars per lineal foot for the construction of any county bridge within the city limits.

A second act authorized any incorporated town to aid in the construction and repair of any roads leading thereto by appropriating for that purpose a sum not exceeding fifty per cent of the road tax of the town. Before money could be appropriated for that purpose, however, it was necessary to file a petition signed by one-third of the resident taxpayers asking that the question be submitted to the voters at a special election. In case a majority voted in favor of the appropriation the council was authorized and empowered to make the necessary expenditure, provided that the improvement was made within two miles of the corporate limits of the town.³⁵⁹

By the provisions of "An Act Relating to Taxes Levied for Bridge Purposes",³⁶⁰ cities and towns maintaining at their own expense bridges at least seventy-five feet in extreme length across running streams were entitled to all bridge taxes levied by county authority and collected on property within their corporate limits. It was further provided, however, that whenever the taxes so levied and the tolls collected and paid over to the proper authorities amounted to the cost of building and maintaining such bridges, the bridge tax should thereafter remain in the county treasury for general bridge purposes.

Aside from two minor amendatory laws, "An Act Legalizing the Establishment of Roads by County Judges and Auditors",³⁶¹ completed the road legislation of 1872. This measure was rendered necessary by a decision of the Supreme Court holding that the board of supervisors was the proper authority to establish roads and that this authority could not be delegated.³⁶²

The *Code of 1873* was adopted at an adjourned session of the Fourteenth General Assembly. The codification made at that time, like that of 1851, was a complete and thorough revision of the statutes on a logical and systematic basis, but the changes were not of such a revolutionary character as in the earlier code. A brief analysis of the new code will reveal the exact machinery of road administration which existed at that time.

In making an historical study of any complex and important question, like roads, taxation or the public school system, it is frequently desirable or in fact necessary to examine a cross section of the whole in order to understand thoroughly any real progress which may have been made. Indeed, it is quite impossible to possess an accurate knowledge of details unless one has a clear grasp of fundamental principles; but at the same time it is a well established rule of logic that the mind can not comprehend the whole of a problem except through a patient and thorough analysis of its various parts. In other words, a cross section of the general subject of road legislation and administration as contained in the various codes and revisions will be helpful both from the standpoint of details and of fundamental principles.

The statutes dealing with the subject of roads and bridges in the *Code of 1873* may be briefly analyzed under the following heads: (1) the method of laying out and opening roads, including the awarding of damages, the preparation of field notes, and the like; (2) the levy and collection of

taxes for the building and maintenance of roads and bridges; and (3) the actual work on the roads, including the administration or supervision of the same. Speaking in general terms, the laying out and opening of roads according to the plan outlined in the *Code of 1873* was a county function; the levy of taxes for the support of roads was very largely a township function; while the actual work on roads and the administration of the same was a road district function. While the county board of supervisors did have authority to levy a tax of not more than three mills for making and repairing bridges,³⁶³ the fact remains that the levy of road taxes at that time was primarily a function exercised by the township trustees. A mere statement of these considerations suggests the extent to which the same administrative decentralization had taken place since 1851 in the supervision of roads which has been found to exist in the assessment and equalization of taxes during the same period.³⁶⁴

The principal officers and boards engaged in the administration of roads and bridges as outlined in the *Code of 1873* were the following: the county boards of supervisors, the county auditor, the commissioners, the reviewers and appraisers, and the circuit court — all of which were clothed with certain definite powers and authority; the township trustees and township clerks, who exercised important duties with reference to the levy of road taxes and the making out of the tax list; and finally, the road supervisors, who were engaged either in actual work upon the highways or in the supervision of the same. A brief statement of the duties of these officers and boards will, as already suggested, present to the reader a cross section of the method of road administration which existed at that time.

The board of supervisors was given general supervision over the highways in the county "with power to establish and change them as herein provided, and to see that the laws

in relation to them are carried into effect.”³⁶⁵ In performing this work, the county auditor was closely associated with the board of supervisors. Any person desiring the establishment, vacation, or alteration of a highway was required to file a petition in the auditor’s office and give bond with sureties approved by the auditor. After filing the petition and bond as required by law, the county auditor appointed a commissioner to view the road and make a report on the same.

The report of the commissioner being placed on file, the county auditor was then required to appoint a day for hearing complaints and claims for damages. In this connection he served notices on each owner or occupier of land lying in the proposed highway or abutting thereon. In case no objection or claims for damages were placed on file within the specified time and the auditor was satisfied that all the provisions of the law had been complied with, he was vested with authority to “establish such highway as recommended by the commissioner upon the payment of costs.”³⁶⁶ If, however, the auditor was satisfied that notice had not been served and published in a legal manner, it was made his duty to appoint another day and proceed in the same manner as already indicated. In other words, the county auditor under certain conditions had authority to establish highways.

If objections were made or claims for damages filed, the whole question was postponed and brought before the board of supervisors at its next meeting. Under these conditions the county auditor appointed “three suitable and disinterested electors of the county as appraisers to view the ground on a day fixed by him, and report upon the amount of damages sustained by the claimants”.³⁶⁷ If no damages were awarded, the applicant was obliged to pay all costs growing out of his application.

The code stipulates that “when the time for final action

arrives, the board of supervisors may hear testimony, receive petitions for and remonstrances against the establishment, vacation, or alteration, as the case may be, of such highway, and may establish, vacate, or alter, or refuse to do so, as in their judgment, founded on the testimony, the public good may require."³⁶⁸ The board might also increase or diminish the damages allowed by the appraisers and establish, vacate, or alter the proposed road, conditioned upon the payment either in whole or in part of the damages awarded. After the establishment of the highway, the plat and field notes were filed by the auditor who directed the road supervisors to open and work the road.

Some other miscellaneous provisions concerning the laying out and opening of roads should be mentioned. When established along or across a county line concurrent action of the respective boards of supervisors was required; and highways thus established by concurrent action could be discontinued only in the same manner. Roads might also be established without the appointment of a commissioner if the written consent of all owners of land to be used for that purpose was first filed in the auditor's office. As an additional protection of individual rights, the applicant for damages might "appeal from the final decision of the board of supervisors to the circuit court of the county in which the land lies".³⁶⁹ Finally, provision was made for the re-survey of highways in cases where the field notes had been lost.

In order to make the supervision of roads more definite and systematic by affording more accurate information to different local officials, it was made the duty of the county auditor to cause every highway in the county to be platted in a book obtained and kept for that purpose and known as the "Highway Plat-book". Each township was platted separately and the records always kept up to date, and copies of portions of the plat-book were furnished to the

various township clerks as far as the same related to their respective townships.

As noted above, the township trustees possessed a large amount of power with reference to the levy of taxes for the support of roads. It was made their duty to determine the amount of tax "to be levied for highways, bridges, guideboards, plows, scrapers, tools, and machinery adapted to the construction and repair of highways, and for the payment of any indebtedness previously incurred for highway purposes".³⁷⁰ The amount of such tax, however, was not to be less than one nor more than five mills on the dollar. The trustees also determined whether any portion, and if so what part, of the road tax should be paid in labor. When it is remembered that the same officials also were granted the power of dividing their township into a sufficient number of road districts, of settling with the township clerk and township supervisors of highways, and at the same time of determining the amount of a general road fund to be used for certain purposes specified by law, it becomes apparent that the township was the really important unit of local government, especially when viewed from the standpoint of road finances.

The numerous duties of the township clerk are also carefully defined in the *Code of 1873*. Among other things he was required to furnish each road supervisor "with a copy of so much of the map or plat furnished such clerk by the auditor as relates to the highways in the district of such supervisor".³⁷¹ Thus, the county auditor was required to keep a plat or road map of the entire county; the various township clerks kept on file plats or road maps of their respective townships; and finally, each road supervisor was provided with a similar map of his own road district. The making out of the tax list in a manner provided by law was also placed in the hands of the township clerk, who delivered the same to the road supervisors of the various dis-

tricts of his township, who in turn had full authority to collect all taxes charged against resident property holders in his district.³⁷²

As has been suggested, actual work on the highways was under the direct supervision of a district road supervisor, each township being divided into a number of road districts as determined by the township trustees. Thus it is seen that the work of constructing and maintaining roads and highways was more decentralized from the standpoint of administration than was the levy of taxes for road purposes. The office of district road supervisor, created in 1853, seemed to satisfy the democratic tendencies of the people who were very anxious to preserve the largest measure of what they believed to be local self-government.

The numerous and important duties of the road supervisor are outlined with much detail in the *Code of 1873*. Among other things, he was required to give bond, cause all taxes collected by himself to be expended in a manner provided by law, collect the road poll tax, give notice to all persons required to work on the highways, and finally make a report to the township clerk. The character of the report submitted by each road supervisor to the township clerk reveals the extent to which the actual administration of highways had become a local function.³⁷³

Aside from being responsible for damages caused by unsafe bridges in certain cases and possessing a number of miscellaneous duties, the supervisors were required to meet the township trustees for the purpose of settling all accounts connected with the highway fund, "and after payment of the supervisors, the trustees shall order such distribution of the fund in the hands of the township clerk, as they may deem expedient for highway purposes, and the clerk shall pay the same out as ordered by the trustees."³⁷⁴

The code further provides certain definite rules and regulations regarding ferries and bridges, toll bridges, and rail-

way toll bridges. For example, the board of supervisors was vested with authority to grant licenses for the erection of toll bridges across any water courses which called for an expenditure that could not reasonably be met by the revenues of the county. In such cases a private corporation constructing a toll bridge might appropriate as much private property as was necessary for a right-of-way and all approaches. In fact, the board of supervisors possessed a large amount of authority and discretion in the case of ferries and toll bridges. Even in the case of railway toll bridges across the Mississippi, Missouri, and Big Sioux rivers, the supervisors might designate their location.

A brief analysis of the road legislation contained in the *Code of 1873* would be incomplete without calling attention to certain provisions relating to the control of highways, bridges, streets, and public squares in certain cities. The reader will recall the general rule or plan of having each city constitute a road district, separate and distinct from the adjoining rural territory.³⁷⁵ The reasons for this rule are sufficiently obvious. The care of streets, side-walks, alleys, and public squares in cities involves very different problems than does the administration of ordinary wagon roads in the country.

The organization of cities into separate road districts and the powers granted to the cities are thus outlined in the code: "The city council shall have the care, supervision, and control of all public highways, bridges, streets, alleys, public squares, and commons within the city, and shall cause the same to be kept open and in repair, and free from nuisances; all public bridges exceeding forty feet in length, over any stream crossing a state or county highway, shall be constructed and kept in repair by the county".³⁷⁶ The city council, however, might appropriate a sum not exceeding ten dollars per lineal foot to aid in the construction of any county bridge within the city limits.

No fundamental changes were made in the general machinery of road administration following the enactment of the *Code of 1873* until the session of 1884. In fact, the system of road administration at the present time is substantially the same as it was forty years ago. While it is true that amendatory acts have been passed from time to time these measures for the most part involve matters of detail and not fundamental principles.

The period under consideration was one of transition and not of radical changes. This is especially evident from the following facts and circumstances: first, the problem of road legislation considered as a whole was coming to be vastly more complex, involving the principles of civil engineering, economics, and sociology, as well as political science and administration; second, thinking men were beginning to recognize the fact that good roads and well constructed bridges required something more than the mere enactment of law; and finally, the decentralized system of administration created during the period from 1853 to 1870 was gradually proving itself to be out of harmony with changed economic conditions. In other words, the good roads movement was soon to follow with its emphasis upon scientific engineering, sound economic principles, and the honest and efficient administration of law.

Governor Cyrus Clay Carpenter in his first biennial message on January 23, 1874, referred to the necessity of amending the road law. The Governor was among those who had a great deal of faith in the principles of local self-government and believed that the amendment of road legislation at that time should be along the lines of even greater decentralization. "I suggest for consideration", said Governor Carpenter, "whether it would not be well to make each road-district independent, and provide that the people may come together and levy a tax to build highways as the law provides they may do to build school-houses. . . .

If one enterprising district, for the honor of the neighborhood, secures good roads, the adjoining district is stimulated to like enterprise. Contracts let to competitors among neighbors, whose reputation in the neighborhood depends upon faithful performance, are not only usually done well but economically.³⁷⁷

No very important road legislation, however, was enacted in 1874. Cities and towns were granted authority to make contracts with any railroad or other private company for the use of a bridge belonging to such a company as a public highway, assuming at the same time responsibility for any damages that might result from such use.³⁷⁸ Another statute defined the penalties for obstructing, defacing, or injuring any public road or highway.³⁷⁹ In the third place, the code was so amended as to give the township clerk rather than the county auditor authority to direct the supervisor of highways to open and work a highway after the plat and field notes had been filed as provided by law.³⁸⁰ Railroad corporations were granted the privilege of raising or lowering any turnpike road or other highway for the purpose of having its railway cross over or under the same — the company, however, being required to put the highway in as good repair and condition as before such change had been made at the place of crossing.³⁸¹

Finally, the Fifteenth General Assembly authorized the establishment of railways or highways "from any stone-quarry, coal, lead, or other mine".³⁸² In case, however, the owner of the land refused to grant the necessary right-of-way, or could not agree with the corporation regarding the price thereof, it was made the duty of the county sheriff upon the application of either party to appoint six disinterested freeholders to assess the damages and report on the same. The method of determining and awarding damages, the giving of notice to residents and non-residents, and other necessary details were governed by the provisions of the *Code of 1873* which have already been noted.

Practically nothing was accomplished in the way of fundamental changes in the general system of road administration during the legislative session of 1876. The laws which were passed were again for the most part amendatory in character or referred to certain special problems. In other words, the General Assembly was endeavoring to improve roads and construct bridges by the mere enactment of detailed laws. Indeed, the people were very slow to realize the necessity of a more efficient administration of law along this line — which meant that their chosen representatives were not inclined to pass constructive measures. As has been suggested, this was a period of transition when some beginnings were being made, but when nothing very definite was accomplished.

Among the amendments passed by the General Assembly in 1876 was one dealing with the question of penalty for failure to work on the highway when summoned to do so by the road supervisor. The *Code of 1873* gave the road supervisor in such cases the authority to bring action before any justice of the peace in the proper town.³⁸³ The amendatory act strengthened the provision of the code by requiring that in such cases “no property or wages belonging to said person shall be exempt to the defendant on execution.”³⁸⁴

Other amendatory acts related to the cutting of shade trees on unenclosed lands, county appropriations for bridges in certain cases, and the construction of catterways across the public roads. The *Code of 1873* had permitted the road supervisor to take timber or other material for use on highways from any unenclosed lands in the vicinity of the road, but had prohibited the cutting of certain growing trees which did not obstruct the highway.³⁸⁵ The law in this connection was strengthened by an amendment which provided that “it shall not be lawful for the supervisor to enter upon any enclosed or unenclosed lands for the purpose of taking timber therefrom without first

receiving permission from the owner or owners of said lands." ³⁸⁶

It will be recalled that under the provisions of the *Code of 1873* the board of supervisors was prohibited from ordering the erection of a bridge, when the probable cost of the same would exceed five thousand dollars, until the proposition was submitted to the voters of the county. The same statute, however, gave the board of supervisors the authority to appropriate a sum not exceeding forty dollars per lineal foot or a maximum of fifteen thousand dollars for the construction of certain county bridges.³⁸⁷ The law in this connection was amended by adding the proviso of the county bridge law of 1872, which stipulated that "in any county having a population exceeding fifteen thousand, said board may appropriate as aforesaid, not to exceed twenty-five thousand dollars." ³⁸⁸

An act relative to the construction of cattle-ways across public highways conferred upon the board of supervisors the authority to permit the construction of such cattle-ways under certain conditions. The person making application for this privilege was required to construct the cattle-way at his own expense and assume the responsibility for all damages that might result therefrom. In case of failure on the part of the owner to keep the cattle-way in good condition the road supervisor made all necessary repairs and charged the same to the owner of the land.³⁸⁹

The session of the General Assembly in 1878 was also characterized by the absence of any definite program of reform along the line of road legislation. Much in the way of criticism was expressed, but no one seemed able to formulate a constructive policy. According to a petition signed by citizens of Jasper County, the expense and damages caused by establishing roads on section lines should be paid by the counties and not by the petitioners.³⁹⁰ Another petition demanded the levying of "the Rate of Taxes

in advance and requiring the work to be done by a given time, and Setting the Settlement as early as the first of October." Governor John Henry Gear in his first inaugural had referred to the fact that "the present method of managing our public roads and highways is neither efficient or economical, and that the time has arrived for a change."³⁹¹ While the Governor lamented the condition of the highways, especially during certain seasons of the year, and emphasized in this way the economic importance of good roads, no constructive program of reform was suggested.

Only a few minor changes were made by the General Assembly in 1878. "An Act to Amend Section 990, Chapter 2, Title 7, of the Code of 1873" strengthened the law regarding the liability for damages resulting from the unsafe or impassable condition of bridges or portions of the public highway.³⁹² In the case of bridges erected or maintained by the county it was further made the duty of the road supervisor to inform at least one member of the board of supervisors of his county of its unsafe condition. Failing to do this the road supervisor himself was made responsible for any damages that might result — providing, however, that "nothing herein contained shall be construed to relieve the county from liability for the defects of said bridge."³⁹³ A second act provided that county line bridges on the county line roads might be constructed wholly within one county where it was found convenient to do so.³⁹⁴

Governor Gear in his first biennial message called the attention of the General Assembly to the fact that the amount of road tax levied by the boards of supervisors during the fiscal year 1877-1878 as shown by the State Auditor's report was \$1,076,408.31. Moreover, this large sum did not represent the amount of tax worked out on the highways, the money value of which it was impossible to compute. The Governor suggested that nothing added

more to the convenience of the people than a good system of public highways and declared that there was a necessity for some definite legislation on the subject. What this legislation should be, however, was not indicated. "I am persuaded", said Governor Gear, "that a judicious expenditure of much less than one-half the amount now put upon roads would give us far better returns."³⁹⁵

The General Assembly in 1880 passed the usual number of minor laws and amendatory acts, but no general changes of importance were made in the system of road administration. Street railway companies organized under the laws of the State were granted the privilege of using the public highways beyond the limits of the city where the road was a hundred feet wide or more. The company constructing the street railway was required, however, to keep such highway in as good repair and condition as before the railway was constructed. It was further made the duty of the railway company to "pay all damages sustained by such land owners by reason of building said road, which damages shall be ascertained and paid in the same manner as provided for taking private property for works of internal improvement."³⁹⁶

Another law required boards of supervisors in certain cases to pay cities of the first class a portion of the county bridge fund. Where any bridge or bridges exceeded three hundred feet in length, and for which the city was indebted in a sum not less than one hundred thousand dollars, the board of supervisors was obliged "to annually set apart and pay to such city out of the bridge fund of such county the whole amount of bridge tax collected on the taxable property within the limits of such city for that year, until such indebtedness shall be fully paid."³⁹⁷ After the payment of the indebtedness the bridge was to become free to the public.

Other road laws enacted during the same session author-

ized towns and cities of under ten thousand inhabitants to set aside a part of their road tax to be used in the construction or repair of highways outside of and "within three miles of the limits of such incorporated town or city";³⁹⁸ required the county treasurer, when turning over highway taxes to the township clerks, to furnish to each clerk a statement showing the road district or districts to which the same belonged;³⁹⁹ vested the county boards of supervisors in counties free from debt with authority to use surplus funds in making improvements on the highways "upon the petition of one-third of the resident free holders of any township in said county";⁴⁰⁰ provided that persons able to work who asked for poor relief might be required to earn such relief "by labor on the public highway at a rate of not to exceed sixty-five cents per day";⁴⁰¹ changed from the annual to the biennial system of electing certain township officers, including district highway supervisors;⁴⁰² and finally, authorized the compilation and publication of the road laws and the distribution of the same.⁴⁰³

Not more than twenty-five per cent of the highway tax of any town or city, however, could be used in improving the roads outside of the corporate limits. In counties having a surplus the board of supervisors could use merely this surplus in making improvements and were not authorized to run the county into debt for that purpose. In such cases the work was also let by contract to the lowest bidder. The act authorizing the compilation and publication of the road laws stipulated that twenty-five thousand copies should be printed, bound in pamphlet form, and distributed by the Secretary of State to the county auditors, who in turn should deliver them to the township clerks, who should finally hand them to the district road supervisors.

While little of a constructive character was being accomplished during this period, sentiment was gradually being crystalized in favor of good roads. Thinking men were

coming to realize the necessity of a more efficient administration of the law. It is an axiom verified by historical research that important movements which comprehend changes in the whole system of local government move slowly. About 1880 a few progressive men began to understand why so large an amount of money was being annually expended for road purposes with such small results. In the petitions presented to the General Assembly, in the messages and proclamations of the Governors, and in other contemporary source materials one finds for the first time a real comprehensive grasp of the general problem of road administration.

For example, a petition signed by citizens of Warren County and submitted to the General Assembly in 1882 contains the following suggestions: first, that the damages awarded for property condemned for public use should be paid for by the public and not by the petitioners, unless in the judgment of the county board of supervisors the proposed road would be more beneficial to the petitioners than to the public generally; second, "that the work should be done under the Supervision of the Township Supervisors"; third, that the poll tax should be fixed by law and the property tax levied by the township trustees and "Collected all in money and Paid over to the authorities of the Township where assessed"; and fourth, that persons be permitted to work in lieu of paying money by making an agreement with the road supervisor.⁴⁰⁴ Evidently the petitioners in this case were impressed not only with the importance of paying road taxes in money rather than in labor, but also, with the necessity of enlarging the unit of local administration by making it the township rather than the road district.

In his second biennial message Governor Gear spoke in very definite terms concerning the subject of public highways. Up to this time he had been satisfied with lamenting the impassable condition of highways and indulging in gen-

eralizations. But now, after referring to the fact that business was frequently brought almost to a standstill by the condition of the roads, the Governor declared:

The present system of working the roads by a headless and almost aimless army of over ten thousand supervisors is radically unsound. The infinitesimal road districts, with their attendant dissipation of responsibility and utter want of system, along with the practice of paying taxes with what is called labor on the roads, ought to be remorselessly annihilated. Of the half million dollars collected for road purposes throughout the State, a far larger proportion, it may, I think, be safely said, is wasted than of any other amount of money collected in this State for any purpose whatever.

Governor Gear at this time was not even satisfied with pointing out the character of our highways and stating the reasons for the same, but he actually suggested a definite constructive program of reform by saying that "the payment of all taxes in money and the consolidation and systemization of the work on the roads under intelligent management, would be as productive of good results here as it has been in other States."⁴⁰⁵

Governor Buren Robinson Sherman, in his first inaugural address, likewise had something definite to say regarding the problem of the roads. He referred to the necessity of a complete revision of the road laws, stated that the "sorry condition of the highways" seriously interfered with the business of the people, and suggested that the large amount of tax levied for road purposes was sufficient, if properly expended, "to bring a handsome return in improved ways." He considered that the careless supervision or piecemeal system of administration was primarily responsible for the fact that no real progress had been accomplished; and, following the example of his predecessor, he ventured some definite recommendations. "I believe", said the Governor, "a betterment would result if the road taxes were payable in money as other taxes, and the ex-

penditure made under authority of a township road-master who should be held to the same rigid accountability for faithful service as other officers."⁴⁰⁶

The session of 1882, although barren of constructive legislation, was nevertheless characterized by an earnest effort in both the Senate and the House of Representatives to make important changes in the road laws. At least ten bills were presented in the House and two in the Senate, which proposed fundamental and radical changes in the whole system of highway administration. In the House the Committee on Roads and Highways held numerous meetings and endeavored to reach a compromise in the form of a substitute measure. Notwithstanding the development of a radical difference of opinion, a substitute signed by seven members of the committee was finally reported — although a minority report was also presented.⁴⁰⁷ The distinct features of the committee substitute, or majority report, were as follows:

1st. Each civil township constituted one road district; corporations exempted from the operations of the bill.

2d. Township road masters appointed by the Board of Trustees, and to serve in that capacity from April to October, each year.

3d. All road taxes, except poll taxes, to be paid in money and collected by the County Treasurer.

4th. The Boards of Township Trustees to have directory authority in all matters pertaining to the public highways in their respective townships, and to act as Supervisors of the township road district from October to April each year.⁴⁰⁸

It appears that the committee substitute was a very elaborate measure which comprised thirty-three sections and outlined in detail the duties of the township trustees, road master, and township clerk with reference to the supervision of public highways. Strenuous opposition was made to this bill, especially to those provisions which required the appointment of a township road master and the payment

of all property road taxes in money. The substitute having been made a special order for March 13th it was again referred to the Committee on Roads and Highways with instructions "to report additional provisions to the bill leaving it to civil townships to determine by vote as to whether they will accept the provisions of the substitute, before any township shall be affected thereby."⁴⁰⁹ This action being taken only three days before the close of the session and with the radical differences of opinion which prevailed in the House at that time, it was impossible to redraft the measure. Accordingly, the Committee on Roads and Highways submitted the following report on March 14th:

We find after a careful consideration of the provisions of the resolution instructing the committee, that to so amend the bill as to incorporate the provisions of said instructions would involve so many changes as to make it practically impossible for want of time, and would recommend the adoption of the substitute with such changes as the House may see proper to make.⁴¹⁰

The sifting committee which had already been appointed was, however, opposed to so radical a change and therefore no action was taken on the substitute.

In the Senate, where two important bills were introduced along the same line — one by Senator Martin Garber and the other by Senator Samuel D. Nichols — even greater opposition was manifested.⁴¹¹ After being referred to the Committee on Highways, reported back without recommendation, and re-referred to the same committee, it was finally recommended that the bills "be indefinitely postponed, for the reason that the committee consider that they have not time to perfect the bill, and for the further reason that a part of the committee are radically opposed to the measures of the bill."⁴¹²

Thus ended the first real effort to provide for the payment of all property road taxes in money and at the same time to make the civil township a more important unit of

local government from the standpoint of road administration. But progress was made in that a foundation was being laid for some real constructive legislation at the following session of the General Assembly.

Only a few supplementary acts dealing with the subject of roads were passed at the session in 1882. For example, the board of school directors was authorized to obtain, at the expense of the district, such highways as were deemed necessary for proper access to the schoolhouse.⁴¹³ Townships, incorporated towns, and cities (including those acting under special charters) were granted authority by vote of the people at a special election to aid in the construction of county bridges. It was provided further that "the aggregate amount of tax to be voted or levied under the provision[s] of this act in any township, incorporated towns, or city, shall not exceed five per centum of the assessed value of the property therein, respectively, nor shall it exceed one-half the estimated cost of the bridge sought to be aided as fixed by the board of supervisors."⁴¹⁴

In conclusion, the following table, compiled from the reports of the Auditor of State, will serve to show the amount of revenue raised for road and bridge purposes during the period under consideration:

TABLE I
ROAD AND BRIDGE REVENUES 1870-1882

YEAR	BRIDGE TAX	ROAD TAX
1870.....	\$ 618,884.11	\$268,137.46
1871.....	695,781.74	348,092.82
1872.....	705,445.61	360,700.95
1873.....	672,300.47	414,610.48
1874.....	680,255.29	458,488.27
1875.....	839,668.79	443,449.48
1876.....	952,948.10	438,206.88
1877.....	946,788.08	532,732.27
1878.....	856,338.81	543,676.04
1879.....	764,747.12	394,332.30
1880.....	823,442.40	447,047.00
1881.....	970,238.08	486,454.36
1882.....	1,089,294.92	477,389.95

It should be noted, however, that the amounts indicated in the above table do not include the road tax paid in labor. It does not appear that the amount of road tax paid in labor has ever been reported even to the county auditors in the respective counties, and hence it is impossible to estimate the amount of tax thus worked out on the roads.

The period from 1870 to 1883 was characterized by legislation along the following lines: first, the change from the supervisor to the commissioner system of county government which had a direct bearing on the general subject of road and bridge administration; second, a separate and distinct body of acts relating to bridges, bridge funds, and the fixing of responsibility for damages sustained as the result of unsafe bridges; and third, a distribution of road taxes as between the cities and the rural districts. Regarding the last point, it will be recalled that cities and towns were vested with authority to levy taxes for the improvement of the public highways within three miles of the corporate limits. This law and one granting townships, towns, and cities the authority to levy a tax for a county bridge fund were an important recognition of the well known fact that from an economic standpoint the value of a road is not confined to the small local district in which it is situated and therefore its financial support should come partly at least from a larger or neighboring jurisdiction.

The new plan of county government, which was nominally the supervisor but in reality the commissioner system, represented a compromise between the county judge and the county board of township supervisors. The name "supervisor" was retained, and the number of supervisors by vote of the people of the county might be increased to five or seven as concessions to the advocates of the township-county principle of county organization. The county board of supervisors or commissioners being organized on a

county basis, the line of demarcation between the sphere of the township and the county in local government was destined to become more distinct and clearly defined. Moreover, it would be reasonable to expect a greater separation of township and county functions in the future as a result of the commissioner system, on the one hand, and changed economic conditions, on the other.

As a concrete example of this point one may cite the act authorizing the appropriation of money for a county bridge fund. It will be recalled that the General Assembly in 1872 vested the board of supervisors of any county having a population of more than fifteen thousand with power to appropriate for the construction of any one bridge a sum not exceeding forty dollars per lineal foot, the total appropriation not to exceed twenty-five thousand dollars.

Finally, the period under consideration was essentially one of transition. There was a gradual recognition of the fact that roads and bridges are quite as important from the standpoint of economics and civil engineering as from the standpoint of political science and administration. The wastefulness and inefficiency of the existing system was recognized by both Governor Gear and Governor Sherman and emphasized by a substantial minority of the members of the General Assembly in the session of 1882. In fact, the Nineteenth General Assembly, while practically barren of constructive road legislation, marked out the real beginnings of a reform movement along the following lines: first, the payment of property road taxes in money; second, the desirability of appointing a township supervisor of roads or a township road master for at least a short period of time each year, thus recognizing the necessity of abolishing the small road district and making the civil township a more important unit of highway administration; and finally, an enlargement of the power and authority of the county, especially from a financial standpoint.

VIII
THE GOOD ROADS MOVEMENT
1883-1904

For reasons partially suggested in the preceding chapter the session of the General Assembly in 1884 marked the beginning of an important era in the history of road legislation in Iowa. During the winter of 1882-1883 the public highways had been in an almost impassable condition — a fact which very naturally stimulated an active interest in the demand for radical changes in the road laws and the general system of highway administration. Indeed, this aroused popular interest was largely responsible for the calling of what seems to have been the first State road convention held in Iowa.

A communication entitled *Public Highways in Iowa*, written by Mr. S. D. Pryce of Iowa City and sent to the *Iowa State Register* under date of January 3, 1883, contributed in no small degree to the education of the public regarding the value of an improved system of highways. Mr. Pryce's communication was reprinted in almost every section of the State and became in a large measure the basis of the good roads movement which led to the calling of a State road convention in March, 1883. "To Capt. Pryce, especially, and in a large measure to other energetic gentlemen in Iowa City", wrote the editor of the *Iowa City Weekly Republican*, "is due the credit of working up an interest in the desired and much needed change in the manner of working the public highways."

The Pryce communication was in fact a very progressive document, discussing the road question from the stand-

point both of engineering and political science. Among other points Mr. Pryce called attention to the following: first, the great economic loss, especially to the farmers, resulting from bad roads; second, the fact that Iowa ranked first as an agricultural State and yet possessed the "highest per cent of poor roads of any country this side of the swinging worlds"; third, the folly of working public highways in the fall of the year, the result being similar to the "fate of the Daughters of Danaas in the fable, who were compelled to the endless task of filling bottomless buckets with water"; fourth, the necessity of "graded, tile-drained, gravel, or macadamized" roads, depending upon the topography and road material which might exist in any particular section; and fifth, the wastefulness and inefficiency of the system of paying road taxes in labor. "In so far as these laws [road laws] provide for commutation of tax by labor", said Mr. Pryce, "they are absolutely worthless and should be repealed."

In conclusion Mr. Pryce recommended the following definite changes in the road laws: (1) the repeal of the provision allowing the commutation of road taxes in labor; (2) a general and uniform tax of five mills for road purposes levied upon the assessed valuation of each township and paid into the county treasury; (3) the appointment by the Governor of a highway commissioner in each county, who should commence the building of public highways throughout each county; and (4) "the building of roads to be let by contract to responsible parties, and the drains and grades to be placed under the supervision of a competent civil engineer." These suggestions make the communication read very much like a modern document. Indeed, it is a significant fact that most of the reforms suggested by Mr. Pryce have not yet been realized and are now being advocated by the State Highway Commission and endorsed by friends of the good roads movement throughout the

State. If the future may be measured by the past, it will probably still require many years to write into law the dreams of some of the progressive men who assembled in the State Road Convention at Iowa City thirty years ago.⁴¹⁵

1883 With regard to the State Road Convention it appears that the Iowa City Board of Trade, largely through the efforts of Mr. Pryce, extended a cordial invitation "to the Boards of Trade, Boards of Supervisors, City and Town Councils, Farmers' Clubs and kindred organizations, to send delegates to a State Road Convention, to assemble in Iowa City, March 1 and 2 to consider the improvements of the public roads, and to devise means for a change in the laws and governing the working of public highways."⁴¹⁶

At the appointed time the convention assembled in the Opera House, and after the reading of the call by Captain H. W. Fyffe, Secretary of the Iowa City Board of Trade, Hon. John Scott was made chairman of the convention by a unanimous vote. Then followed the introduction of Governor Kirkwood, who delivered a short address of welcome in which he called attention to the importance of a better system of highways and emphasized the practical difficulties in the way of bringing about a general revision of the road laws.

"I have lived in three States", said Governor Kirkwood, "and have worked for the road laws, and they are substantially the same, and the roads are just about as bad. The system is an old one, and you will find it harder to change than you perhaps imagine it to be. It will not be sufficient that you here lay down a system that you think should take the place of the existing system. You will find the legislators in both branches slow to move and they must be moved upon; you will find that organized action produces its results in legislative bodies both State and National." In the light of the history of road legislation since 1883 it will be admitted that the venerable Governor gave the convention some very sound advice.

Chairman Scott replied to the address of welcome in a brief but enthusiastic speech. He referred to the vast sums of money which had been expended in the building of railroads, first to reach the extensive and fertile region of the Mississippi Valley and later the Pacific Coast—and yet these main thoroughfares of steel represented only a part of the whole system of transportation throughout the Union. Finally, Mr. Scott favored better highways and a better system in locating highways, building bridges, and grading roads in order to obtain “a public highway system that shall supplement our railroad system.”

At the close of the introductory addresses Mr. H. S. Fairall of Johnson County was elected secretary and Mr. T. H. Palmer of What Cheer assistant secretary of the convention. Committees on credentials, resolutions, and permanent organization were also appointed.

After the offering of a number of resolutions Senator Pliny Nichols of Muscatine County read a most instructive paper on *Practical Reform in Our Road Laws*. While recognizing that there was some necessity for the permanent improvement of the main thoroughfares—for example, the building of macadamized roads—Mr. Nichols declared that the principal business of the convention was to devise ways and means of providing a better system of wagon roads. Governor Gear and Governor Sherman, he said, had both called attention to the inefficiency and wastefulness of the small road district plan and suggested the desirability of a complete revision of the statutes dealing with highways and bridges.

The Senator then proceeded to give a brief history of the efforts to secure legislation in the session of 1882; and following the example of Governor Kirkwood he pointed out very definitely the practical difficulties in the way of any thorough and scientific reform along this line. During that session ten bills, he said, had been introduced in the House

of Representatives and referred to the Committee on Roads and Highways. Not finding any of the proposed measures entirely satisfactory, a majority of the committee undertook the task of combining into one committee substitute the best features of all the bills that had been presented. In considering this substitute measure the committee had "met oftener and remained in session longer than scarcely any other committee of the House", taking up point by point all the different sections of the bill. The majority and minority reports of the Committee on Roads and Highways — already noted in the preceding chapter — revealed, in the opinion of Mr. Nichols, the great difficulty in the way of securing a thorough revision of the road laws.

In reviewing the arguments which had defeated good road legislation, Senator Nichols emphasized especially the objection to the payment of all road taxes in money. The farmers in many sections of the State, it was alleged, were already paying taxes on two or three times what they were really worth — considering the heavy mortgages against their live stock and real estate — and they believed that the proposed reform would simply add to their burdens. Strenuous opposition had also manifested itself against the employment of a township road superintendent for so long a period and against the payment of fees to township trustees and county treasurers for the collection of road taxes on a money basis.

Thus the experience of the Nineteenth General Assembly had made very evident the necessity of advocating reforms on an evolutionary basis. And so Senator Nichols observed that "any measure of reform in our present system of road laws, to insure its success in the Legislature, in my opinion, must have local option applied, either to the measure as a whole or to a considerable portion of the features of its makeup. Then if local option be incorporated into the measure, it must be so sugar-coated that the people will

take the pill when offered to them, otherwise it had better not incumber our statute books.'"

While an advocate of reform Senator Nichols believed in proceeding along conservative lines. In his opinion, Iowa was not ready for the improved system of highways which existed in Ohio under county supervision and control. The people, however, were ready for substantial improvements, and he thought that they should make their wants known. He favored the one-district plan, with the division of the township into four sub-districts for road purposes and the appointment of a road supervisor for each district. Funds were not available in his judgment for employing a township superintendent except for a very short period of time. If there was too much superintending there would be no funds left for actual road work. By employing a township road superintendent for a short time and having four sub-district road supervisors appointed by the township trustees, he believed that a more efficient and economical administration of township funds would be realized. On this point Mr. Nichols spoke specifically as follows:

With *one* road district for each civil township, we should have *better* instruments, but would not have so many of them. With one road district, we should have more head work, skill, and would get *more* and *better* road work done for the same money. Work would be of uniform excellence throughout the township, and railroad and all other road taxes would be applied where most needed, and where they would do the most good in the township.

The reports of the various committees⁴¹⁷ followed the address of Senator Nichols. The Committee on Credentials showed that two hundred and fifty delegates were present, representing thirty-nine counties of the State. The Committee on Permanent Organization reported in favor of organizing a State road improvement association, and outlined the work which such an organization should perform. Believing that much better results could be accomplished

through organized effort, the committee recommended the desirability of forming county road improvement associations. In a word, State officials were provided for and a general plan for organized effort in promoting the good roads movement was definitely formulated.

The report of the Committee on Resolutions is significant from the standpoint of the present reform movement; for it is a striking fact that the document contains most of the recommendations which are now being made by the State Highway Commission. The report as originally presented was as follows:

Resolved, 1st. That it is the sense of this Convention that all road taxes, except the poll tax, be paid in money.

2d. That the District Supervisor system be abolished.

3d. That the county surveyor in each county shall be the Bridge and Road Commissioner.

4th. That each township shall elect a township road master, who shall have charge of the road work in his township under the Commissioner, and may expend the poll tax for necessary repairs.

5th. The road work shall be let by contract to the lowest responsible bidder.

In view of the fact that the payment of road taxes in money, the repeal of the district supervisor system and the substitution of the township system, and the letting of contracts to the lowest responsible bidder were all advocated in 1883, it is apparent that the good roads movement may be said to have originated at that time. The State Road Convention of 1883, assuming a decidedly progressive attitude, inaugurated a far-reaching movement for reform.

Resolutions one and two were adopted after a brief debate, although some members of the convention favored the payment even of poll taxes in money. The third resolution, however, called forth a very general discussion. Mr. Palmer offered the following substitute: "That the Board of Supervisors be empowered to engage a suitable and com-

petent man to have charge of the public highways within the county, and require sufficient bonds for the faithful and able manner of doing the work." Mr. McFarland, on the other hand, presented a more conservative substitute: "*Resolved*, That there shall be elected in each township, one commissioner to supervise the working of the roads", which was adopted as resolution number three.

The fourth resolution was promptly stricken out. This was followed by an effort to defeat the fifth resolution. In fact Senator Nichols offered the following substitute: "*Resolved*, That road work in the township shall be done under the direction of the township trustees." The proposed substitute was lost, and the fifth resolution was finally adopted, requiring the letting of contracts to the lowest responsible bidder.

During the course of the session, which lasted for two days, other resolutions were adopted dealing largely with the question of organization and the methods which should be followed in order to obtain desirable road legislation. A resolution presented by Mr. Ambler provided that the board of supervisors of the several counties should take charge of public road work "where extraordinary expenditure is required" and improve such roads by tiling, macadamizing, or some other practicable method. Mr. W. P. Payne of Story County offered a resolution which was adopted urging the necessity of "intelligent, directive and general supervision of road building and repairing in harmony with the recommendation already made."

In concluding this account of the epoch-making State Road Convention of 1883, brief reference should be made to a paper read by Mr. L. S. Coffin, in whose judgment good roads were very desirable. He thought, however, that the people of the cities and towns ought to bear their share of the expense. The farmers, he maintained, were already paying "three-quarters of all the taxes that run the gov-

ernment" and were obliged to pay taxes on all their farm lands and improvements although they might be mortgaged for two-thirds of their value. "The first step, then, in my humble judgment", said Mr. Coffin, "is to commence at the bottom. First make equal and just tax and revenue laws; put all on a level; then enact the wisest law possible for road making, and we will all pull together." Needless to say this was very sound doctrine in 1883 and in the last analysis represents the very cornerstone of the good roads movement at the present time; for without funds permanent highway improvement is impossible, and the proper distribution of funds can be realized only through an equitable system of taxation.

From an examination of the Senate and House journals it appears that a great many petitions dealing with the road question were submitted to the General Assembly in 1884. Only a very few of these petitions, however, are still in existence. The few that have been preserved are on file in the Department of Public Archives at Des Moines. A resolution passed by the board of supervisors of Clinton County asked that the road supervisors should be placed under the jurisdiction of the county judge or the township trustees of the several townships, "thereby relieving the Board from duties that can be better performed by the county Judge or the township Trustees."⁴¹⁸ A petition signed by citizens of Warren County is especially instructive because of the positive and reactionary stand taken against the recommendations of the State Road Convention and the Governor. Among other things, the petition declared that if all the road tax was required to be paid in money the logical result would be to increase the burden of taxation by making the payment more difficult. Under existing conditions the farmers, it was claimed, worked out their road taxes after the harvest during the dry season when the best results could be obtained. It was further asserted by the

petitioners that farmers did more and better work than any other class.

The memorialists were in favor of the existing system of local supervision, believing that such a policy was "more in accord with the provisions of justice and liberty and the requirements of free government than the suggestions of the late road convention or the recommendations of the governor." Considerable opposition was expressed to the placing of only one road supervisor in each township. "We cannot close", said the farmers, "without reminding you as the Honorable Representatives of the people that the System of one Supervisor only in each township as recommended could not be as advantageous as the present system of having five or six small districts with a man to supervise each because there is a supervisor in each small district now who can be notified easier of anything and is right close to all needed repairs."⁴¹⁹ These petitions afford concrete evidence of the opposition to reform as suggested by Senator Nichols.

Governor Buren R. Sherman in his first biennial message emphasized the existence of many conflicting views on the subject of road administration and indicated the necessity of a definite program on which the representatives of the people might agree. The subject, he said, was an important and perplexing one, and one which would "tax to the utmost the ingenuity and wisdom of the Legislative department." Governor Sherman admitted that his own personal views were not very clear and satisfactory. He believed, however, that the payment of road taxes in labor was the basis of much of the difficulty. "If this tax was all payable in money", he said, "as I believe it should be, the same in the hands of a competent supervisor would accomplish much more than is now possible, and better roads would result. This will be conceded by everyone."

In the second place, the Governor suggested the desira-

bility of having one road master in each township, who should be held responsible for the roads therein, to be appointed by the township trustees and made accountable to them for his official actions. Finally, it was held that the funds provided by law were frequently not sufficient to keep bridges in good repair. "I suggest the propriety", said Governor Sherman, "of increasing the powers of the trustees in such cases, and having gained the consent of the board of supervisors thereto, that they be authorized to levy such additional tax as will replace the bridges swept away."⁴²⁰

Three laws relating directly or indirectly to the administration of roads and bridges were passed by the General Assembly in 1884: one authorizing boards of supervisors to purchase and maintain bridges over streams dividing their respective counties;⁴²¹ the second, relating to ditches, drains, levees, embankments, and changes in water courses;⁴²² and the third "An Act to Promote the Improvement of Highways".⁴²³ By the provision of the first measure boards of supervisors in adjoining counties, each having a population of more than ten thousand, were clothed with authority to purchase and acquire any toll bridge constructed between such counties and maintain the same at joint expense as a free public bridge, "provided that the total cost of such bridge shall not exceed the sum of \$10,000." The second act authorized boards of supervisors to establish drainage districts, and also to permit the construction of ditches or drains within the limits of any public highway on condition that the same did not interfere or prevent public travel.

By far the most important road law enacted in 1884 was the one entitled "An Act to Promote the Improvement of Highways". This measure followed in some degree the recommendations and suggestions of Governors Gear and Sherman and was obviously the result of the popular agita-

tion for better roads which had led to the holding of the State Road Convention. Briefly stated, the act stood for a larger measure of administrative centralization, first, by providing a regular county road fund as distinguished from the township road fund, and second, by authorizing township trustees in certain cases to consolidate the various road districts of a township into one highway district.

Boards of supervisors were authorized to levy a tax of not more than one mill on a dollar of the assessed value of the taxable property in their county. The road tax thus levied was collected in the same manner as other taxes and set aside as a county road fund to be paid out "only on the order of the board of supervisors for work done on the highways of the county, in such places as the board shall determine".⁴²⁴ The board also possessed the authority to determine in what manner the county road tax should be expended, whether by contract or otherwise.

It will be recalled that both Governor Gear and Governor Sherman suggested the advisability of making the township the unit of actual road administration. An optional system of this character was established by the act under consideration. On petition of a majority of the voters of a given township the trustees might organize the township into one highway district. After two years' trial of the plan, however, the trustees might again return to the old district system.⁴²⁵

Where the township system of road supervision was adopted a great many changes were made in the township plan of administration. First of all, the trustees might order the township highway taxes to be paid in money and collected by the county treasurer the same as other taxes. In the second place, the township trustees were authorized to direct the expenditure of all the highway funds belonging to the township and in this connection might let any contract for road work to the lowest responsible bidder. In

case the contract system was objectionable, the trustees might appoint a township superintendent of highways with one or more assistants to superintend all or any part of the road work.

Other minor requirements of this important act are worthy of mention. For example, it was made the duty of the township trustees to see that the road tax was equitably and judiciously expended for highway purposes in the township; the trustees were also required to see that noxious weeds were cut twice a year if deemed necessary; nine hours was declared to constitute a full day's work; and it was further stipulated that all highway funds belonging to the several road districts prior to the change of system should be placed to the credit of the general township highway fund. Finally, the law applying to road supervisors was made applicable to contractors and superintendents in these terms: "The powers, duties, and accountability imposed on highway supervisors, so far as consistent with this act, shall apply with equal force to contractors, superintendents and assistants contemplated in this act."⁴²⁶

No petitions are on file in the Department of Public Archives and nothing was said by the Governor during the 1886 session of the General Assembly in regard to the subject of road administration. The public mind was occupied with other problems — especially the important question of regulating railway rates. In fact, Governor Larrabee was soon to make the regulation of railroads one of the chief planks in his platform.

The General Assembly, however, passed the following minor laws on the subject of highways and bridges: (1) an act enabling cities to aid in the construction of highway bridges over navigable boundary rivers;⁴²⁷ (2) an act allowing underground tile drains to be constructed across the public highway and defining the duties of road supervisors relative to the same;⁴²⁸ and (3) the board of supervisors,

in certain cases, was granted discretionary power to establish highways along streams in order to avoid the construction of bridges.⁴²⁹ It will be recalled that under the provisions of the *Code of 1873* the road supervisor was authorized to take timber or other material for use on the highway from any unenclosed lands in the neighborhood under certain conditions and limitations outlined in the statute.⁴³⁰ The amendment under consideration merely stipulated that in obtaining this material for use on the highway the road supervisor should be forbidden to "destroy or injure the ingress or egress to any property, or to turn the natural drainage of the surface water to the injury of the adjoining owners."⁴³¹

That the question of good roads was by this time beginning to receive serious attention is illustrated by some instructive suggestions from an engineering standpoint made by Mr. F. L. Easley of Fort Dodge in a paper before the Iowa Surveyors' and Civil Engineers' Association at its annual meeting in 1887. After pointing out the confusion and delay resulting from the existing method of laying out highways, Mr. Easley made the following suggestions:

For example when a new highway is established make it the duty of the County Surveyor to run levels and establish a grade line, set slope stakes and give directions, in writing, for the working of the same, and in order that the Surveyor may have full control and supervision as to the location of highways, place the highway records and all duties relating to them now devolving upon the Auditor in the hands of the Surveyor and allow him an assistant and a salary of some amount for the extra duties thus required. Make it his special duty to see to all locations of county bridges on highways and have the same cross sectioned and staked out, so that a highway supervisor can go to work in an intelligent manner and then have him make an estimate each year, say after closing of work upon highways, of all work done in each district during the year.

This will give the highway supervisors some chance to show to the public how they have used the public funds of their district and in a few years will show a systematic working of highways and a saving of money to the public on account of having the material used in the proper place for there is no ordinary man but what will agree that it costs more to place 100 cubic yards in embankment on a public road than it does to place 100 cubic yards in an embankment upon a railroad. Why is this? Just because everything is planned and staked out on railroad work. Grade lines are cross sectioned and staked out, so that any man of ordinary intelligence can go to work and do the grading in an intelligent and substantial manner without having to move material two or three times before he gets it to the proper place.

I have often wondered that there was not worse work done on account of not having anything to guide them in their working of difficult places.

Place the highway matters in the hands of the Surveyor instead of the Auditor and the public will not have to wait three or six months for the determination of the location of any portion of an old highway, providing it is made his duty to attend to such cases, and is allowed a salary for doing so, and a faithful assistant to help him. The office will then be filled by competent men as a rule and not as it is now an exception.

The change as suggested would relieve the Auditor of what to him is a very unpleasant duty, one for which he is rarely qualified, and place it in the hands of an officer who is more apt to be qualified to adjust such matters to the satisfaction of all parties concerned. The highway supervisor could present a petition signed, by say, two-thirds of the legal voters of his district to the Surveyor to have any work done, which might be necessary in the working of the highways of his district.

Let the Surveyor's profile and grade line be subject to approval by the Board of Supervisors, and become a part of the records of the road, as much so as any part of the plat or line, thus binding all successors to continue the work in the manner of its commencement, viz: In a systematic way.⁴³²

The 1888 session of the General Assembly was practically barren of road legislation. As has been suggested, other

problems were absorbing the attention of the public. Governor William Larrabee in his first biennial message had nothing to say directly on the subject of roads and bridges. An act authorizing the construction of cattle-ways across public roads and under any township bridge constituted the body of road legislation enacted by the General Assembly in 1888.⁴³³

In his second biennial message Governor Larrabee broke his silence on the subject of road legislation by calling attention to the fact that taxes collected for the care of highways "yield a smaller return proportionately than any other imposts", and he suggested that "the manner in which these taxes are used is a reproach to people ordinarily provident in private matters." The sum expended on roads, according to the Governor, was greater in the aggregate than the total amount of State taxes; and yet the highways were not improved by that large expenditure. He further stated that the General Assembly had contemplated a remedy, first, by providing that the board of supervisors might levy a road tax on the whole county to be expended under their direction, and second, by authorizing the trustees to organize a township as a single road district on petition of a majority of the voters. "It is believed", said Governor Larrabee, "that very few townships have availed themselves of this provision for securing better management of highway work. The requirement that a majority of the voters must petition for the system practically prevents its adoption. It would be better to authorize the trustees to submit the question of the adoption of the system to the people of the township at a general or special election."⁴³⁴ Finally, it was declared that the farmers should lead in this important reform for the obvious reason that better roads would not only tend to increase the value of land by making markets more accessible, but would also render farming more profitable.

Only two minor amendments were made to the general body of road legislation in 1890: the first related to the bridge fund in cities of the first class and cities of the second class having a population of less than ten thousand, and also in cities under special charters;⁴³⁵ and the second gave the board of supervisors power to grant street railways the privilege of operating their lines over highways to any State institution under certain conditions and limitations.⁴³⁶

During the session of the General Assembly in 1892 amendments were made to the road law regarding the construction of street railways over highways,⁴³⁷ and to the law regulating the cutting of Canadian thistles.⁴³⁸ Laws were also passed requiring owners of Osage Orange hedge fences to keep the same trimmed along the public highways and railroads⁴³⁹ and authorizing the location of a highway, by and with the consent of the trustees of the Hospital for the Insane at Independence, across land belonging to the State of Iowa in Buchanan County.⁴⁴⁰ The latter measure was rendered necessary by the existence of a law prohibiting the construction of highways across lands belonging to any of the various State institutions without obtaining the express consent of the General Assembly. Finally, a law was enacted to protect persons and property from danger resulting from steam engines on the public highways.⁴⁴¹

About this time the case of Chas. C. Waud, Appellant, *v.* Polk County, involving the question of personal injury resulting from defective bridges, came up for adjudication. In regard to contributory negligence⁴⁴² the evidence in the case showed, first, that the bridge had been defective for a period of more than six months, and second, that the plaintiff had known of this condition. With reference to the latter point the court held that the question as to whether the plaintiff was guilty of contributory negligence in using the bridge at the time of the accident was a matter for the

jury to determine, and not for the court. In the second place, the court maintained that where a patent and obvious defect in a county bridge had existed for six months or a year, knowledge on the part of the proper county authorities would be presumed.

By this time the good roads movement was a subject of general discussion. The people of Iowa seemed to be just awakening to the fact that something was wrong with the system of road administration and that poor highways were not unavoidable concomitants of Iowa soil and climate. Day after day and week after week many of the leading newspapers of the State contained editorials and communications dealing with the road question; while various societies and organizations took up the problem. For instance, at the annual meeting of the Iowa Society of Civil Engineers and Surveyors in January, 1893, "Good Roads in Iowa" was the subject of a symposium participated in by six men, all of whom were more or less familiar with the practical side of road making.

Besides discussing the road question from the purely engineering standpoint, these men suggested many changes in the road laws. For instance, they agreed upon the desirability of requiring all road taxes to be paid in money, and upon the need of expert, centralized supervision of roads and highways. In order that work on the roads might be suited to the needs of each particular highway the following classification of roads was suggested: (1) main thoroughfares of long distance travel, (2) the principal routes of travel between the smaller cities and towns, (3) the principal country roads leading to the market towns or cities, and (4) the so-called neighborhood roads of the rural districts. To insure systematic and intelligent road work according to this classification it was proposed that there should be established an elaborate and highly centralized system of State supervision and control.

The proposed plan of State supervision provided for an executive board of highways consisting of five men appointed by the Governor, two of whom should be civil engineers of ability and reputation and one a lawyer of good standing. It should be the duty of this board to divide the State into road districts consisting of one or more counties as the case might seem to require, and to exercise general supervision over the working of roads. The work of each district was to be in charge of a superintendent of highways and a district engineer elected by the people of the district, the latter of whom, however, must possess a certificate from the State board indicating his qualifications for the office. In fact, the system of supervision thus proposed was outlined in considerable detail and contains many suggestions which are worthy of study.⁴⁴³

At about this same time there appeared a newspaper article which contains a clear statement of one reason for the poor roads of Iowa as well as a picture of actual conditions on country roads at certain seasons of the year. The writer pointed out the fact that in the laying out of the early Territorial and State roads an effort had usually been made to follow the contour of the country, and that as a result these roads were often excellent highways in spite of the fact that little work was done on them. But, he declared, "these early roads spoken of, have been done away with, and narrow lanes, laid largely on subdivision lines, regardless of the character of the ground, regardless of steep grades, regardless of distance, regardless of sloughs and everything else that should be avoided in road making. Only one thought was kept in view, that, to save land."

Furthermore, the writer declared that no road should be less than sixty feet wide in order that room might be left "for a drive-way and drainage gutters or ditches on either side" of the road and that the road might have a chance to dry. Instead, there were many roads which were only forty

feet or less in width, and these roads filled "with snow in winter and are veritable mud traps in the spring and fall. The snow and mud hang on long after the fields adjacent are dry. I have seen an empty wagon being dragged through one of these lanes by four horses, with the axle nearly to the ground, while an old state road in the same section of exactly the same soil was comparatively dry, because it was wide enough to dry out." Finally, the writer declared:

But if it is disheartening for a man to drive through one of these narrow apologies for a road, what of the man who attempts to navigate one on foot? He may have climbed snow clad mountains, penetrated jungles, traversed the forests or deserts of Africa, or found his way in safety across the prairies in a Dakota blizzard, but he is conquered here. He leaps from one island to another, weaving his way from side to side until exhausted, and his feet loaded with mud, he thinks to betake himself to the fields, but he is confronted with a hedge of thorns or a barbed wire fence, and finally owns himself knocked out.

And these are the roads that the children must use in going to and from school.⁴⁴⁴

In his inaugural address Governor Frank D. Jackson touched upon the building of permanent highways. Some broad and comprehensive plan, he thought, should be adopted on the basis of which a few miles of substantial and permanent road might be constructed each year. Referring to the new processes in the manufacture of road materials which, in his judgment, were an important factor in promoting the building of permanent highways, the Governor suggested that the six hundred inmates of the prisons, who were engaged chiefly in the manufacture of products in competition with free labor, might be employed with far greater advantage to the general public in the preparation of material for the construction of highways. From the general standpoint of road administration, however, no definite constructive program was formulated by the Governor.

1894 In spite of a determined effort to secure the enactment of a progressive road law⁴⁴⁵ the Twenty-fifth General Assembly accomplished practically nothing in the line of road legislation. The law authorizing the establishment of public ways to lands having stone or mineral thereon⁴⁴⁶ was so amended as to give "any person, corporation, joint stock association or co-partnership, owning or leasing any land not having a public or private way for ingress or egress", the privilege of establishing over the land of another a highway "to any railway station, street or highway, not exceeding forty feet in width".⁴⁴⁷ In other words, the right to enjoy such a private highway was not confined to persons owning lands with stone or mineral thereon. The important act to promote the improvement of highways approved on April 14, 1884,⁴⁴⁸ was so amended as to make the levy of a tax to be set aside as a county road fund mandatory upon the county board of supervisors. In other words, by substituting "shall" for "may" the county was given more authority in the administration of roads and highways;⁴⁴⁹ and thus a second step was taken toward the desired goal of expert administration represented by the county road engineer. Furthermore, there was enacted "An Act providing for breaking and loading stone by convict labor at Anamosa penitentiary and the State quarry, to be used in improving highways and streets by macadamizing."⁴⁵⁰ Upon proper application "any county, township, road district or town or any city" might secure a quantity of this stone not to exceed ten carloads in any one month for use on streets and highways, the only cost being the cost of transportation.

In the case of *Homan v. Franklin County*, the question of contributory negligence in the case of personal injury resulting from a defective county bridge again came up for discussion. The court held that any person who crossed a bridge knowing it to be in an unsafe condition could not

recover damages for injuries sustained, if there was another safe and convenient passage. This was true even though the county had neglected to prevent the use of the unsafe bridge. "To our minds", said the court, "the effect of the invitation to the public to cross or use a bridge that is really unsafe, and can not be prudently used, ceases in behalf of any person who actually knows of the unsafe condition. When such knowledge obtains, then the reason of the rule ceases, for the person does not then rely on the invitation or apparent conditions as to safety, but he assumes the risk of using that which he actually knows to be unsuitable for use."⁴⁵¹

The 1896 session of the General Assembly was likewise practically barren of any important road legislation. Governor Francis Drake in his inaugural address made only a brief reference to the question of good roads — speaking of the convenience and economy thereof. He hoped that measures would soon be taken which would result in an improved system; but he failed to outline or develop any bills towards the realization of that desired end.⁴⁵²

While no important changes were made in the plan of road administration in 1896 the following amendments and supplementary acts were passed: (1) authorizing the transfer of any surplus in the county road fund either to the general county fund or to the county bridge fund;⁴⁵³ (2) requiring the petitioner for the establishment of a highway to pay the costs "unless the claimant recovers a less amount than was allowed him by the board";⁴⁵⁴ (3) making it the duty of the board of supervisors "to use strict diligence in draining the surface water from the public highway in its natural channels";⁴⁵⁵ (4) making additional regulations for the trimming of various forms of hedge fences along the highway;⁴⁵⁶ and (5) providing more stringent rules for the extermination of Russian thistles.⁴⁵⁷ The time of the meeting of the township trustees for the purpose of making a

settlement with district road supervisors was changed from October to November in order to give the farmers more time during the fall of the year to work out their road taxes.⁴⁵⁸ An act was also passed enabling the trustees or commissioners of State institutions to lay out, establish, vacate, or change public highways through land owned by the State "subject however to the approval of the board of supervisors of the county or the city council of the city wherein such lands are situated."⁴⁵⁹

The nature and scope of that provision of "An Act to Promote the Improvement of Highways"⁴⁶⁰ which authorized township trustees under certain conditions to consolidate the several road districts of their township into one highway district came up for adjudication in *P. C. Dunham et al v. Orvis Fox et al*, Appellants.⁴⁶¹ The evidence in the case revealed the fact that eighty-nine voters had signed the required petition asking for a consolidation of the road districts, but that later forty of this same number signed a remonstrance indicating that they had changed their minds. The court maintained, first, that the statute was not mandatory but permissive only, giving the township trustees a discretionary power under certain conditions, and second, that the petitioners had a right to sign a remonstrance thus expressing to the board of supervisors the fact that they did not desire to be regarded any longer as petitioners. The conclusion that petitioners in such cases have a right to sign a remonstrance is sustained by a long list of authorities.⁴⁶²

It is apparent that, aside from the laws providing for the optional consolidation of road districts on the township basis and creating a county road fund, no fundamental changes in the general system of road administration were made between 1873 and 1896. In other words, the *Code of 1897*, viewed from the standpoint of road and bridge legislation, is substantially the same as the *Code of 1873*.

Numerous mandatory and supplementary acts of a somewhat minor character were passed; but in the final analysis the power and authority of the townships, on the one hand, and of the county, on the other, remained practically unchanged. In this respect the history of road legislation and administration in Iowa, as has been suggested, has very much in common with the history of taxation. Indeed, the fact that all real progress and reform must be for the most part evolutionary is well illustrated in the history of the two great problems of taxation and road legislation in Iowa.

By referring to the analysis of the provisions of the *Code of 1873*⁴⁶³ made in Chapter VII the reader will have a comprehensive and fairly accurate understanding of the system of road administration which prevailed when the *Code of 1897* was enacted into law. The board of supervisors still had general supervision over the roads in the county, with power to establish, vacate, and change them as provided for by law.⁴⁶⁴ The width of roads, the form of petitions for the establishment of roads, the bond required, the appointment of a commissioner to survey the road and file a report, together with the plat and field notes, are provided for in the *Code of 1897* on substantially the same basis as had been adopted nearly a quarter of a century before. The county auditor in his relation to the board of supervisors, on the one hand, and the township clerks, on the other, retained essentially the same authority and powers of supervision. In fact, the county auditor under both codes was an important official.

Briefly stated, the county board of supervisors and the county auditor had practically complete jurisdiction with reference to the laying out and the opening of highways. The method of selecting appraisers and determining damages caused by the establishment of highways likewise remained unchanged. One also notes that essentially the

same provisions are found in both codes concerning the laying out and the opening of county line roads and the establishment of what are referred to as consent highways.⁴⁶⁵ Under the new code appeals might be taken from the decision of the county board of supervisors to the district court, which had taken the place of the old circuit court.

From the standpoint of raising revenue for the maintenance of highways and bridges, the township trustees possessed large powers and authority. Under the new code it was provided that the township trustees at their meeting should determine "the amount of property tax to be levied for roads, bridges, guide-boards, plows, scrapers, tools, and machinery adapted to the construction and repair of roads, and for the payment of any indebtedness previously incurred for road purposes, and levy the same, which shall not be less than one nor more than four mills on the dollar on the amount of the township assessment for that year, which, when collected, shall be expended under the direction and order of the township trustees".⁴⁶⁶ A part of the tax thus levied was to be set aside by the township trustees as a general township road fund, the township clerk being required to give bond for the handling of the same.

As already intimated, the new code differed from the one enacted in 1873 in the provision which was made for a county road fund under the jurisdiction of the county board of supervisors. In other words, the county, being clothed with a larger measure of real financial authority, was made a more important unit of local government in the administration of highways and bridges. Judged from the standpoint of the new standards of local organization and the problems connected with the building of permanent roads and bridges, this was not only an important but in fact an absolutely necessary change.

The *Code of 1897* provided that "the board of supervisors of each county may, at the time of levying taxes for other

purposes, levy a tax of not more than one mill on the dollar of the assessed value of the taxable property in its county, including all taxable property in cities and incorporated towns, which shall be collected at the same time and in the same manner as other taxes, and be known as the county road fund, and paid out only on the order of the board for work done on the roads of the county in such places as it shall determine".⁴⁶⁷ It should be noted, however, that the portion of the county fund obtained from property within any city or incorporated town "shall be expended on the roads or streets within such city or town, or on the roads adjacent thereto, under the direction of the city or town council".

The optional plan of consolidating road districts on a township basis provided for in "An Act to Promote the Improvement of Highways",⁴⁶⁸ approved on April 14, 1884, has already been outlined. This important act with only very slight changes of detail is embodied in the *Code of 1897*. The whole machinery of road administration worked out on the basis of making the civil township, rather than the sub-district, the real unit for actual work on the highways should be thoroughly understood since it has a close and vital relationship to the present road movement, both in Iowa and in other States.

In townships where the old system prevailed and where the actual work on highways was done on the basis of smaller areas or sub-districts, the system of district road supervisors, created nearly one-half a century before, was still retained. As very few townships adopted the new plan this meant that the district supervisor system continued to prevail over practically the entire State. From the standpoint of actual work on the highways and the supervision thereof the *Code of 1897* does not represent any substantial progress over the *Code of 1873* or in fact over the *Revision of 1860*.

It is a significant fact that the most vital part of the whole scheme or plan of highway administration — that of actual highway work done — was just as decentralized and inefficient in 1897 as in 1860. That is to say, the laying out and the opening of roads and highways had been and continued to be a county function. The levying of taxes for the support of roads was still primarily a township but had become partially a county function, the county as already suggested being clothed with this authority in 1884. But from the really essential standpoint of the expenditure of funds the same old decentralized, pioneer system continued to exist. It should be noted, however, that under the *Code of 1897* there was a tendency to separate bridge legislation from the general road laws and provide for the expenditure of money for the construction of bridges on a somewhat more logical basis.

The road legislation of 1898 was again very limited in scope, being confined to a number of minor amendments and an act providing for the publication of the road laws in pamphlet form.⁴⁶⁹ The demand on the part of the farmers for more time to work roads during the fall season of the year was recognized by amending the code so as to make November rather than September the time when road taxes which remained unpaid should be transferred to the books of the county auditor and made collectible as ordinary taxes.⁴⁷⁰ The law with reference to the cutting of weeds on public highways was also amended and made more stringent in its provisions.⁴⁷¹

Governor Leslie M. Shaw in his second inaugural announced the fact that "the highways of Iowa ought to be greatly improved", suggesting at the same time that "internal improvement distinguish energy and hopefulness from sloth and ignorance." Moreover, a constructive attitude of mind was manifested in his reference to the payment of road taxes in money. "I am convinced", said the

Governor, "from observation where the experiment has been tried, that it is far better to have highway taxes paid in cash, and expended with the same care and under like restrictions as protect the disbursement of other public funds."⁴⁷² The product of legislation in 1900 on the subject of roads, however, was confined to a minor amendment in the law providing for the cutting of weeds along the public highways.⁴⁷³

By the year 1902 the good roads movement, which took its rise in 1883, was an established fact. Nearly all classes of people were now demanding some fundamental changes in the system of road administration. Accordingly a series of amendatory acts were passed along the following lines: first, authorizing cities, which had voted taxes to aid any corporation organized under the laws of the State for the construction of a combination bridge across any navigable boundary river, to vote additional taxes under certain limitations and restrictions for the purchase of such bridge;⁴⁷⁴ second, repealing certain provisions of the code, abolishing the office of district road supervisor and with it the district road system, and providing in lieu thereof for the consolidation of each township into one road district;⁴⁷⁵ third, amending those sections of the code relative to the levying, certifying, and collection of the road tax,⁴⁷⁶ and also those relating to levees, drains, and water courses;⁴⁷⁷ and fourth, providing additional regulations defining and conferring rights and powers upon interurban street railways constructed along the public highways.⁴⁷⁸ Under certain conditions and limitations determined by the board of supervisors, a street railway might be constructed along a public road less than one hundred feet wide, providing the consent of three-fourths of the residents owning property abutting upon such highway was obtained and filed with the auditor of the county where the highway was located.⁴⁷⁹

By far the most important act passed by the General

Assembly in 1902 was the one repealing certain sections of the code and providing for the consolidation of road districts on the basis of the civil townships. This measure resulted in a fundamental change in the whole system of road administration. The decentralized system of road administration represented by the district road supervisors and established by the Fourth General Assembly in 1853, had by the year 1902 been in existence nearly half a century.⁴⁸⁰ The system of strictly local supervision established forty years before was employed in the control of highways down to the legislative session of 1902.

Thus the new measure represents a radical break with the established system by providing that "the board of township trustees of each civil township in this state, at its regular meeting in April, 1903, shall consolidate said township into one road district, and all road funds belonging to the road districts of said township shall at once become a general township road fund, out of which all claims for work done or material furnished for road purposes prior to the change, and unsettled, shall be paid."⁴⁸¹ The act further provided for a township superintendent of roads to be appointed by the trustees or the township clerk as the board of trustees itself might determine and direct. Finally, after the township trustees had levied the road tax the township clerk was vested with authority to certify such levy to the county auditor "who shall enter it upon the tax books for collection by the county treasurer as other taxes."

Thus it will be seen that the act under consideration virtually represents a return to the system of administrative centralization provided for in the *Code of 1851*,⁴⁸² for it will be recalled that between 1851 and 1853 the township rather than the so-called road district was the unit of local government from the standpoint of the actual supervision of highway work. After 1853, while the laying out and the

opening of roads was a county function and the levying of taxes for the support thereof had become partly a county although primarily a township function, actual work on the highways and the direct supervision and control of the same was conferred upon local road districts as parts of civil townships. It is, therefore, instructive to note that this thoroughly decentralized and inefficient plan was finally abandoned and the township (for the first time since 1853) made the unit of local government for this purpose. It is hardly necessary to observe in this connection that the law of 1902 providing for a consolidation of road districts is in harmony with the best thought on the subject and is well adapted to meet the social and economic conditions of the present day. "The last General Assembly of Iowa", declared Professor C. F. Curtiss, "enacted a very important law making the township instead of the sub-district the unit for road work in Iowa and providing for the payment of road taxes in cash. It is too early yet to fully forecast the results of this legislation, but it is safe to say that this is the most important step that has yet been taken looking to the improvement of the public highways of this state."⁴⁸³

The good roads movement in Iowa may be said to date from the State Road Convention held at Iowa City on March 1 and 2, 1883. For the first time in the history of Iowa the subject was discussed from the broad standpoint of political, economic, and engineering science. Indeed, the convention did not stop with mere discussion, but actually endorsed the following propositions: (1) the payment of property road taxes in money; (2) the appointment of a township road superintendent or road master for at least a part of the year, thus substituting the civil township for the small road district as a unit of actual road administration; and (3) the establishment of a county road fund, which meant that the county should be clearly differentiated

from the township and made a distinct and important unit of local government for the supervision and control of highways. In fact, the decentralized and inefficient system of road supervision by small road districts was not only condemned by the State Road Convention, but was also severely criticized by Governor Gear and Governor Sherman.

As a logical result of the good roads agitation, the people through their chosen representatives demanded important changes in the road laws. As would naturally be expected strong opposition — especially from the rural districts — developed against the idea of paying all property road taxes in money, as well as against the appointment of a township road superintendent. Indeed, the opposition was strong enough to make the new system optional and not mandatory. In other words, the epoch-making act to promote the improvement of highways, which was passed in 1884, provided that the county board of supervisors “may” levy a tax to create a county road fund; and the township trustees “may” consolidate the several road districts of their township into one highway district; they “may” order the township highway tax paid in money; and finally, they “may” let work by contract “to the lowest responsible bidder.” As a matter of fact, the measure, although purely optional in character, served as an entering wedge for development along the right lines.

The progress really made during the period from 1883 to 1904 becomes evident when the act of 1884 is compared and contrasted with the legislation of 1902. The more recent measure relating to the duties of township trustees, the consolidation of road districts, and the appointment of township road superintendents differed from its predecessor chiefly in the fact that its provisions were mandatory. For example, the law of 1902 plainly stipulated that the township trustees “shall consolidate said township into one

road district"; that all road funds belonging to the road districts of a certain township "shall" become a general township road fund; and finally, that the trustees "shall" order the township road tax paid in money. Thus the sub-district system was finally abolished and the civil township made the basis of actual road supervision.

In the same connection, it should be remembered that the levy of a tax by the county board of supervisors to create a regular county road fund was made mandatory by the provisions of an act passed in 1894. Thus the optional system, first, of passing from the sub-district to the township in the matter of actual road administration, and second, of transferring a part of the fiscal authority from the township to the county, which had been created in 1884, became mandatory by action of the General Assembly as to the county road fund in 1894 and as to the township road district in 1902. These important acts give a distinct character and purpose to the period under consideration.

The possibility of a greater separation of township and county functions has already been noted as a result of the commissioner system of county organization created in 1870. From a financial standpoint, the line of demarcation between the township and the county was clearly defined in legislation which provided for a county road fund in 1894. Aside from this change, and the optional system provided in 1884, the *Code of 1897* contained substantially the same provisions as the *Code of 1873* relative to roads and highways. The laying out and opening of roads remained a county function; the levying of all taxes for the support of roads continued to be primarily a township function; and finally, the district road supervisor system was retained for the actual administration of highway work — this system not being definitely abolished until the session of 1902.

In conclusion, it should be stated that a summary of the legislation during the period from 1883 to 1904 would be

incomplete without a brief reference to the long list of special and amendatory road acts which were passed. Indeed, a considerable number of measures dealing with special phases of the road and bridge question were enacted into laws which are chiefly important as an indication of an effort on the part of the General Assembly to solve the question of highway administration by the writing of statutes.

IX

THE STATE HIGHWAY COMMISSION

1904-1912

The history of road legislation and administration in Iowa since 1904 is in a very large measure the history of the State Highway Commission. Indeed, the Commission itself was the logical result of at least twenty years of agitation for good roads. Since 1884 public opinion had been gradually crystalizing in favor of a more systematic and definite plan of road administration. More immediately, however, experimental work, conducted by the Division of Engineering of Iowa State College, beginning as early as 1902, contributed in no small degree to the enactment of the law creating the Commission. Certain experiments were made with reference, first, to the traction resistance of country roads, second, to the amount of traffic over country roads in selected townships, and finally, to the relation between the prices of agricultural products and the condition of the roads.⁴⁸⁴

In the establishment of the State Highway Commission two men, namely, Dean C. F. Curtiss of the Division of Agriculture and Dean A. Marston of the Division of Engineering of Iowa State College, are entitled to much credit. The question of creating a regular State Highway Department at the College and of providing an appropriation therefor came before the General Assembly in 1904, but public sentiment was not ripe for such a radical step. Indeed, it soon became apparent that no separate department supported by a substantial appropriation could be established until public sentiment had been educated to the

value of improved highways and the necessity of a more efficient system of road administration. At this juncture Representative F. F. Jones introduced a bill providing that the Iowa State College should act as a State Highway Commission.⁴⁸⁵ This measure, which did not carry an appropriation, was passed by both houses after being slightly amended.⁴⁸⁶ The money for the support of the Commission was included in the regular college budget for experimental purposes and was subject to the control of the Board of Trustees. The act as finally passed stipulated that the Iowa State College of Agriculture and Mechanic Arts should serve as a State Highway Commission for Iowa with the following powers and duties:

1. To devise and adopt plans and systems of highway construction and maintenance, suited to the needs of the different counties of the state, and conduct demonstration in such highway construction, at least one each year at some suitable place, for the instruction of county supervisors, township trustees, superintendents, students of the college, and others.

2. To disseminate information and instruction to county supervisors, and other highway officers who make request; answer inquiries and advise such supervisors and officers on questions pertaining to highway improvements, construction and maintenance, and whenever the board of supervisors of a county adjudge that the public necessity requires a public demonstration of improved highway construction or maintenance in said county, and so request and agree to furnish necessary tools, help, and motor power for same, the commission shall furnish as soon as practicable thereafter, a trained and competent highway builder for such demonstration free to the county.

3. To formulate reasonable conditions and regulations for public demonstrations; and to promulgate advisory rules and regulations for the repair and maintenance of highways.

4. To keep a record of all the important operations of the highway commission, and report same to the governor at the close of each fiscal year.⁴⁸⁷

In conformity with the provisions of the law, the Board of Trustees of the Iowa State College appointed the Deans of the Divisions of Agriculture and Engineering to serve the State in that capacity. Moreover, Professor T. H. McDonald was engaged as an assistant to give all of his time to the work, and vigorous steps were taken to carry out the requirements of the statute.

In the meantime the movement in favor of good roads was greatly furthered by the organization of the Iowa Good Roads Association on August 15, 1903. This Association held its first meeting in Des Moines on February 24 and 25, 1904. Mr. T. G. Harper served as president and Mr. D. B. Lyons acted as secretary of the Association. In addition to the presentation of an instructive program a general plan was developed to promote good road legislation before the General Assembly.⁴⁸⁸

Strangely enough an effort was made during the 1904 session of the General Assembly to force a backward step in road administration through a bill providing for an amendment of the Anderson law which had authorized the consolidation of road districts on the basis of civil townships and the appointment of a township superintendent of roads.⁴⁸⁹ The author of the bill did not wish to repeal the Anderson law, but desired merely to make the adoption of the consolidated system optional with each civil township. He declared that taxpayers ought to have the right to return to the old system of decentralized supervision and control if they so desired. In other words, they should be granted the privilege of enjoying local self-government.⁴⁹⁰ The bill passed the House, but was indefinitely postponed by the Senate.⁴⁹¹

Some amendments, however, were made at this time to the general body of road legislation. Among other changes, the road tax was excluded from the consolidated levy of the county;⁴⁹² and the law with reference to personal injuries

caused by steam engines on the public highways was slightly amended.⁴⁹³ Finally, a law with reference to the construction of levees, ditches, drains, or changes of any natural water-course across the public highway⁴⁹⁴ stipulated: first, that the actual cost of constructing the same across any public highway should be paid for by the township trustees out of the township road fund, and second, that "whenever the making of such improvement across any highway necessitates the building of a bridge over the same, the board of supervisors shall build and construct the same and pay all costs and expenses thereof out of the county bridge fund."⁴⁹⁵

An example of the somewhat complex character of local government and of the necessity of carefully distributing the tax burden in proportion to benefits received is to be found in the fact that it was further specified in the act that whenever any highway was beneficially affected by the construction of any improvements in such districts "it shall be the duty of the commissioners appointed to classify and assess benefits, to determine and return in their report the amount of the benefit to such highway, and notice shall be served upon the clerk of the township in which said highway is located as provided in case of an individual property owner." Finally, the law specified that levees and drainage ditches should be so constructed as not to interfere materially with travel on the public highways.

It is not too much to say that the creation of the State Highway Commission by the General Assembly in 1904 marked an important turning point in the history of road legislation in Iowa. Professor T. H. McDonald, who had been employed as assistant in charge of good roads investigation for the Commission, was also made secretary of the Iowa Good Roads Association. Plans were laid and work was commenced along strictly scientific lines. With the limited funds which the College Board of Trustees set apart

for the purpose of road investigation it was possible to make only small beginnings.

In a bulletin entitled *The Good Roads Problem in Iowa*, dated June, 1905, Professor McDonald reviewed the early labors of the Commission and outlined a constructive program of reform along the line of road legislation and administration. An effort was made to investigate road conditions in different sections of the State, and at that time road maps were prepared for about twelve counties. A preliminary investigation was also made regarding the amount of road funds raised in the different counties and the methods and results of the expenditure for such purposes. This included a house to house canvass in typical townships. Finally, the investigation of road materials in Iowa was placed in the hands of Professor S. W. Beyer, whose work is now practically ready for publication.

It was estimated at that time that Iowa possessed about one hundred thousand miles of road — about twenty-five thousand miles of which were classed as main-traveled roads. The relation between the price of farm produce and the condition of public highways, the amount of road taxes in the various funds, the subject of road drainage and the use of the King Road Drag, road culverts, gravel and stone roads, and various other problems were carefully discussed in this preliminary report. Professor McDonald pointed out that the good roads problem in Iowa was how to spend the money already being raised so as to secure one-hundred-cents-on-the-dollar returns. He estimated that \$1,000,000 set aside annually for permanent stone or gravel roads would give the State from three hundred and fifty to five hundred miles of stone road or from one thousand to fifteen hundred miles of gravel road.⁴⁹⁶

The State Highway Commission also published a *Manual for Iowa Highway Officers* (dated June, 1905) which was widely distributed and which has rendered an important

service to the cause of the good roads movement along rational, scientific lines. In this *Manual* attention is called to the well known fact that the rapid development of railroads in recent years had attracted the attention of the people from the importance of public highways as agencies of transportation. In this connection it will be recalled that prior to the coming of the railroads the Territory and later the State had manifested great interest in and had given substantial encouragement to the building of permanent roads, including the chartering of private corporations with authority to construct graded and plank roads.⁴⁹⁷ But in reference to the new agitation in favor of permanent highway improvement in 1905 Professor McDonald was able to say: "At the inception of road building in the United States the leading men of the day championed the movement, and now the foremost men in every state have not only given its revival their approval, but have aided its advancement in every possible manner."⁴⁹⁸

The *Manual for Highway Officers* contains, besides the data noted above, chapters dealing with the topography of Iowa, a brief historical statement regarding the subject of road legislation with special emphasis on the Anderson road law enacted in 1902 and providing for the consolidation of road districts on the basis of civil townships and the appointment of a township road superintendent, the work of the Commission itself, the importance of road dragging, and various other technical problems in highway engineering, including the location of roads, drainage, and the proper method of constructing permanent highways. It is declared that the Anderson law has been quite generally disregarded by township trustees. The law contemplated that a man filling that important position should devote his full time to the work. "Some townships", according to the *Manual*, "have appointed several men to work on the roads and called them road superintendents

but this is merely a modification of the old many-district system. It would be much better and would follow the requirements of the law to have one road superintendent for the township and let him have, if necessary, a number of assistants. The more the work is concentrated under one man and this man held responsible for the proper expenditure of the fund, the more economical will be the administration of the road funds provided the proper man is selected in the first place."⁴⁹⁹

In 1905 the Iowa Good Roads Association held its annual meeting at Ames on June 15th and 16th. In his address of welcome, Dean Charles F. Curtiss suggested that "an inferior public road system imposes a heavy burden upon the people who live under it and it is only a prosperous and rich community that can afford to bear that burden."⁵⁰⁰ President T. G. Harper emphasized the fact that the road legislation of Iowa was the product of pioneer days. "In every department of business activity and commercial enterprise", said Mr. Harper, "we look around to find that we have gone ahead by leaps and bounds, but in the matter of common road making we find ourselves precisely where our pioneer fathers left us." In his opinion, there was no more important question before the people of Iowa than the road question, since the means of communication and transportation marked the high or low civilization of any people. Mr. Harper emphasized the importance of a larger unit of road administration. "I contend", he said, "that the unit of the road district should be the county instead of the township. There should be a county superintendent of roads and bridges to work under the direction and jurisdiction of the county board of supervisors."⁵⁰¹

At this meeting of the Association a number of excellent addresses were made on practical subjects, including the questions of maintaining and repairing highways, road laws in Iowa, weeds, the work of the State Highway Commission,

the question of public roads considered from the standpoint of the legislator, stone roads, and the use of concrete in culverts and bridges. Attorney General Charles W. Mullan stated that in his opinion all road work should be let by contract to the lowest responsible bidder and placed under the supervision of a competent road engineer. It was pointed out further that the old system of small road districts had produced two results: first, a wasteful expenditure of the public funds; and second, a lack of concerted action or spirit of coöperation in the building of a connected system of highways. "The abolishment of these small taxing districts", said Mr. Mullan, "and the creating of road districts co-extensive with the townships of the state, have given a broader field of action and to a large degree eliminated the local penuriousness which so long predominated in the construction and repair of public highways."⁵⁰²

Hon. F. F. Jones of Villisca, the author of the law creating the State Highway Commission, delivered an address in which he attributed the poor condition of the public highways to the lack of definite, scientific knowledge of the elementary principles of civil engineering. The result was a waste of energy, materials, and resources. The Iowa State College at Ames, he declared, was selected to head this important enterprise for the following reasons:

First — Because it is continually demonstrating its interest in and its ability to serve the great agricultural interests of the state: and these interests are the greatest beneficiaries of improved roads.

Second — Because the training, experience, ability, organization, facilities, and men, necessary to bring the largest results, are there ready to be thus employed, and without additional burdens of expense.

Third — Because the farmers, who are the country road-builders, have such confidence in this institution that they will more readily accept instruction and recommendations from it than from any other source.

Fourth — Because the college officials, when approached in re-

gard to the matter, very kindly consented to undertake and prosecute the work outlined should the bill become a law.⁵⁰³

An address by E. W. Weeks of Guthrie Center, entitled *The Legislator and The Public Roads* is noteworthy because of the emphasis placed on the importance of a more centralized system of road administration — especially the necessity of creating the office of county highway commissioner. He believed that by pursuing this method the township levy of four mills could be abolished and the county levy increased two mills, thereby saving two mills for the taxpayers. "I would have this County Highway Commissioner have charge of all the highways within the county, both constructive and maintaining. Eliminate all township taxes and supervision, turn them all to the county and County Highway Commissioner."⁵⁰⁴ While this was no doubt an extreme view, it nevertheless indicates an important tendency of the present day along different lines of social and economic reform.

In its first annual report to the Governor of Iowa, dated December 30, 1905, the State Highway Commission emphasized the imperative need of more funds to carry out the work required by law and recommended the desirability of having a larger percentage of road taxes expended by county authorities. In the judgment of the Commission there should be a county engineer appointed by the board of supervisors and placed in immediate charge of road work, who in turn should consult the State Commission regarding the standard plans and methods of construction.⁵⁰⁵ The report contains a review of the work accomplished by the Commission under the following headings: (1) investigations, (2) experiments, (3) plans and publications, and (4) the road school.

A discussion of the general topography of the State on the basis of glacial districts, an account of road and bridge work carried on in various counties, the expenditure of the

different road funds, and a number of closely allied problems are also presented in this first annual report. The results of certain experimental work along the line of traction resistance, gravel road with clay binder, stone roads, and certain problems in concrete are also included in the report. That is to say, a comprehensive statement of work accomplished, together with an outline of the future plans and policies of the Commission, was now laid before the Governor and the General Assembly.

Agitation for good roads continued and gradually crystallized into a definite policy. On January 11, 1906, Governor Albert B. Cummins addressed a communication "To the Boards of Supervisors and to the Associations of Every Kind Organized in Aid of the Development of the State", asking that the board of supervisors in each county appoint three delegates and that each association "of whatever kind, organized in aid of development" appoint two delegates to attend the Third Annual Convention of the Iowa Good Roads Association to be held at Des Moines on February 7 and 8, 1906. In his communication the Governor referred especially to the practical value of the King Drag in keeping ordinary dirt roads in a good state of repair.⁵⁰⁶

Largely as a result of the campaign of education carried on by the State Highway Commission and the Iowa Good Roads Association a number of important bills dealing with the subject of roads were introduced in the General Assembly in 1906. On January 11th a bill to provide for working or smoothing public highways by the use of split log road drags was presented by Mr. M. Z. Bailey and referred to the Committee on Highways.⁵⁰⁷ Bills were also introduced to increase the tax levy in townships,⁵⁰⁸ to amend the law regarding the appointment of a township superintendent of roads,⁵⁰⁹ to amend the law regarding the collection of road taxes,⁵¹⁰ to amend certain sections of the law relating

to levees, drains, and water courses,⁵¹¹ and finally, to encourage the use of wagons with wide tires on public highways and providing for a rebate of a portion of their road tax to persons using wagons with tires not less than three inches in width when hauling heavy loads on the public roads and highways.⁵¹² It will be recalled that the use of the split log road drag had been endorsed by the State Highway Commission and the Iowa Good Roads Association.

The proposition to abolish the office of county surveyor and substitute in lieu thereof that of county engineer was also urged by a great many advocates of road reform and endorsed by the State Highway Commission. Members of the committees on roads and highways of the Senate and House of Representatives held an informal joint meeting to hear representatives of the Iowa Engineering Society with respect to the desirability of legislation along this line. The Secretary of the State Highway Commission was also present and spoke in favor of the proposition.

The members of the joint committee, however, were in doubt concerning the necessity of such an office, believing that the split log drag and better drainage would solve the road question in the rural districts. For example, one member endorsed the wide tire idea and the use of the road drag; but he "doubted the value of the scheme of substituting an engineer for the surveyor, which would largely increase the expense."⁵¹³ As a matter of fact the people of Iowa were not as yet ready to assimilate a substantial program of constructive reform along the line of road administration.

The Thirty-first General Assembly, judged from the standpoint of road legislation, accomplished very little. Laws relating to vehicles with wide tires and the dragging of roads were about the only constructive measures of the session. The bills introduced in the House and Senate⁵¹⁴ amending the so-called Anderson law providing for the con-

solidation of road districts and the appointment of a township superintendent of roads were of a reactionary character. One of these bills gave the township trustees the power to divide a township into two or more road districts, the superintendent of each district to be elected by the people. It was suggested that after a trial of two or more years the people of a given locality might be given the right to return to the township basis. The bill also permitted the road tax to be worked out rather than paid in cash.⁵¹⁵ In short, the proposed bills were destructive and reactionary in three important respects: first, in the adoption of a decentralized plan of road administration; second, in the principle of electing the local road superintendents; and third, in the payment of road taxes in labor. While these measures were defeated, a backward step from the progressive legislation of 1902 was taken in the passage of a bill providing for the appointment of not to exceed four township road superintendents, which had been introduced by the Senate Committee on Highways.⁵¹⁶

In the meantime the Good Roads Convention, to which Governor Cummins had on January 11th invited the boards of supervisors and various associations to send delegates, convened at Des Moines and listened to a number of instructive papers dealing with almost every phase of the road question. The primary purpose of the convention, however, was to give special consideration to certain bills then pending before the General Assembly. Under date of February 5th the following statement appeared in *The Register and Leader*:

The convention will take up the discussion of several laws which are to be presented to the legislature for further action and also the discussion of laws and resolutions that are now before the legislature. One resolution has to do with the changes in the law to promote the use of the King drag throughout the state and the payment of the same out of the township road fund. The conven-

tion will take up further the resolution that was adopted by the recent convention of the road supervisors of the state relative to the reduction of the township road fund from 4 mills, as it now stands, to 3 mills, and the raising of the county road fund from 1 to 2 mills, thus transferring and centralizing the control of the road funds to the supervisors. The law in regard to compensating wide tires which is already before the legislature, will come in for discussion. The resolution of the recent Iowa engineers' meeting at Des Moines in recommending the extending of the powers of the county surveyor and making him the consulting engineer of the board of supervisors, will be presented for discussion.⁵¹⁷

Mr. D. Ward King of Maitland, Missouri, inventor of the King road drag, addressed the convention on the use and practical value of his machine.⁵¹⁸ Senator Byron W. Newberry spoke on the merits of the wide tire bill which he had just introduced into the General Assembly and referred to the fact that New York, California, New Jersey, Ohio, and Vermont had experienced great benefit through the enactment of similar laws. In the course of a few remarks on the general subject of agriculture and the public roads, Mr. Henry Wallace, editor of *Wallace's Farmer*, said that "as it has been in the past, we have been obliged to market our crops in about three months in the year — that is, our grain crop. What has been the result? Car famine and inconvenience to us, to the railroads and to everybody. One of the best ways to avoid that car famine and a congestion of grain in the great markets is to amend our ways — get our roads in such shape that we can haul our grain to town any day in the year. That can be done and it can be done over a dirt road."⁵¹⁹ Mr. Wallace then proceeded to give a practical discussion of the use of the road drag.

Attorney J. C. Davis, representing the Northwestern Railroad, told the convention that "the relations between the railroads and the public highways are of the most intimate and, so far as railroads are concerned, dependent character. . . . When you arrive at the last analysis,

and find the bed rock upon which prosperity depends, you will find that it rests largely upon the farmer of Iowa, aided by the facility with which he can transport his products from his farm to the railroad station."⁵²⁰

From the standpoint of the history of road legislation and administration in Iowa the most important address made before the convention was, perhaps, the one by Hon. F. F. Jones of Villisca. Mr. Jones spoke with emphasis concerning the loose methods employed in accounting, the bad management, the lack of training on the part of road-builders, and the absence of definite, scientific information regarding the general subject of roads and bridges. He suggested that the State Highway Commission had been created for the express purpose of remedying these defects. Up to date there had been nothing but chaos in the system of working roads. He had found as many different opinions in the General Assembly as there were individual members — which, in his judgment, proved that there ought to be provided a source of reliable, scientific information. Regarding the location of the State Highway Commission at Ames, Mr. Jones made the following comment:

Now, I might mention, that Ames was chosen as the seat of this Highway Commission for several reasons. One is that they have the brains and the ability and the Engineering Department. They have the equipment and the organization. . . . There is perhaps no institution of anything like the character that has the confidence of you farmers as has the college at Ames.⁵²¹

At the close of the convention a number of important resolutions were adopted, endorsing the action of the General Assembly in passing a road drag law, recommending an increase of the county levy, expressing general satisfaction with the work done by the State Highway Commission, and recommending that appropriations for the support of the work be increased. No action was taken, however, regarding the desirability of abolishing the office

of county surveyor and of establishing in lieu thereof the office of county engineer.⁵²²

The good roads movement, under the direction of the State Highway Commission and the Iowa Good Roads Association, continued to make progress, although the forces of reaction were at work at the same time. The so-called Anderson law, which in its original form had provided for a consolidation of road districts on the township basis and the appointment of one superintendent of roads for each township, had met with constant opposition and many attacks. As already noted, this law was so amended in 1906 as to authorize the appointment of not to exceed four road superintendents in each township. The opponents of the law, not content with this change, seemed determined if possible to return to the old system of administrative decentralization; and so it appears that in 1907 a bill was introduced, which, from the standpoint of efficient road supervision, embraced three reactionary principles: first, the division of the township into two or more road districts; second, the election of road superintendents; and finally, the payment of road taxes in labor.⁵²³

According to the bill as originally introduced the division of a township into two or more road districts, after a petition signed by a two-thirds majority of freehold voters had been presented, was made optional with the township trustees. The Committee on Roads and Highways, however, by substituting "shall" for "may" made such a division mandatory.⁵²⁴ An important amendment proposed to strike out all of section five, which provided for the payment of road taxes in labor.⁵²⁵ The fact that this amendment was defeated by a vote of sixty-six to thirty-three reveals the fact that the sentiment of the House at that time was opposed to the payment of all road taxes in cash. The bill finally passed the House by the decisive vote of seventy-three to twenty-seven, but was indefinitely postponed by the Senate.⁵²⁶

The author of the bill, however, was not to be defeated in his effort to bring about a more decentralized system of road administration without a further contest. It appears that a bill had been introduced to increase the road tax levy made by township trustees from four to five mills,⁵²⁷ which bill had been so amended as to provide "that one mill or necessary portion thereof be reserved to pay benefits assessed against townships in drainage districts."⁵²⁸ After being referred to the Committee on Roads and Highways and subjected to various other forms of parliamentary usage, the bill was finally placed in the hands of the Committee on the Judiciary.⁵²⁹

On March 6th the Committee on the Judiciary brought in a substitute which contained a provision for the optional payment of two mills of the proposed road tax in labor.⁵³⁰ An earnest effort was made to strike this particular provision from the bill. Those who favored the objectionable provision were accused of being disloyal to the existing laws and it was suggested that "they want to go back to the old system of the road work." One Representative referred to the old method of the farmers "killing time, swapping stories and horses while they were supposed to be working out road taxes", and pointed out the improved condition of the highways since the Anderson law had been passed.⁵³¹ The bill, including the labor tax provision, finally passed the House by a vote of fifty-eight to thirty-six, only to be indefinitely postponed by the Senate.⁵³²

A compromise bill was introduced in the House which the author believed would curb the arbitrary power of township trustees and thus make it possible for every taxpayer to have some road work done in his district.⁵³³ The division into small road districts was made mandatory, but the principles of appointing road superintendents and of paying road taxes in money were both retained. It was provided, however, that "at least seventy-five (75) per cent of the tax

collected from each road district shall be expended in the district from which it is collected, the remaining twenty-five (25) per cent to be expended at the discretion of the board."⁵³⁴ After prolonged consideration this bill was finally withdrawn by its author.⁵³⁵

It does not appear that the Thirty-second General Assembly in 1907 was prepared to enact road legislation of far-reaching importance. The following laws, for the most part amendatory in character and dealing largely with special subjects rather than with general principles, may be mentioned: (1) a law authorizing cities of the first class to levy taxes on all the taxable property within such city for the purpose of building or reconstructing bridges and to issue bonds against such levies;⁵³⁶ (2) a law providing that all roads thereafter established should be "at least sixty-six feet wide, and in no case less than forty";⁵³⁷ (3) a law giving boards of supervisors certain powers to prevent the encroachment of streams on public highways and to condemn land necessary for that purpose; (4) a law conferring upon boards of supervisors the power to grant municipalities the use of the public highways for laying water mains and pipes and fixing the liability for damages;⁵³⁸ (5) a law relating to the method of making payments out of the county road fund; (6) a law amending the motor vehicle tax law;⁵³⁹ (7) a law providing a method of administration for State boundary roads; (8) a law regarding the construction of street railways over public roads;⁵⁴⁰ and (9) a concurrent resolution providing for the publication and distribution of ten thousand copies of the report of the Iowa State Highway Commission. The filing fee on motor vehicles was increased from one to five dollars and the annual fee for a dealer's permit was placed at ten dollars.⁵⁴¹

During the biennial period following the 1907 session of the General Assembly the Iowa State Highway Commission

advocated with renewed vigor the cause of good roads. In its report to Governor B. F. Carroll, covering the years 1907 and 1908, the Commission made a careful and thorough review of the work which had been accomplished, and suggested a number of definite changes which ought to be made in the road laws. It appears that since its establishment in 1904 the Commission, with the limited funds at its command, had endeavored to get a fairly accurate knowledge of the general topography of the State and to gather data relative to the amount and character of traffic over the roads, and information concerning road materials and the means available for its use in different localities. Moreover, a series of bulletins had been issued, representing a substantial amount of useful preliminary work both in the laboratory and in the field.

As regards legislation, the Commission suggested the following changes: first, an increase in the expenditure for systematic road dragging which should be placed more directly under the supervision of the road superintendent; second, the desirability of purchasing road machinery out of the county funds which should be relatively increased for that purpose, that is, the more general concentration of road funds in order to promote economical expenditure; third, the creation of the office of county engineer; fourth, the enlargement of the powers of the State Highway Commission; fifth, an adequate bridge law drafted so as to secure real competition in the letting of contracts; sixth, a more comprehensive weed law; and seventh, an automobile tax for the use of the State.⁵⁴²

With reference to a greater concentration of road funds, thus making the county a more important unit of government from the standpoint of finance, the following suggestions are pertinent:

It must be recognized that the township funds are not sufficient to do much road grading as the handling of road machinery implies

not only trained men but trained horses and adequate tools and machinery. As a rule the townships have an investment in machinery that represents the entire tax one, two or even more years and it is equally as certain that not much of this machinery is used more than a few days during any year, or adequately housed and cared for the remainder of the time. . . . It is clearly impossible to drag the roads, build culverts and do much road work with a fund totaling \$1,000.00 and \$1,500.00 per year and the logical step is to make the county road fund sufficiently large to enable the board of supervisors to keep at least one well equipped building crew at work from April to November. By decreasing the township road fund one mill and adding this to the one mill county road levy, a fund of about \$12,000.00 would result in the average county.⁵⁴³

The Commission emphasized the fact that by following the policy thus outlined all the main-traveled roads of a county might be put in excellent shape in only a few years' time; while it would be quite impossible to accomplish the same result with the road fund divided on the basis of civil townships. In other words, trained supervisors, on the one hand, and greater concentration of road funds, on the other, were recognized to be an imperative necessity from the standpoint of the good roads movement. A decrease in the township road fund and a corresponding increase in the county road fund, it was declared, "would result in differentiating the work of road building and road maintenance; the one belongs properly to the township and the second to the county".⁵⁴⁴

An enlargement of the powers and duties of the State Highway Commission was suggested along the following lines: to collect and distribute information and reports from and to local road officials; to apportion and distribute any State or national aid appropriation for road improvement; to furnish plans for permanent roads, bridges, and culverts; to supervise the construction of the same, and aid local authorities in letting contracts for this class of work; to

hold meetings for the instruction of road officers and furnish competent road builders and inspectors when requested to do so by local road officials; to carry on experiments in order to determine the best building materials and the most economical forms of construction; and finally, to make reports to the Governor regarding work accomplished and render a detailed account of all money expended. This large increase in the powers of the Commission, together with the additional office of county road engineer and the enlargement of county funds on the one hand and of State road funds on the other, if enacted into law would have produced revolutionary changes in the whole system of road administration.

These reforms, however, were not to be accomplished in the strenuous session of 1909. It is true that the State Highway Commission, the Iowa Good Roads Association, and a large number of similar organizations, both local and statewide, had been carrying on a vigorous campaign of education to promote the cause of the good roads movement; and as a result public opinion was becoming crystallized and a large group of thinking men favored a more economical and efficient method of building and maintaining highways and bridges. But while a substantial beginning had been made, the agitation was not sufficiently general to convince the great mass of taxpayers and thus insure the enactment into law of substantial reforms in the face of an opposition that was making every effort to block the good roads movement. As so frequently happens, the opposition to reform endeavored to accomplish its purpose through an appeal to the prejudice of the common people by insisting that the good roads movement was striking at the roots of local self-government. Moreover, it was alleged that this opposition to the progressive road bills originated with the bridge companies and other corporations interested in the manufacture and sale of various materials and the ma-

chinery used in the construction of roads, culverts, and bridges.

About fifty bills relating directly or indirectly to the general subject of roads and bridges were introduced into the General Assembly in 1909. Some of these measures were of a progressive, while others were of a decidedly reactionary character. The recommendations of the State Highway Commission formed the basis of proposed legislation along the line of the creation of a county highway engineer, a more efficient road drag law, the formation of road improvement districts, the destruction of noxious weeds, the tax on motor vehicles, and an enlargement of the powers of the Commission itself. The bill upon which the opponents of reform centered their efforts provided for a more decentralized system of road administration, the election of road superintendents, and the payment of road taxes in labor.⁵⁴⁵

Space will not permit of a detailed analysis of the many important road bills considered by the Thirty-third General Assembly. To appreciate the character of the arguments urged for and against the good roads movement it is only necessary to outline briefly a few of the bills that became the storm center of popular discussion. First of all, mention should be made of the bill introduced by Representative John C. Bonwell to create a State Highway Commission, defining its powers and duties, and providing a system of State aid or reward through the coöperation of the State with townships and counties in the improvement of public roads.⁵⁴⁶ By this bill it was provided that the Iowa State College of Agriculture and Mechanic Arts at Ames should act as a State Highway Commission and as such "be charged with the giving of instruction in the art of building, improving and repairing public wagon roads and bridges, collecting reports from township trustees, boards of supervisors, superintendents and street commissioners

in cities and towns, and with the distribution of any State reward for improving the public wagon roads that may be provided by the Legislature and any funds that may be given to the State for such purposes by the United States government."⁵⁴⁷ Road superintendents and street commissioners were obliged to make sworn reports to the Commission, which in turn through its highway engineer was required to furnish plans and specifications, give expert advice under certain conditions, study the quality and cost of various kinds of road material, keep a record of its proceedings, and in fact exercise general supervision over the highways of the State.

Perhaps the most significant feature of the bill was the provision for State reward to be distributed by the Highway Commission on application of the township trustees "notifying the department that the township has made arrangements to improve a mile or more of public wagon road by building a clay gravel, a gravel, a stone gravel, a gravel stone, a macadam, or a King drag clay road". The distribution of the State reward fund was in sums from fifty dollars to one thousand dollars per mile, depending upon the character of the proposed highway. The amount to be given to any particular township was limited, and an appropriation of \$40,000 was made for the year ending June 30, 1910, and \$60,000 for the year ending June 30, 1911. In other words, the Bonwell bill provided for a State commission clothed with real power and authority and outlined a system of State aid or reward.

In a bill along practically the same lines, but which was somewhat more radical in character, provision was made for a State highway commissioner whose salary was fixed at \$4,000 per annum.⁵⁴⁸ On the whole, this measure was not prepared with the same care and thorough study of detail as that presented by Representative Bonwell. Finally, mention should be made of a bill introduced by the Com-

mittee on Roads and Highways providing for an appropriation of \$20,000 for the State Highway Commission.⁵⁴⁹

Again, bills were introduced which provided in one way or another for creating the office of county road engineer. In this connection the measures presented by Representatives S. M. Corrie and Charles W. Hackler formed the basis of discussion.⁵⁵⁰ That introduced by Representative Hackler authorized the county board of supervisors to appoint a county highway engineer and fix his salary — at not less than nine hundred dollars nor more than twenty-four hundred dollars per annum. This county engineer was to be a resident of Iowa “skilled in laying of drains, bridges, culverts and road building and general road work, and he shall have a practical knowledge of civil engineering.”⁵⁵¹

The official to be thus appointed was clothed with large powers and authority, having general supervision over the highways of his county. He was to be custodian of all tools and machinery belonging both to the township and the county; have direct supervision over road superintendents and the expenditure of all county and township funds; be responsible for the construction and maintenance of culverts, bridges, and roads; approve all claims for road work done under contract before warrants were issued; inspect the condition of the roads, culverts and bridges of each township as often as practicable; file with the board of supervisors a statement of the condition of the roads and the amount of money available for each township; and finally he was to call an annual meeting at the county seat of all road superintendents and township trustees of the county. Briefly stated, the bill made the county a vastly more important unit of local government from the standpoint of road administration. The county highway engineer was to be a necessary connecting link between the numerous local officials representing the civil townships on the one hand, and between similar local districts and the State Highway Commission on the other.

The bill presented by Representative Corrie would have accomplished the following changes: first, an increase of the county road fund by the levy of a tax of not to exceed three mills on the dollar; second, the selection of certain roads to be known as county roads, at a joint meeting of the board of supervisors and one or more of the township trustees of each township; and third, the appointment of a county highway engineer. It was further provided that eighty per cent of all taxes should be expended in the township where collected.⁵⁵²

Mention should also be made in this connection of another measure, introduced by Representative John H. Darrah, providing for the issuance of bonds for constructing permanent highways, bridges, culverts, levees, drains, and ditches and the appointment of a county road engineer.⁵⁵³ When to these measures are added the various bills providing for the destruction of noxious weeds,⁵⁵⁴ the dragging of public roads,⁵⁵⁵ the efficient collection of road taxes,⁵⁵⁶ and the taxation of motor vehicles,⁵⁵⁷ it is evident that a substantial body of constructive road legislation was embodied in the bills introduced in the Thirty-third General Assembly.

The Greater Des Moines Committee, the State Highway Commission, and various other organizations sent representatives to plead for the passage of the different good roads bills. The greatest obstacle to overcome, however, was the apathy and spirit of conservatism which prevailed among the people — a condition which resulted from a lack of definite, scientific knowledge relative to the road and bridge question. Moreover, it would appear from the following newspaper comment that bridge companies were active in opposing any bills which had for their object a change in the bridge laws:

Good road advocates are up against a spirit of apathy and conservatism among members of the Iowa legislature that now threatens

to postpone the passage of laws for accomplishing anything like statewide improvement of road for at least another two years.

Bridge men have sent representatives to Des Moines to oppose all legislation which provides for more careful supervision of bridge work and which would destroy the monopoly which they now enjoy.

On Thursday evening several bridge men asked Chairman Bonwell of the house roads Committee to meet with them at the Savery hotel. At this meeting they argued against all bills now in the hands of the committee which would affect bridge work.

Mr. Bonwell asked them what they would recommend in place of these bills, and according to him the bridge men declared the laws should be left as they are.⁵⁵⁸

The forces of opposition, however, were not content with defeating what the State Highway Commission and the friends of the good roads movement regarded as constructive legislation, but seemed determined to attack the most beneficial features of the general system of road administration already in existence. As has been noted, a bill was introduced which had for its purpose the amendment of the Anderson law in such a way as virtually to accomplish its repeal.

This bill embodied three principles which good roads advocates considered as outworn relics of pioneer road legislation, namely: first, a multiplicity of small road districts as provided for by Iowa statutes sixty years ago; second, the election of road superintendents; and finally, the payment of road taxes in labor. Among other provisions the bill stipulated that "when the township is so divided the electors of each road district, at the regular annual election of the even-numbered year shall elect a road superintendent for the term of two years", and further that "in townships which are divided into two or more road districts the township trustees shall permit resident property owners to work out all or part of their property road tax for the year in which said tax is assessed, and shall at their regular

annual meeting in April determine the amount of tax to be paid in labor and the amount to be paid in cash."⁵⁵⁹

Before this measure passed, however, some of its more objectionable provisions were eliminated. The Committee on Roads and Highways introduced an amendment providing that "not to exceed seventy-five per cent" of the road tax should be paid in labor.⁵⁶⁰ In the Senate, on motion of Senator Larrabee, the amount of road taxes which could be paid in labor was reduced to fifty per cent.⁵⁶¹ The bill, as finally passed retained the principles of (1) election rather than appointment of road superintendents, (2) small road districts, and (3) as a compromise, the payment of one-half the property road tax in labor. In other words, the law represented what many people looked upon as a backward step from the road legislation that had been enacted in 1902.

Out of a total of nearly fifty bills relating to roads and bridges which had been introduced in 1909 approximately fifteen were enacted into law; but aside from the bill which has just been outlined, a bill to promote the building of permanent roads which had been introduced by Senator Fred N. Smith,⁵⁶² and possibly the bill relating to the destruction of noxious weeds, the remaining measures were of a more or less special or amendatory character and did not affect in any important way the general machinery of road administration.

Among the various enactments may be mentioned an act providing that roads and highways within and adjacent to State lands should constitute a separate road district and be placed under the supervision of the governing board of the particular institution.⁵⁶³ Finally, the road legislation of 1909 embraced the following laws: a law authorizing boards of supervisors to grant the use of public highways for erecting and maintaining poles and wires for the transmission of electricity and fixing the liability for damages;⁵⁶⁴ a law

relating to the county road and county drainage funds;⁵⁶⁵ a law relative to the erection of guideboards;⁵⁶⁶ a law dealing with the trimming of osage orange, willow, and other hedge fences;⁵⁶⁷ a more stringent road drag law;⁵⁶⁸ and finally, a law providing for the regulation of traction engines and automobiles.⁵⁶⁹

With reference to the dragging of roads, it was made the duty of township trustees to "have all the main traveled roads, including mail routes, in their townships dragged at such time as in their judgment is most beneficial, and they shall contract at their April meeting to have a given piece of road dragged at a rate not to exceed fifty cents per mile for each mile traveled in dragging."⁵⁷⁰ The law further specified that where it was deemed necessary not less than forty per cent of the road tax collected under the levy made by the township trustees on land abutting the road or adjacent thereto should be worked out on such road.

The law to promote the building of permanent roads in the State and providing for the establishment of road improvement districts is worthy of special study. Viewed from the standpoint of the general system of road administration, this was the only really constructive act of the session. The board of supervisors was clothed with "jurisdiction, power and authority at any regular, special or adjourned session, to establish permanent road improvement district or districts and to cause to be constructed as hereinafter provided, by grading, guttering and curbing and paving or macadamizing permanent highways, and to provide for the making and reconstruction of any such highway improvement and to assess not less than fifty per cent of the cost thereof on abutting or adjacent property as provided in this act."⁵⁷¹ In order to provide funds for carrying out the purposes of the act, the board of supervisors was authorized to levy a tax of not more than two mills on the dollar of the assessed value of taxable property in the

county, including all taxable property in cities and incorporated towns. Counties having the mullet tax might use all or any part of the same for permanent road improvements.

The friends of the good roads movement, however, were not to be defeated in their ultimate purpose to secure substantial reforms. Good roads associations in almost every section of the State, commercial clubs, chambers of commerce, and similar organizations of a progressive character renewed their efforts to educate the people as to the importance of a better system of highways. The State Highway Commission continued to be the real force guiding the movement on a conservative basis and along strictly scientific lines.

The conflicting views with reference to road administration were perhaps nowhere more sharply defined than in the Good Roads Convention which met at Des Moines on March 8 and 9, 1910, pursuant to the call of Governor Carroll. Senator Lafayette Young was chosen to act as chairman of the convention, and the opening address was delivered by the Governor. Everything proceeded harmoniously until the vital point was reached, namely, the proposition to create the office of county road engineer. Then the storm broke which resulted in the defeat of this particular resolution.⁵⁷²

The opposition endeavored to make it appear that the leaders in the good roads movement were attempting to destroy local self-government. Furthermore, one delegate referred to the county road engineer as "a scheme to create more offices, as a useless expense which would be productive of no better roads and would be a burden upon the people."⁵⁷³ Another delegate believed that "the plan of County engineer meant merely giving places to a lot of boys from college without accomplishing anything." A gentleman from Monroe County said that "they did not

have to go to the colleges to get men capable of using the level." A delegate from Lucas County declared that "a County engineer would cost \$1800.00 to \$2400.00 a year and not a spade full of dirt thrown."⁵⁷⁴

The real nature and purpose of these arguments is apparent to the critical reader. As a matter of fact thinking men are coming more and more to realize that it requires as much engineering skill to prepare plans and specifications for a permanent road or the building of a concrete bridge as it does to draw plans for railroad construction. Indeed, this obvious fact was recognized by no less an authority than Professor J. W. Jenks a quarter of a century ago.⁵⁷⁵ Those who contend that it requires no special training and expert knowledge to supervise highway and bridge work are thinking the thoughts of their pioneer ancestors and speaking strictly in terms of pioneer life.

At the Good Roads Convention which met in Des Moines on December 28, 1910, immediately preceding the convening of the Thirty-fourth General Assembly, more substantial results were obtained. The following resolution, drafted by a committee composed of Senator N. Balkema, J. W. Foster, W. F. Stipe, C. H. Thomas, and F. T. Morris, was adopted:

Resolved. 1. That in the interest of simplicity we favor a re-writing of the road laws of the state into a single act.

2. That we favor the compulsory dragging of earth roads and the creation of a non divertible drag fund.

3. That we favor a simple system of road management under a centralized authority which shall work through skilled and competent appointed officers.

4. That we favor some form of state aid to encourage good road building.

5. It is the sense of this conference that an increased per cent of our road funds be entrusted to the management of the Board of Supervisors.

The name of Mr. F. T. Morris, at that time a member of the Polk County board of supervisors, was not signed to the resolution. In fact, Mr. Morris presented the following minority report:

Be it resolved by the State Good Roads Conference in session assembled, that it is the sense of said conference that the County Road funds of each County of the State of Iowa be placed in the hands of the Boards of Supervisors of the various counties of the State for expenditure, in the employment of an Engineer at such time as they may deem best, and at a price they may fix, and they, the Board of Supervisors to have supervision, and direction of all work.⁵⁷⁶

After a somewhat animated battle of words this resolution of the minority report failed by only two votes; but later in the session it was again brought up and defeated by a large majority.⁵⁷⁷ Indeed, the conference, after listening to a number of instructive addresses, went on record in favor of State aid, a complete revision of the present road laws, the centralization of authority in the hands of trained engineers, and the compulsory dragging of roads. Judge H. E. Deemer made an able plea in behalf of a graduated tax on motor vehicles.

When the General Assembly convened in January, 1911, the issues in reference to road administration were more clearly defined than ever before. Arguments in favor of a more economical and efficient plan of caring for roads had been presented in every section of the State and given wide circulation through the columns of weekly and daily papers. Moreover, the Iowa State Highway Commission in its report to the State Board of Education for the biennial period from July 1, 1908, to July 1, 1910, gave a brief history of the work of the Commission since it had been organized in 1904 and outlined somewhat definitely the essential features of a scientific system of road and bridge administration. Among other statements the following is suggestive:

The amount spent in the state annually from which no results are obtained would, with the Commission adequately supported, be reduced very materially. With adequate state supervision, the \$5,000,000.00 spent annually on the roads and bridges would show results more consistent with the big expenditure. The record of incompetent and frequently flagrantly dishonest handling of contracts, special bridge contracts, pools and agreements in restraint of competition and the erection of flimsy and inefficient structures and disorganized methods of road work, would be in only a few years almost completely revolutionized. For such work the integrity and solidity of an institution such as the college is needed.⁵⁷⁸

As an aid to the General Assembly in drafting road legislation along the most approved, scientific lines, the Commission prepared an outline of a proposed law providing for surfaced roads, and also submitted a brief to the committees on highways in favor of the good roads bills. With reference to a law providing for surfaced roads, it was shown that all work undertaken along this line should be entirely on the initiative and at the option of the property owners themselves. The part of the cost of such improvement paid by the State should "serve as a nucleus about which to gather the local resources and would offer the advantage of supervision by trained men." As suggested, the plan contemplated the organization of improvement districts upon the petition of the property owners, following the successful experience of a number of good roads States.

It was proposed that the board of supervisors should establish the improvement districts on the recommendation of the State Highway Commission, the cost of improvements to be shared in equal parts by the State, the county, and the improvement district. The part paid by the State was to come from a license tax on automobiles, and that paid by the county from the mulct tax or from the regular county road fund which should be increased for that purpose. The remaining third of the cost, to be paid by the improvement district, was left with a local commission,

“appointed to assess the benefits against the abutting and the adjacent acres in proportion to the benefits derived from the improvements.” Thus the State Highway Commission presented a thoroughly scientific plan based upon the successful experience of other States.⁵⁷⁹

In a more comprehensive brief, presented at a joint meeting of the highway committees of the General Assembly, the State Highway Commission outlined the following essential points: first, that constructive principles should prevail in all matters presented before the committees, or in other words, that an appeal should always be made to reason and not to popular prejudice; second, that all main-traveled, rural route roads should be dragged frequently; third, that roads should be properly drained and the hills reduced to the lowest practicable grades; and fourth, that culverts and bridges should be built safely, permanently, and economically. It was also clearly stated that the advocates of the good roads movement had in mind the strengthening of the county as a unit of local government and not the assumption of local rights by the State. Finally, the joint committee was informed that the road drag law, though mandatory on paper, had never been carefully enforced, due partially to the lack of a specific and definite system and partially to the absence of intelligent supervision and control.

With reference to the grading and draining of roads the Commission emphasized the fact that the county is the only practicable unit to do this class of work efficiently. From the very nature of the case, township funds were inadequate for the obtaining of skilled men — the inevitable result being wastefulness on the one hand and inefficiency on the other. The work in Dallas County had proved the force of these arguments. Uniform road sections, proper grades, and the best system of drainage and of contract plans represented a class of work which could be done properly only by men of experience who possessed a sufficient knowledge of engineering.

The reasoning which applied to the proper grading of roads, drainage, and similar problems was even more applicable in the case of culverts and bridges. The State Highway Commission maintained that the heavy traffic under present economic conditions required the construction of permanent and more substantial bridges, whereas in the past little or no attention had been given to the manner in which vast sums of money had been expended for this purpose. Then it was shown that the loose and unbusinesslike methods of supervision and control on the part of local officials had resulted in excessive prices and light, unsafe structures. The opposition to constructive reform, according to the statement of the Commission, "centers around the bridge and culvert question. Some prejudiced opposition comes from the trustees and farmers, but the careful calculated organized opposition has only one source."⁵⁸⁰

In conclusion, the following definite recommendations were made by the Commission: first, a drag fund, not divisible; second, all money spent for road grading and tiling should be handled by the county; third, bridges and culverts should be let by public contract except in the case of bridges of the smaller sizes; and finally, each county should have in its employ a man trained and experienced to superintend and inspect the expenditure of road and bridge funds, namely, a county road engineer.

The Iowa Engineering Society also appointed a committee to submit a synopsis of the different road bills then (1911) pending before the General Assembly. The Greater Des Moines Committee, the Commercial Club of Des Moines, and numerous other associations took an active interest in supporting the cause of good road legislation.

The opposition, however, was even more active than in 1909. The methods adopted to defeat the good roads bills represented an appeal to prejudice rather than to reason.⁵⁸¹

Nothing was said by the opposition about the wastefulness and inefficiency of the old system, nor was any explanation made as to why such a vast sum of public revenue was annually expended without securing more substantial results.

As a matter of fact, appeals to prejudice proved to be more effective than appeals to reason in 1911. Public opinion had not sufficiently crystalized to bring adequate pressure on the General Assembly to counteract the opposition. The taxpayers were not informed and therefore were either inactive or in some cases gave their moral support to the opposition. Out of nearly fifty bills which were presented to the General Assembly dealing with the subject of roads and bridges only three or four of any special importance were enacted into law. The others were for the most part buried in the highway committees and did not reach the floor of the General Assembly.

Of the House bills the following received the most general discussion throughout the State: (1) an act to completely revise the whole system of road laws, introduced by Representative Ulysses G. Whitney;⁵⁸² (2) an act creating the State Highway Department and establishing a State Highway Commission and the office of State Highway Engineer, introduced by Representative Edwin H. Fourt;⁵⁸³ and finally, an act relating to the registration of motor vehicles, regulating their use, and providing for the expenditure of license fees and funds, introduced by Representative David E. Kulp.⁵⁸⁴ Other important bills relating to road dragging, drainage of roads, and the destruction of noxious weeds might also be mentioned. In the Senate the so-called Whitney bill was introduced by Senator Nicholas Balkema,⁵⁸⁵ and a measure to create a State Highway Department was presented by Senator C. H. Van Law.⁵⁸⁶

Space will not permit of a detailed analysis of the various bills which were proposed. Those mentioned above

were drafted largely on the basis of the recommendations of the State Highway Commission and had the general support of those interested in the good roads movement. Several of the leading bills may with profit be briefly summarized. The bill introduced in the House by Representative Whitney and in the Senate by Senator Balkema provided for: first, the consolidation of road districts on the basis of the civil township, thus following the original Anderson law of 1902; second, the office of county road engineer; third, the letting of contracts by competition to the lowest responsible bidder; fourth, a more comprehensive road drag provision; and fifth, a complete revision of the law regarding bridges, drainage, and culverts. The fundamental principle of the bill was greater administrative efficiency — to be brought about, in the first place, by transferring duties and functions from smaller sub-districts to the civil township, which was to be made the smallest unit of local government from the standpoint of road administration; and in the second place, by the consolidation of greater powers in the hands of the county board of supervisors operating through an efficient county engineer.

The Fourt bill in the House and the Van Law bill in the Senate supplemented the Whitney and Balkema bills by providing adequate State machinery of road administration. The student of political science is familiar with the fact that in dealing with any comprehensive problem of administration like public education, public roads, or public revenue, there must be some definite system of State supervision and control, otherwise the local machinery of administration in the counties and civil townships can not operate harmoniously. In other words, the several areas and phases of administration from the township or sub-district to the State should be closely related and carefully interwoven, so as to form one definite, workable, harmonious system.

Now it is evident that the county, from the standpoint of practical administration, is a necessary connecting link between the civil township on the one hand and the State on the other — a fact which has too often been overlooked by the lawmakers of Iowa. The Whitney and Balkema bills outlined a definite, workable system for the counties and civil townships, in which the responsible head was a county road engineer to be appointed by the county board of supervisors and subject to their general supervision and control. The Van Law and Fourt bills provided for a State Highway Commission clothed with large powers and authority, and outlined a system of State aid or reward. In the former measure State funds were to be raised by a license tax on automobiles, while the Fourt bill levied an additional quarter of a mill on all the taxable property of the State.

When it became evident, toward the close of the session, that there was no hope of passing these bills, the good roads advocates were determined, if possible, to save something from the wreck and by so doing provide an entering wedge for constructive legislation in the future. Accordingly, the highway committees of both the Senate and the House introduced a bill which was clearly a compromise measure.⁵⁸⁷ By its provisions the board of supervisors was vested with authority "to employ a competent person who shall perform all of the duties now belonging to the office of county surveyor, and who may now be employed by them for the purpose of making plans and specifications for the grading, repairing and building of roads, bridges and culverts and to perform such other duties as the board of supervisors may determine."⁵⁸⁸ For the grading and building of roads a county road building fund was to be created by the levy of a tax of not more than two mills on the dollar of assessed valuation. Finally, the bill required the trustees to select a township superintendent of dragging and make contracts for the dragging of the highways.

It will be observed that the provision relating to the appointment of a county road engineer had the appearance of being a harmless compromise for two reasons: first, the system was entirely optional with the county board of supervisors; and second, the individual selected was to be a "competent person"—which of course means something or nothing according to the wishes of those in authority. Nevertheless, it was a small recognition of the necessity of more intelligent supervision and control of county road and bridge work, and of the desirability of having a connecting link between the local officials and the State Highway Commission.

Under date of March 20th the following comment appeared in *The Register and Leader*:

A good roads bill making important changes in the present road laws has been prepared by the house committee on roads and highways. . . . The measure gives new powers to the county boards of supervisors and regulates the levying of taxes and the powers and duties of the township trustees.⁵⁸⁹

Moreover, as proof of the compromise character of the act, the following statement is significant: "The measure is the first of several which good roads enthusiasts hoped to have passed by this legislature."⁵⁹⁰ When finally passed, the bill was characterized as "one of the most important road measures before the General Assembly", including as it did "many of the features of other bills concerning the regulation of road work."⁵⁹¹

In concluding the discussion of road legislation of 1911 a brief reference at least should be made to the new road drag law and the so-called Kulp bill regulating motor vehicles, levying license fees, and providing for the distribution of the same. As originally introduced, the Kulp bill provided for a registration fee of eight dollars on motor vehicles having a rating of twenty horse power and less, and an additional forty cents per horse power above that amount.

After the vehicle had been used four years the fee was to be fixed at half the regular amount; and the rate on motor vehicles used solely for commercial purposes was placed at five dollars. Finally, all funds obtained under the provisions of the act were to be distributed equally among the counties and designated as the "County Motor Vehicle Road Fund", which was to be used for the following purposes only: "the dragging, graveling or macadamizing of public highways outside of the limits of cities and towns, and for the building of permanent culverts on such highways."⁵⁹²

As finally enacted into law, the Kulp bill provided for the payment of an annual fee of fifteen dollars for the registration or re-registration of any electric or steam motor vehicle, also an annual fee of three dollars for the registration or re-registration of a motor bicycle or motor cycle. In the statute as approved no distinction was made between ordinary motor vehicles and those used for commercial purposes. The method of distributing the funds, however, as provided in the law is very different from the plan outlined in the original bill. Fifteen per cent of the tax is now retained in the State treasury and the remaining eighty-five per cent is "apportioned among the several counties of the state in the same ratio as the number of townships in the several counties bear to the total number of townships in the state."⁵⁹³

As already suggested, this bill created much enthusiasm among the friends of the good roads movement throughout the State—especially among owners of and dealers in automobiles. Indeed, it received more publicity than any other road measure considered by the Thirty-fourth General Assembly. In the consideration of the bill the chief point of controversy was the distribution of the tax obtained from this source. Some people wanted the whole amount to be retained in the State treasury and used as a

State aid fund; others believed that all the tax should be distributed among the counties as provided in the original Kulp bill; and still others desired a different plan.

Regarding the desirability of retaining all of the tax in the State treasury, an editorial in *The Register and Leader*, entitled *Automobile Taxation*, contains the following instructive statement:

Apart from this legal reason for eliminating the local taxes on automobiles, there is this further reason:

All special sources of revenue, like automobile taxes, telephone and telegraph taxes, railroad taxes, hunters' license taxes and others that might be named, ought to be granted exclusively to the state. . . .

If the state were given exclusively the revenue from these sources, it would in time make unnecessary a state tax levy on other property.⁵⁹⁴

When the bill providing for a tax on automobiles was pending before the General Assembly opinions were freely expressed by almost every class of citizens. A gentleman representing the Commercial Club of Des Moines declared that "Des Moines is willing to pay her share of the expense of improving Iowa roads if the money is expended judiciously". "I believe that 90 per cent of the auto owners will sanction the Kulp bill," said a prominent dealer in motor vehicles.⁵⁹⁵ With reference to the method of distributing the funds, the following comment was made:

A generous slice of the automobile tax pie provided for in Representative Kulp's automobile and good roads bill was reserved for the state of Iowa yesterday afternoon by the members of the house committee on ways and means. . . .

Fifteen per cent of the fund is to go into the general fund of the state as the bill stands with the amendment of the ways and means committee.⁵⁹⁶

Finally, "An Act to repeal chapter one hundred one (101) of the laws of the thirty-third general assembly and to enact

a substitute therefor relating to the dragging of public highways and providing penalty for failure to perform such duties", should not be overlooked. This measure had been introduced and ably supported by Representative E. H. Cunningham of Buena Vista County.⁵⁹⁷ Briefly stated, the law as finally passed made it the duty of township trustees to divide the public roads of the township into permanent road dragging districts, "designate what districts shall be dragged, which must include all mail routes and all the main traveled roads within the township", and appoint a superintendent of dragging to serve for one year unless sooner removed by the board.⁵⁹⁸ The trustees were also required to furnish suitable road drags for the township, paying for the same out of the township road fund, it being further stipulated that the superintendent of dragging shall "cause all roads to be dragged that the township trustees may from time to time direct at such times as in his judgment is most beneficial."

While the law as thus enacted was doubtless an improvement upon previous legislation dealing with the subject, it was still defective from two important standpoints: first, the tax set aside for that purpose, being limited to fifty cents per mile, is not adequate to produce satisfactory results; and second, the superintendent of dragging should be clothed with larger powers and authority and held directly responsible for the work.

Again defeated in their efforts to place the administration of roads and bridges on an economical and efficient basis, the friends of the good roads movement were more determined than ever before to reveal to the taxpayers of Iowa the real condition of road affairs. While a number of organizations were active along this line, the Des Moines Commercial Club and the leading daily papers of that city proceeded to make an investigation of the methods of building bridges and supervising road work which had been employed in Polk County by the board of supervisors.

After a preliminary investigation the Des Moines Commercial Club commenced proceedings against a member of the board of supervisors of Polk County under the Cosson law. Space will not permit of a detailed account of this important case. It may be noted, however, that the State Highway Commission was employed to make a careful, detailed study of all the bridges in Polk County, prepare a map showing the location of all bridges, and file a report. At the same time, an equally thorough investigation was made of the records in the County court house. The following statements from the *Des Moines Daily Capital* will give the reader an idea of the charges made against the Polk County supervisor at the time the suit was filed.

It is claimed that he practically turned the entire building interests of his district over to N. M. Stark, permitting the erection of more than \$100,000.00 worth of concrete structures during his term, without ever asking a competitive bid, without ever requiring the submission of plans, designs, specifications or estimates. It is claimed that he never saw, let alone checked a single itemized bill for a completed bridge; that no bridges were properly inspected during the building; that he caused to be torn down good wooden bridges to permit the erection of concrete bridges; that he neglected scores of wooden bridges in his district, using up his bridge funds on comparatively few concrete structures, the total number of concrete bridges being only about one-fifth of the total number of bridges in his district; that he caused concrete bridges to be erected on spur roads with no outlet, presumably to favor some political friends; that he neglected important bridges in dangerous conditions on main traveled roads; that he has kept no accurate records of his bridges, their cost of construction, blue prints or any data or records by which the people can determine what their money has been paid out for or upon which they can determine the kind of basis settlement was made with the N. M. Stark Company.⁵⁹⁹

Professor Thomas H. McDonald, acting for the State Highway Commission, made a survey of Polk County and prepared a map and a report as requested by the Des

Moines Commercial Club. The result was a confirmation of practically every one of the charges above outlined. Incidentally, Professor McDonald made the following suggestions relative to the letting of contracts for bridge work which are worthy of study:

The structure should be designed by a competent bridge engineer; the letting of the contract should be conducted under the supervision of said engineer; never ask contractors to bid on a bridge where each contractor is bidding on his own plan; demand sealed bids on one design only; on small jobs have the county engineer put in a bid on the work for the county itself; consider only sealed bids and require a substantial deposit with each proposal; see that the county gets what it pays for; a competent inspector should be maintained on the work who will see that the provisions of the plans and specifications are rigidly enforced; each and every member of the bridge must be inspected and particular attention must be given to the following: a. concrete — to see that it is properly proportioned, mixed and deposited. b. pile driving — to see that the piles are of proper size and have sufficient penetration. c. all tension members must be uniformly stressed. The bridge should receive a test load in order to determine whether or not it is sufficiently strong for the purpose intended; in the event the bridge is to be paid for on a percentage basis, complete and itemized accounts should be furnished, showing materials used and labor performed, and these should be carefully checked; and a guarantee should be required of the contractor.⁶⁰⁰

The Polk County case, however, did not come to trial. Consequently all of the evidence was not presented and perhaps will never be known to the public. The supervisor against whom the suit was filed resigned before the case was brought to trial, giving to the press a detailed statement of the reasons for his resignation,⁶⁰¹ and his example was followed by another member of the board.

In this connection it may be noted that proceedings similar to those instituted in Polk County were begun in Clinton County in April, 1912. A petition signed by a num-

ber of citizens of that county requested the grand jury to make a careful investigation of the letting of bridge contracts during the last five years, "to ascertain whether the prices were reasonable or excessive, and if excessive, to fix the blame for such excess".⁶⁰² Grave irregularities have repeatedly been charged against the supervisors of Clinton County in connection with the alleged letting of bridge contracts without competition to the Clinton Bridge and Iron Works.

The State Highway Commission was promptly employed to make an investigation of the bridges in Clinton County similar to that made in Polk County. Field engineers were set to work and a large amount of data was gathered. At the same time the grand jury continued its investigations, assisted by expert counsel and accountants. As a result twelve men, including Mr. George E. Wilson, Jr. of the Clinton Bridge and Iron Works, were indicted by the grand jury on September 5th, and the case is now pending in the courts.⁶⁰³

In conclusion, an idea of the amount of money expended in Iowa for road and bridge purposes during the period under consideration can be gained from the following table:

TABLE II

ROAD AND BRIDGE REVENUES 1903-1911

YEAR	BRIDGE TAX	ROAD TAXES	
		COUNTY TAX	TOWNSHIP TAX
1903.....	\$1,628,720.88	\$547,309.92	\$2,283,129.65
1904.....	1,947,423.53	559,409.42	1,749,395.23
1905.....	1,923,431.81	518,535.71	1,773,304.08
1906.....	1,967,546.02	520,779.54	1,804,483.83
1907.....	2,178,028.09	556,173.16	1,909,988.03
1908.....	2,180,381.45	575,374.39	1,890,573.04
1909.....	2,563,193.78	602,389.31	1,903,479.64
1910.....	2,756,659.45	618,666.52	2,028,096.47
1911.....	3,059,319.68	724,760.74	2,644,168.66

It should be noted, however, that the amounts given in this table do not include the road tax paid in labor. There is apparently no way of determining the amount thus paid, since it seems that the amount of taxes worked out on the

roads is not even certified to the county auditors, let alone to the State Auditor. Furthermore, it should be noted that the amount of township taxes given for the year 1903 really included more than one year, on account of a change from the labor to the cash system.

It is apparent that the last eight years of the history of road legislation in Iowa have been characterized by two distinct forces. First, there has existed a force the object of which has been to amend and modify the Anderson law of 1902 which provided for the consolidation of road districts on the basis of the civil township, the appointment of one township road superintendent, and the payment of road taxes in money. The chief result of the activities along this line was the law of 1909, which authorized the division of a township into road districts, the election of road district supervisors, and the payment of one-half of the road tax in labor. The other force has been the progressive good roads movement which has had for its purpose the payment of all property road taxes in money, the enlargement of the county road fund, the appointment of a trained county engineer, a State aid policy, and finally, the strengthening of the powers of the State Highway Commission. Coupled with this dual tendency toward progress on the one hand, and reaction on the other, there appears a more distinct line of separation between township and county functions, judged from the standpoint of road supervision and control.

Indeed, it may be said that at the present time there are at least three distinct spheres of authority in road matters which will be generally recognized both by the practical man and by the scientific investigator: first, State functions; second, county functions; and third, township functions. It is hardly necessary to observe that the local road district, or subdivision of a civil township, is an antiquated and altogether useless relic of pioneer conditions.

The State Highway Commission and the leaders in the good roads movement, however, have made continued efforts to overcome the forces of opposition. The 1904 session of the General Assembly not only defeated the strenuous effort made to return to the sub-district system, but it took a most important forward step by creating a State Highway Commission. It will be generally admitted that the law which established a State Highway Commission marked an important turning point in the history of road administration in Iowa. Up to the present time this Commission has only been given authority to collect certain data and furnish expert advice when requested to do so. While the appropriation for the support of the Commission has been wholly inadequate to produce the best results even from the standpoint of expert service, it may be said that a vast amount of useful work has already been accomplished. Since 1904 efforts have been made to enlarge the powers of the Commission, to secure additional appropriations, and in fact to provide a comprehensive system of State aid. Indeed, State highway commissions have already become the leaders of reform along the line of efficient road administration in a large group of States. But the good roads movement embraces vastly more than the creation of a State Highway Commission.

The county is generally recognized throughout the United States as being a very important unit of local government along many lines, including the supervision of highways. In fact the county is a necessary connecting link between the civil township, which has always possessed large powers and authority, and the State. Moreover, it is a sufficiently large area and possesses enough taxable property to purchase expensive road machinery, construct bridges, and engage in the work of permanent highway improvement. When it is considered that the township is too small a unit of local government to undertake improvements which re-

quire, large expenditures of money and the employment of expert service, it is apparent that if these important functions are to be kept close to the people, thus preserving the maximum amount of local self-government, the county should be made a more important unit of road and bridge administration — especially from a fiscal standpoint. These considerations are at the basis of the demand which has been made again and again for creating the office of county road engineer.

In view of the vast sums of money which are annually expended in every county of Iowa, either by the county board of supervisors or by the various boards of township trustees, and in view of the necessity of using this money to the best possible advantage in constructing culverts, reinforced concrete bridges, and in building permanent roads, the advantage of having a trained civil engineer and practical road builder to prepare plans and specifications and supervise work must be apparent to every thoughtful person. In fact, Professor J. W. Jenks, writing for the American Economic Association nearly a quarter of a century ago, recognized the obvious fact that it requires the same engineering skill to construct bridges and build permanent roads as to be a successful railroad engineer. Until trained experts are employed, the townships and counties will continue to waste at least one-half of the people's money raised in the form of taxation for this class of work.

At the same time the important functions of the civil township in road matters should neither be overlooked nor underestimated. In view of the fact that except for the short period from July 1, 1851, to February 2, 1853, the township has possessed large powers and authority from the very beginning of our Territorial history, it may reasonably be assumed that it will continue to exercise a large amount of influence for many years to come. Indeed, it is a fact that the civil township has a logical sphere of

authority in the actual supervision of road work. Nor is this sphere of authority any less important now than it has been in the past. A careful historical analysis of Iowa road legislation reveals the fact that the civil township has always been the important division of local government for the maintenance of the public highways. In other words, while the county has had charge of the laying out and the opening of roads and now possesses considerable financial authority, the township trustees have been responsible for the actual direction of road work.

Furthermore, it should be stated in this connection that actual road work in the past has almost universally meant simply the maintenance of ordinary dirt roads and not the building of what are generally known as permanent roads. When it is considered that this road work is likely to remain a very important function, it is evident that the township will continue to occupy a position of substantial influence in the future. The problem of reform along the line of road administration does not consist, therefore, in subtracting powers from the civil township, but rather in adding new duties or new functions to the county on the one hand and to the State on the other. Considered in the light of practical legislation this fact is of great significance, because it undermines the force of the arguments which have been so frequently advanced for the alleged preservation of local self-government. In a system of highway administration, reorganized along strictly scientific lines, it is believed that the civil townships may exercise even larger functions than they have been able to perform in the past.

Thus it is obvious that when one comes to differentiate between township, county, and State functions, it will be found that the civil township is destined to remain an absolutely essential part of the more comprehensive state-wide administrative organization. The appointment of a township road superintendent responsible to the township

trustees and having jurisdiction in the field of road maintenance — especially the dragging of the public highways — is significant in this connection. It is believed that a township road superintendent should be appointed by the township trustees, that he should be clothed with larger powers and authority, and that a larger fund should be raised for the purpose of road dragging. These considerations emphasize the important administrative duties of the township — duties which it is believed have a logical place in a scientific system of road administration.

In conclusion, it may be noted that the recent investigations in Polk County and in Clinton County have thrown some light upon the letting of bridge contracts. In fact, these investigations are significant in view of the charges which have been made from time to time that certain bridge companies and other corporations producing road and bridge materials have been active in opposing changes in the road and bridge laws by declaring that these changes threatened the right of local self-government.

X

COMPARATIVE STUDY OF ROAD LEGISLATION

In the first general road congress which assembled at Atlantic City late in September a large number of road organizations — national, State, and local — coöperated in making a thorough and comprehensive presentation of the whole problem of road administration in the United States. The main purpose of this convention, however, was to discover ways and means of stopping the tremendous expenditure of road revenues which is becoming greater and greater every year without producing tangible results in the form of permanent road improvement.⁶⁰⁴ The various sessions of the convention were devoted to the highway and bridge problem in its various aspects — educational, economic, administrative, and engineering. The deliberations of this congress afford an excellent opportunity for contrasting the intelligent and sympathetic interest now manifested in the good roads movement with the spirit of indifference which prevailed quite generally only a few years ago.

As has been stated in the course of the preceding historical study, the problem of road legislation throughout almost the entire history of Iowa has been largely one of local government and administration. The fact that road improvement requires, on the one hand, a constant application of the principles of engineering science and, on the other, is closely related to almost every aspect of educational, social, and economic life did not occur to the pioneers of Iowa nor, indeed, to the pioneers of any of the American commonwealths. In a general way that which has been true of Iowa has likewise been true of the older States.

The first road law enacted in America was passed by the Virginia House of Burgesses in 1632 and was based on English precedents. Other road laws followed — including one in 1662 which had for its object “the maintenance of highways in good condition.”⁶⁰⁵ Surveyors were appointed to establish a system of highways, including convenient roads to the church, to the court-house, to Jamestown, and between the different counties. Each surveyor was assigned certain definite work to be performed, which was done under the jurisdiction of the county court in coöperation with the clerk and the church wardens of the parish who were required to enforce the law. In other words, the parish, which developed as a local unit of church administration, exercised a large measure of jurisdiction over roads and bridges.

Other colonies followed the example of Virginia by enacting definite road laws. Maryland passed its first road act in 1666, although actual road building had commenced at a much earlier date. Laws along the same line were also passed in 1696 and 1704 — the latter remaining in force until after the Revolutionary War. In New England the oldest road connected Plymouth with Boston and was established by the General Court in 1639. In New York, road legislation dates from 1664, when the English under the leadership of the Duke of York had possession of the colony. In Pennsylvania it appears that William Penn placed roads under the jurisdiction of the county courts, but in 1692 authority was transferred to the township. This in turn was followed by an act in 1700 giving the county justices a large measure of jurisdiction over the laying out, opening, and maintaining of highways. Finally, roads were constructed and road legislation was enacted in the southern colonies during the period just preceding the Revolution.

At the close of the Revolutionary War the westward movement of the American people began in earnest. The

settlement of larger and larger areas of land beyond the Alleghany Mountains rendered necessary improved means of communication between the East and the West. Even before independence was realized some of our leading statesmen realized the importance of building highways, that is, of creating what George Washington and Benjamin Franklin referred to as ties of commercial intercourse between the old and the new sections of the country. It soon became evident to these men that without means of communication the economic progress of the country would be greatly retarded. In fact, during the period just following the Revolutionary War national unity itself depended to a large extent upon the building of a system of roads across the mountains connecting the Ohio valley with the Atlantic sea-board.

In the beginning the toll road — that is, the so-called turnpike road, financed either by private corporations, by States, or by the national government — was the most popular form of highway. During the first half of the nineteenth century the building of turnpike roads was quite general throughout all of the States. As early as 1808 there were in the State of New York sixty-seven turnpike companies with a capital of about \$5,000,000 — nine hundred miles of such highways being completed and two hundred additional miles in process of construction. Twenty years later Pennsylvania had one hundred and sixty-eight companies, with 2380 miles of improved road already completed at a cost of nearly \$8,500,000.⁶⁰⁶

During the same period the national government also took a very active interest in the building of highways, and numerous appropriations from time to time were made by Congress for the purpose — the total amount of such appropriations being about \$14,000,000. The so-called "Cumberland Pike" was the most important of these national projects, extending as it did from Cumberland, Maryland,

to a point which gradually moved westward until it reached Illinois. It should be stated in this connection that there was always more or less doubt in the minds of certain statesmen as to the constitutionality of a system of internal improvement supported by the general government.

The coming of the railroad as a practical factor in transportation gradually supplanted the whole turnpike system of highways. Although toll roads had never been a real success from a financial standpoint — for instance, it was claimed that none of the numerous toll roads of Pennsylvania had yielded a profit — the system was very beneficial both to the agricultural and commercial interests before the coming of the railroad. Many permanent highways were constructed, making, in conjunction with canals and other internal waterways, a fairly comprehensive system of transportation without which the rapid and successful settlement and improvement of free or cheap lands would have been impracticable if not impossible.

After the Civil War the general government discontinued its policy of participation in the work of constructing permanent highways. Congress was busy endeavoring to devise means to pay off the national debt and seems to have neglected entirely the question of roads and road administration. In the second place, turnpike companies for reasons already suggested had almost entirely passed out of existence. Nor were the various States giving any serious aid or attention to the subject. In a word, the administration of highways ceased to be in any real sense either a national or State function, but was transferred to the various local units of government.

Prior to the building of railroads the necessity of constructing permanent highways to serve as avenues of commercial intercourse, first, between the different sections of the whole country, and second, between different parts of the same State, was evident to the general public. The

economic progress of the country and the preservation of the Union itself depended upon easy means of transportation. Thus the necessity became apparent to both the Federal Government and to the various States of taking an active interest in promoting this work. But when the problem of transportation for long distances was solved by highways of steel, the turnpike road, constructed either by private corporations, by States, or by the national government, naturally became a thing of the past. In other words, road administration as a logical result of actual conditions became merely a function of local government and was destined to remain so until practically the close of the nineteenth century.

Referring to the fact that of the 2,151,000 miles of public roads in use in the United States in 1904, only 7.14 per cent was improved, and at a total expenditure for that year of \$79,000,000, Mr. Logan Waller Page says:

This entire fund was administered under the system of localized control so long in vogue throughout the country, and it was largely due to this system that so little in the way of good results was accomplished, for the reason that it fails to insure skilled supervision, provides an inadequate revenue, depends upon a purely unskilled and unreliable class of labor, and practically precludes any construction of a permanent character.⁶⁰⁷

One of the earliest, if not the first, comprehensive and thoroughly scientific studies of road legislation in the United States was made in 1889 by Professor Jeremiah W. Jenks, at that time a member of the faculty of Knox College at Galesburg, Illinois. In a monograph entitled *Road Legislation for the American State*, published by the American Economic Association, Mr. Jenks referred to the deplorable condition of the highways and lamented the wasteful expenditure of public moneys for this purpose — both of which conditions he attributed in a large measure to the decentralized and inefficient system of local administration.

Concerning the relation of the growth of railroad systems to the tendency to neglect the improvement of highways, Professor Jenks said:

The principal reason for this comparative neglect of the common roads in nearly all countries is, of course, to be found in the astonishing growth of the railway systems, and, since the invention of the steamboat, of commerce by water. These have rendered unnecessary long roads such as the ancient Aztecs and Romans found it wise to build for commercial and military purposes.⁶⁰⁸

The importance of paying road taxes in money rather than in labor, the necessity of employing experts — especially a county engineer and a State highway commissioner — in order to make more efficient the whole system of highway administration, and the importance of a careful classification of roads on the basis of a definite scientific plan are all clearly presented in this monograph. It is certainly an interesting and instructive fact that nearly a quarter of a century ago Professor Jenks advocated a State highway commission and a county engineer — that is to say, the employment of experts where experts are necessary for the purpose of solving the road and bridge question.

Efficient administration of the law was recognized as the only means of preventing needless waste in the expenditure of public moneys and of gradually securing the construction of a comprehensive system of permanent roads. "To build and repair to the best advantage all the main roads in any fairly well settled county", said Professor Jenks, "requires certainly as much skill in an engineer as to lay out and build a railroad through an ordinary county, and probably more. The problem is not so much that of making good roads, as that of making the best roads possible with the limited means given".⁶⁰⁹ It was also stated in this same connection that the intelligent administration of the county road fund made the services of a skilled engineer indispensable. In other words, expert service was necessary:

first, in order to secure the establishment of an equitable system of taxation; and second, for the purpose of ensuring a wise and economical expenditure of public moneys.

At the time the monograph was written (1889) the road commissioners of Illinois recognized that at least one-half of the money tax expended for roads in that State was wasted through ignorance or carelessness — the same thing being true also of a much greater portion of the labor tax. In the judgment of Professor Jenks this criminal waste, which amounted to more than \$2,000,000, not including the loss resulting from poor roads, could be largely prevented by a State highway commission and a system of county road engineers.

The cause of the deplorable conditions of the roads and the almost criminal waste in public expenditure for highway purposes are presented in terms which can not be misunderstood. "To our early circumstances then; to the comparative lack of interest in local affairs; to the conservative spirit of our people, combined with the influence of the form of the law itself in hindering them from noting the changing circumstances in their relation to such matters; and to the strong bent of our people toward the retention of local powers, may, in great part, be attributed our present defective system."⁶¹⁰

Only two years after the publication of this instructive monograph the policy of State aid for the construction of permanent highways was first adopted by the State of New Jersey — which meant that a new movement along the line of more centralized State administration of roads and bridges had been inaugurated. Since the New Jersey State Highway Department was established in 1891 one State after another has followed the example, until today thirty-seven out of the forty-eight States in the Union have adopted this principle in one form or another. During the last year four new States (namely, Alabama, Oklahoma,

South Dakota, and Wyoming) have provided for State aid. According to Mr. Page, the movement is still progressing very rapidly, and nine of the eleven States not having yet enacted laws on this subject have bills pending before their respective legislatures.⁶¹¹

It should be noted, however, that so-called State aid does not always refer to actual money appropriated for the improvement of highways. A number of States, like Iowa, merely provide highway departments for giving engineering advice and assistance. Other States furnish convict labor; and still others supply some combination of money aid, expert engineering service, and perhaps convict labor. The important problem of State aid in whatever form it is granted, together with a number of miscellaneous questions connected with the general subject of road legislation and administration, can, however, best be presented by making a brief comparative study of the progress made in the various States. A study of this character may be found in an Appendix which follows this chapter.

It is evident from an examination of the different systems of road administration in the various States, as outlined in the Appendix, that the good roads movement has long since passed the academic stage and become a practical reality. In an article entitled *Highway Improvements*, Mr. Logan Waller Page, Director of the United States Office of Public Roads, declares that the year 1911 witnessed the greatest progress which has ever been made in a single year in the matter of highway improvement. It is stated that the expenditures for construction projects in 1911 were much greater than those of any preceding year.⁶¹²

In order to furnish a definite idea of the present good roads movement in the United States and what it means to the country, nothing better can be done by way of conclusion than to present a brief outline of the following important subjects: first, educational propaganda carried

on by chambers of commerce, commercial clubs, local, State, and national good roads associations, and various other similar organizations; second, revenue for the support of roads and bridges; third, State aid and what it has accomplished; fourth, the economic value of good roads; and fifth, the importance of a more efficient, centralized administration in all the units of government from the township up to the State.

According to Mr. Page, during the year 1911 numerous county, State, and national road associations were organized. Many other associations, which up to that time had taken no interest in road matters, appointed committees to investigate the subject. Some organizations are working for the improvement of certain special highways like the ocean to ocean highway, the Pacific highway, or the River to River Road in our own State. In other words, some organizations are nation wide, others State wide, still others are interested in the roads of a county or similar area, and finally there are others devoted to certain special projects.

The reader will recall the interest taken by the railroads and the running of special trains in Iowa to promote the use of the road drag. Much was accomplished in that way and certain definite legislation was the result. This sort of an educational campaign, however, has not been confined to the limits of Iowa, but has been carried on in other States. During the year 1911 the Office of Public Roads of the United States Department of Agriculture, in coöperation with different railroad companies, encouraged the good roads movement by operating special trains for that purpose. The Pennsylvania Railroad, for example, ran a special train over its lines between January 25th and March 28th. The State Highway Department of Pennsylvania and the State College of Pennsylvania also coöperated in the movement. Illustrated lectures were given, models of sta-

tionary types of road construction showing the most improved methods of building earth, sand-clay, gravel, brick, and bituminous macadam roads, were exhibited, and in fact, a school of instruction along scientific lines was conducted from place to place. The Pennsylvania Railroad supplied the cars, the State Highway Department furnished the views and lecturers, the State College had general charge of the work, including publicity, and the United States Office of Public Roads supplied the different models and bromide prints to lecturers. Some excellent work of a similar character was also carried on in other sections of the country.

It would require a monograph to discuss adequately the history of good roads associations and the excellent educational work which they have accomplished. One of the standpoints from which both the scientific investigator and the practical legislator should judge any important problem is that of publicity. It is a well known fact that before any substantial reform can be realized, public sentiment along that line must first be created. The history of road legislation in Iowa has proved over and over again the necessity of conducting a vigorous campaign of education among the people before any important constructive measure can hope to receive a hearing, much less be adopted. The running of special road trains, the holding of good roads conventions, local, State, and national, and the publicity work carried on by the different highway commissions are all very essential from the important standpoint of creating an educated public sentiment.

In the second place, it is necessary to consider the road question or any similar question from the standpoint of finance. It requires money to construct permanent roads and build reinforced concrete bridges. In the past when the labor system was practically the universal rule, the amount of actual money required for the construction, maintenance, and repair of roads and bridges was reduced to a

minimum. With the gradual repeal of laws permitting road taxes to be paid in labor, on the one hand, and the growing necessity of constructing roads and bridges out of more costly material, on the other, the need of greater revenue obtained by taxes or the issue of bonds has become obvious. It may be safely said that there will never be a time when the revenue for road and bridge purposes in the various States of the Union will be less than at the present moment. In fact, the amount of money needed along this line has increased by leaps and bounds and will continue to increase and be an important factor in making imperative the gradual establishment of more scientific revenue systems in the various States of the Union. The reader can form some idea of the magnitude and the increase of this expenditure by a comparison of Tables III and IV.

It will be noted that in 1904 there were 2,151,579 miles of wagon road in the United States, or in other words, approximately ten miles of wagon road for every mile of railroad. Of this amount 108,233 miles were surfaced with gravel, 38,622 with stone, and 6,807 with other materials, making a total mileage of improved roads of 153,662. It appears that the cost of construction, repair, and maintenance of this vast mileage of highways was \$79,771,417.87, of which sum \$53,815,387.98 represented property and poll taxes paid in cash in the counties and minor civil divisions, \$19,818,236.30 represented labor taxes, \$3,530,470.93 was derived from bonds issued by the counties and minor civil divisions, and \$2,607,322.62 was expended by the States on State aid roads.

An examination of Table IV, giving the road expenditures for 1911, reveals a very different story. The State aid fund had increased from only \$2,607,322.66 in 1904 to the large sum of \$21,037,769.00 in 1911; local bond issues had also increased from \$3,530,470.93 to \$18,503,356; and finally, the total revenue from all sources expended for road purposes had practically doubled in six years, increasing from

TABLE III

PUBLIC ROAD MILEAGE AND EXPENDITURES IN THE UNITED STATES IN 1904

State	Miles of all public roads			Miles of improved roads					Expenditures				Total	Per mille of public road	Per inhabitant	
	Total mileage	Square mile of area	Population per mile of road	Surfaced with gravel	Surfaced with stone	Surfaced with other materials	Total mileage of improved roads	Percentage of all roads improved	By counties, townships, and districts							
									From property and poll taxes payable in cash	From labor taxes	From bond issues	By States on State-aid roads				
Alabama	50,089	0.97	36	1,261.5	892.5	66	1,720	3.43	\$78,039.77	\$1,198,394.50			\$1,576,434.27	\$31.47	\$0.86	
Arizona	5,987	0.05	20	216	1	0	217	3.62	67,591.43	41,718.00			1,109,309.43	18.25	0.89	
Arkansas	36,445	0.67	36	181	55	0	236	0.64	681,933.80	713,409.00			1,995,332.80	38.28	1.06	
California	46,853	0.29	31	5,943.5	418.5	2,541	8,808	18.87	2,146,145.36			\$	11,251.00	2,157,396.36	46.24	1.45
Colorado	30,214	0.30	17	121	57	0	178	0.38	601,060.63	71,828.00			707,223.63	23.40	1.31	
Connecticut	14,088	2.90	64	1,896.5	463.6	0	2,360.1	16.75	975,960.01				219,165.00	1,195,125.01	84.83	1.32
Delaware	3,000	1.53	61	2	14	50	66	2.20	76,802.88				14,000.00	90,802.88	30.26	0.49
Dist. of Columbia	191	3.18	1,459	70	61	131	131	68.58	176,000.00					176,000.00	921.46	0.63
Florida	17,374	0.34	30	17.5	335	523	885.5	5.09	437,184.10	140,393.00			577,577.10	33.24	1.09	
Georgia	57,203	0.96	38	659	438	537	1,634	2.85	894,936.33	1,185,936.00			2,080,872.33	36.37	0.93	
Idaho	18,163	0.20	9	195	17	0	212	1.16	109,648.00	109,940.00			311,588.00	17.15	0.87	
Illinois	94,141	1.60	51	6,800	1,106.5	17.5	7,924	8.41	3,844,423.73	366,526.50			4,210,950.23	44.73	1.92	
Indiana	68,006	1.90	36	20,882	8,295	20	23,877	34.94	2,095,970.30	896,718.75			4,335,108.00	63.46	1.72	
Iowa	102,448	1.84	21	1,403	241	20	1,664	1.62	2,844,106.50	762,501.00		1,342,418.95	3,106,607.50	30.92	1.39	
Kansas	101,196	1.20	14	1,588.5	1,111.7	3	2,732	1.26	692,923.45	539,994.00			1,232,817.45	12.18	0.83	
Kentucky	57,137	1.40	37	1,408	8,078	0	9,486	16.60	1,161,194.03	387,495.00			2,148,689.03	37.60	1.00	
Louisiana	24,897	0.34	55	26	0	8	34	0.13	345,451.86	606,421.00			951,872.86	38.23	0.68	
Maine	25,528	0.85	27	2,236	87.5	0	2,323.5	9.10	1,427,508.21				1,472,393.70	57.67	2.12	
Maryland	16,773	1.70	70	480	840	250	1,570	9.36	873,470.50				873,470.50	52.07	0.73	
Massachusetts	17,092	2.12	164	6,621	1,213	10	7,844	45.89	2,295,616.48				2,871,222.47	167.98	1.02	
Michigan	69,296	1.20	35	6,777	2,48.5	10	7,025.5	10.13	1,816,504.21	1,363,283.67			3,179,787.88	45.58	1.31	
Minnesota	78,324	1.00	22	6,179	67.5	1	6,247.5	7.87	1,542,641.99	354,212.25			1,961,629.24	24.72	1.12	
Mississippi	39,698	0.83	40	109	0	40	149.5	0.38	339,669.45	1,335,816.00		64,775.00	1,675,485.45	48.29	1.08	
Missouri	108,133	1.50	28	1,871.5	861.5	0	2,733	2.52	1,570,801.29	798,171.50			2,368,972.79	21.90	0.76	
Montana	22,419	0.15	10	65	0	0	65	0.28	308,743.81	95,354.00			404,097.81	18.02	0.66	
Nebraska	79,462	1.00	13	0	17	6	23	0.02	494,886.40	383,661.00			878,547.40	11.05	0.82	
Nevada	12,885	0.11	3	60	4	0	64	0.50	46,875.85				46,875.85	3.72	1.10	
New Hampshire	15,116	1.67	27	1,175	113	0	1,293	8.55	828,606.35				44,000.00	872,606.35	57.72	2.12
New Jersey	14,842	1.97	127	481.5	1,901	40	2,422.5	16.32	3,024,811.25				250,000.00	3,274,811.25	220.64	1.73
New Mexico	15,826	0.12	12	2	0	0	2	0.01	35,457.56	130,194.00			165,651.56	10.50	0.84	

TABLE III — CONTINUED

State	Miles of all public roads			Miles of improved roads					Expenditures				Per mille of public road	Per inhabitant	
	Total mileage	square mile of area	Population per mile of road	Surfaced with gravel	Surfaced with stone	Surfaced with other materials	Total mileage of improved roads	Percentage of all roads improved	By counties, townships, and districts			Total			
									From property and poll taxes payable in cash	From labor taxes	From bond issues				
New York	73,798	1.54	98	3,692	2,184	0	5,876	7.96	2,881,268.99	1,754,785.83	.....	1,056,460.00	5,692,514.82	77.05	0.79
North Carolina	48,763	1.90	38	422	399	438	1,259	2.52	624,380.78	734,306.45	.....	.....	1,358,687.23	27.30	0.71
North Dakota	59,332	0.84	5	205	7	0	212	0.35	456,130.22	94,210.50	.....	.....	550,340.72	9.28	1.72
Ohio	69,439	1.79	59	16,159	7,160.5	140.5	23,460	33.78	3,932,563.97	929,766.00	848,753.64	.....	5,706,083.61	82.17	1.37
Oklahoma	43,554	1.10	0	0	0	0	0	0	447,319.59	327,456.00	.....	.....	774,775.59	17.79	1.84
Oregon	34,258	0.36	12	2,235	209	145	2,589	7.55	649,717.97	146,658.00	.....	.....	796,375.97	23.24	1.92
Pennsylvania	99,777	2.21	63	0	2,161	0	2,161	2.10	4,759,499.16	297,414.71	.....	.....	5,056,913.87	48.98	0.77
Rhode Island	2,361	2.24	181	774.5	247	0	1,021.5	43.26	297,414.71	.....	.....	79,397.45	376,812.16	171.44	0.94
South Carolina	41,330	1.30	32	179	69	1,630	1,878	4.48	334,081.90	411,619.60	.....	.....	745,701.50	17.82	0.55
Tennessee	59,295	0.70	7	147	4	0	151	0.25	268,722.57	114,560.50	.....	.....	383,283.07	6.46	0.95
Texas	48,989	1.17	41	2,511	1,774	52	4,285	8.74	386,013.85	892,635.75	343,127.55	.....	1,621,777.15	33.10	0.80
Texas	121,409	0.46	25	1,677	1,909	0	2,128	1.75	1,607,216.70	1,594,545.00	936,395.79	.....	4,138,157.49	34.08	1.35
Texas	7,090	0.98	29	597	11	0	608	8.57	135,210.78	60,390.00	.....	.....	195,600.78	30.84	0.79
Utah	14,321	1.98	23	1,672.5	281	0	1,953.5	13.45	440,016.12	.....	.....	127,381.21	567,397.33	39.07	1.65
Vermont	51,812	1.29	35	720	755	125	1,600	3.06	687,751.06	.....	.....	.....	687,751.06	13.27	0.37
Virginia	31,998	0.48	16	1,928	48.5	0	1,976.5	6.17	1,344,842.19	91,228.00	.....	.....	1,436,070.19	44.88	2.77
West Virginia	26,178	1.06	36	26.5	217	11	254.5	0.97	587,870.28	805,415.00	.....	.....	893,285.28	34.12	0.93
Wisconsin	63,593	1.17	33	9,900	733.2	0	10,633.2	16.72	1,924,025.88	257,236.50	.....	.....	2,181,262.38	34.30	1.05
Wyoming	10,447	0.10	8	0	0	153	1.46	1.46	324,475.73	21,456.00	.....	.....	345,931.73	9.45	1.04
United States	2,151,570	0.73	35	108,233	38,622	6,807	153,662	7.14	53,815,387.98	19,818,236.30	3,530,470.93	2,607,322.66	79,771,417.87	37.07	1.05

Attention should be called to certain exceptions in the above table. In the first place, in the column devoted to revenue derived from property and poll taxes payable in cash it should be noted that property taxes may be worked out in the following States: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, West Virginia, Wisconsin, and Wyoming. It has been impossible, however, to ascertain the extent to which such taxes were actually paid in labor instead of in cash.

In the second place, in the column devoted to revenue derived from labor taxes it should be noted that the statutes of the following States permit the payment of labor taxes in cash: Illinois, Indiana, Kansas, Michigan, Minnesota, North Dakota, Ohio, Oklahoma, South Dakota, Texas, West Virginia, Wisconsin, and Wyoming. Here again, it has been impossible to ascertain the exact amount of labor taxes paid in cash.

Furthermore, it should be noted that one-half of the cost of road construction and repair in the District of Columbia is paid by Congressional appropriations and the other half by the District out of general revenues derived from the taxation of property. Likewise, of the amount expended in Wyoming \$250,000 was appropriated by Congress and expended on the roads in Yellowstone National Park under the direction of a United States engineer.

\$79,771,417.87 to \$141,291,125. While it should be noted that these figures are not absolutely accurate, they nevertheless point out in terms of cold dollars and cents the significance of the present good roads movement.

In concluding this brief comparative study of the road and bridge question from the standpoint of public revenue, the labor tax, so called, should at least be mentioned. This form of taxation for road purposes is universally condemned by men who have given serious thought to the subject. Professor J. W. Jenks, in his able monograph on *Road Legislation for the American State*, to which reference has already been made, advocated the desirability of paying all road taxes in money rather than in labor. At that time the labor tax was almost universally employed throughout the Union and its evils were just becoming apparent to students of road administration. It was destined to require a great many years of experience to convince the general public of the necessity of the cash system.

In the bulletin already noted, Mr. Maurice O. Eldridge discusses the labor tax in connection with the subject of improved highways. At that time (1904) twenty-five States had the statute labor tax, while eleven other States levied a poll tax payable in labor. In other words, some form of statute labor taxation existed in thirty-six States. It is a significant fact that only 6.15 per cent of the roads were improved in the statute labor States, while 18.39 per cent were improved in States where no such taxes were levied, thus indicating that the statute labor system had far outlived its usefulness from the standpoint of permanent highway improvement.⁶¹³

In the third place, no comparative study of road legislation and administration would be complete without special reference to the very important subject of State aid as a definite plan of permanent highway improvement. While in reality this is a logical division of the general question of

TABLE IV
APPROXIMATE ROAD EXPENDITURES IN 1911

State	State Aid	Local Bond Issues†	Local Revenues*	Total
Alabama	\$ 154,000	\$ 2,330,000	\$ 1,000,000	\$ 3,484,000
Arizona	150,000	.....	175,000	325,000
Arkansas	.....	.....	2,450,000	2,450,000
California	2,067,500	1,500,000	3,500,000	7,067,500
Colorado	162,000	.....	1,000,000	1,162,000
Connecticut	2,000,000*	.....	2,275,000	4,275,000
Delaware	30,000	300,000	100,000	430,000
Florida	.....	755,000	750,000	1,505,000
Georgia	.....	.....	2,500,000	2,500,000
Idaho	53,000	.....	500,000	553,000
Illinois	65,000	.....	5,000,000	5,065,000
Indiana	.....	.....	4,500,000	4,500,000
Iowa	.....	.....	3,500,000	3,500,000
Kansas	6,500	93,356	1,500,000	1,599,856
Kentucky	.....	.....	2,500,000	2,500,000
Louisiana	132,354	.....	1,000,000	1,132,354
Maine	250,000	.....	2,000,000	2,250,000
Maryland	1,250,000	.....	1,000,000	2,250,000
Massachusetts	1,000,000	.....	2,500,000	3,500,000
Michigan	250,000	2,216,000	3,500,000	5,966,000
Minnesota	79,300	.....	2,000,000	2,079,300
Mississippi	.....	1,130,000	2,000,000	3,130,000
Missouri	300,000	.....	2,500,000	2,800,000
Montana	.....	.....	500,000	500,000
Nebraska	.....	.....	1,000,000	1,000,000
Nevada	.....	.....	50,000	50,000
New Hampshire	375,000	.....	1,000,000	1,375,000
New Jersey	500,000	.....	4,500,000	5,000,000
New Mexico	100,000*	.....	200,000	300,000
New York	5,000,000*	.....	7,000,000	12,000,000
North Carolina	5,000	2,500,000	2,000,000	4,505,000
North Dakota	.....	.....	1,000,000	1,000,000
Ohio	600,365	.....	6,000,000	6,600,365
Oklahoma	5,000	.....	1,500,000	1,505,000
Oregon	.....	1,500,000	2,000,000	3,500,000
Pennsylvania	4,000,000	.....	7,500,000	11,500,000
Rhode Island	97,000	.....	500,000	597,000
South Carolina	.....	100,000	1,000,000	1,100,000
South Dakota	.....	.....	500,000	500,000
Tennessee	.....	1,400,000	2,500,000	3,900,000
Texas	.....	1,600,000	6,000,000	7,600,000
Utah	355,750	.....	500,000	855,750
Vermont	450,000	.....	1,000,000	1,450,000
Virginia	300,000	2,454,000	1,250,000	4,004,000
Washington	900,000*	.....	2,000,000	2,900,000
West Virginia	.....	625,000	1,000,000	1,625,000
Wisconsin	390,000	.....	3,000,000	3,390,000
Wyoming	10,000	.....	500,000	510,000
Total	\$21,037,769	\$18,503,356	\$101,750,000	\$141,291,125

*Estimated.

†Other local bond issues, but information lacking.

California has just begun the expenditure of \$18,000,000 State bond issue for constructing State roads.

finance it has assumed such large proportions in recent years as to merit separate treatment. It will be recalled that prior to the coming of the railroads to Iowa, the Territory and later the State took a very active interest in the laying out, opening, and maintaining of public highways. What was true of Iowa in pioneer days has been quite generally true of all the States before the era of railroad building. It has already been pointed out that this was a logical development, because at that time highways were looked upon not merely as a local convenience, but as a means of transportation for long distances in large sections of the country where water transportation was impossible or at least impracticable.

The first result of railway transportation was to relegate the whole question of roads to the local units of government from the standpoint of both finance and administration. In recent years, however, it has come to be more and more obvious that the railroad at best can only supplement and not take the place of wagon roads. When it is remembered that at the present time there are approximately ten miles of wagon road to every mile of railroad and that practically all produce must be hauled over wagon roads before being transported by rail, it is very evident that the whole system of transportation, considered as a unit, is efficient only in proportion to the extent to which the public highways are improved and kept in good condition. Thus, if it is vital to the economic interests of the country to have one mile of the transportation system constructed of steel and be put in the best condition that money and science can afford, it is at least equally important to have the remaining nine miles of the system improved and maintained on a reasonably efficient basis. The recognition of this important principle is in the last analysis the foundation of the good roads movement of the present day and of the accompanying policy of State aid.

New Jersey was the first State in the Union to adopt the system of State aid. At that time (1891) practically all road work throughout the entire Union was in the hands of local officials who could not possibly possess expert knowledge, and the result was that the whole system was wasteful and inefficient. Between 1891 and December 31st, 1910, the various State aid appropriations in New Jersey amounted to \$3,059,882.70, with the result that 1562 miles or more than ten per cent of the roads of that State were permanently improved.⁶¹⁴

As has already been suggested, however, State aid does not always consist in money. Some States appropriate money for that purpose, some supply expert engineering assistance, others provide convict labor in some form, and still other States provide a combination of money aid, expert assistance, and convict labor. Georgia is perhaps the leading example of State aid in the form of convict labor. At the present time nearly five thousand convicts are at work on its roads. Illinois operates a rock crushing plant with convict labor, furnishing crushed stone to the various counties throughout the State. A similar plan is followed in California. Arizona, California, Colorado, Louisiana, Maryland, Michigan, Missouri, New Mexico, and Virginia provide both convict labor and money aid; while Wyoming, Oklahoma, and Illinois furnish convict labor and engineering assistance. The remaining States which have adopted the policy of State aid, namely, Alabama, Connecticut, Delaware, Iowa, Maine, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Utah, Vermont, Washington, and Wisconsin, give money aid, together with advice and engineering assistance.

Money aid is generally the direct result of some form of State taxation. The policy of issuing bonds for this purpose, however, has already been adopted in a group of States. There is a bond issue of \$18,000,000 in California,

\$4,500,000 in Connecticut, \$6,000,000 in Maryland, \$2,500,000 in Massachusetts, \$1,000,000 in New Hampshire, and \$50,000,000 in New York, making a total of \$82,000,000. It may be stated that this plan of raising funds for the building of roads has become well established. Indeed, at the present time Rhode Island, Colorado, Alabama, and Pennsylvania are agitating the question of providing bond issues, which if adopted will amount to the enormous sum of \$110,600,000.⁶¹⁵

Closely connected with the subject of State aid is the question of expert administration and, in fact, of expert service of any kind. As already noted, expert assistance and advice is in reality one phase of the general policy of State aid. In fact, the road and bridge question, judged from the standpoint of political science, is one of efficient centralized administration; and from the standpoint of engineering science requires expert knowledge of the methods of dealing with various materials of construction to the best advantage. Indeed, the good roads movement has now reached a stage where as a problem of both economics and political science, on the one hand, and of the fundamental principles of engineering, on the other, it demands the service of the best trained minds.

During the last decade perhaps no point has received greater emphasis in all intelligent discussion of the road question than the desirability, in fact the absolute necessity, of a more expert system of supervision and control. This principle has been recognized again and again by the Governors of Iowa and the various good roads associations, as well as by the State Highway Commission. It has been discussed in every State of the Union where comprehensive reports have been submitted dealing with the road and bridge question.

As already observed, Professor Jenks, in his monograph written nearly a quarter of a century ago, referred to the

wastefulness of the old decentralized system of road administration and emphasized in that connection the importance of vesting more authority in larger units of government. "The general custom", said Professor Jenks, "seems to be to make small districts the unit of administration. In the southern states, where the county is the unit, the county authority, as a rule, limits its duties to dividing the county into road districts and appointing over each district an overseer. Of course this gives no *system* of roads more than does the sole supervision by township authorities. In the New England states, and those settled in large part from New England, the township system is found, a system which in itself prevents unity of administration, unless some higher authority is especially empowered for this purpose, a provision very seldom made. This local administration under whichever form it is found would, of course effectually prevent any thorough classification of the roads".⁶¹⁶ Of course the "higher power" to which reference is made is none other than that of the State, or the State highway commission as now understood.

Space will not permit any detailed comparative study of the question of expert centralized administration. A thorough study of this one subject would require a special monograph. The principles of State aid, expert engineering assistance, and efficient administration, which taken together represent the very essence of the good roads movement, are so firmly established and so universally endorsed by thinking men that at this time only brief reference will be made to the system employed in three or four representative States.

The State Highway Commission of California early recognized the necessity of possessing a larger measure of supervision and control in order to accomplish the best results. In a recent report of the State Engineer may be found the following statement:

It was noted by those who observed the situation of a new department of this nature, that it would be necessary to concentrate more power into the department, that it might have proper effectiveness; that is to say, the powers of the various boards of managers to award contracts, purchase materials, to make payments on day labor work, and hire the day laborers, as they were enabled under the law of 1907, gave unsatisfactory results, and it was therefore necessary at the session of 1909 of the California Legislature to grant the Department of Engineering those powers of buying, awarding contracts, and doing all things necessary for the construction of the various works of the State, and after their construction to turn them over to the respective boards or institutions for which they were constructed. . . . It is but reasonable to suppose that, where the work is spread among a number of boards, that you cannot get uniformity, and you cannot get the best results, nor can you get the best economy.⁶¹⁷

The State Highway Commission of Illinois emphasized the necessity of putting road work upon a business basis. The following statement appears in their report:

This cannot be done until it is made one man's business in each locality to do this work all the time; not to have it done at odd times as personal convenience may dictate. Those who have given the question any close attention generally agree that it is no exaggeration to say that twice as much road work can be done under a business-like system and at no greater cost than is incurred by present methods. To get such results the work must be done when needed and in the right manner. The present law affords full opportunity to get such results, in that it is within the power of any board of road commissioners to appoint a superintendent who may have entire charge of the work and who should be on the work all of the time, devoting his entire attention to it. Where this has been tried and put into effective operation, the results have been nothing less than marvelous. . . .

It must be evident that no system of improved roads that will answer present needs can be built or maintained under township units; the township unit is too small, and the fund that can be raised therefrom inadequate for the work.

There should be larger areas of control in order to plan and construct a system of roads such as is needed in practically every community. The county unit is the one that must naturally suggest itself, and with some exceptions would answer more nearly the conditions necessary for the development of a system of main roads than any other areas bounded by present political boundaries.⁶¹⁸

In the northeastern States where the township is the important unit of local government it is instructive to note that the State Highway Commission of Maine believes that the township rather than the small sub-district should be the unit for actual highway work, thus endorsing the principle of the so-called Anderson law passed in Iowa in 1902. The following statement is significant:

We would like to see every town elect one road commissioner and give him authority over the roads, subject of course to general supervision by the selectmen but this supervision only to extend to passing upon the expediency of unusual expenditure for specific purposes, such as permanently improving certain sections of road, and the general character of the improvement. This settled, the road commissioner should be left unhampered to carry out the work according to his own best judgment.⁶¹⁹

Finally, Wisconsin, the banner State in the field of social, political, and economic reform during the last decade, has taken a very positive stand on the subject of expert road administration. A Special Joint Committee on Highways in the legislature made an exhaustive investigation and submitted a report in 1910. The problem of distributing authority among the different units of government — State, county, and local — receives special attention by the committee. In this connection the report is a very sane, well balanced document, recommending centralized power and authority only when necessary and reserving to the local units of government powers which ought to be placed under their jurisdiction. The following statements are instructive:

The committee is of the opinion that the county and not the town should be made the unit, and the people of our state universally recognize this fact: that the town alone is too small and weak to do effective work; and that better results can be obtained by accepting the county as a unit and adopting a county system. The county system, with authority vested in the county board similar to that contemplated in this bill has given satisfaction where tried.

Speaking of the work of drafting the highway bill the committee reported as follows:

First of all there appeared to be very little, if any, dissent from the proposition that the initiative in the matter of road construction should be left with the town; that the town and county should work together, thus making the county the working unit; it being agreed that the town is too small and the state too large for that purpose. The committee also found an equal unanimity upon the provision that the town, county and state should bear the burden of the cost of construction in approximately equal shares.⁶²⁰

Even a brief study of the problem of State aid and centralized administration would be incomplete without calling attention to the bearing of this program of reform upon the fundamental principles underlying our democratic institutions. The reader is well aware of the fact that the old-time objection to a more centralized system of supervision and control was that it destroyed local self-government. This argument has been advanced over and over again not only in Iowa, but in every State of the Union, and the fact that it is frequently successful in preventing real progress is well known to the friends of the good roads movement. This being true, it is important to ascertain whether in reality the argument rests on solid foundations or merely consists of so much verbiage.

It is a well established principle of democratic government that representation is the only logical and just basis of taxation. This is true whether the unit of government concerned is the State, the county, the township, the city, or

any other minor subdivision. To the extent that money is voted and levied in a civil township it ought to be expended in that township. Otherwise, there is an absence of either pure democracy or representative government. To the extent that money is levied by the authority of the county board of supervisors or any similar body it should be expended under the supervision and control of the county. Finally, money levied by the authority of the State legislature and paid by the people of the whole State should be expended under the supervision and control of the State. Otherwise the very fundamental principles of representative government are ignored.

Following this course of reasoning, it is obvious that money secured either by the levy of State taxes, or by the issue of State bonds, or in any other way by the State should not be expended under the supervision and control of either township or county authorities. To permit such a practice would be to grant to officers in one township or county the right to appropriate money which had been raised in remote sections of the State.

A thoughtful, comparative study of road legislation and administration, therefore, leads to three conclusions: first, the problem of building permanent roads and constructing the best type of bridges is one of expert engineering science, on the one hand, and of expert administration, on the other, requirements which can be met only by the larger units of government, namely, the county and the State; second, judged from the economic standpoint the amount of revenue required to carry on these undertakings is so large as to demand a more extensive taxable area, in some cases the county, in others the State; and finally, as a logical result of these facts, if the time-honored principles of representative institutions are to prevail, supervision and control should go hand in hand with dollars and cents appropriated and expert services rendered.

In other words, authority over the construction and maintenance of roads and bridges must be a State function in proportion to the amount of money levied on the people of the entire State and paid out of the State treasury. In the same way supervision and control of roads and bridges should remain a county function or a township function in proportion to the amount of money raised in those respective jurisdictions. Democratic institutions are not determined primarily by the size of the political unit, but rather by the principle of responsible representation and the judicious expenditure of public funds.

Finally, the reader will recall the fact that one of the five important standpoints from which the subject of road legislation must be judged is that of the economics of transportation. This again offers a practically unlimited field for investigation. Good road enthusiasts and representatives of the press have indulged in much hasty generalization along this line, but very little scientific data has been collected.

First of all, it should be recognized that the problem is a complex one, involving careful research work in the separate fields of political, economic, and engineering science. Indeed, judged from the standpoint of research, the subject of the economics of transportation is practically a virgin field of investigation where the labors of the civil engineer and the political economist will always be supplementary and interdependent. This is true whether the problem is approached from the standpoint of public expenditure, on the one hand, or of traction resistance, on the other.

In Iowa it has been frequently alleged that at least half of the revenue expended on roads and bridges is absolutely wasted, largely as a result of the present careless and inefficient system of highway administration. This estimate was made more than a quarter of a century ago by Governors Gear and Sherman and it is now being repeated

almost daily through the press of the State by business men, lawyers, civil engineers, and practical road builders, in fact by men in almost every walk of life. Yet if this is true it means that the Commonwealth of Iowa is wasting \$2,500,000 annually, or more than double the amount that is now being expended to support the cause of higher education.

In order to determine the actual amount of the economic waste resulting from the high traction resistance of our roads and from the loose system of administration, it is necessary to study the various materials of construction, analyze the laws of strains and stresses, carry on experiments for ascertaining the cost of hauling produce on different road-beds and up different grades, and consider numerous other closely allied problems of an engineering and economic character. The cost of structural steel, concrete and other materials of construction, also the wages of labor are among the economic questions which the highway engineer must always have in mind when preparing his plans and specifications.

APPENDIX

APPENDIX

DATA RELATIVE TO ROAD ADMINISTRATION IN THE UNITED STATES

The following data is presented for the purpose of indicating briefly the systems of road administration employed in the various States of the Union, together with the methods of State aid, and other information relative to the construction of roads and bridges.

ALABAMA

The State Highway Commission consists of a professor of civil engineering in the Alabama Polytechnic Institute selected by the governing board of the Institute, the State Geologist, and three civilians appointed by the Governor for a term of four years. The Commission is required to appoint a competent civil engineer to serve as State Highway Engineer at an annual salary of not more than \$4,000.⁶²¹

An annual appropriation of \$154,000 has been authorized for State aid — not including \$10,000 for office expenses, which sum may be increased to \$20,000 at the discretion of the Governor. The State Highway Engineer is required to prepare and keep a general highway plan of the State, collect statistics relative to the mileage, the character, and the condition of highways and bridges, have general supervision of the construction and repair of all roads and bridges improved under the State aid law, furnish where needed during the progress of road construction in any county a competent engineer who is required to see that all work is done according to plans and specifications, and

finally make a map within two years of such of the main highways in the State as should be improved and maintained at the expense of the State in coöperation with the counties. All contracts must be let to the lowest responsible bidder, subject to the approval of the State Highway Commission. Indeed, the Commission is clothed with very large powers and authority both as to the improvement and as to the maintenance of all public highways which receive the benefit of State aid.

Since in the southern States the county is the important unit of local administration it is not surprising that in Alabama public roads, bridges, and ferries are placed under the jurisdiction of what is called the court of county commissioners, who may divide the county into a convenient number of road districts, each district being placed under the jurisdiction of an overseer, and may also appoint a county supervisor of roads, who shall be a competent civil engineer, to prepare surveys, maps, plats, and plans of the public roads and superintend the work of overseers, contractors, employees, and road hands.⁶²²

All able-bodied men between eighteen and forty-five years of age, unless exempt by law, are liable to work on the highways not to exceed ten days a year or commute for the same by the payment of not more than ten dollars in money. The statutes further provide that counties may also be divided into road districts for the purpose of ordering an election on the question of levying special road taxes. While a majority vote decides this question, the court of county commissioners does not have the authority to levy a tax of more than one-fourth of one per cent on the assessed value of property for road purposes. Finally, convict labor in any county or municipality is provided for by the statutes of Alabama and the court of county commissioners is authorized to transfer from the county treasury any surplus not needed for general purposes.

ARIZONA

A State Highway Engineer is appointed by the Governor with the consent of the Council for two years and receives an annual salary of \$3,000. The State Board of Control, composed of the Governor, Auditor of State, and one other person, must require the State Engineer to make maps and furnish estimates of the cost of State highways and at the same time designate such roads as are deemed proper and expedient to be improved and maintained as State highways.⁶²³ All work on State highways must be let by contract to the lowest responsible bidder, subject to the approval of the Board of Control. All State highways and bridges are constructed and maintained entirely at the cost of the State out of a fund obtained by the levy of a tax of not more than one-fourth of one per cent on all the taxable property of the State.

For the purpose of local administration the county board of supervisors is required to appoint a county superintendent of roads, who shall have charge of all public highways in the county subject to the control of the board of supervisors. Aside from the State levy already noted, revenue for the support of roads and bridges is obtained by a poll tax of two dollars, payable in cash, and a county levy of not more than one-fourth of one per cent on the assessed value of all real and personal property.⁶²⁴

ARKANSAS

The public roads are placed under the supervision of the county court, which is given authority to divide the county into road districts, appointing one overseer for each district.⁶²⁵ In counties where a road tax is levied or where the county prisoners are required to work upon the public highways the working of roads may be let by contract to the lowest responsible bidder and a county road commissioner appointed and paid a reasonable salary. When this system

is adopted the roads are classified by the county road commissioner, who is also required to prepare plans and specifications for bridges and for any permanent improvements that may be necessary. In counties adopting the contract system all contracts are awarded by the county judge and county road commissioner. Finally, it should be stated that the county court also has the option of declaring each township a road district, the road overseer to be elected in the same manner as other township officers.

In addition to the property tax levied for road purposes, all able-bodied men within certain ages are required to work on the roads of their township four days out of each year or commute for the same at the rate of one dollar per day. The levy of road taxes must be submitted to a vote of the people at the time of the regular election of county officers. If a majority vote is cast in favor of such a tax the county court, together with a majority of the justices of the peace, may levy not less than two and one-half nor more than three mills on each dollar of taxable property in the county.

One unique provision of the road legislation of Arkansas is that giving the county court power to establish road improvement districts.⁶²⁶ Before this can be done, however, it is necessary to file a petition signed by a certain number of the land owners of the county. Where road improvement districts are established three directors are elected by the land owners and are given general supervision and authority to construct and maintain, by contract or otherwise, all roads in their district and to expend for this purpose an amount not to exceed twenty-five per cent of the value of the property in their district. They are also authorized to issue bonds, the amount of which shall not exceed twenty per cent of the value of the property. This act, however, applies only to thirty-eight out of the seventy-five counties. Finally, the General Assembly of Arkansas in 1911 created the office of County Highway Engineer. This officer is ap-

pointed by the county court and is vested with general supervision of all the public roads of the county.⁶²⁷

CALIFORNIA

In 1907 the legislature created a State Highway Department to consist of the Governor, the State Engineer as chief executive officer of the department, the chief superintendent of state hospitals, and the chairman of the board of harbor commissioners of San Francisco. The State Engineer is appointed by the Governor with the advice and consent of the Senate, for a term of four years, receives a salary of \$4,800, and is given complete charge of the engineering work of the department.⁶²⁸

The State Department of Engineering has full control of all so-called State highways and of all moneys expended by the State for the improvement of roads. It supplies, without charge, information to road authorities upon request, collects data regarding suitable road material, publishes the same in bulletin form, may obtain rights of way by purchase or condemnation, and finally may appoint superintendents of State highways.

Prior to 1910 California had made no direct provision for State aid, although the State had built roads through the mountains and sparsely settled districts where the people were not able to meet the expenses of construction. In 1909, however, the legislature passed an act submitting to the people at the general election of 1910 a proposition to vote bonds to the amount of \$18,000,000 for the building of permanent State roads. The bond issue was approved, thus placing California near the top of the list of good road States.

The general control of highways is vested in the county board of supervisors, which may form road districts for permanent improvements, issue bonds, and levy special taxes to pay the expenses of such work.⁶²⁹ The county

supervisors are also given power to appoint a competent person to act as engineer. It should be noted, however, that the power of the board to establish such road improvement districts and to construct gravel, macadamized, oil, or otherwise improved roads, can not be exercised in case an objection is made by a majority of the land owners.

Bonds may be issued to promote permanent improvements, the same to extend twenty years, bear not to exceed seven per cent interest, and be paid for out of funds secured partly by the county and partly from a special district tax. In other words, the county board in such cases must transfer from the general county fund to each improvement district an amount which in their judgment is a fair proportion of the road fund of the supervisorial district in which the improvement is located. All highway taxes are required to be paid in cash and the county board of supervisors may levy an annual property tax of not to exceed four mills on the dollar on assessable property. In addition to the property tax every male citizen between the ages of twenty-one and fifty years is required to pay a road poll tax of three dollars unless specifically exempted by law.

In the report of the State Engineer dated 1910 it is stated that the law creating the State Highway Department enacted in 1907 was so amended as to concentrate more power and authority in the hands of the State department. "It is but reasonable to suppose", reads the report, "that, where the work is spread among a number of boards, that you cannot get uniformity, and you cannot get the best results, nor can you get the best economy."⁶³⁰ Reference is also made to the necessity of granting the Department of Engineering the full power of awarding contracts for the construction of the various works of the State. Indeed, the large powers granted the State Highway Commission, on the one hand, and the issue of \$18,000,000 in bonds, on the other, have been primarily responsible for the great improvement of the public highways in California.

COLORADO

In 1909 the legislature of Colorado created a State Highway Department, the commission to consist of three members appointed by the Governor for six years, the eastern, central, and western sections of the State each having a representative on the board. The commission employs a secretary who must be a trained civil engineer, at an annual salary of \$2,500, and is given authority to apportion the State aid fund among the counties, to prepare maps showing the location of all State aid roads as well of all public roads, to ascertain the location of road materials, to prepare rules and regulations for the improvement and maintenance of State roads, to make all necessary changes in any surveys, plans, and specifications prepared by the various boards of county commissioners, to exercise general supervision over all local boards, approve contracts for work upon State roads before being let by the county commissioners, and finally, to receive annual reports from all of the various county boards.⁶³¹

According to the provisions of the same act, the county commissioners are required to prepare a map of their county showing the roads considered sufficiently important to receive State aid, a copy of said map being filed with the State Highway Commission. Accompanying the map must also be a statement of the location of suitable road materials within the county. Not later than January 1, 1912, the law requires that the highway commission must have completed a road map of the entire State showing all open public roads, and, in a different color, all roads considered by the commission of sufficient public importance to receive State aid. This work being accomplished it is made the duty of the commission to divide State aid roads into two classes, primary and secondary, the primary roads to be improved first. For the purpose of State aid the sum of \$50,000 was appropriated.

The board of county commissioners has control of county roads, may divide the county into suitable road districts from time to time, appoint annually a road overseer for each district, and may levy a maximum property tax of one dollar for every one hundred dollars of valuation for road purposes. The county commissioners are further clothed with authority to create an indebtedness for the building of roads and bridges when the same is authorized by a majority of the voters of the county. All property taxes must be paid in cash, but the road poll tax of three dollars may be paid by performing two days labor on the highways. Finally, State prison authorities are authorized to work convicts on State roads.

It should be noted, however, that properly organized road districts, so called, are made bodies corporate. In counties organized on that basis the office of road overseer, already noted, is abolished and in lieu thereof the county commissioners are authorized to appoint a superintendent of roads and bridges who is given charge of the construction and maintenance of bridges and of those roads coming under the jurisdiction of the commissioners. Furthermore, what amounts to a third system of local administration is provided for in case a petition is filed, signed by a majority of the qualified electors. The county commissioners may organize any county into road districts, three directors being elected by popular vote for each district, who are given supervision of all roads and bridges except those under the jurisdiction of the commissioners themselves.

CONNECTICUT

The State of Connecticut has been very progressive in the matter of providing for good roads and an efficient system of road administration. The State Highway Department is under the supervision of a highway commissioner appointed by the Governor for a term of four years, who must be an

experienced road builder and who receives an annual salary of \$5,000, together with his actual and necessary traveling expenses. The highway commissioner is required to appoint one deputy, eight division engineers, and such other assistants as from time to time may be necessary to make surveys, plans, specifications, and maps. The State is divided into eight highway districts, one division engineer being assigned to each district.⁶³²

It is made the duty of the highway commissioner to designate highways to be constructed or improved in towns where the same are desired; keep in repair roads built by the State, one-fourth of the cost of such work being charged to the town; maintain in good condition all State aid roads; and let contracts for permanent road improvements. In case the selectmen refuse to carry out the vote of their town for a State aid road, the highway commissioner is vested with authority to enter the town and perform this duty, a power which obviously represents a large measure of centralized control. As an additional example of State supervision and control it should be noted that prior to 1907 all contracts for State aid roads had been let by the selectmen of the towns, but under the new law this very important power was vested in the State Highway Department. In other words, from the standpoint of letting contracts, building permanent roads, and keeping the same in repair, Connecticut within recent years has developed a very large measure of State supervision and control of highways.

Connecticut also provides very liberally in the way of taxes for the support of roads. As has already been suggested the salary of the highway commissioner is \$5,000 per annum. In addition to this he is allowed \$8,000 annually for office expenses. An appropriation of \$29,000 has been made for the salary, traveling and office expenses of the highway commissioner; \$50,000 for engineers, deputies, and inspectors; \$5,000 for the operation and maintenance of State

crushing plants; and \$50,000 for making repairs on public roads.⁶³³

Considering the fact that in addition to the liberal appropriations for expert services in road building, the State has also authorized the issuing of \$4,500,000 in bonds to be expended under the direction of the State Highway Department at the rate of not to exceed \$750,000 per annum it is apparent that Connecticut should be placed in the list of good road States. The relative appropriations given to the towns by the State for the construction of State aid roads has also increased. Prior to 1907 the State had paid two-thirds or three-fourths of the cost, depending upon the taxable valuation of the town, but under the new law the State now pays three-fourths of the cost in towns having a taxable valuation of over \$1,250,000 and seven-eighths of the cost in towns having a lower taxable valuation.

From the standpoint of local administration, authority is vested partly in the counties and partly in the several townships. Towns at their annual meetings provide for the repair of highways. If the towns, however, neglect to repair their highways the county commissioners have the power to order the repairs made, and in case the selectmen refuse to do the work the same may be done by the county authorities and the cost collected from the town. Any town is authorized to issue bonds if it has incurred an indebtedness of more than \$10,000, but the rate of interest must not exceed six per cent. Finally, the State requires that all property taxes shall be paid in cash.

DELAWARE

There are only three counties in the State of Delaware: Kent, Sussex, and New Castle. The Governor, subject to the approval of the Senate, appoints one State highway commissioner for New Castle County and also one for Kent County, each at an annual salary of \$1,000. The Levy

Court of New Castle County also appoints a county commissioner at a salary of \$2,500 per annum. This rather unique arrangement is obviously the result of certain local conditions prevailing in Delaware. In all three counties general authority or jurisdiction over highways is vested in the levy courts which are required to appoint one road supervisor for each hundred, a local unit of government which in a measure resembles the civil township. In New Castle County the State Highway Commission and the Levy Court have joint supervision and control of both State and county roads.⁶³⁴

The highway commissioner reports biennially to the legislature, is required to give his consent before State aid money is paid, has charge of all work after the contract has been awarded, and appoints a supervisor of construction whose salary is paid by the Levy Court. It is further made the duty of the commissioner to investigate the most practicable methods of constructing roads, make an estimate of cost, and prepare plans and specifications. One-half of the cost of all State aid roads is paid by the county and the other half by the State, the present annual appropriation being \$30,000. All road taxes levied in New Castle County must be paid in cash.

FLORIDA

Jurisdiction over roads and bridges is vested in the board of county commissioners, each commissioner's district being considered a road district.⁶³⁵ The county board appoints three persons in each road district as commissioners of roads and bridges, and may appoint a county road superintendent to supervise and direct the building and repairing of all public roads in the county. It is made the duty of the road commissioners to lay off the roads in their respective districts and to appoint overseers for each subdivision of the same.

The county commissioners in each county are authorized to levy a road tax not to exceed five mills on the dollar of assessed valuation of real and personal property, provided, however, that in counties not constructing paved, macadamized, or hard surfaced roads an additional road tax of not exceeding three mills may be levied to be used solely for the purpose of constructing roads.⁶³⁶ Counties are also authorized to issue bonds for road purposes, and every able-bodied male citizen not exempt by law is required to work five days each year on the public highways or commute for the same at the rate of one dollar per day.

A law passed in 1911 authorized the formation of road improvement districts on a petition signed by not less than twenty-five per cent of the registered voters.⁶³⁷ In case said special road and bridge improvement district is formed, the board of county commissioners is required to prepare plans and specifications and let the contract for work to the lowest responsible bidder. Revenue may be obtained either by a special tax or by the issuing of bonds as determined upon by the people themselves. Finally, it should be stated that convict labor on the public highways is authorized by the laws of Florida, and the road legislation of 1911 provided for a progressive license tax on motor vehicles, to be paid into the road and bridge funds of the various counties.

GEORGIA

The board of county commissioners or the so-called ordinary of the county court has jurisdiction over the roads, divides the county into road districts and appoints three commissioners for each road district, who in turn are required to appoint road overseers.⁶³⁸ It is made the duty of road overseers to superintend the work on the highways. A separate law, however, providing for what is known as the alternative road system, may be adopted by any county on the recommendation of the grand jury. In counties

adopting this system, the board of county commissioners appoints a superintendent of public roads, together with necessary overseers and guards. All male citizens not exempt by law are liable to road duty not exceeding ten days per year, which tax may be commuted at the rate of fifty cents per day.

The convict labor law enacted in 1908 has received considerable publicity and should be briefly outlined. This measure provides that all male felony convicts not required to be kept at the State farm may be employed by the authority of the several counties and municipalities upon the public roads, bridges, or other public works. It is made the duty of the Prison Commission to communicate with the county authorities and ascertain those counties desiring to use convict labor. The convicts are apportioned among the counties largely on the basis of population, but under certain conditions there may be exceptions to this rule. The commission is also authorized to purchase road machinery, appliances, and teams to organize road working forces. The county in which convicts are employed shall pay the expenses, including the cost of maintenance and equipment and all material required for the work which must be done in the county. All convicts are placed under the direct supervision of the Prison Commission, which is required to prescribe rules and regulations for governing the same, subject to the approval of the Governor.

The convict labor law of Georgia has been responsible for a great deal of valuable work on the highways of that State. From the standpoint of the construction and maintenance of permanent roads, there is much to be said in favor of the plan. It should be stated, however, that prison reform workers and humanitarians in general have offered some very serious objections to this very important convict law, or perhaps more particularly to the manner in which it has actually been administered.

The public road fund is made up of the so-called commutation tax and a levy of not more than two mills on the dollar of taxable valuation, as determined by the commissioners of roads. All able-bodied men, unless exempt by law, are subject to work on the public highways not exceeding fifteen days in a year.

IDAHO

Jurisdiction over roads and bridges in Idaho is vested: first, in a State Highway Commission composed of the Governor, the State Engineer, and the State Mining Inspector; second, in the boards of county commissioners of the respective counties; and finally, in road overseers elected from road districts, the boundaries of which are determined by the county board. The members of the highway commission serve without any salary, but are allowed their actual and necessary expenses incurred while performing their official duties.⁶³⁹

The State Highway Commission has general supervision of all highways constructed in whole or in part out of the State aid fund and is required to make an itemized report each year to the State Auditor of all disbursements, contracts, and transactions. In case the county commissioners refuse or fail to make repairs on any road subject to the jurisdiction of the highway commission, the latter may establish such road as a toll road for a period not exceeding five years.

Aside from the ordinary road districts determined upon by the board of county commissioners and placed under the control of road overseers, the law provides that any portion of a county with twenty-five or more resident taxpayers may be organized into a special road district. Special districts, as thus defined, are organized by the board of county commissioners after the project has been approved by the people at a district election. In special road districts three

resident good roads commissioners are elected and required to supervise the road work within their districts. The legislature in 1911 authorized the appointment of a county road supervisor by the board of county commissioners.⁶⁴⁰

An annual property tax of not less than one nor more than six mills is levied for road purposes by the board of county commissioners. The board, however, may also levy a special road tax not exceeding ten mills on the dollar on all taxable property for road purposes.

In road districts, with the consent of two-thirds of the qualified electors, the road commissioners are given authority to issue bonds not to exceed twenty-five per cent of the assessed valuation of all real property within the district. Every male inhabitant between the ages of twenty-one and fifty is required to perform two days labor annually on the road or commute for the same by the payment of four dollars. All road taxes in contract road districts must be paid in cash and the board of county commissioners may require convicts to perform labor on the highways under certain conditions. Finally, it should be noted that by recent acts appropriations have been made by the legislature to build certain special highways, as for instance an appropriation of \$5,000 to complete the Atlantic road.

ILLINOIS

The State Highway Commission is composed of three persons appointed by the Governor, with the advice and consent of the Senate, to hold office for the term of two years and receive no compensation except for actual and necessary expenses. The commission is required to appoint a State Engineer, carries on experimental work in road building, investigates methods of construction, kinds of road material and systems of drainage best adapted to meet certain conditions, and prepares a uniform system of blanks to be used by local commissioners of highways.⁶⁴¹

State aid is therefore given in the form of expert service, but in addition the State supplies stone, crushed at the penitentiary and reformatory institutions, and also road machinery. Local highway commissioners may apply for State aid, but if aid is granted they are required to use the material and machinery according to rules formulated by the highway commission.

From the standpoint of local administration a dual system of supervision and control prevails in Illinois. In counties having the township-county system three highway commissioners are alternately elected for a term of three years. In counties having the county-township system of local government the county board creates road districts of convenient size, three highway commissioners being elected in each district. The highway commissioners, in either case, have general charge and supervision of the construction and maintenance of the roads and bridges of their respective townships or districts.

From the standpoint of revenue, Illinois also has a dual and somewhat complicated system. About one-half of the townships of Illinois require the payment of road taxes in cash, while the other half still permit payment in labor. In townships under the cash system highway commissioners may levy an annual tax of not to exceed six mills, while in townships under the labor system the tax limitation is four mills. A township may also vote on the question of borrowing money for constructing hard roads by issuing bonds, which bonded debt, however, is not to exceed the sum of \$35,000. Finally, the Board of Prison Industries may be required by the highway commission to employ convicts in the manufacture of tile and culverts suitable for draining the wagon roads of the State, in the preparation of road material, and in the manufacture of machinery, tools, and other necessary appliances for the building and repair of highways.

INDIANA

Jurisdiction over highways in the State of Indiana is vested in the board of county commissioners and the township trustees.⁶⁴² It is made the duty of the township trustees to divide their townships into four or six road districts depending upon the area. A road supervisor is elected annually for each district. Said officer is required to construct and maintain roads and bridges according to the directions of the township trustees and to see that roads are properly dragged whenever their condition makes it advisable.

The system of raising revenue for highway purposes is somewhat complicated. A general tax of three mills is levied annually by the township trustees and an additional tax of one mill may be levied for bridges, subject to the approval of the board of county commissioners. A tax of one mill may also be levied for every ten miles of free, gravel, macadamized, turnpike roads completed in any county, provided that counties having less than fifty miles of such roads may be authorized to levy a three mill tax for road purposes in a sum not exceeding four per cent of the assessed valuation of the county. Both the poll and property road tax may be paid in either money or labor.

Bonds may be issued by the board of county commissioners to an amount not exceeding two per cent of the assessed valuation of the county. Free gravel roads may be constructed either by assessment, according to benefits received, or by taxation. If constructed on the basis of benefits received, the board of county commissioners appoints three disinterested freeholders as viewers and a competent engineer to lay out the proposed highway and assess both the benefits and damages; provided, however, that no lands shall be assessed for benefits that are more than two miles from the contemplated improvement. Indiana has practically an unlimited amount of stone and gravel and, largely as a result of this fact, has a very high per cent of permanent roads.

KANSAS

The State of Kansas does not have a highway commission, but has created the office of county engineer, and the State Engineer at the Agricultural College gives advice and prepares plans and specifications for roads and bridges. The county engineer inspects all road work, classifies roads, investigates road materials in different sections of the State, and prepares plans and specifications for bridges and permanent highway improvements.⁶⁴³

When sixty per cent of the abutting land owners file a petition, the board of county commissioners may authorize the improvement of the highways under the direction of a superintendent appointed by them. In such cases seventy-five per cent of the expense is paid by the land owners and twenty-five per cent by the township; although under certain conditions the county may pay a portion of the expense. The township, in fact, is given considerable authority in road matters. All roads are under the control of the township board, subject to the authority of the county engineer. In other words, there is a dual system of township and county supervision in Kansas, much the same as there is in Iowa.

From the standpoint of revenue for road purposes, both the township and the county are granted substantial authority. The county commissioners may levy an annual road tax of not more than three mills except on real estate in certain cities. In the second place the county commissioners may also levy a tax of not more than one mill on all taxable property in each township; and at the same time the township board may levy a road tax of not more than three mills to improve the roads in the township. Moreover, what is called a good roads tax of not more than one mill may be levied by the county commissioners for a period of not less than five years, subject to the approval of a majority of the voters in the county, the income from which tax must be

expended for the construction of hard surfaced roads. Finally, certain special assessments are authorized, county road bonds may be issued up to twenty per cent of the construction price of a permanent improvement, and a road poll tax of three dollars is levied which may be paid either in money or in labor.

KENTUCKY

The fiscal court, so called, of each county has general supervision of roads and bridges. The county judge divides his county into road precincts, and appoints a resident overseer to have general charge of the work in each precinct. In counties where the funds for the working of the roads are raised by taxation, the fiscal court may appoint a county supervisor, a plan similar to the system adopted in Iowa in the *Code of 1851*. The county road supervisor thus appointed lets contracts to the lowest bidder, inspects all road work, and may hire men to work under his own supervision in case he desires not to let the work on contract. It is made the duty of the overseers to assist the county supervisor and to look after the roads in their respective road districts.⁶⁴⁴

The tax levy is placed in the hands of the fiscal court, which may levy a tax of not more than five mills annually for road and bridge purposes, and also a per capita tax of not more than one dollar for the support of the same fund. In addition, the court may require all male citizens not exempt by law to work on the roads not more than six days in the year, and finally, provision is made for convict labor on the public highways.

An amendment to the Constitution of Kentucky authorizes the State to extend credit to any county for public road purposes, but limits the amount of indebtedness which a county may incur for this purpose to five per cent of the value of all taxable property located therein.

LOUISIANA

According to the provisions of an act passed in 1910 the State Board of Engineers is authorized and required to appoint a competent State Highway Engineer and fix his salary at a sum not to exceed \$5,000 per annum.⁶⁴⁵ The State Board of Engineers is also required to appoint such assistant engineers and other help as may be necessary to establish, construct, and maintain public highways and bridges. Among other things the State Engineer is given the right to reject any or all bids if a good cause exists. Otherwise he is supposed to award the contract to the lowest responsible bidder, the same to be subject to the approval of the police jury or of the mayor and council or other governing authority. With the approval of the State Board of Engineers he may also purchase for the State rock crushers, steam rollers, and other road machinery, tools, implements, and draft animals which may be needed for the purposes of highway construction. It is thus apparent that Louisiana has made great progress in the important work of road administration and at the present time is entitled to be placed in the list of good road States.

From the standpoint of local administration, public roads are placed under the jurisdiction of the police juries, who are required to divide their parishes into road districts and appoint an overseer for each district.⁶⁴⁶ Police juries are authorized to levy special taxes for road purposes on all real and personal property in the parishes, said tax to be limited to fifteen dollars per annum on each person. Under certain conditions negotiable bonds may be voted by a drainage district, parish, or municipal corporation for the purpose of paving and improving roads. Finally, all able-bodied male citizens, unless exempt by law, are required to work not to exceed twelve days per annum on the public roads or commute for the same at the rate of one dollar per day.

MAINE

A State Highway Department was created in 1907, the Governor being legally authorized, with the advice and consent of the Council, to appoint one commissioner of highways who must be a civil engineer, holds office for a term of four years, and receives a salary of \$2,500 per annum.⁶⁴⁷

The commissioner of highways is clothed with large powers and authority. First of all, he must give his approval before work is commenced on any State road and no State aid is paid until the work has been performed to his satisfaction. All bids are subject to his approval and he may appoint inspectors to supervise the construction of all roads which are built on the contract basis. Finally, the State Highway Commissioner is required to compile statistics, prepare maps, plats, and in various other ways disseminate information as to the best methods of highway construction. In this connection he conducts annual meetings in each county to discuss the question of good roads.

A very comprehensive system of State aid has also been worked out in Maine. A State tax of one-third of one mill is levied on all property in the State, which tax in 1910 amounted to about \$131,000. In order to receive State aid, towns and other subdivisions of the State are required each year to set aside a certain part of the road fund for the permanent improvement of highways under the supervision of the State Highway Commissioner. The amount thus required depends upon the taxable valuation. For every dollar thus set apart by the various subdivisions of local government, the State gives from seventy-five cents to two dollars, depending also upon the taxable valuation. Where the taxable valuation is \$100,000 or less, the State will give two dollars for every dollar locally raised; where it is between \$100,000 and \$200,000 the State will give \$1.50; where it is between \$250,000 and \$500,000 the State will give \$1.25; and finally, where the taxable valuation is between \$500,000

and \$1,000,000 the State will give seventy-five cents for every dollar locally raised.

From the standpoint of local administration, jurisdiction over county roads is vested in the court of county commissioners, and over town roads in the selectmen or municipal officers. The county commissioners are given authority to designate State roads, but upon petition signed by a majority of the local voters of a certain town this matter may be brought before the State Highway Commissioner. State roads, the same as other roads, when once completed, are maintained by the cities and towns through which they pass. The county commissioners, however, may repair highways at the expense of the town if the latter declines or neglects to do so. Each town at its annual meeting elects from one to three road commissioners, who are required to go over the roads of their town and see that they are in good condition and keep an accurate account of all expenditures made by them. Funds for the building and repair of roads and bridges are raised annually at the town meeting. All property taxes must be paid in cash and county convicts may be used to break stone for the repair of the public highways.

MARYLAND

The State Highway Department is composed of three competent persons paid a regular annual salary ranging from \$2,000 to \$2,500 per annum, and the Governor and two men from the State Geological and Economic Survey as ex-officio members. The latter receive no compensation. The commission is authorized to appoint a chief engineer and as many assistants as are necessary.⁶⁴⁸

Large powers and authority are conferred upon the highway commission, including the preparation of a definite plan or system of State roads, a map of the State which must be filed with the county commissioner of every county,

plans and specifications for permanent highway construction which must also be furnished to the county commissioners. Finally, the commission is authorized to let contracts, supervise the work of construction, and must keep all State roads in good condition.

Bonds have been issued in the sum of \$6,000,000, not more than \$1,000,000 of which may be expended in any one year. It is also stipulated that not more than one-half of the cost of building a highway shall be paid out of the State treasury, the amount received by each county depending upon its mileage of roads as compared with the total mileage in the State. Local revenues for road purposes are levied by the boards of county commissioners. Some counties levy special taxes for road purposes and others use the general county fund for the building of roads. All property taxes must be paid in cash and the boards of county commissioners may authorize the working of county prisoners on the public highways. Finally, the license tax on automobiles is paid into the State treasury, one-fifth of the same being expended in Baltimore and the remaining four-fifths being distributed among the counties for repairs on State aid roads.

MASSACHUSETTS

Perhaps no State in the Union has made greater progress in the construction of permanent roads than Massachusetts. The State Highway Commission consists of three members appointed by the Governor for a term of three years, at an annual salary of \$2,500, except the chairman who receives \$3,500 per annum. The members are required to devote all of their time to the work, receive their necessary traveling expenses, and may appoint as many clerks and expert engineers as are necessary.⁶⁴⁹

Among other duties, the commission is required to prepare maps showing both the location of public roads and the

places where the best road materials may be found. It is given full control over State highways, prepares plans and specifications for the same, accepts or rejects all bids, and is required to hold at least one meeting in each county annually for the purpose of discussing the question of good roads.

In 1907 a bond issue of \$2,500,000 was authorized, not more than \$500,000 to be expended in any one year. In addition to this large amount of money for the building of permanent roads, Massachusetts has made very liberal provision for the same purpose by taxation. For example in 1908 the legislature appropriated \$150,000 for maintenance, in addition to \$85,000 which at the same time was available from the motor vehicle fees. The engineers of the commission estimated that over \$600,000 was necessary to put the State highways in good condition. In 1909 the legislature appropriated \$250,000 and during the same year \$154,000 was collected in motor vehicle fees. In 1910 the sum of \$316,000 was available from the tax on motor vehicles and the total amount spent for various permanent improvements was \$504,000, of which amount \$200,000 was available from the regular tax levy. In 1911 the commission received a direct State appropriation of \$200,000 for the maintenance of State highways and it also had available \$300,000 from motor vehicle fees for the same purpose.

A county, city, or town desiring State aid is required to make application for the same, whereupon the commission prepares a plan which is filed with the local authorities. One-fourth of any money expended by the State for the construction of State roads must be returned to the State treasury with interest at the rate of three per cent, the money thus returned being applied to the regular appropriation to be expended by the commission. Not more than fifty dollars per mile is assessed upon the town or city where a State road is located, to be applied for the purpose of maintaining and repairing the same.

From the standpoint of local administration the county commissioners have general authority over the highways of the various counties. At the same time the selectmen of the towns exercise both original and concurrent jurisdiction with the county commissioners over all highways located therein. Each town may annually elect a road commissioner or a surveyor of highways, the latter having exclusive control in the matter of repairs of roads and bridges without being subject to the authority of the selectmen. Local funds for road purposes are appropriated at the annual town meeting and the counties are required to assess on the towns the amount necessary to meet the State appropriation. No statute labor tax exists in Massachusetts, but convict labor may be employed within the various prisons under certain conditions and limitations.

MICHIGAN

The State Highway Commissioner of Michigan is nominated and elected by the people for a term of four years and receives an annual salary of \$2,500. The reader will note that this is an exception to the general rule which provides for the appointment of such officials, a method which, it is believed, is much better adapted to the peculiar functions and responsibility of such a department. The highway commissioner may appoint a civil engineer and such other assistants as may be necessary.⁶⁵⁰

The State Highway Commissioner possesses a large measure of supervision and control over the highways of the State. He may require local officials to report from time to time such facts as he may deem necessary, furnishes plans and specifications for State aid roads, prepares maps showing the location of highways and of road materials, inspects road work, holds road conventions or institutes in the various counties which are attended by county and township highway commissioners, gives expert advice, and

sends engineers to the various townships and counties when the same is justified by the importance of the work. Finally, the highway commissioner may withhold State aid if roads are not kept in good condition.

A regular system of State aid has been established. A county or township, or both acting together, may under certain conditions petition the highway commissioner for the improvement of a certain road or roads. The allotment to any township or county, however, is not paid until the work has been inspected and found to be up to the standard required by law. State aid is paid on the following basis: for clay gravel, \$250; for gravel, \$500; for stone gravel or gravel stone, \$750; and for stone roads, \$1,000 per mile. No township is permitted to receive State aid in any one year for the construction of more than two miles of road.

From the standpoint of local administration, jurisdiction over highways is vested partly in township and partly in county authorities. The so-called county road system may be adopted by a vote of the people. Where this system, which represents a larger measure of administrative centralization, is adopted not more than three county road commissioners are elected in a county. These county road commissioners are vested with large powers over all roads located within their county, including the right to determine what are county highways, to macadamize, drain, or improve any road under their control, fix the amount of tax to be levied for road purposes, with certain restrictions and limitations, disapprove the expenditures planned by the board of road supervisors, and be responsible for keeping the roads in good condition. In other words, counties adopting this centralized plan of road supervision would seem to be placed upon a very efficient basis from the standpoint of obtaining the best practical results for the amount of money expended.

The law also authorizes two or more organized townships

or any one or more townships and one or more contiguous villages or cities to form a good roads district. Thus, Michigan has adopted a somewhat complicated system of supervision and control of highways, having had in view, however, the importance of some system of efficient, centralized administration.⁶⁵¹

A large amount of revenue, both State and local, is provided for the building and maintaining of roads and bridges. In the first place the State has made an annual appropriation of \$250,000, of which amount \$10,000 is set aside for the support of the State Highway Department, the remainder to constitute the State road fund. Counties which have adopted the so-called county road system may levy taxes for highway purposes on the following basis: not more than three mills where the assessed valuation does not exceed \$20,000,000; two mills where the assessed valuation is more than \$20,000,000, but less than \$50,000,000; one mill where the assessed valuation is more than \$50,000,000; and finally, where the assessed valuation is more than \$100,000,000, the tax is limited to fifty cents on each \$1,000 of assessed valuation.

In the civil townships two distinct taxes are levied for road purposes: one, known as the road repair tax, which is limited to five mills except under certain special conditions; and the other, known as the highway improvement tax, which varies from one to five mills depending upon the assessed valuation. Provision is also made by law for the issue of both county and township bonds for road purposes, the issue by the county not to exceed three per cent and that of the township not to exceed five per cent of the assessed valuation.

Statute labor has been abolished in Michigan, but under certain conditions the board of supervisors of any county may require convicts to work upon the public roads under the direction of the township highway commission, the prisoners being under the control of the sheriff.

MINNESOTA

The State Highway Commission of Minnesota is composed of three members appointed by the Governor for a term of three years, not more than two members to belong to the same political party. The commissioners serve without compensation, but are authorized to appoint a secretary who must be a civil engineer and practical road builder, and such other assistants as from time to time may be necessary.⁶⁵²

The commission must inquire into the best methods of road construction in other States, hold public meetings throughout the State for the purpose of discussing the good roads question, ascertain the location of road materials, report annually to the Governor the number of miles of State road constructed during the year, distribute the State aid fund among the counties, prepare rules and regulations for the construction and improvement of State roads, and in fact exercise general supervision and control of the public highways of the State. The State Engineer, when it is practicable, is required to make all necessary surveys and prepare plans and specifications for State roads. In cases where plans, specifications, and surveys are not made by the State Engineer, the same must be reported to him. In fact, much of the authority in such cases is vested in the county board, subject to the general supervision of the State Highway Commission.

Minnesota has provided very liberally for the various road and bridge funds. A tax of one-fourth of a mill on each dollar of assessed valuation is set aside as a State aid fund. No county may receive less than one-half per cent or more than three per cent of this fund. In addition to this amount the sum of \$300,000 is annually appropriated to aid in the construction of bridges, not more than one-third of the cost of building any bridge to be paid out of the State aid fund. The last General Assembly made an annual appro-

priation of \$150,000 for State aid and the expenses of the commission. The county board makes an annual levy of not more than one mill on the taxable valuation for general road and bridge purposes, and the township authorities may also levy a tax of not more than one mill on the dollar of assessed valuation, which tax, however, may be paid in labor. Finally, both townships and counties may issue bonds under certain conditions and restrictions.

In 1907 a law was enacted providing for a more centralized system of road administration. A county superintendent of roads and a township inspector were given general supervision and control of highways in counties having less than 200,000 inhabitants.⁶⁵³ This law, however, which no doubt would have been a great step in advance, was declared unconstitutional by the Supreme Court on the ground that the classification adopted was purely arbitrary.

From the standpoint of local administration, therefore, the present system in Minnesota provides simply for ordinary township overseers except in townships that have voted to pay all road taxes in cash. In such cases a township highway inspector is appointed who must be a competent road builder, but the cash system now prevails in not more than one-fourth of the townships of the State.

MISSISSIPPI

The State of Mississippi has not provided for a highway commission and, in common with the majority of the southern States, has not made very great progress in the good roads movement. Each county is divided into five districts for the election of members of the county board of supervisors. The supervisor of each district is given general supervision over the public highways and the board of supervisors is authorized to divide the county into what is termed road links and appoint one overseer to have general charge of the road work.⁶⁵⁴ The board of county super-

visors, however, may employ a competent person to serve as a county road and bridge commissioner thus providing for a somewhat more definite system of responsible administration. The board may also work the public roads by contract.

Revenues for the road and bridge fund are provided for: first, by what is called a commutation tax; second, by a property tax of not more than three mills on all taxable property within that part of the county subject to the contract system; third, by an additional tax of not more than one mill on all taxable property levied under certain special conditions; and fourth, by bonds which may be issued to an amount not to exceed five per cent of the assessed property valuation of the county.⁶⁵⁵ The county supervisor may order a road to be macadamized, provided that one-third of the cost shall be paid by the owners of the lands benefited. All male citizens not exempt by law are required to work on the public highways not more than ten days or pay in lieu thereof the sum of five dollars. Finally, convict labor is also provided for by the statutes of Mississippi.

MISSOURI

Missouri belongs to the small group of States which give the county court jurisdiction over the public highways in counties not under township organization. The court may divide the county into road districts, appointing a road overseer for each district, but is required to appoint a county highway commissioner to inspect and supervise all the roads of the county. In counties under township organization the county engineer has supervision over all the public roads and over the road overseers of the civil townships.⁶⁵⁶

Revenue for the support of the road and bridge funds is derived from the following sources: first, all money accruing to the State from any levy for road purposes constitutes

the State road fund and must be used for the construction of permanent highways; second, the county courts may levy a tax of not more than two mills on the dollar of assessed valuation; third, a special tax of not more than two and one-half mills may be levied in counties not under township organization for road and bridge purposes; fourth, township boards may also levy a tax of not more than two and one-half mills on the assessed valuation; and fifth, bonds may be issued by the county court after being authorized by a two-thirds vote of the people at a special election, provided that the total debt of the county does not exceed five per cent of the assessed valuation of all property in the county.⁶⁵⁷ Special road districts, however, may be formed and authorized to issue bonds. Finally, the county court in all counties not under township organization may levy a poll tax of not less than three dollars nor more than six dollars which may be worked out or paid in cash.

In the construction of permanent roads Missouri possesses a very unique system of tax distribution. The State pays one-half, the citizens benefited pay one-fourth, and the county or other local district pays the remainder. The apportionment of the State fund is based on the assessed valuation, but no county may receive more than three per cent of this fund in any one year.

MONTANA

Montana, in common with practically all of the States west of the Missouri River, has the commissioner system of county government. The county boards have general supervision over the highways, divide their counties into suitable road districts, and appoint supervisors for the same.⁶⁵⁸ The county commissioners may let by contract the construction and improvement of highways and bridges when the amount of work required costs more than two hundred dollars.

The revenue for the improvement of highways and the construction and repair of bridges is provided for by a tax of not less than one nor more than three mills on all taxable property and by a special road tax of two dollars which may be paid by one day's labor on the roads. Finally, the board of county commissioners is authorized to issue bonds for the construction of bridges and highways.

NEBRASKA

The county boards of commissioners have jurisdiction over the public roads where the township organization does not exist, and are required to divide their respective counties into convenient road districts, one road overseer being elected for each district.⁶⁵⁹ In counties under township organization, however, jurisdiction over township roads is vested in the township board. The county board may appoint a county highway commissioner, who must be an experienced road builder, and who is given general supervision of district road overseers, and is further required to have all main traveled roads dragged regularly at a cost of not more than one dollar per mile for each dragging.⁶⁶⁰

From the standpoint of the distribution of road funds the laws of Nebraska are very instructive. The county levy, so called, includes a tax of not more than five mills for road purposes and four mills for bridge purposes, a special tax of not more than five mills to pay outstanding road warrants, and on the petition of interested parties a road improvement levy may also be made. One-half of all money collected constitutes the county road fund and is divided equally among the commissioner districts. The other one-half makes up what is called a district road fund and must be expended in the road district where it was collected.

The civil townships are also authorized to levy a tax of not more than ten mills on the dollar for roads and two mills on the dollar for bridges. Every male inhabitant, unless

exempt by law, is required to pay a poll tax of two dollars and fifty cents which, together with all other road taxes, must be paid in cash. Finally, bonds may be issued by any county, township, precinct, city, or village for constructing a State boundary road after the same has been approved by three-fifths of the voters at a special election; and State aid is also given for constructing roads under certain conditions.

NEVADA

Jurisdiction over highways in the State of Nevada is vested in local road inspectors or supervisors, the board of county commissioners, and a State Engineer.⁶⁶¹ The county board is required to district the county and may appoint one road inspector for each district. In any county polling three thousand votes or more at the last general election, however, the board of county commissioners shall divide the county into road districts and appoint one road supervisor in each district to serve during the pleasure of the board.

Revenue for the support of roads and bridges is secured through taxes levied by the board of county commissioners, a tax of not more than two and one-half mills being levied for highway purposes; but upon the petition of a majority of the property holders of any district an additional levy of three mills may be made, which tax may either be paid in cash or worked out on the highways. Finally, a poll tax of three dollars is also levied for the use of the State and county, and a system of convict labor is provided.

NEW HAMPSHIRE

The Governor and Council constitute the State Highway Commission of New Hampshire.⁶⁶² The commission is authorized to appoint a State Engineer, fix his salary, and must make a biennial report to the legislature embodying a statement of expenditures. The Governor and Council,

acting as a highway commission, are also required to furnish the services of any engineer in the employ of the State for consultation and advice, must provide plans and specifications for any work paid for partly out of State funds, and make rules and regulations governing the question of State aid. The law requiring all State aid work to be done according to specifications furnished by the highway commission was enacted in 1907.⁶⁶³

Each town desiring State aid must make application for the same through the board of county commissioners and set apart a certain amount for the improvement of its main highways under the advice and direction of the State Engineer. The amount that must be set apart varies from twenty-five cents to one dollar for every \$1,000 of valuation, depending upon the total assessed valuation of the town; and the amount in turn appropriated by the State varies from twenty cents to three dollars for each dollar set apart by the locality, also depending upon the assessed valuation of the town. The amount thus apportioned by the State and the localities for the building of permanent roads is known as the joint fund. No part of this fund may be expended within the "compact portion" of a city or village of more than 2500 population, and it is further stipulated that all highways improved by the joint fund must be kept in good repair at local expense in a manner satisfactory to the State Highway Commission.

From the standpoint of local supervision, jurisdiction over highways is vested in the commissioners of the counties and in the selectmen of the towns. In common with the other New England States, the township is a very important unit of local government in New Hampshire. Revenue is obtained from both State and local taxes and by the issuance of bonds. The State annually appropriates \$125,000 as a permanent highway fund, and bonds have also been issued to the amount of \$1,000,000. Furthermore, each town at its

annual meeting raises and appropriates a sum not less than one-fourth of one per cent of the valuation of all polls and rateable estate on which taxes are paid. Each town, however, may raise as much more as is necessary, but not to exceed fifty dollars per mile, for the repair of roads and bridges. Finally, the law provides that sixty-five per cent of the fees and fines collected from the motor vehicle law shall be used for the maintenance of trunk line roads and thirty-five per cent for the maintenance of roads which are not trunk lines.

NEW JERSEY

A commissioner of public roads is appointed by the Governor, with the consent of the Senate, for a term of three years and receives an annual salary of \$5,000. An additional allowance for clerk hire and the employment of supervisors and engineers is made. The commissioner of highways collects data regarding the improvement and construction of roads, makes an annual report to the legislature, awards contracts for the improvement of roads constructed partly out of State aid, must approve all plans and specifications, and may reject either the contract itself or the plans and specifications if he believes that the best interests of the county require it. In other words, plans and specifications for so-called county roads are prepared by the board of freeholders of the county, but must be approved by the State Highway Commissioner.⁶⁶⁴

The method of distributing road taxes in New Jersey is also worthy of careful study. One-third of the cost of building county roads is paid by the State, fifty-six and two-thirds per cent by the county, and ten per cent by the township. New Jersey was the first State in the Union to begin the policy of State aid, establishing that policy in 1891, and since that time the sum of \$3,301,595.10 has been paid out of the State treasury for this purpose. The effect of the State

aid policy and the more centralized plan of road administration has been very marked. Out of a total of 14,842 miles of public highway, 3377 miles have been improved. About 1562 miles were improved under the State aid law down to December 31, 1910.

From the standpoint of local supervision, the county board of chosen freeholders has jurisdiction over county roads and the township committee of each township has jurisdiction over the township roads. The boards of chosen freeholders of the various counties are authorized to construct and repair certain county roads and pay for the same by levying a special tax, securing temporary loans, or by issuing bonds to be met by a special tax levy. Such bonds, however, must not run more than thirty years and bear not to exceed five per cent interest. All road taxes are required to be paid in cash.

At the present time the General Assembly annually appropriates about \$400,000 for what is known as new construction work. Up to October 31, 1911, the amount received from the motor vehicle tax and distributed for road repair work was about \$200,000. Indeed, the annual expenditure for the construction and repair of roads by both State and counties now exceeds \$200,000, exclusive of the large amount expended by townships, boroughs, and cities.

NEW MEXICO

The State Highway Commission of New Mexico is composed of three members: the Governor, the Commissioner of Public Lands, and the State Engineer, all of whom serve without compensation.⁶⁶⁵ The commission has general supervision of all highways and bridges in the State constructed or maintained either in whole or in part out of the State aid fund. The State Engineer also has supervision of all county bridges built by contract, the cost of which is more than \$1,000.

In the various counties the highways are placed under the jurisdiction of the county commissioners who are required to divide their counties into road districts and appoint a road overseer for each district.⁶⁶⁶ In 1907 the road law was so amended as to prevent any county from having more than three road districts.

The State road fund is obtained by levying an annual tax of not more than one mill on each dollar of taxable property in the State. The boards of county commissioners are authorized to levy a tax for road purposes of not more than three mills on the dollar. All able-bodied men not exempt are required to pay a road poll tax of three dollars, or in lieu thereof work three days on the public highways. Finally, convict labor is provided for under certain restrictions and limitations.

NEW YORK

The Department of Highways is composed of three commissioners appointed by the Governor with the consent of the Senate for a term of six years at salaries ranging from five to six thousand dollars. At least one commissioner must belong to the minority party and one is required to be a civil engineer and an experienced road builder.⁶⁶⁷

The State Highway Commission of New York is clothed with very large power and authority, which fact is primarily responsible for the great progress of the good roads movement in that State during the last few years. The commission has supervision over all highways and bridges improved either in whole or in part out of State funds; prescribes rules relating to the duties of division engineers, district, county or town superintendents of highways; aids local road officers in establishing grades and drainage systems; prepares plans and specifications for both roads and bridges when requested to do so by local authorities; investigates methods of road construction; and holds annual

meetings in each county or district throughout the State in order to furnish information regarding the best methods of highway construction and the proper interpretation of the highway law. Finally, it is made the duty of the State Highway Commission to divide the State into not more than six divisions, assigning to each a division engineer who must also be an experienced road builder.

New York has established a very liberal State aid policy. Recently \$50,000,000 in bonds was issued for that purpose. Application for State aid must be made through the county board of supervisors. If the consent of the highway commission is obtained, plans and specifications are prepared by the division engineer and submitted to the proper district or county superintendent of roads for examination. The board of supervisors may make changes in the plans with the consent of the highway commission.

The amount of State aid granted to the several townships varies from fifty to one hundred per cent of the amount of taxes raised in said township, depending upon the assessed valuation. The cost of building State roads is borne entirely by the State; while fifteen per cent of the cost of building county roads is borne by the town, thirty-five per cent by the county, and fifty per cent by the State. In other words, the State pays all the cost of constructing State roads, fifty per cent of the cost of constructing county roads, and distributes aid among the civil townships on the liberal basis outlined above.

The boards of supervisors of the respective counties have general jurisdiction over the roads of their counties, while the commissioners of highways of the civil towns have the care and supervision of all highways and bridges located therein. Towns that have adopted the so-called money system raise a tax for road purposes equivalent to at least one-half of the value at the commutation rates of the highway labor which would be assessed under the labor system.

In addition every able-bodied male not exempt by law is required to pay an annual road poll tax of one dollar. In towns retaining the labor system the number of days assessed annually must not be less than three times the number of taxable inhabitants in the town. It is therefore apparent that from a financial standpoint both the township and the county are important units of road administration,⁶⁶⁸ having the power to levy taxes and borrow money for road purposes.

In conclusion it should be noted that all property road taxes must be paid in cash, that convict labor may be employed to a very limited extent, and that the county superintendent of roads may be removed from office by the highway commission, which from the standpoint of responsible administration is an important power to be vested in the State. The fiscal authority of the town board is apparent from the following list of taxes which it is authorized to levy: first, the amount levied and collected for the repair and improvement of highways must equal thirty dollars per mile outside the limits of incorporated villages; second, not more than fifteen hundred dollars may be levied in any one year for the repair and construction of a bridge unless authorized by the town meeting; third, the purchase of more than five hundred dollars worth of road machinery must also be authorized in the same manner; and fourth, the town meeting must give its consent to the expenditure of more than fifteen hundred dollars for the repair or rebuilding of any highway or bridge which has been damaged or destroyed. Other important powers both of the township and county might be mentioned.

NORTH CAROLINA

The North Carolina Geological Board through the State Geologist may make investigations and experiments concerning the best methods of road construction and the best

kind of road materials, and disseminate this information by means of bulletins, reports, or lectures, thus acting to a certain extent as a State highway commission. The sum of \$5,000 is annually appropriated for carrying out the provisions of this particular act. Indeed, the system of State supervision in North Carolina is quite similar to that which now prevails in Iowa.

The State of North Carolina has a dual system of township and county supervision and control of highways, which varies more or less in the different counties throughout the State.⁶⁶⁹ Jurisdiction over highways is vested partly in the justices of the peace in each township, who have control of the public roads and are known as the township board of supervisors of public roads; and partly in the board of county commissioners. The township board of supervisors, thus constituted, is required to divide the township into road districts and appoint road overseers for the same. It should be noted, however, that the jurisdiction of township authorities within the respective townships is subject to the direction of the board of county commissioners.

From the standpoint of revenue for the support of roads and bridges, the county is the important unit of local government, the county commissioners having authority to levy a tax of not more than double the amount of the State tax. All male citizens not exempt by law are required to work on the public highways not more than six days each year, except in the counties west of the Blue Ridge Mountains, where ten days work may be required. Finally, the county commissioners may employ convict labor according to the rules and regulations prescribed by law.

NORTH DAKOTA

In 1909 a Good Roads Experiment Station was established at Bismarck for the purpose of investigating the most practical, economical method for the construction and main-

tenance of the public roads of the State.⁶⁷⁰ The State Engineer is required to furnish plans and specifications, and also to supervise the construction and maintenance of roads constructed under the provisions of this act. It should also be noted that in 1911 a concurrent resolution was adopted providing for an amendment to the Constitution of the State, which if ratified will enable the State to grant aid for the construction of highways.

The supervision and control of highways in North Dakota depends upon the character of local government prevailing in the different counties. In counties not under township organization the board of county commissioners is required to divide the county into road districts and appoint a road supervisor for each district. In counties under township organization the township supervisors are required to divide the townships into suitable road districts, an overseer being elected for each district, said overseer being subject to the general supervision and control of the board of county commissioners. Finally, it should be noted that a recent statute gave the board of county commissioners authority to appoint a county superintendent of highways and deputy road superintendents to take the place of the local road overseers, a law quite similar to that enacted by the General Assembly of Iowa in 1911.⁶⁷¹

The county levy is limited to five mills for the support of roads and two mills for the construction and repair of bridges; while the township road tax may not exceed eight mills and the bridge tax not more than two mills on each dollar of assessed valuation. Every male inhabitant not exempt by law is required to pay a road poll tax of one dollar and fifty cents which may be paid by one day's labor on the roads; and in 1911 a license fee of three dollars was levied on owners of motor vehicles, the revenue thus derived to be placed in the county road fund.

OHIO

The State Highway Commissioner is appointed by the Governor for a term of four years at an annual salary of \$2,500. The highway commission is required to cooperate in the building of roads in those counties which comply with the provisions of the act. The State Highway Commissioner approves all applications, prepares plans and specifications, submits estimates of the cost of work, advertises for bids, and apportions the cost among the State, county, township, and abutting property.⁶⁷²

Ohio gives a substantial amount of State aid for highway purposes. Application for the same may be made by the boards of county commissioners or by abutting property owners. The State aid fund consists of an annual appropriation of \$158,000, which must be equitably distributed among the counties, the State paying fifty per cent of the cost of State aid roads, the county twenty-five per cent, the township fifteen per cent, and the owners of abutting property ten per cent. The township trustees are authorized to apportion the amount to be paid by the owners of abutting property on the basis of benefits received. All State aid roads must be kept in good condition by the county commissioners, but in case of failure to do so the State Highway Commissioner may do the work and take the cost from any fund apportioned to said county.

Local jurisdiction over roads is vested in the board of county commissioners for county roads and in the township trustees for township roads, the county and township road supervisors being independent of each other. Good roads districts, however, may be formed, the board of county commissioners being given authority in such cases to appoint road commissioners, who in turn may appoint an engineer to do the necessary work. A township, with the approval of the people at a special election, may also be organized into a good roads district with power to appoint road commissioners to superintend the work.

The revenue system of Ohio, judged from the standpoint of road administration, is very complicated. Money is derived for roads and bridges from the following sources: first, a tax varying from one-half to five and one-half mills, depending upon the assessed valuation, levied by the board of county commissioners; second, an additional tax of not more than five-tenths of a mill for the creation of a State and county improvement fund, also levied by the board of county commissioners; third, county bonds which may run not more than three years; fourth, township bonds to pay for road improvements; fifth, so-called district bonds issued in a good roads district, with the approval of the voters, to an amount not exceeding \$100,000; and sixth, a township tax of not more than six mills on each dollar of assessed valuation in the township. In addition to this, all male citizens not exempt by law are required to perform two days' labor on the highways or commute for the same by the payment of three dollars. All property taxes must be paid in cash and convicts may be required to crush stone and manufacture road materials.

OKLAHOMA

The Constitution of Oklahoma directs the legislature to establish a Department of Public Highways and also grants authority to create improvement districts for the building and maintaining of public roads. Such a department has been created, the Governor having authority to appoint, with the approval of the Senate, a State Highway Commissioner who holds office for a term of four years and receives an annual salary of twenty-five hundred dollars.⁶⁷³ The State Highway Commissioner is required to prepare standard specifications for the construction and maintenance of roads, also a general highway plan for the State, and collect information as to the mileage, character, and

condition of highways throughout the State. All local road officials are required to furnish the commissioner any information which he may require concerning the cost of building and maintaining highways in their particular jurisdictions. Finally, a motor vehicle tax of one dollar annually is levied for the support of the State Highway Department.

The county commissioners have jurisdiction over what are termed county roads and the township board has general supervision over township roads. Township boards acting as township highway commissioners divide their townships into a convenient number of road districts, appointing supervisors to take charge of the work therein. The county commissioners may appoint a county engineer who shall be the same person as the county surveyor if the latter possesses a practical knowledge of civil engineering.

In 1905 an act was passed whereby on petition of not less than one hundred freeholders the board of county commissioners of any county is required to submit to a vote of the people the question of adopting a system of county supervisors of highways. In counties adopting this system the office of county surveyor is abolished and that of county engineer created in lieu thereof. Road improvement districts of not less than eighteen square miles may be created in any county upon a written petition signed by fifteen per cent of the qualified electors of a proposed district, seventy-five per cent of the cost of road improvement to be paid by the district and twenty-five per cent by the county.

Revenue for roads and bridges is obtained from township and county levies, also by the issue of county and township bonds. The township board may levy a township road and bridge tax of not more than five mills on the dollar. County bonds for highway purposes may be issued not in excess of two per cent of the assessed valuation of the county if the same has been approved by a three-fifths vote of the people.

Under the same conditions the township may issue bonds not to exceed three per cent of the assessed valuation. Every male citizen not exempt by law is required to work four days on the public roads or commute for the same by the payment of five dollars in money. The law also authorizes the working of convicts on the highways.⁶⁷⁴

OREGON

The public roads of Oregon are under the general supervision of the county courts, as is also the case in Kentucky and Missouri. The court is required to divide the county into road districts, appointing a road supervisor for each district, and may appoint a county road master or masters who must devote their whole time to the work, which is done either by contract or by hired labor.

Revenue is obtained for road and bridge purposes by a levy of not more than ten mills in any road district if the same has been approved at a meeting of at least ten per cent of the taxpayers of the district making the levy.⁶⁷⁵ Fifty per cent of the money levied by the county is apportioned among the several road districts, and the tax must be paid in cash. A poll tax of three dollars must also be paid in money by every male citizen not exempt by law. Finally, a system of convict labor is provided and in 1911 the Legislative Assembly passed a law fixing a graduated license fee on motor vehicles, the proceeds of which are to be paid into the State treasury and known as "The Motor Vehicle Fund."⁶⁷⁶

PENNSYLVANIA

The State Highway Commissioner is appointed by the Governor with the consent of the Senate for a term of four years. He must be an experienced road builder, receives an annual salary of \$8,000, and is required to furnish a bond in the sum of \$50,000, to be approved by the Governor, for the

faithful performance of his duties. The Governor also is required to appoint two Deputy State Highway Commissioners, each at a salary of \$6,000 per annum, an expert accountant at a salary of \$3,000 per annum, and a chief engineer at a salary of \$7,000 per annum. The State Highway Commissioner in turn shall appoint one assistant to the chief engineer at a salary of \$3,600 per annum, fifty superintendents of highways, and fifteen additional civil engineers at liberal salaries.⁶⁷⁷

The State Highway Commissioner prepares plans and specifications, makes necessary surveys and estimates of the cost of work, apportions the State aid fund, determines the standard of construction in the various localities, and may reject any and all bids if the prices are materially higher than his own estimates. He is also required to compile highway statistics, investigate road building, and may be consulted by the various local highway authorities.

On petition by the supervisor of any township and application by the board of county commissioners State aid may be obtained for the building of permanent highways. In such cases, however, the township is required to levy a cash road tax and may issue bonds to pay its share of the expense. The sum of \$6,356,232.47 was appropriated to carry out the provisions of this act. The expense of improving highways is paid on the following basis: three-fourths by the State, one-eighth by the county, and one-eighth by the township. It should also be noted that ten per cent of the amount available for State aid is set apart for the maintenance of highways and distributed among the localities by the State Highway Commissioner on a mileage basis.

From the standpoint of local supervision and control Pennsylvania has a somewhat complicated system. Largely as the result of geographical and historical development, local government is an instructive mixture of the township and county principles. The roads of the county are under

the jurisdiction of the county commissioner. In order to improve roads, however, the consent of the grand jury and the court of quarter sessions is required. In townships having a population of less than three hundred, three road supervisors are elected, who serve for a term of three years, and who divide their respective townships into road districts containing not less than five miles of road and appoint a road master for each district.

Revenue for road and bridge purposes is obtained from the following sources: first, a county levy of not more than two mills on the dollar for improving important county roads; second, a township levy of not more than ten mills on the dollar for constructing and repairing bridges; third, an additional levy of ten mills may be levied by the court of quarter sessions upon petition of the township board of supervisors; fourth, by the issue of road bonds under certain conditions and limitations; and fifth, by the State tax levy already noted. All road taxes must be paid in cash, although it is provided that townships at their annual meeting may by a majority vote adopt the labor system. Convict labor may also be employed when deemed expedient.

RHODE ISLAND

A State Board of Public Roads consisting of five qualified electors, one from each county in the State, is appointed by the Governor for a term of four years, each receiving an annual salary of \$1,000, but not being required to give their full time to the work.⁶⁷⁸ This board, acting as a highway commission, makes an annual report to the General Assembly on the subject of roads. No work, aside from preliminary surveys, is done until the report of the commission has been approved by the General Assembly and an appropriation of money made for the purpose of the proposed road improvement. State roads are constructed entirely at State expense, no aid being given by counties or minor divisions.

In 1906 a bond issue of six hundred thousand dollars was authorized to provide for a highway construction fund, and a second bond issue of the same amount was made in 1909 to complete the system of State roads. The proceeds of a graduated license fee on motor vehicles are used for the repair of State highways under the supervision of the State Board of Public Roads.

From the standpoint of local administration the township is the important unit of local government. The town council is required to divide the town into not more than four districts, annually electing one surveyor of highways for each district. Each town at the regular town meeting should annually raise and appropriate such sum as may be deemed necessary for the construction and maintenance of highways and bridges. All road taxes must be paid in cash.

SOUTH CAROLINA

In the eight counties of South Carolina where the township system of road supervision prevails, the township board, with the approval of the county commissioners or the supervisors of the county, is required to divide the township into a convenient number of road districts and appoint an overseer for each district. In all the remaining counties jurisdiction over the public roads is vested in the board of county commissioners and the county supervisor. In counties under this system the township constitutes the highway district and the board of county commissioners, acting with the county supervisor, is authorized to appoint an overseer for each township.⁶⁷⁹ In 1909, however, certain counties were authorized to adopt the contract system and to employ superintendents and engineers and lay out a plan of road construction.⁶⁸⁰

Revenue for road and bridge purposes is raised by the county or township, depending upon the system of local government as above outlined, the regular levy being lim-

ited to one mill on the dollar. The township board may make an additional levy of not more than two mills when the same has been approved by a vote of the people. All male citizens not exempt by law are required to perform not less than two nor more than eight days labor on the public highways or commute for the same by the payment of not less than one dollar nor more than three dollars per day. Some counties require all road taxes to be paid in cash. Finally, a system of convict labor is provided by the laws of South Carolina.

SOUTH DAKOTA

General jurisdiction over highways is vested in the board of county commissioners, which divides the county into a suitable number of road districts and appoints a road supervisor for each district. In counties under township organization, however, the township authorities have supervision over all roads located therein and are required to divide each township into road districts and appoint an overseer for each district. In other words, two distinct systems of local supervision and control of highways prevail in South Dakota much the same as in Illinois.⁶⁸¹

Revenue is obtained by a county levy of not more than two mills, a township levy of not more than five mills, and a poll tax of one dollar and fifty cents which may be paid in money or by one day's labor, unless the township has adopted the cash system, in which case road work is let by contract.

TENNESSEE

The State Highway Commission of Tennessee consists of three members appointed by the Governor, one from each grand division of the State, who serve for a term of three years without compensation.⁶⁸² It does not appear, however, that this commission has been granted any substantial power or authority.

Jurisdiction over public highways and bridges is vested in the county court, which is required to divide the county into one or more road districts and elect a road commissioner for each district. The county court may also elect a board of three turnpike commissioners, the chairman of the court to be ex-officio chairman of the board, the other two members being freeholders of the county, but not members of the court.

Revenue for roads and bridges is obtained from the following sources: first, a road poll tax of not less than four nor more than eight days, which may be commuted by paying seventy-five cents per day in cash; second, a levy of two mills by the county court on all property outside of incorporated towns and cities, provided any person may work out two-thirds of this tax where his property is situated; third, an ad valorem tax of not less than one nor more than three mills on all property in the county outside of incorporated towns and cities; fourth, county bond issues authorized by special acts of the legislature and approved by the people; and fifth, a bridge tax of two mills on the dollar levied by the county court. The road tax of incorporated towns and cities is levied by the proper municipal authorities. Finally, convicts may be worked on the public highways subject to the direction of the county court.

TEXAS

The county commissioners have jurisdiction over the public highways, each commissioner being a road supervisor within his own district. They have power to divide the county into precincts and appoint an overseer to supervise the work in each precinct. The commissioners' court, however, may appoint one county road superintendent, who shall have supervision over all the public roads in his county and over all county convicts working on the roads.⁶⁸³

The commissioners of each county may levy a road tax

of not more than one and one-half mills on the taxable valuation, and an additional road and bridge tax of not more than one and one-half mills if agreed to by a majority of the taxpayers. In 1907 an act was passed authorizing any county or political subdivision thereof to issue bonds for constructing and maintaining public roads with the approval of the people by a two-thirds vote. The bonds so issued must not exceed twenty-five per cent of the assessed value of real property, may extend forty years, and bear interest not to exceed five and one-half per cent, a tax of not more than one and one-half mills being levied to pay the interest and principal of said bonds. All male citizens not exempt by law are required to work on the roads not more than five days in each year or commute for the same by the payment of one dollar for each day.

UTAH

The State Highway Commission serves without compensation, being composed of the Governor, the State Engineer, the State Treasurer, one member of the faculty of the Utah Agricultural College selected by its Board of Trustees, and one member of the faculty of the University of Utah selected by its Board of Regents. The commission thus constituted is clothed with authority to select the roads comprising the system of State highways, prepare a map of the roads thus designated, furnish plans and specifications on the application of county commissioners, prepare a road manual for the assistance of local road officials, and in fact exercise a substantial supervision and control over the highways of the State.⁶⁸⁴

In 1911 the legislature of Utah made an annual appropriation of \$60,000 for a State road fund to be available for the construction of State roads in each county of the State in equal proportions.⁶⁸⁵

Jurisdiction over the highways is vested in the boards of

county commissioners, who divide their respective counties into road districts, appointing biennially a road supervisor for each district. The county commissioners may also divide their counties into special districts for the purpose of constructing permanent roads.

No special limit is placed upon the amount of taxes to be levied for road purposes, the county commissioners being authorized to appropriate such sums as they deem necessary. Bonds may be issued by the commissioners when approved by a majority vote of the people, and a special road tax may be levied for the construction of permanent highways. When a special tax, however, is levied for this purpose the taxable property is divided into three equal sections, the first section adjacent to the road bearing fifty per cent of the cost, the middle section thirty per cent, and the section most remote twenty per cent. Finally, a road poll tax of two dollars is levied and must be paid in cash.

VERMONT

The State Highway Commissioner is appointed by the Governor, with the consent of the Senate, and is clothed with authority to direct the expenditure of all moneys appropriated by the State or appropriated to towns or incorporated villages for highway purposes. The commissioner shall also make rules and regulations governing the expenditure of highway funds and, with the advice and consent of the Governor, shall annually appoint not to exceed one supervisor for each county to assist him in the performance of his duties.⁶⁸⁶

While the county, therefore, is an important unit of government from the standpoint of State administration, it has no local supervision or control of highways as such. In Vermont the town is the unit of local administration, the selectmen being granted a substantial amount of power and authority. In addition to other functions, the town is the

unit for the maintenance of highways constructed by the State.

Revenue for road and bridge purposes is obtained by a State highway tax of five mills, a town tax of five per cent on the grand list, and a license tax on motor vehicles. An appropriation of \$150,000 was made in 1910 for permanent highway improvements. The automobile tax now amounts to \$60,000 a year and is used as a maintenance fund.

VIRGINIA

A State Highway Commissioner who must be a civil engineer is appointed by the Governor, with the consent of the General Assembly in joint session. His term of office is six years and his salary \$3,000 per annum. The State Highway Commissioner and the professors of civil engineering in the University of Virginia, the Virginia Military Institute, and the Virginia Agriculture and Mechanical College and Polytechnic Institute constitute the State Highway Commission. The commission prepares plans, specifications, and estimates of the cost of permanent highway improvements, surveys proposed State roads, has supervision of the construction and repair of main traveled roads, is required to supply technical information to local authorities, and approves or disapproves contracts after the same have been let by local authorities.⁶⁸⁷

From the standpoint of local administration Virginia in common with a great many other States has a somewhat complicated system. Some counties operate under special road laws. In general, however, the supervision of highways is vested in county boards of supervisors, county superintendents of roads, road sub-district boards and road sub-district surveyors. The board of county supervisors appoints biennially a county superintendent of roads who must be experienced in road building or preferably a civil engineer. This officer superintends the work of opening,

repairing, and maintaining county roads and bridges. If deemed necessary the superintendent of roads, with the approval of the county board of supervisors, may divide the county into road districts each of which usually consists of at least one magisterial district.

State aid is granted on application of the proper county authorities, provided one-half of the expense of construction is paid by the county. The sum of \$250,000 is annually appropriated for this purpose. The road authorities of each county are also clothed with authority to determine what part of the fifty per cent borne by the county shall be paid by the small road divisions or by private contributions.⁶⁸⁸

In addition to the State appropriation already noted the board of supervisors of each county may levy a tax of not more than four mills on a dollar of assessed valuation, also a tax of not more than four mills on all taxable property in the several magisterial districts, and finally, counties where no special road law is in force may be divided into road sub-districts by the board of supervisors, and a tax of not more than five mills levied, with the approval of a majority vote of the qualified electors. Aside from the taxes thus levied bond issues are authorized to an amount which would be met by the imposition of an annual tax of not more than two mills on a dollar, providing the same has been approved by a vote of three-fifths of the qualified voters. Finally, convict labor is provided for by the laws of Virginia.

WASHINGTON

The State Highway Commissioner of Washington is appointed by the Governor for a term of four years and receives an annual salary of \$5,000. The State Highway Board is composed of the Governor, the Auditor, the State Treasurer, the State Highway Commissioner, and a member of the State Railroad Commission to be selected by the

Governor. The ex officio members of the Board serve without compensation. The State Highway Commissioner is required to compile statistics relating to public highways throughout the State, may be consulted by county officers, shall assist local road officials when requested to do so, and is required to submit a report ninety days before each session of the legislature.⁶⁸⁹

The unit of local administration is the county, the board of county commissioners having general charge of road work and the levying of taxes for road and bridge purposes. The commissioners are required to divide their respective counties into not more than twenty-four districts and appoint one road supervisor for each district. The county surveyor is elected to office, must be a competent civil engineer, and is given substantial authority in road and bridge matters.

In 1911, however, a law was passed permitting counties to adopt township organization. In counties which take advantage of this option, the township supervisors may divide their townships into road districts and appoint a road overseer for each district, thus representing a somewhat reactionary tendency toward administrative decentralization.⁶⁹⁰

Revenue for road and bridge purposes is obtained from the following sources: county bonds issued in an amount not exceeding five per cent of the taxable valuation; a tax of not to exceed four mills on all the taxable property in the county levied by the board of county commissioners; a tax of not more than two mills on the dollar of all taxable property in each road district also levied by the county commissioners for the district road and bridge fund; a license fee of two dollars on motor vehicles; and finally, a State tax of one mill on all taxable property in the State. Washington also provides for a somewhat comprehensive system of convict labor on the public highways.

WEST VIRGINIA

The State Highway Commissioner is appointed by the Governor for a term of four years and receives an annual salary of \$3,000. The commissioner distributes bulletins concerning the construction and maintenance of roads, makes biennial reports to the Governor and legislature recommending advisable legislation, exercises general supervision over all roads constructed, improved or maintained either in whole or in part by State money, prepares rules and regulations for county engineers, holds public meetings for the discussion of all questions relating to the general subject of roads, examines and approves plans and specifications for State aid roads, causes tests of road materials to be made, and finally examines all accounts and records made by various road officials.⁶⁹¹

From the standpoint of local administration, jurisdiction over roads is vested in the county court, which appoints a competent man as a road supervisor for each magisterial district, who under the direction of the court divides his district into convenient road precincts. In lieu of this system, however, the court may appoint a county road engineer, who is given supervision of all road work in the county.

State aid is granted if plans and specifications prepared by the county engineer have been approved by the county court and by the State Highway Commission. The county court advertises for bids, but it should be noted that the contract must be approved by the State Highway Commissioner. The State pays one-third of the cost of constructing county roads out of a fund created by levying a tax of not more than one mill on a dollar. In addition to the State aid fund the county court is authorized to levy such taxes as may be necessary for the construction and maintenance of roads. What is called a district tax of one dollar may be levied on every male inhabitant not exempt by law. Finally, counties, cities, towns, and villages are authorized to issue

bonds for the purpose of improving roads. All road taxes are paid in the same manner as other county and State taxes and the county road engineer is authorized to employ convict labor on the highways.⁶⁹²

WISCONSIN

The State Highway Commission consists of the Dean of the College of Engineering of the State University, the State Geologist, and three other members appointed by the Governor, all of whom serve without compensation. The commission has authority to employ, remove, and fix the salaries of engineers and experts as well as the regular clerical force of the office.⁶⁹³ The law of 1911 made an annual appropriation of \$350,000 for road and bridge construction and \$40,000 additional for engineering and other expenses of the commission.

The county board of each county is required to appoint a competent man as county highway commissioner. The new law provides for a continuous system of county roads or prospective State aid highways. These roads may be constructed by the township, county, and State acting jointly, each paying one-third of the cost. Improvements are made by the county highway commissioner under the general supervision of the State Highway Commission. Counties may pay two-thirds or four-fifths of the cost, the State paying the remaining one-third or one-fifth in cases where townships have not petitioned for improvement. Bridges and improved stone or gravel roads are maintained by the counties, but ordinary dirt roads are maintained by the townships. Finally, the cost of bridges over six feet in span is paid two-fifths by the township, two-fifths by the county, and one-fifth by the State.

It would seem, therefore, that the distribution of authority in road and bridge matters has been worked out on a somewhat complex but scientific basis. At the head of the

system is the State Highway Commission which exercises supervision and control through county highway commissioners appointed by the various county boards of supervisors. Jurisdiction over township roads is vested in the township board composed of three members elected annually, who divide their township into small road districts, appointing a road superintendent or road master for each district.

Revenue is obtained from the following sources: a poll tax of one dollar and fifty cents which may be worked out; a county levy of not more than two mills for the purpose of building county roads; a township levy of not less than one nor more than seven mills; an additional levy of not more than fifteen mills if the same has been authorized by a vote of the town meeting; a special tax of not less than one-half nor more than one mill may be voted at the annual township meeting for the construction of permanent highways; an issue of township or county bonds; and finally, the State appropriation already mentioned.

WYOMING

The county commissioners have jurisdiction over the public highways and may divide the county into a convenient number of road districts, one road supervisor being elected for each district. If a county is not divided into road districts, a county road supervisor is elected by the people.⁶⁹⁴

Revenue for the support of roads and bridges is derived from an annual county levy of not more than twelve mills on the dollar. A road building tax of two dollars may also be levied by the county commissioners, which may be paid in cash or worked out on the roads. Finally, in 1911 a law was passed establishing a regular system of State highways and providing for the construction, repair, and maintenance of the same by convict labor.⁶⁹⁵

NOTES AND REFERENCES

NOTES AND REFERENCES

CHAPTER I

¹ Newhall's *A Glimpse of Iowa in 1846*, p. 12.

² The facts concerning the roads of early Iowa here presented are taken largely from an article by Jacob Van der Zee on *The Roads and Highways of Territorial Iowa* in *The Iowa Journal of History and Politics*, Vol. III, pp. 175-225.

³ Van der Zee's *The Hollanders of Iowa*, p. 136.

⁴ *Iowa Historical Record*, Vol. XII, pp. 405, 406. The writer was Judge George G. Wright.

⁵ Shambaugh's *Documentary Material Relating to the History of Iowa*, Vol. II, p. 283; Vol. III, pp. 266, 267.

⁶ Aurner's *History of Township Government in Iowa*, Chapter XVII. This monograph is in manuscript form in the possession of the State Historical Society of Iowa which plans to publish it during the coming year.

⁷ Aurner's *History of Township Government in Iowa*, Chapter III.

⁸ *Acts of the State of Ohio*, 1st Session, 3rd General Assembly, 1804-1805, pp. 364, 365; *Laws of the Territory of Iowa, 1839-1840*, p. 48.

⁹ *Laws of the Territory of Iowa, 1838-1839*, p. 428; *Laws of the Territory of Michigan* (Lansing: 1874), Vol. III, p. 1211; *Laws of the Territory of Wisconsin, 1837-1838*, p. 175.

¹⁰ *Laws of the Territory of Iowa, 1839-1840*, pp. 115, 133; Chase's *Statutes of Ohio*, Vol. III, pp. 1850-1859.

¹¹ *Laws of the Territory of Michigan*, Vol. III, p. 820.

¹² *Laws of the Territory of Michigan*, Vol. III, p. 848.

¹³ *Laws of the Territory of Michigan*, Vol. III, p. 1045.

¹⁴ *Laws of the Territory of Michigan*, Vol. III, p. 982.

¹⁵ *Laws of the Territory of Michigan*, Vol. III, p. 1038.

¹⁶ *Laws of the Territory of Michigan*, Vol. III, p. 1326.

¹⁷ *Laws of the Territory of Michigan*, Vol. III, p. 1049.

¹⁸ *Laws of the Territory of Michigan*, Vol. III, p. 1050.

¹⁹ *Laws of the Territory of Michigan*, Vol. III, p. 1050.

²⁰ *Laws of the Territory of Michigan*, Vol. III, pp. 1051, 1052.

²¹ *Laws of the Territory of Michigan*, Vol. III, p. 1053.

²² *Laws of the Territory of Michigan*, Vol. III, pp. 1054, 1055.

²³ *Laws of the Territory of Michigan*, Vol. III, p. 1055.

²⁴ *Laws of the Territory of Michigan*, Vol. III, pp. 1056, 1057.

²⁵ *Laws of the Territory of Michigan*, Vol. III, pp. 1057, 1058.

²⁶ *Laws of the Territory of Michigan*, Vol. III, pp. 1058, 1059.

²⁷ *Laws of the Territory of Wisconsin*, 1836, p. 64.

²⁸ The three Territorial roads established in the Iowa country by the Legislative Assembly of the original Territory of Wisconsin were as follows:

1. From Farmington on the Des Moines River to Prairie du Chien, via Moffit's mill, Burlington, Wapello, and Dubuque.—*Laws of the Territory of Wisconsin*, 1836, p. 73.

2. From Bloomington (now Muscatine) to the forty-mile point on the Cedar River, via Geneva, Moscow, and Rochester.—*Laws of the Territory of Wisconsin*, 1837-1838, p. 191.

3. From Dubuque to the settlement in Delaware County west of Andrew Bankston's, via Whiteside's mill on the Little Maquoketa.—*Laws of the Territory of Wisconsin*, 1837-1838, p. 192.

²⁹ *Laws of the Territory of Wisconsin*, 1836, p. 73.

³⁰ *Laws of the Territory of Wisconsin*, 1836, pp. 73-75.

³¹ The plats and field notes of all, or at least, of a large number of the early Territorial roads provided for by special act are now on file in the Land Office records in the office of the Secretary of State at Des Moines.

- ³² *Laws of the Territory of Wisconsin*, 1836, p. 75.
- ³³ *Laws of the Territory of Wisconsin*, 1837-1838, pp. 175, 176.
- ³⁴ *Laws of the Territory of Wisconsin*, 1837-1838, p. 263.
- ³⁵ *Laws of the Territory of Wisconsin*, 1837-1838, pp. 138-144.
- ³⁶ *Laws of the Territory of Wisconsin*, 1837-1838, p. 263.
- ³⁷ *Laws of the Territory of Wisconsin*, 1837-1838, p. 264.
- ³⁸ *Laws of the Territory of Wisconsin*, 1837-1838, p. 264.
- ³⁹ *Laws of the Territory of Wisconsin*, 1837-1838, p. 266.
- ⁴⁰ *Laws of the Territory of Wisconsin*, 1837-1838, p. 267.
- ⁴¹ *Laws of the Territory of Wisconsin*, 1837-1838, p. 269.
- ⁴² *Laws of the Territory of Wisconsin*, 1837-1838, pp. 270-272.
- ⁴³ *Laws of the Territory of Wisconsin*, 1837-1838, p. 270.
- ⁴⁴ *Laws of the Territory of Wisconsin*, 1837-1838, pp. 270-272.
- ⁴⁵ *Laws of the Territory of Wisconsin*, 1837-1838, pp. 272, 273.
- ⁴⁶ *Laws of the Territory of Wisconsin*, 1837-1838, p. 275.

CHAPTER II

⁴⁷ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. I, p. 82.

⁴⁸ *Laws of the Territory of Iowa*, 1838-1839, pp. 428, 429.

⁴⁹ Chase's *Statutes of Ohio*, Vol. III, pp. 1847-1850.

⁵⁰ *Laws of the Territory of Iowa*, 1838-1839, p. 87.

⁵¹ *Laws of the Territory of Iowa*, 1838-1839, p. 165.

⁵² *Laws of the Territory of Iowa*, 1838-1839, pp. 254, 255. The toll rates specified in this act were as follows for each ten miles of road:

“For every four-wheeled carriage, wagon, or other vehicle, drawn by two horses, or oxen, twenty-five cents; and for each horse, or ox, in addition, six cents.

“For every two-wheeled carriage, wagon, or other vehicle, drawn by two horses, or oxen, twenty cents; and for each horse, or ox, in addition, six cents.

“For every horse and rider six and a fourth cents.

“For every horse, mule, or ox, led or driven, three cents.

“For every head of neat cattle, two cents.

“For every head of sheep, or hogs, one cent.

“For every four-wheeled pleasure carriage, drawn by two horses, forty cents.

“For every two-wheeled pleasure carriage, drawn by one horse, twenty-five cents.

“For every four-wheeled pleasure carriage, drawn by one horse, twenty-five cents.

“For every chaise, riding chair, gig, sulkey, or cart, or other two wheeled carriage of any kind, drawn by one horse, twelve and a half cents.”

⁵³ See below, p. 58.

⁵⁴ The acts creating Territorial roads may readily be found by consulting the four bound volumes of the session laws of the Legislative Assembly from 1838 to 1846. For a general discussion of Territorial roads, see Van der Zee's *The Roads and Highways of Territorial Iowa* in *The Iowa Journal of History and Politics*, Vol. III, pp. 175-225.

⁵⁵ *Laws of the Territory of Iowa*, 1838-1839, p. 435.

⁵⁶ *Laws of the Territory of Iowa*, 1839-1840, pp. 47, 48.

⁵⁷ *Laws of the Territory of Iowa*, 1839-1840, p. 48.

⁵⁸ *Laws of the Territory of Iowa*, 1839-1840, pp. 50, 51.

⁵⁹ Chase's *Statutes of Ohio*, Vol. III, p. 1854.

⁶⁰ *Laws of the Territory of Iowa*, 1839-1840, pp. 115-120, 133-138.

⁶¹ *Laws of the Territory of Iowa*, 1839-1840, p. 133; Chase's *Statutes of Ohio*, Vol. III, p. 1850; *Acts of the State of Ohio*, 3rd General Assembly, 1804-1805, p. 435.

⁶² *Laws of the Territory of Iowa*, 1839-1840, p. 133.

⁶³ *Laws of the Territory of Iowa*, 1839-1840, pp. 134, 135.

⁶⁴ See above, p. 16.

⁶⁵ *Laws of the Territory of Iowa*, 1839-1840, p. 135.

- ⁶⁶ *Laws of the Territory of Iowa*, 1839-1840, p. 135.
- ⁶⁷ *Laws of the Territory of Iowa*, 1839-1840, pp. 135, 136.
- ⁶⁸ *Laws of the Territory of Iowa*, 1839-1840, p. 138.
- ⁶⁹ For references to these special acts see *Laws of the Territory of Iowa*, 1840-1841, Index, pp. 133, 134.
- ⁷⁰ *Laws of the Territory of Iowa*, Extra Session, 1840, p. 19.
- ⁷¹ *Laws of the Territory of Iowa*, 1840-1841, p. 43.
- ⁷² *Laws of the Territory of Iowa*, 1840-1841, p. 92.
- ⁷³ *Laws of the Territory of Iowa*, 1839-1840, p. 115.
- ⁷⁴ *Journal of the House of Representatives*, 1840-1841, p. 38.
- ⁷⁵ *Journal of the House of Representatives*, 1840-1841, p. 35.
- ⁷⁶ *Laws of the Territory of Iowa*, 1841-1842, pp. 69, 70.
- ⁷⁷ *Laws of the Territory of Iowa*, 1841-1842, p. 26.
- ⁷⁸ *Laws of the Territory of Iowa*, 1841-1842, pp. 27, 28.
- ⁷⁹ *Laws of the Territory of Iowa*, 1841-1842, pp. 97, 98.
- ⁸⁰ *Journal of the House of Representatives*, 1841-1842, p. 31.
- ⁸¹ *Journal of the House of Representatives*, 1841-1842, p. 75.
- ⁸² *Laws of the Territory of Iowa*, 1841-1842, pp. 69, 70.
- ⁸³ *Journal of the House of Representatives*, 1841-1842, p. 85.
- ⁸⁴ Brindley's *History of Taxation in Iowa*, Vol. I, p. 26.
- ⁸⁵ *Laws of the Territory of Iowa*, 1841-1842, p. 69.
- ⁸⁶ *Laws of the Territory of Iowa*, 1841-1842, pp. 69, 70.
- ⁸⁷ *Laws of the Territory of Iowa*, 1841-1842, p. 70.
- ⁸⁸ The Moss substitute for section 5 was as follows:
"That it shall be the duty of each supervisor to have the money expended upon the road or roads, in his district, raised for that purpose, as provided in the first section of this act; and if found to be insufficient to put the road or roads in good order, and keep them in such condition, it shall be the duty of such supervisor, to order out every person in his district, subject to labor on roads, as many days as, in his opinion, shall be necessary to put such road

or roads in good repair. And if any person shall fail or refuse, without good cause, to obey the summons of said supervisor, and work, as aforesaid, he shall forfeit and pay the sum of one dollar and fifty cents, for each and every refusal or neglect; to be recovered by action before any Justice of the Peace, in the same manner as other debts are recoverable; and in case of any such refusal or neglect of any person to attend, as aforesaid, without good cause, to make complaint to any Justice of the Peace, in the name of such road district, and further attend to the collection of such forfeit, which said sum shall be expended on the roads in his district.

“That such supervisor shall be accountable in damages, to all and every person who shall receive special damage by traveling on any of the said roads in his district, by his neglect: Provided, however, that no supervisor shall be accountable for any damage sustained by any temporary obstruction that may be thrown in the way, and of which said supervisor has not had at least three weeks’ notice.

“And the question being put, Will the House adopt the substitute? Was determined in the negative.”—*Journal of the House of Representatives, 1841–1842*, p. 86.

⁸⁹ *Laws of the Territory of Iowa, 1841–1842*, p. 26.

⁹⁰ *Laws of the Territory of Iowa, 1839–1840*, p. 133.

⁹¹ *Laws of the Territory of Iowa, 1841–1842*, p. 27.

⁹² *Laws of the Territory of Iowa, 1841–1842*, pp. 27, 28.

⁹³ See below, pp. 55, 123.

⁹⁴ *Laws of the Territory of Iowa (Local), 1842–1843*, pp. 124–126.

⁹⁵ *Revised Statutes of the Territory of Iowa, 1842–1843*, pp. 519–525.

⁹⁶ *The Iowa Standard (Iowa City)*, Vol. III, No. 9, February 2, 1843.

⁹⁷ *Iowa Capitol Reporter (Iowa City)*, Vol. II, No. 3, December 24, 1842.

⁹⁸ *Revised Statutes of the Territory of Iowa, 1842–1843*, pp. 618, 619.

⁹⁹ *Revised Statutes of the Territory of Iowa, 1842-1843*, pp. 623-625.

¹⁰⁰ See below, pp. 183, 263, 264.

¹⁰¹ *Laws of the Territory of Iowa, 1843-1844*, pp. 213-219.

¹⁰² *Laws of the Territory of Iowa, 1843-1844*, p. 25.

¹⁰³ *Laws of the Territory of Iowa, Extra Session, 1844*, p. 7.

¹⁰⁴ *Laws of the Territory of Iowa, Extra Session, 1844*, pp. 9-11.

¹⁰⁵ *Laws of the Territory of Iowa, 1845*, pp. 47, 48.

¹⁰⁶ *Laws of the Territory of Iowa, 1845*, pp. 48, 49.

¹⁰⁷ *Laws of the Territory of Iowa, 1845*, pp. 27-30.

¹⁰⁸ *Journal of the House of Representatives, 1845*, p. 10.

¹⁰⁹ See above, p. 47.

¹¹⁰ *Laws of the Territory of Iowa, 1845*, p. 28.

¹¹¹ *Laws of the Territory of Iowa, 1845*, p. 47.

¹¹² *Laws of the Territory of Iowa, 1845*, p. 48.

¹¹³ *Laws of the Territory of Iowa, 1845*, p. 48.

¹¹⁴ *Laws of the Territory of Iowa, 1845*, pp. 48, 49.

¹¹⁵ *Laws of the Territory of Iowa, 1845-1846*, p. 33.

¹¹⁶ *Laws of the Territory of Iowa, 1845-1846*, pp. 41, 42.

¹¹⁷ *Laws of the Territory of Iowa, 1845-1846*, p. 40.

¹¹⁸ *Laws of the Territory of Iowa, 1845-1846*, pp. 145, 146.

¹¹⁹ *Laws of the Territory of Iowa, 1845-1846*, p. 42.

¹²⁰ *United States Statutes at Large, Vol. V*, p. 352.

¹²¹ Van der Zee's *The Roads and Highways of Territorial Iowa in The Iowa Journal of History and Politics, Vol. III*, pp. 221, 222.

¹²² *United States Statutes at Large, Vol. V*, p. 670.

¹²³ Irish's *History of Johnson County Iowa in The Annals of Iowa, Vol. VI*, p. 607. See also Van der Zee's *The Roads and*

Highways of Territorial Iowa in The Iowa Journal of History and Politics, Vol. III, p. 221.

¹²⁴ Aurner's *History of Johnson County*, Chapter X.

CHAPTER III

¹²⁵ *Laws of Iowa*, 1846-1847, pp. 250, 251; *Laws of Iowa*, Extra Session, 1848, p. 114.

¹²⁶ *Laws of Iowa*, 1846-1847, p. 116.

¹²⁷ *Laws of Iowa*, Extra Session, 1848, p. 44.

¹²⁸ The special acts establishing State roads may readily be found by consulting the bound volumes of the session laws.

¹²⁹ *Annals of Iowa* (Third Series), Vol. IV, p. 72.

¹³⁰ *Laws of Iowa*, 1848-1849, pp. 52-55.

¹³¹ *Laws of Iowa*, 1848-1849, pp. 52, 53.

¹³² *Laws of Iowa*, 1848-1849, p. 53.

¹³³ *Laws of Iowa*, 1848-1849, p. 54.

¹³⁴ See "An Act to authorize General Incorporations", approved February 22, 1847.—*Laws of Iowa*, 1846-1847, p. 101.

¹³⁵ *Laws of Iowa*, 1848-1849, p. 55.

¹³⁶ *Laws of Iowa*, 1850-1851, pp. 53-55.

¹³⁷ *Laws of Iowa*, 1850-1851, pp. 54, 55.

¹³⁸ The acts providing for these graded or plank roads may be found in *Laws of Iowa*, 1848-1849, pp. 52, 126, 159; 1850-1851, pp. 42, 53, 72, 78, 97, 139, 159, 161, 180; 1852-1853, p. 43.

¹³⁹ *Autobiographical Manuscript and Papers of James Harlan*.

¹⁴⁰ Van der Zee's *The Hollanders of Iowa*, p. 91.

Through the kindness of Mr. Ralph B. Smith of Keokuk the following interesting facts concerning the plank road leading from Keokuk up the valley of the Des Moines River have been secured:

The road ran from the corner of Fourteenth and Main Streets in Keokuk to a point about thirteen miles to the northwest of the city. The original plan seems to have been to build the road

through to Fort Des Moines (the present city of Des Moines), but the construction of the first thirteen miles exhausted the funds of the company. The road was financed by a stock company, but it has not been possible to discover the names of the stockholders.

The road was built in the years 1850 and 1851, the contractors being the firm of Brownell and Sprott, of whom William Brownell of Keokuk was the senior partner. "The road was constructed of stringers and planks cut from the surrounding timber. There were three stringers six by six of black walnut and the planks were eight feet long, two inches thick and of whatever breadth they squared." It seems that at first the planks were laid on loose, but that later they were spiked down to the stringers. There were at least two toll gates: one at the city limits of Keokuk, and the other about four miles out, opposite where the present County Home stands.

The road finally came into the possession of Harry Fulton, a former Deputy United States Marshal for that district, who later sold it to Lee County after a long controversy. The board of supervisors took up the planks and sold them for fire wood, and thus the existence of the road as a plank road came to an end. The route, however, was not abandoned, but is still the principal highway into Keokuk from the northwest.

In this connection it is believed that the following estimate of the cost of a proposed plank road from Keokuk to Montrose is illustrative of the cost of plank road construction in Iowa in general:

"A single track, for one mile, will require one hundred and forty thousand and eight hundred feet. This, at \$15 per thousand, will be \$2,112. Engineering, gates, bridges and contingencies, say \$500; making in all \$2,612 per mile, or the entire distance \$31,344. Putting the toll at 3 cents per mile, (the usual charge) and the travel at fifty teams daily, the road will earn during the year \$6,570. Deducting a dividend of 10 per cent. on the capital invested will leave \$3,436 to keep up repairs and pay charges."—*Keokuk Register*, Vol. II, No. 38, February 8, 1849.

Furthermore, an excellent idea of the methods of constructing plank roads is to be found in the following extract from a report made by H. W. Starr of Burlington at a meeting of citizens called to consider the question of building the plank road from Burlington to Mt. Pleasant:

“In the construction, steep inclinations are to be avoided,—never ascending more than one foot in thirty or forty. The road should be graded wide enough for two tracks. Two stringers, twelve by three, four feet apart, and centre to centre, are laid down flatwise and well imbedded in the earth. Across these at right angles, three inch plank, eight feet long, are laid. The earth is then to be well packed up to them, and the earth track sloped toward the ditches, and the road is complete. Many minor points, such as fastening down the planks, breaking joints, carrying off the water, preventing ruts alongside &c., are to be attended to, and readily occur to an observer.

“As to durability, experience is limited. One set of stringers will outlast two or three coverings of plank. The wear of the first year is equal to the next six. On one road, the passage of 16,000 teams wore a hemlock plank down one inch. Oak or pine is thought to be better than hemlock.”—*Keokuk Register*, Vol. II, No. 38, February 8, 1849.

¹⁴¹ For the special acts relative to these roads the reader is referred to the statute laws.

¹⁴² *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 35, August 27, 1850.

¹⁴³ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 65, November 5, 1850.

¹⁴⁴ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 80, December 10, 1850.

¹⁴⁵ *The Muscatine Journal*, Vol. II, No. 28, December 7, 1850.

¹⁴⁶ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 85, December 21, 1850.

¹⁴⁷ *The Muscatine Journal*, Vol. II, No. 28, December 7, 1850.

¹⁴⁸ The following is a statement from a contemporary source:

“In that excellent little treatise on plank roads by the Hon. Robert Dale Owen, the author, by way of illustrating some of the benefits arising to farmers and land holders upon the line of these roads, alludes to a farmer named Wilson, whose lands are divided by the road, built under the direction of Mr. O, running from New Harmony to Mt. Vernon. Mr. W. owns a thousand acres

of land, one hundred and fifty of which are cleared and under cultivation while the remaining eight hundred and fifty acres, rich, and heavily timbered, are still in a state of nature. The nearest available market to Mr. Wilson is Mt. Vernon, seven miles distant; to haul his wood thither on the old road required a four horse team, and in long days could make but two loads, one cord each, a day, which for family use would bring \$1.50 a cord; allowing \$2.50 a day for the hauling and added to this the price of chopping the two cords of wood at 40 cents a cord, Mr. W. would sink by the operation 30 cents a day.

“But how does the account stand by the use of the improved road? He can now haul with four horses upon a properly constructed wagon three cords of seasoned wood as easily as he could haul one on the old road, and can make his two trips a day at all seasons of the year, and in considerably shorter time than he could on the unimproved road. Each day, then, a single four-horse team can deliver six cords of wood, which, as before, is \$1.50; chopping six cords at 40 cents is \$2.40; add to the tolls, 30 miles at 3 cents per mile, 90 cents; making the cost of the six cords of wood delivered \$5.80. These six cords of wood bring \$9, leaving a daily profit of \$3.20.

“Now for the results. While the old road without toll gates, was the only medium of transportation, Mr. Wilson’s cord-wood, as an article of commerce, was worthless, while his land for agricultural purposes was entirely unavailable, except at a very considerable additional cost for clearing. But, by the use of the improved taxed road, the same worthless incumbrance becomes at once of so much value that it will pay more than twice over for clearing and fencing the land on which it stands, or allowing the usual quantity of wood which may be cut from such land, the clear profits arising from the wood from 100 acres may be put down at one thousand dollars. The author then continues:

“Let us suppose that he keeps two four-horse teams regularly running between his farms and Mount Vernon, conveying thither twelve cords of wood a day. To chop and haul this wood, he must employ regularly ten or twelve hands.

“Here, then, we have a mere improvement in a road creating permanent employment and giving lucrative business, furnishing

a livelihood to eight or ten additional laborers on a single farm, and returning to the owner of that farm a clear profit from this newly created business of \$700 or \$800 annually.”— *Muscatine Journal*, Vol. II, No. 28, December 7, 1850.

¹⁴⁹ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 84, December 19, 1850.

¹⁵⁰ *Constitution of Iowa*, 1846, Art. II, Sec. 18.

¹⁵¹ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 84, December 19, 1850.

¹⁵² The editorial in full reads as follows:

“To show, in some measure, the necessity of a general plank road law for the State of Iowa, we must consider that plank road companies are now being organized all over the State, none of which have the power of acquiring the right of way, and which can only carry out their objects by buying the land over which the road runs. This amounts to a denial of power to construct the road in many instances, and companies are to be put to great expense, trouble and delay in locating the routes of their roads.

“At the last session of the Ohio Legislature charters were granted to forty-eight companies to construct plank roads, in addition to several charters granted to turnpike companies, with permission to use plank to construct their roads, if found desirable. All this special legislation might have been avoided by a liberal and properly guarded general plank road law, such as exists in New York. In the latter State, 213 plank road companies had been organized up to the 15th of October last, with an aggregate of 2600 miles of plank road, and with a capital employed of more than \$4,500,000.

“In a general plank road law for our State, in our opinion there are several things that should be specially provided for. The provisions may be made applicable to all roads constructed by incorporated companies, whether rail roads, turnpike roads or plank roads; we only speak of the latter for facility of illustration. In the first place the law should provide that any incorporated road company may acquire the right of way through the land of any proprietor living on the proposed route, and the compensation awarded for damages sustained by such proprietor should be assessed by a jury, summoned under a writ of *ad quod damnum*.

This writ may be issued to the Sheriff of the county from the office of the clerk of the district court, and the proceedings of the Sheriff and jury might be returned to the office to undergo the supervision of the court at its next session.

“The law should further provide that in assessing the damages of any proprietor through whose land the road is to run, the jury shall be sworn to take into consideration any damage or inconvenience the owner may sustain, including the building of additional fences, as well as the benefit he is to derive from the road, including the increased value of his land and greater facilities in getting to market.

“All roads should further be declared public highways, and the offence of injuring or obstructing them should be made highly penal. The corporation building the road may be a private one, and the road may be private property, but in another sense the roads are public property and are for the public use. As a private association, the road company might not have the power to acquire the right of way under the constitution, even by paying compensation; but if the roads are declared public highways and set apart for the public use, no such constitutional questions can possibly arise. The Constitution of our State provides that ‘private property shall not be taken for public use without just compensation.’ The right of a road company to take private property for their use, even for a just compensation, may well be doubted, and to obviate the objection, we have made the above suggestions. Such a provision will not at all interfere with the right or power to collect tolls; for if the State would itself have the power to collect tolls on any public improvement, it may well grant such power to any company incorporated under a general law to construct a public road.

“The provisions above as to roads, should also include bridges. Ample inducements should be held out to our citizens to encourage their erection, and to capitalists abroad to invest their money in them.

“This may all be done by a general law; such may easily be framed, and such we hope the legislature will pass this winter. Its provisions should be liberal on the one hand and strictly guarded on the other. Let it lend the aid and countenance of the State to

every species of internal improvement, and at the same time let it put on every necessary restraint to prevent the possibility of abuse or fraud."—*The Burlington Tri-Weekly Telegraph*, Vol. I, No. 85, December 21, 1850.

¹⁵³ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 98, January 21, 1851.

¹⁵⁴ In the editorial referred to in the text, which is entitled "Burlington and Louisa County Plank Road", it was claimed that the people residing along the route of the proposed highway had contributed \$10,000, and that \$18,000 of the capital stock had to be subscribed before it was possible to establish a permanent organization. The city of Burlington was urged "to show some tangible evidence of their appreciation of the importance of this undertaking."—*The Burlington Tri-Weekly Telegraph*, Vol. I, No. 98, January 21, 1851.

¹⁵⁵ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 118, March 8, 1851.

¹⁵⁶ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 111, February 20, 1851.

¹⁵⁷ *Constitution of Iowa*, 1846, Art. IX, Sec. 1.

¹⁵⁸ *Constitution of Iowa*, 1846, Art. IX, Sec. 2.

¹⁵⁹ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 91, January 4, 1851.

¹⁶⁰ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 91, January 4, 1851.

¹⁶¹ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 99, January 23, 1851.

¹⁶² *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 85, December 21, 1850.

¹⁶³ *Constitution of Iowa*, 1857, Art. III, Sec. 30.

¹⁶⁴ *Constitution of Iowa*, 1857, Art. VIII.

CHAPTER IV

¹⁶⁵ The members of the Code Commission were Stephen Hemp-

stead, Charles Mason, and Wm. G. Woodward. For a discussion of the *Code of 1851* see Powell's *History of the Codes of Iowa Law in The Iowa Journal of History and Politics*, Vol. X, pp. 3-69.

¹⁶⁶ Brindley's *History of Taxation in Iowa*, Vol. I, pp. 35-41.

¹⁶⁷ Brindley's *History of Taxation in Iowa*, Vol. I, p. 40.

¹⁶⁸ See above, p. 4.

¹⁶⁹ For instance see *The Burlington Tri-Weekly Telegraph*, Vol. I, Nos. 84 and 86, December 19 and 24, 1850.

¹⁷⁰ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 87, December 26, 1850.

¹⁷¹ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 87, December 26, 1850.

¹⁷² *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 88, December 28, 1850.

¹⁷³ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 88, December 28, 1850.

¹⁷⁴ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 88, December 28, 1850.

¹⁷⁵ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 89, December 31, 1850.

¹⁷⁶ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 92, January 7, 1851.

¹⁷⁷ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 90, January 2, 1851.

¹⁷⁸ *The Burlington Tri-Weekly Telegraph*, Vol. I, No. 89, December 31, 1850.

¹⁷⁹ *The Muscatine Journal*, Vol. II, No. 33, January 11, 1851. See also Powell's *History of the Codes of Iowa Law in The Iowa Journal of History and Politics*, Vol. X, p. 27.

¹⁸⁰ *Code of Iowa*, 1851, p. 21.

¹⁸¹ *Code of Iowa*, 1851, p. 90.

¹⁸² *Code of Iowa*, 1851, pp. 90-98.

- 183 *Code of Iowa*, 1851, p. 91.
 184 *Code of Iowa*, 1851, p. 91.
 185 *Code of Iowa*, 1851, pp. 91, 92.
 186 *Code of Iowa*, 1851, p. 92.
 187 *Code of Iowa*, 1851, p. 93.
 188 *Code of Iowa*, 1851, pp. 94, 95.
 189 *Code of Iowa*, 1851, pp. 95, 96.
 190 *Code of Iowa*, 1851, p. 96.
 191 *Code of Iowa*, 1851, pp. 98-100.
 192 *Code of Iowa*, 1851, p. 100.
 193 *The Iowa Journal of History and Politics*, Vol. VIII, p. 505.

CHAPTER V

- 194 In the Department of Public Archives (Des Moines).
 195 *Laws of Iowa*, 1852-1853, pp. 79-83.
 196 See above, pp. 86, 87.
 197 *Laws of Iowa*, 1852-1853, p. 80.
 198 *Laws of Iowa*, 1852-1853, pp. 81, 82.
 199 *Laws of Iowa*, 1852-1853, p. 82.
 200 *Laws of Iowa*, 1852-1853, pp. 82, 83.
 201 *Laws of Iowa*, 1852-1853, p. 82.
 202 *Laws of Iowa*, 1852-1853, pp. 174-185.
 203 Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. I, p. 463.
 204 *Journal of the Senate*, 1854-1855, pp. 213, 214.
 205 *Journal of the Senate*, 1854-1855, p. 214.
 206 *Journal of the Senate*, 1854-1855, p. 215.
 207 *Journal of the Senate*, 1854-1855, p. 216.
 208 *Burlington Tri-Weekly Hawk-Eye*, Vol. I, No. 38, February 6, 1855.

- ²⁰⁹ *Laws of Iowa*, 1854–1855, pp. 320–322; also *Laws of Iowa*, Extra Session, 1856, p. 116.
- ²¹⁰ *Laws of Iowa*, 1854–1855, p. 217.
- ²¹¹ *Laws of Iowa*, 1856–1857, pp. 168, 169.
- ²¹² *Annals of Iowa* (Third Series), Vol. IV, p. 73.
- ²¹³ See above, pp. 45, 48.
- ²¹⁴ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. II, p. 41.
- ²¹⁵ *Constitution of Iowa*, 1857, Art. III, Sec. 30.
- ²¹⁶ *Constitution of Iowa*, 1857, Art. VIII, Secs. 1–12.
- ²¹⁷ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. II, p. 55.
- ²¹⁸ *Laws of Iowa*, 1846–1847, p. 163.
- ²¹⁹ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. II, p. 57.
- ²²⁰ See above, pp. 4, 27.
- ²²¹ In the Department of Public Archives (Des Moines).
- ²²² *Journal of the House*, 1858, pp. 88, 89.
- ²²³ *Journal of the Senate*, 1858, pp. 96, 97.
- ²²⁴ *Journal of the Senate*, 1858, p. 99.
- ²²⁵ *Journal of the House*, 1858, pp. 136, 137.
- ²²⁶ *The Daily Gate City* (Keokuk), Vol. IV, No. 282, January 28, 1858.
- ²²⁷ *Laws of Iowa*, 1858, pp. 290–296, 330–340.
- ²²⁸ *Laws of Iowa*, 1858, pp. 330–340.
- ²²⁹ *Laws of Iowa*, 1858, pp. 331, 332.
- ²³⁰ *Laws of Iowa*, 1858, pp. 333, 334.
- ²³¹ *Laws of Iowa*, 1858, p. 334.
- ²³² *Laws of Iowa*, 1858, p. 335.
- ²³³ *Laws of Iowa*, 1858, p. 335.

- ²³⁴ *Laws of Iowa*, 1858, p. 336.
- ²³⁵ *Laws of Iowa*, 1858, p. 338.
- ²³⁶ *Laws of Iowa*, 1858, pp. 339, 340.
- ²³⁷ *Laws of Iowa*, 1858, pp. 290-296.
- ²³⁸ *Laws of Iowa*, 1858, p. 290.
- ²³⁹ *Laws of Iowa*, 1858, p. 291.
- ²⁴⁰ *Laws of Iowa*, 1858, p. 294.
- ²⁴¹ *Laws of Iowa*, 1858, p. 295.
- ²⁴² 7 Iowa 248.
- ²⁴³ *Constitution of Iowa*, 1857, Art. I, Sec. 18.
- ²⁴⁴ 9 Iowa 202, 203
- ²⁴⁵ 9 Iowa 203.
- ²⁴⁶ 9 Iowa 450.
- ²⁴⁷ *United States Statutes at Large*, Vol. V, pp. 70, 71, 178, 179.
- ²⁴⁸ 9 Iowa 450, 451.
- ²⁴⁹ The opinion of the court is explained more fully by the following extract:
- “We have seen that neither of these propositions can be sustained. That on the contrary thereof, the city by virtue of the dedication by the United States, took no title to the streets; that it has no right to use them for its own purposes, nor to employ them for any purpose different from that for which they were designed; that, subject to the public easement, the owner of the adjoining lots is the absolute owner of the soil of the streets, and retains his exclusive right in all mines, quarries, springs of water, timber and earth, for every purpose not inconsistent with the public right of way.
- “Neither the city, nor any individual had the right, against the will or without the consent of the owner of the adjoining lot, to construct a cistern under the street or sidewalk; and if the defendant for his own convenience, or to suit his own purpose, excavated the earth from the sidewalk opposite his lot, and in so doing injured or destroyed the cistern, there is no principle on which he

can be made liable, in any action by the city, to recover damages for the injury."—9 Iowa 459-461.

CHAPTER VI

- ²⁵⁰ See above, p. 6.
- ²⁵¹ In the Department of Public Archives (Des Moines).
- ²⁵² In the Department of Public Archives (Des Moines).
- ²⁵³ In the Department of Public Archives (Des Moines).
- ²⁵⁴ House File, No. 113.—*Journal of the House of Representatives*, 1860, pp. 161, 162.
- ²⁵⁵ House File, No. 33.—*Journal of the House of Representatives*, 1860, p. 90.
- ²⁵⁶ House File, No. 185.—*Journal of the House of Representatives*, 1860, p. 259.
- ²⁵⁷ House File, No. 295.—*Journal of the House of Representatives*, 1860, p. 450.
- ²⁵⁸ *Journal of the Senate*, 1860, p. 438.
- ²⁵⁹ *Journal of the House of Representatives*, 1860, pp. 161, 162.
- ²⁶⁰ House File, No. 113, in the Department of Public Archives (Des Moines).
- ²⁶¹ House File, No. 113, Sec. 23, in the Department of Public Archives (Des Moines).
- ²⁶² *Journal of the House of Representatives*, 1860, pp. 161, 162.
- ²⁶³ *Journal of the House of Representatives*, 1860, p. 211.
- ²⁶⁴ *Journal of the House of Representatives*, 1860, p. 261.
- ²⁶⁵ Senate File, No. 95 was introduced as a substitute for Senate Files, Nos. 45, 46.—*Journal of the Senate*, 1860, pp. 248, 249.
- ²⁶⁶ *Journal of the Senate*, 1860, pp. 249, 250.
- ²⁶⁷ *Journal of the House of Representatives*, 1860, p. 387.
- ²⁶⁸ *Journal of the Senate*, 1860, p. 412.
- ²⁶⁹ *Journal of the Senate*, 1860, pp. 438, 439.

²⁷⁰ For instance see *Journal of the Senate*, 1860, pp. 440, 441.

²⁷¹ The following is a copy of an amendment by Senator Wilson of Dubuque providing for the election of Supervisors on the basis of population:

“But if the population of any such township exceeds four thousand, and is less than eight thousand, there shall be elected an additional Supervisor from such township, or townships, and one additional Supervisor for each four thousand inhabitants over and above eight thousand, the number of inhabitants to be determined by the last preceding State or Federal Census, each of which Supervisors, &c.”—*Journal of the Senate*, 1860, p. 455.

²⁷² *Journal of the Senate*, 1860, p. 456.

²⁷³ *Journal of the House of Representatives*, 1860, p. 430.

²⁷⁴ “The bill substituting the Supervisor system for the present County Judge system, has passed both branches of the Legislature, and we presume has received the signature of the Governor. We regard this as the most important measure of the session—not excepting the new Code. It works a much needed and radical reform. It subverts and dethrones just as many little kings or petty despots, or *possible* despots, as there are Counties in the State. It restores to the people the powers, and the exercise of powers which never should have been taken from them, and which it is dangerous for them to part with. It restores that principle and system of *local self-government* which was the germ of our municipal Republican institutions, and, in all ages of English civilization, the bulwark of individual liberty.

“The system is essentially democratic in the true sense of the term. It gives to the people of every organized locality a voice in the control of their own affairs, and thereby develops a true civic life, and trains up each individual in the practice of the duties of citizenship. Close representation and direct responsibility secure a faithful management of County affairs. As the people become acquainted with the system, they will like it, and will rejoice that the ‘County King’ is dethroned. He, at least, can no longer use, abuse, and distribute the vast patronage of the County for the perpetuation of his own power.”—*The Daily Gate City* (Keokuk), Vol. VII, No. 18, March 21, 1860.

- ²⁷⁵ *The Burlington Daily Hawk-Eye*, February 29, 1860.
- ²⁷⁶ *Revision of 1860*, pp. 133-147.
- ²⁷⁷ *Revision of 1860*, p. 53.
- ²⁷⁸ *Revision of 1860*, p. 146.
- ²⁷⁹ *Revision of 1860*, p. 53.
- ²⁸⁰ *Revision of 1860*, pp. 48-53.
- ²⁸¹ See above, pp. 129-132.
- ²⁸² *Revision of 1860*, pp. 50, 51.
- ²⁸³ *Laws of Iowa*, 1858, p. 334.
- ²⁸⁴ 12 Iowa 506.
- ²⁸⁵ 12 Iowa 507-509.
- ²⁸⁶ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. II, p. 314.
- ²⁸⁷ In the Department of Public Archives (Des Moines).
- ²⁸⁸ In the Department of Public Archives (Des Moines).
- ²⁸⁹ *Laws of Iowa*, 1862, pp. 106-108.
- ²⁹⁰ *Laws of Iowa*, 1862, pp. 192, 193.
- ²⁹¹ *Laws of Iowa*, 1862, p. 107.
- ²⁹² *Laws of Iowa*, 1862, pp. 107, 108.
- ²⁹³ *Laws of Iowa*, 1862, p. 192.
- ²⁹⁴ See above, p. 116.
- ²⁹⁵ *Laws of Iowa*, 1862, p. 193.
- ²⁹⁶ *Laws of Iowa*, 1864, pp. 82, 83 and 89.
- ²⁹⁷ *Laws of Iowa*, 1864, p. 89.
- ²⁹⁸ House File, No. 64.—*Journal of the House of Representatives*, 1866, p. 109. Also House File, No. 86, *Journal of the House of Representatives*, 1866, p. 123; and Senate File, No. 124, *Journal of the Senate*, 1866, p. 251.
- ²⁹⁹ *Journal of the House of Representatives*, 1866, p. 129.
- ³⁰⁰ *Iowa Daily State Register* (Des Moines), Vol. V, No. 6, January 24, 1866.

³⁰¹ For an account of the debate in the House of Representatives on the Brown resolution relative to the proposed change in local government see the *Iowa Daily State Register* (Des Moines), Vol. V, No. 6, January 24, 1866.

³⁰² *Journal of the House of Representatives*, 1866, p. 208.

³⁰³ *Laws of Iowa*, 1866, p. 80.

³⁰⁴ *Revision of 1860*, p. 51.

³⁰⁵ *Laws of Iowa*, 1866, p. 80.

³⁰⁶ *Laws of Iowa*, 1866, pp. 135-137.

³⁰⁷ *Laws of Iowa*, 1866, p. 136.

³⁰⁸ 21 Iowa 409.

³⁰⁹ 21 Iowa 415, 416

³¹⁰ Petitions on file in the Department of Public Archives (Des Moines).

³¹¹ In the Department of Public Archives (Des Moines).

³¹² House Files, Nos. 8, 9, 24, and 25.—*Journal of the House of Representatives*, 1868, pp. 65, 75.

³¹³ A copy of House File, No. 9, introduced by Mr. Dudley may be found in the Department of Public Archives (Des Moines).

³¹⁴ See *Journal of the House of Representatives*, 1868, pp. 544, 545; *Journal of the Senate*, 1868, pp. 85, 161, 209, 248, 249.

³¹⁵ *Laws of Iowa*, 1868, pp. 39, 40.

³¹⁶ 23 Iowa 531.

³¹⁷ *Laws of Iowa*, 1868, p. 53.

³¹⁸ *Laws of Iowa*, 1868, p. 102.

³¹⁹ *Revision of 1860*, p. 143.

³²⁰ *Laws of Iowa*, 1868, pp. 221, 223.

³²¹ *Laws of Iowa*, 1868, p. 138.

³²² *Laws of Iowa*, 1868, p. 139.

³²³ *Laws of Iowa*, 1868, p. 152.

³²⁴ *Laws of Iowa*, 1868, p. 207.

³²⁵ *Laws of Iowa*, 1868, p. 114.

³²⁶ *Laws of Iowa*, 1866, p. 135.

³²⁷ 25 Iowa 540.

³²⁸ 25 Iowa 546-549.

³²⁹ 34 Iowa 421.

³³⁰ *Revision of 1860*, p. 53.

CHAPTER VII

³³¹ In the Department of Public Archives (Des Moines).

³³² Petitions in Department of Public Archives (Des Moines).

³³³ *Journal of the Senate*, 1870, p. 31.

³³⁴ *Journal of the Senate*, 1870, p. 36.

³³⁵ A copy of Senate File, No. 7, as introduced by Senator Murray may be found in the Department of Public Archives (Des Moines).

³³⁶ A copy of Senate File, No. 18, as introduced by Senator Campbell may be found in the Department of Public Archives (Des Moines).

³³⁷ *Journal of the Senate*, 1870, p. 69.

³³⁸ *Journal of the Senate*, pp. 75, 93, 118, 120, and 124-126.

³³⁹ *Daily Iowa State Register*, Vol. VIII, No. 338, February 3, 1870.

³⁴⁰ Senator Patterson submitted the following facts concerning Floyd County:

“There are in Floyd County three townships lying on the Shell Rock River: Rockgrove, with a population of 914, Rockford, with a population of 599, and Union, with a population of 831.— There are also three townships lying on the Cedar River: Floyd, with a population of 1,267, St. Charles, with a population of 2,671, and River-ton, with a population of 776. A majority of the townships are in the west side of the county, near the Shell Rock.”— *Daily Iowa State Register* (Des Moines), Vol. VIII, No. 338, February 3, 1870.

³⁴¹ *Journal of the Senate*, 1870, p. 126.

³⁴² *Journal of the House of Representatives*, 1870, p. 186.

³⁴³ *Laws of Iowa*, 1870, p. 187.

³⁴⁴ *Laws of Iowa*, 1870, p. 186.

³⁴⁵ *Laws of Iowa*, 1870, pp. 186, 187.

³⁴⁶ *Dubuque Daily Herald*, Vol. XVI, No. 5397, February 5, 1870. The following editorial entitled *The Supervisor System* also appeared in the *Dubuque Daily Herald*:

“The voice of the press of all parties, so far as we have noticed, is unanimous against the bill that has passed the senate abolishing the supervisor system and re-establishing the old county commissioner system. There are more papers in the state than there are members of the legislature, and we believe taken as a whole they are better exponents of public opinion in their several localities. And yet we see the entire press a unit against the bill that has passed the senate and is now pending in the house.

“At the same time, the present system undoubtedly needs some amendments, but would it not be better that those be made rather than abolish the whole system and adopt one which is much more open to objection and faulty?”—*Dubuque Daily Herald*, Vol. XVI, No. 5407, February 17, 1870.

³⁴⁷ *Laws of Iowa*, 1870, p. 20.

³⁴⁸ *Laws of Iowa*, 1870, p. 37.

³⁴⁹ *Laws of Iowa*, 1870, p. 85.

³⁵⁰ *Laws of Iowa*, 1870, p. 87.

³⁵¹ *Laws of Iowa*, 1870, p. 185.

³⁵² *Laws of Iowa*, 1870, p. 229.

³⁵³ *Laws of Iowa*, 1870, pp. 37, 38.

³⁵⁴ *Laws of Iowa*, 1870, p. 85.

³⁵⁵ *Shambaugh's Messages and Proclamations of the Governors of Iowa*, Vol. III, p. 377.

³⁵⁶ See above, p. 64.

³⁵⁷ *Shambaugh's Messages and Proclamations of the Governors of Iowa*, Vol. IV, p. 20.

- 358 *Laws of Iowa*, 1872 (Public), p. 1.
- 359 *Laws of Iowa*, 1872 (Public), p. 14.
- 360 *Laws of Iowa*, 1872 (Public), p. 33.
- 361 *Laws of Iowa*, 1872 (Public), p. 101.
- 362 23 Iowa 531.
- 363 *Code of Iowa*, 1873, p. 132.
- 364 Brindley's *History of Taxation in Iowa*, Vol. I, pp. 70, 71.
- 365 *Code of Iowa*, 1873, p. 161.
- 366 *Code of Iowa*, 1873, p. 163.
- 367 *Code of Iowa*, 1873, p. 163.
- 368 *Code of Iowa*, 1873, p. 164.
- 369 *Code of Iowa*, 1873, pp. 165, 166.
- 370 *Code of Iowa*, 1873, p. 168.
- 371 *Code of Iowa*, 1873, p. 168.
- 372 *Code of Iowa*, 1873, pp. 168, 169.
- 373 *Code of Iowa*, 1873, pp. 170-172.
- 374 *Code of Iowa*, 1873, p. 173.
- 375 See above, p. 116.
- 376 *Code of Iowa*, 1873, p. 92.
- 377 Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. IV, p. 99.
- 378 *Laws of Iowa*, 1874, p. 6.
- 379 *Laws of Iowa*, 1874, p. 14.
- 380 *Laws of Iowa*, 1874, p. 15.
- 381 *Laws of Iowa*, 1874, p. 35.
- 382 *Laws of Iowa*, 1874, p. 26.
- 383 *Code of Iowa*, 1873, p. 171.
- 384 *Laws of Iowa*, 1876, p. 17.
- 385 *Code of Iowa*, 1873, p. 172.

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- ³⁸⁶ *Laws of Iowa*, 1876, p. 23.
- ³⁸⁷ *Code of Iowa*, 1873, pp. 52, 53.
- ³⁸⁸ *Laws of Iowa*, 1876, p. 66; *Laws of Iowa*, 1872 (Public), p. 1.
- ³⁸⁹ *Laws of Iowa*, 1876, p. 97.
- ³⁹⁰ In the Department of Public Archives (Des Moines).
- ³⁹¹ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. V, p. 16.
- ³⁹² *Code of Iowa*, 1873, p. 172.
- ³⁹³ *Laws of Iowa*, 1878, pp. 46, 47.
- ³⁹⁴ *Laws of Iowa*, 1878, p. 35.
- ³⁹⁵ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. V, pp. 80, 81.
- ³⁹⁶ *Laws of Iowa*, 1880, p. 28.
- ³⁹⁷ *Laws of Iowa*, 1880, pp. 38, 39.
- ³⁹⁸ *Laws of Iowa*, 1880, p. 44.
- ³⁹⁹ *Laws of Iowa*, 1880, p. 32.
- ⁴⁰⁰ *Laws of Iowa*, 1880, p. 85.
- ⁴⁰¹ *Laws of Iowa*, 1880, pp. 128, 129.
- ⁴⁰² *Laws of Iowa*, 1880, p. 155.
- ⁴⁰³ *Laws of Iowa*, 1880, p. 173.
- ⁴⁰⁴ Department of Public Archives (Des Moines).
- ⁴⁰⁵ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. V, p. 169.
- ⁴⁰⁶ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. V, pp. 247, 248.
- ⁴⁰⁷ *Journal of the House of Representatives*, 1882, p. 286.
- ⁴⁰⁸ *Iowa City Weekly Republican*, Vol. 43, No. 15, March 7, 1883.
- ⁴⁰⁹ *Journal of the House of Representatives*, 1882, p. 511.
- ⁴¹⁰ *Journal of the House of Representatives*, 1882, p. 524.
- ⁴¹¹ *Journal of the Senate*, 1882, pp. 75, 153.

⁴¹² *Journal of the Senate*, 1882, p. 406.

⁴¹³ *Laws of Iowa*, 1882, p. 52.

⁴¹⁴ *Laws of Iowa*, 1882, p. 64.

CHAPTER VIII

⁴¹⁵ *Iowa City Weekly Republican*, Vol. 43, No. 9, January 17, 1883.

⁴¹⁶ *Iowa City Weekly Republican*, Vol. 43, No. 15, March 7, 1883.

⁴¹⁷ The Committee on Credentials was composed of John Mahin of Muscatine County, David Leonard of Des Moines County, J. Scott Jenkins of Clinton County, W. P. Ketchum of Iowa County, and C. L. Jones of Butler County. The Committee on Resolutions was made up of one delegate from each congressional district. It consisted of M. L. Crew of Henry County, representing the First District; L. F. Parker of Scott, Second District; Geo. O. Van Bleek of Butler, Third District; Robert Grant, of Clayton, Fourth District; S. D. Pryce of Johnson, Fifth District; Samuel Gilfoy of Keokuk, Sixth District; B. F. Gue of Polk, Seventh District; D. F. Paul of Shelby, Ninth District; W. P. Payne of Story, Tenth District; and J. J. Bruce of Pocahontas, Eleventh District. Finally, the Committee on Permanent Organization consisted of Judge N. B. Holbrook of Iowa; Carey R. Smith of Johnson; Professor S. A. Knapp of Story; C. L. Jones of Butler and A. Pearson of Washington.—*Iowa City Weekly Republican*, Vol. 43, No. 15, March 7, 1883.

⁴¹⁸ In the Department of Public Archives (Des Moines).

⁴¹⁹ The following memorial was submitted by certain farmers of Warren County:

“Your memorialists beg leave to represent that the recommendation of the Governor to make all Road tax to be paid in money if adopted would without doubt be increasing the Burden of Taxation by making the payment more difficult to pay than it now is the farmer can now work his tax after Harvest with the best advantage to the Roads and to himself too the dry season being conceded to be the right time to make roads.

“The adoption of said recommendation then could only by in-

jurious to the tax payer nor can it be shown that it would be any benefit to the Roads beyond what the Road Laws now are.

“The same may be said of every proposition made by the State road convention and its committees indeed every measure they propose would require greater outlay to produce better or even good results as are obtained under our present road laws.

“Why should the tax be paid in Money then the farmer who has to pay is close to where the work is and is as able and as willing and does work as good or does more work than any other class of people and to save that money paid hands will do better work under the same supervision is neither reasonable nor true nor warranted by known facts. We ask further to say that our present Road Laws more than any other plan named by leaving the road management in the hands of the People of the Several Townships are more in accord with the principles of justice and Liberty and the requirements of Free Government than the suggestions of the late road convention or the recommendation of the governor the Liberty to say how the tax shall be paid and the election of Supervisors being left with the People of each Township when it should be and now is the best government it is said and the best Laws are those that leave the greatest amount of Liberty with the People only retaining injury to others. We can not close without reminding you as the Hon. Representatives of the People that the System of one Supervisor only in each Township as recommended could not be as advantageous as the present system of having five or six small districts with a man to supervise each because there is a Supervisor in each small district now who can be notified easier of any and is right close to all needed Repairs and can do their repairing to as much greater advantage as his district is smaller than the whole Township this is just as true as the declaration that six men can do more than one.

“We will then in conclusion ask that you give heed to the call of human rights and equal justice and the great principle of free Government which will leave the road Laws and management as they now are in the hands of the People and not under the control of a centralized one man power and moneyed Despotism.” [Signed by 33 persons].— In the Department of Public Archives (Des Moines).

⁴²⁰ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. V, pp. 308, 309.

- ⁴²¹ *Laws of Iowa*, 1884, p. 12.
- ⁴²² *Laws of Iowa*, 1884, p. 197.
- ⁴²³ *Laws of Iowa*, 1884, p. 217.
- ⁴²⁴ *Laws of Iowa*, 1884, p. 217.
- ⁴²⁵ *Laws of Iowa*, 1884, p. 218.
- ⁴²⁶ *Laws of Iowa*, 1884, p. 219.
- ⁴²⁷ *Laws of Iowa*, 1886, p. 13.
- ⁴²⁸ *Laws of Iowa*, 1886, p. 59.
- ⁴²⁹ *Laws of Iowa*, 1886, p. 108.
- ⁴³⁰ *Code of Iowa*, 1873, p. 172.
- ⁴³¹ *Laws of Iowa*, 1886, p. 110.
- ⁴³² *Proceedings of the Iowa Surveyors' and Civil Engineers' Association*, 1887, pp. 13, 14.
- ⁴³³ *Laws of Iowa*, 1888, p. 130.
- ⁴³⁴ Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. VI, pp. 170, 171.
- ⁴³⁵ *Laws of Iowa*, 1890, p. 6; see also *Laws of Iowa*, 1888, pp. 19, 21.
- ⁴³⁶ *Laws of Iowa*, 1890, p. 34.
- ⁴³⁷ *Laws of Iowa*, 1892, p. 34.
- ⁴³⁸ *Laws of Iowa*, 1892, p. 71.
- ⁴³⁹ *Laws of Iowa*, 1892, p. 67.
- ⁴⁴⁰ *Laws of Iowa*, 1892, p. 102.
- ⁴⁴¹ *Laws of Iowa*, 1892, p. 92.
- ⁴⁴² 88 Iowa 617.
- ⁴⁴³ *Proceedings of the Fifth Annual Convention of the Iowa Society of Civil Engineers and Surveyors*, 1893, pp. 36-69, especially pp. 57-62.
- ⁴⁴⁴ An article on *Improvement of Highways*, by C. R. Allen, City Engineer of Ottumwa, Iowa, reprinted from the *Iowa Capital* in the

Proceedings of the Sixth Annual Convention of the Iowa Society of Civil Engineers and Surveyors, 1894, pp. 27-34.

⁴⁴⁵ A strenuous effort was made to secure the adoption of the following bill, which was submitted by the Committee on Highways in the Senate as a substitute for Senate File, No. 9:

“Be it enacted by the General Assembly of the State of Iowa:

“SECTION 1. The township trustees of each township shall meet on the first Monday in April, and on the first Monday in September in each year. At the September meeting said trustees shall determine upon the amount of the property tax to be levied for highways, bridges, guide boards, plows, scrapers, tools and machinery adapted to the construction and repair of highways, and for the payment of any indebtedness previously incurred for highway purposes, and levy the same, which shall not be less than one nor more than four mills on the dollar on the amount of the township assessment for that year. Road taxes levied and assessed under the provisions of this act shall be paid in money to the county treasurer at the time of the payment of the first installment of other taxes as provided by law.

“SEC. 2. The township clerk shall, on or before the second Monday in October in each year, certify to the county auditor the amount of the levy made by the township trustees at their September meeting in each year.

“SEC. 3. The board of supervisors of each county shall, at the time of levying taxes for other purposes, levy a tax of one mill on the dollar of the assessed value of the taxable property in their county, which tax shall be collected at the same time and in the same manner as other taxes are collected and shall be known as the county road fund, and shall be expended under the direction of the board of supervisors in the construction and maintenance of highways leading from the trade centers located within the county from which the same is levied, and such expenditures shall be made as near as may be so as to give each township contributing to such tax the benefit of the tax collected therein.

“SEC. 4. The board of supervisors shall, at their meeting in January of each year, formally designate the highways leading from the trading centers to be improved by them during the year following, and they shall extend such main highways from year to

year so as to give the various townships of the county the benefit of such improvement.

“SEC. 5. Every civil township or part thereof lying outside of any incorporated town or city shall constitute a single road district.

“SEC. 6. The board of trustees of each township shall, at their regular meeting on the first Monday in September of each year, appoint a highway supervisor, whose duties shall be to superintend all work on the highways under and by direction of the township trustees, and his compensation shall be fixed by the trustees as aforesaid, not to exceed, however, the sum of \$2.50 per day for each day actually employed in the duties of his office, fractional parts of a day to be paid for *pro rata*. Said highway supervisor shall hold his office for one year unless removed by a two-thirds vote of the township trustees.

“SEC. 7. The township trustees shall constitute a committee to purchase for their respective townships all tools and implements to be used on such highway and to provide for the custody and care of the same.

“SEC. 8. The township trustees shall have power to let by contract, by competitive bidding, all work upon the highway, or they may authorize the said highway supervisor to employ help at such compensation as such trustees may fix.

“SEC. 9. Ten hours shall constitute a day's work upon the highway.

“SEC. 10. All able-bodied men over twenty-one years of age and under forty-five years of age shall pay to the county treasurer at such time as the first installment of other taxes are payable the sum of \$2.00 each, annually, to be known as poll-tax for highway purposes.

“SEC. 11. The township clerk shall receive from the county treasurer all moneys collected under sections one and ten of this act, and disburse the same only on the order of the township trustees, and such township clerk shall receive as compensation for receiving and disbursing the same one-half of one per cent of all moneys received by him. The bond of such township clerk shall be fixed by the trustees and be approved by the board of supervisors.

“SEC. 12. The board of supervisors and the township trustees shall have the power to employ, at the *per diem* now fixed by law,

the county surveyor to make surveys upon public highways to be graded, improved or drained by them under the provisions of this act; and it shall be the duty of such surveyor to make such surveys and prepare plans and specifications for such road improvements under the direction of said board of supervisors to township trustees. Said surveyor shall be paid by said board of supervisors out of the county highway fund when employed by them and by the township trustees out of the township highway fund when employed by them.

“SEC. 13. Every county in this state shall have power to purchase or take and hold in the manner provided in Chapter 4 of the code of 1873, and amendments thereto, lands upon which gravel beds or stone quarries are located, for the purpose of securing material for the improvement and maintenance of the highways located within such county and shall pay therefor the purchase price or damages adjudged for the taking of such property under condemnation proceedings out of the one mill road tax provided herein. The board of supervisors of each county shall have the power to make such purchase for such county or shall institute the proceedings necessary for such condemnation in the name of the county.

“SEC. 14. All powers heretofore delegated by law to road supervisors are hereby vested in the township trustees of the respective townships.

“SEC. 15. That all property now subject to taxation in any city or town which by law is not subject to taxation for general municipal purposes shall nevertheless be liable to taxation for road purposes as may be provided by the council of such city or town, but not exceeding the rate of four mills upon the dollar of the assessed valuation thereof, and all personal property, necessary for the use and cultivation of agricultural or horticultural lands shall be liable for such road taxes but shall not be liable for any other city tax or assessments.

“SEC. 16. This act shall be binding and in force from and after its publication; but shall not interfere with the duties of the township trustees as provided by Section 969 of the code of 1873, or of the duties of road supervisors as now by law provided, until September 1, 1894, and all moneys in the hands of the road supervisors unexpended on the first day of September, 1894, shall be turned

over to the township clerk who shall give his receipt therefor, and said money shall be subject to the order of the township trustees for highway purposes.

“SEC. 17. That Sections 969 and 975 of the code of 1873, and Sections 1, 4 and 5 of Chapter 200 of the acts of the Twentieth General Assembly and Section 1 of Chapter 158 of the acts of the Nineteenth General Assembly be and the same are hereby repealed, and all acts and parts of acts inconsistent with this act are hereby repealed.”— Copy of the bill found in *Proceedings of the Sixth Annual Convention of the Iowa Society of Civil Engineers and Surveyors*, 1894, pp. 38–41.

⁴⁴⁶ *Laws of Iowa*, 1874, p. 26.

⁴⁴⁷ *Laws of Iowa*, 1894, p. 32.

⁴⁴⁸ *Laws of Iowa*, 1884, pp. 217–220.

⁴⁴⁹ *Laws of Iowa*, 1894, p. 34.

⁴⁵⁰ *Laws of Iowa*, 1894, pp. 33, 34.

⁴⁵¹ 90 Iowa 185–189.

⁴⁵² Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. VII, pp. 109, 110.

⁴⁵³ *Laws of Iowa*, 1896, p. 45.

⁴⁵⁴ *Laws of Iowa*, 1896, p. 46.

⁴⁵⁵ *Laws of Iowa*, 1896, p. 51.

⁴⁵⁶ *Laws of Iowa*, 1896, p. 52.

⁴⁵⁷ *Laws of Iowa*, 1896, p. 76.

⁴⁵⁸ *Laws of Iowa*, 1896, p. 45.

⁴⁵⁹ *Laws of Iowa*, 1896, p. 46.

⁴⁶⁰ *Laws of Iowa*, 1884, p. 217.

⁴⁶¹ 100 Iowa 131.

⁴⁶² 60 N. W. Reporter 266.

⁴⁶³ See above, pp. 163–169.

⁴⁶⁴ *Code of Iowa*, 1897, p. 554.

- ⁴⁶⁵ *Code of Iowa*, 1897, p. 565.
- ⁴⁶⁶ *Code of Iowa*, 1897, p. 570.
- ⁴⁶⁷ *Code of Iowa*, 1897, p. 571.
- ⁴⁶⁸ *Laws of Iowa*, 1884, p. 217.
- ⁴⁶⁹ *Laws of Iowa*, 1898, p. 104.
- ⁴⁷⁰ *Laws of Iowa*, 1898, p. 23.
- ⁴⁷¹ *Laws of Iowa*, 1898, p. 29.
- ⁴⁷² Shambaugh's *Messages and Proclamations of the Governors of Iowa*, Vol. VII, pp. 332, 333.
- ⁴⁷³ *Laws of Iowa*, 1900, p. 97.
- ⁴⁷⁴ *Laws of Iowa*, 1902, p. 24.
- ⁴⁷⁵ *Laws of Iowa*, 1902, p. 30.
- ⁴⁷⁶ *Laws of Iowa*, 1902, p. 40.
- ⁴⁷⁷ *Laws of Iowa*, 1902, p. 48.
- ⁴⁷⁸ *Laws of Iowa*, 1902, p. 49.
- ⁴⁷⁹ *Laws of Iowa*, 1902, p. 50.
- ⁴⁸⁰ See above, p. 100.
- ⁴⁸¹ *Laws of Iowa*, 1902, p. 31.
- ⁴⁸² See above, p. 93.
- ⁴⁸³ Paper by Professor C. F. Curtiss on *Good Roads* in the *Proceedings of the Fifteenth Annual Meeting of the Iowa Engineering Society*, 1903, p. 10.

CHAPTER IX

- ⁴⁸⁴ In the files of the Iowa State Highway Commission (Ames).
- ⁴⁸⁵ *Journal of the House of Representatives*, 1904, p. 578.
- ⁴⁸⁶ *Journal of the House of Representatives*, 1904, pp. 1290, 1291.
- ⁴⁸⁷ *Laws of Iowa*, 1904, p. 108.
- ⁴⁸⁸ In the files of the Iowa State Highway Commission (Ames).
- ⁴⁸⁹ *Journal of the House of Representatives*, 1904, p. 196.

⁴⁹⁰ *The Register and Leader* (Des Moines), No. 620, March 12, 1904.

⁴⁹¹ *Journal of the House of Representatives*, 1904, pp. 693, 694; *Journal of the Senate*, 1904, p. 835.

⁴⁹² *Laws of Iowa*, 1904, p. 43.

⁴⁹³ *Laws of Iowa*, 1904, p. 44.

⁴⁹⁴ *Laws of Iowa*, 1904, p. 66.

⁴⁹⁵ *Laws of Iowa*, 1904, p. 67.

⁴⁹⁶ *The Good Roads Problem in Iowa*, Vol. II, Bulletin No. 6, Engineering Experiment Station of the Iowa State College, p. 75.

⁴⁹⁷ See above, p. 74.

⁴⁹⁸ *Manual for Iowa Highway Officers*, by the State Highway Commission, 1905, p. 4.

⁴⁹⁹ *Manual for Iowa Highway Officers*, by the State Highway Commission, 1905, p. 35.

⁵⁰⁰ *Proceedings of the Iowa Good Roads Association*, June 15 and 16, 1905, p. 6.

⁵⁰¹ *Proceedings of the Iowa Good Roads Association*, June 15 and 16, 1905, pp. 9, 15.

⁵⁰² *Proceedings of the Iowa Good Roads Association*, June 15 and 16, 1905, p. 28.

⁵⁰³ *Proceedings of the Iowa Good Roads Association*, June 15 and 16, 1905, p. 46.

⁵⁰⁴ *Proceedings of the Iowa Good Roads Association*, June 15 and 16, 1905, p. 47.

⁵⁰⁵ *First Annual Report of the Iowa State Highway Commission*, 1905, p. 5.

⁵⁰⁶ *Proceedings of the Iowa Good Roads Association*, June 15 and 16, 1905, p. 2.

⁵⁰⁷ *Journal of the House of Representatives*, 1906, pp. 95, 96.

⁵⁰⁸ *Journal of the House of Representatives*, 1906, p. 114; House File, No. 39.

⁵⁰⁹ *Journal of the House of Representatives*, 1906, p. 56; House File, No. 13.

⁵¹⁰ *Journal of the House of Representatives*, 1906, p. 758; House File, No. 379.

⁵¹¹ *Journal of the Senate*, 1906, p. 528; Senate File, No. 252.

⁵¹² *Journal of the Senate*, 1906, p. 42; Senate File, No. 6.

⁵¹³ *The Register and Leader*, 56th year, No. 193, January 12, 1906.

⁵¹⁴ *Journal of the Senate*, 1906, p. 53; Senate File, No. 19.

⁵¹⁵ *The Register and Leader*, 56th year, No. 193, January 12, 1906.

⁵¹⁶ *Laws of Iowa*, 1906, p. 38.

⁵¹⁷ *The Register and Leader*, 56th year, No. 213, February 6, 1906.

⁵¹⁸ *Proceedings of the Iowa Good Roads Association*, February 7 and 8, 1906, pp. 6-8.

⁵¹⁹ *Proceedings of the Iowa Good Roads Association*, February 7 and 8, 1906, pp. 28, 29.

⁵²⁰ *Proceedings of the Iowa Good Roads Association*, February 7 and 8, 1906, pp. 31, 32.

⁵²¹ *Proceedings of the Iowa Good Roads Association*, February 7 and 8, 1906, p. 33.

⁵²² The following resolutions were adopted:

“WHEREAS, We the members and visitors in attendance at the Good Roads Convention now being held in the City of Des Moines are in hearty accord with the efforts being put forth by the various state and county officers, and by many local organizations as well as private citizens. And that to further show our interest and support in their efforts,

“BE IT RESOLVED: First, That we heartily approve of the law just passed by the present Legislature authorizing the use of the road drag on our highways, and recommend that township trustees and others add a sufficient number of them to their outfit of road machinery and to insist on their use, and we also recommend that the use of wide-tired wagons be encouraged.

“Second. That the township road levy be made three mills and be used for maintenance purposes under the direction of the town-

ship trustees, who shall also collect and use the poll tax of the township.

“Third. That the county road levy be made two mills instead of one, and that this fund be used for construction and emergency work under the direction of the Board of Supervisors in a systematic manner and that such portion thereof as is paid by property within any city or incorporated town shall be expended upon the business streets within, and upon the main thoroughfares connecting with, and leading from said city or town, and that the law shall be amended so that it shall be the duty of the Board of Supervisors to designate from time to time such streets and main thoroughfares as county roads and the same shall thereafter be subject to improvement.

“That such portion of said tax as arises from property within the county shall be expended in the extension of the work on such main thoroughfares and tributaries thereto extending through the townships contributing the same.

“Fourth. Be it further resolved that this convention endorse the work now being done by the State Highway Commission, and we recommend that its work be continued, and that sufficient appropriation be made by the Legislature for continued work along the line for which it was organized, and that its bulletins and reports be published and distributed as public documents.

“Fifth. Be it further resolved that the thanks of this Convention be extended to the Des Moines Commercial Club for the use of its rooms and for courtesies shown our number and that copies of these resolutions be placed on the records of this association, and furnished the papers of Des Moines, and the Clerk of each branch of the Legislature.”— In the files of the Iowa State Highway Commission (Ames).

⁵²³ *Journal of the House of Representatives*, 1907, p. 110.

⁵²⁴ *Journal of the House of Representatives*, 1907, p. 287.

⁵²⁵ *Journal of the House of Representatives*, 1907, p. 333.

⁵²⁶ *Journal of the House of Representatives*, 1907, pp. 343-346;
Journal of the Senate, 1907, p. 410.

⁵²⁷ *Journal of the House of Representatives*, 1907, p. 124.

- ⁵²⁸ *Journal of the House of Representatives*, 1907, p. 338.
- ⁵²⁹ *Journal of the House of Representatives*, 1907, p. 424.
- ⁵³⁰ *Journal of the House of Representatives*, 1907, p. 620.
- ⁵³¹ *The Register and Leader*, Vol. 57, No. 251, March 10, 1907.
- ⁵³² *Journal of the Senate*, 1907, p. 856; *Journal of the House of Representatives*, 1907, p. 712.
- ⁵³³ *The Register and Leader*, Vol. 57, No. 245, March 4, 1907.
- ⁵³⁴ House File, No. 346, by Darrah.
- ⁵³⁵ *Journal of the House of Representatives*, 1907, p. 1221.
- ⁵³⁶ *Laws of Iowa*, 1907, p. 28.
- ⁵³⁷ *Laws of Iowa*, 1907, p. 71.
- ⁵³⁸ *Laws of Iowa*, 1907, pp. 71, 72.
- ⁵³⁹ *Laws of Iowa*, 1907, pp. 72, 73.
- ⁵⁴⁰ *Laws of Iowa*, 1907, pp. 73, 102.
- ⁵⁴¹ *Laws of Iowa*, 1907, pp. 73, 291.
- ⁵⁴² The following is a brief summary of the recommendations made along this line by the State Highway Commission:
- “The increase of the duties and powers of the Highway Commission, consistent with the evident need and field of usefulness in the state of such a department.
- “The establishment of the office of county engineer who shall be qualified to take charge of all county road and bridge construction and maintenance.
- “An adequate bridge law that will provide real competition for county contracts and protect both the county and the contractor.
- “The concentration of more of the road funds under the county supervisors to provide an adequate building fund.
- “A mandatory road drag law providing for the consistent dragging of all main roads and rural routes.
- “An act based somewhat on the Michigan law providing for a state reward which shall be paid to counties or townships for road construction under plans and specifications prepared by the Highway Commission. The reward should aggregate one-third to one-half the cost of the improvement.

“A provision inaugurating tree planting and the destruction of roadside weeds.

“An act collecting an annual tax from automobile owners, this tax to be set aside for use by the Highway Commission in encouraging road improvement, and for offering rewards for improved road construction.”—*Third Annual Report of the Iowa State Highway Commission, 1907–1908*, p. 34.

⁵⁴³ *Third Annual Report of the Iowa State Highway Commission, 1907–1908*, pp. 22, 23.

⁵⁴⁴ *Third Annual Report of the Iowa State Highway Commission, 1907–1908*, p. 32.

⁵⁴⁵ *Journal of the House of Representatives, 1909*, p. 125.

⁵⁴⁶ *Journal of the House of Representatives, 1909*, pp. 185, 186.

⁵⁴⁷ House File, No. 47, introduced by Bonwell.

⁵⁴⁸ *Journal of the House of Representatives, 1909*, p. 239; House File, No. 137, 1909, introduced by Fulliam.

⁵⁴⁹ *Journal of the House of Representatives, 1909*, p. 735; House File, No. 395, introduced by the Committee on Roads and Highways.

⁵⁵⁰ *Journal of the House of Representatives, 1909*, pp. 437, 559.

⁵⁵¹ House File, No. 275, introduced by Hackler.

⁵⁵² House File, No. 327, introduced by Corrie.

⁵⁵³ *Journal of the House of Representatives, 1909*, p. 395.

⁵⁵⁴ *Journal of the Senate, 1909*, p. 179; Senate File, No. 71, introduced by Allen; also *Journal of the House of Representatives, 1909*, p. 200; and House File, No. 83, introduced by Perkins.

⁵⁵⁵ *Journal of the Senate, 1909*, pp. 156, 269.

⁵⁵⁶ *Journal of the Senate, 1909*, p. 521; Senate File, No. 264, introduced by Balkema.

⁵⁵⁷ *Journal of the Senate, 1909*, p. 245; Senate File, No. 119, introduced by Larrabee.

⁵⁵⁸ *The Register and Leader*, Vol. 59, No. 240, February 27, 1909.

⁵⁵⁹ House File, No. 5, introduced by Zeller.

⁵⁶⁰ *Journal of the House of Representatives*, 1909, p. 279.

⁵⁶¹ *Journal of the Senate*, 1909, p. 679.

⁵⁶² *Journal of the Senate*, 1909, p. 400.

⁵⁶³ *Laws of Iowa*, 1909, p. 81.

⁵⁶⁴ *Laws of Iowa*, 1909, p. 82.

⁵⁶⁵ *Laws of Iowa*, 1909, p. 88.

⁵⁶⁶ *Laws of Iowa*, 1909, p. 91.

⁵⁶⁷ *Laws of Iowa*, 1909, p. 91.

⁵⁶⁸ *Laws of Iowa*, 1909, p. 92.

⁵⁶⁹ *Laws of Iowa*, 1909, pp. 93, 94.

⁵⁷⁰ *Laws of Iowa*, 1909, p. 92.

⁵⁷¹ *Laws of Iowa*, 1909, p. 83.

⁵⁷² "The vote on the motion to strike out that section of the resolution referring to the office of county engineer was carried, ayes, 315; nays, 168".— In the Files of Iowa State Highway Commission (Ames).

In this connection it may be noted that charges were made at the time of this convention that certain bridge companies had provided hotel accommodations for a number of local officials who were delegates to the convention.

⁵⁷³ *The Register and Leader*, Vol. 60, No. 252, March 10, 1910.

⁵⁷⁴ In the files of the Iowa State Highway Commission (Ames).

⁵⁷⁵ See below, p. 269.

⁵⁷⁶ In the files of the Iowa State Highway Commission (Ames).

⁵⁷⁷ *The Register and Leader*, Vol. 61, No. 181, December 29, 1910.

⁵⁷⁸ In the files of the Iowa State Highway Commission (Ames).

⁵⁷⁹ In the files of the Iowa State Highway Commission (Ames).

⁵⁸⁰ In the files of the Iowa State Highway Commission (Ames).

⁵⁸¹ For instance letters were sent out to county supervisors containing the following list of questions for the purpose of arousing opposition to the work of the State Highway Commission and the good roads bills then pending before the General Assembly:

“Des Moines, Iowa, Feb. 4, 1911.

“Dear Sir:—

“Your legislative committee, appointed at the last meeting of the Iowa Association of Supervisors, have met and secured a copy of the various road and bridge laws introduced in this session of the General Assembly. Before we appear before the Committee, on Roads and Highways in the House and Senate, we wish to have the opinion of all the Supervisors in the State on the following questions. The following sections are taken from the Whitney bill, House File No. 131, repealing all our present bridge and road laws.

“Sec. 1 to 17 provides for the reorganization of the township, the levying of taxes, etc. Are you in favor of this?

“Sec. 8, Line 5, Page 4, provides for paying the township trustees out of the General County Fund. Do you want this done?

“Sec. 17, Line 3, Page 6, provides for dividing the road fund in two equal parts for 1911, one half to be used for dragging, the other half to be used for building roads. Do you want this done?

“Sec. 46, Line 9 to 16 inclusive, Page 16, provides for paying for road demonstrations out of the General County Fund. Do you want this done?

“Sec. 53 provides that the County Engineer shall make all surveys of roads and prepare plats and profiles, also detail plans and draw specifications, for each bridge and each culvert, and the Board must let the contracts in accordance therewith. Do you approve of this method?

“Sec. 56 provides for advertising for bids for all bridges of certain size, culverts and road work for two weeks and for the letting of the contract ten days later, making a total of twenty-four days, exclusive of the time consumed by the engineer in preparing the plans; and further provides in case bids are not satisfactory the work must be re-advertised for the same length of time. Do you think this is a practical way of letting contracts for such work?

“Sec. 61, provides that the contract be let to the lowest responsible bidder, and Sec. 74 provides that in case of a dispute between the Board and the Engineer as to whom is competent, or any other matter, it must be referred to the State Highway Commission whose decision is final. In your opinion, should the work go to the

lowest bidder or in case of a dispute between the Board and the County Engineer, should the Highway Commission have the authority to decide who was competent?

"Sec. 70 provides for creating the office of County Highway Engineer, specifying his qualifications and term of office. Sec. 72 provides that his salary shall be not less than \$1500 nor more than \$2500 per year, with all necessary expenses. Are you in favor of creating a high salaried office to be filled by some one not a resident or an officer of your county and thereby cause the expenditure of one-fourth and perhaps one-half of the entire fund from the tax levied and collected to build and maintain your roads?

"Would you be in favor of making an additional levy to cover this expense?

"The Highway Commission has been in existence six years, with an appropriation of \$5000 per year. Do you think they have accomplished enough good to justify this expenditure?

"Are you in favor of a State Highway Commission (an appointive office) in any form, that takes the authority away from the Board of Supervisors, who are elected by the people?

"Are you in favor of the passage of the bill House File No. 131, known as Whitney bill, or any similar bill?"

⁵⁸² *Journal of the House of Representatives*, 1911, p. 229; House File, No. 131, introduced by Whitney.

⁵⁸³ *Journal of the House of Representatives*, 1911, p. 400; House File, No. 264, introduced by Fourt.

⁵⁸⁴ *Journal of the House of Representatives*, 1911, p. 167; House File, No. 27, introduced by Kulp.

⁵⁸⁵ *Journal of the Senate*, 1911, p. 211; Senate File, No. 116, introduced by Balkema.

⁵⁸⁶ *Journal of the Senate*, 1911, p. 51; Senate File, No. 8.

⁵⁸⁷ *Journal of the House of Representatives*, 1911, p. 1116; House File, No. 529, introduced by the Highway Committee.

⁵⁸⁸ House File, No. 529, introduced by the Highway Committee.

⁵⁸⁹ *The Register and Leader*, Vol. 61, No. 262, March 20, 1911.

⁵⁹⁰ *The Register and Leader*, Vol. 61, No. 274, April 1, 1911.

- ⁵⁹¹ *The Register and Leader*, Vol. 61, No. 280, April 7, 1911.
- ⁵⁹² House File, No. 27, introduced by Kulp.
- ⁵⁹³ *Laws of Iowa*, 1911, pp. 69, 70, 76.
- ⁵⁹⁴ *The Register and Leader*, Vol. 61, No. 200, January 17, 1911.
- ⁵⁹⁵ *The Register and Leader*, Vol. 61, No. 235, February 21, 1911.
- ⁵⁹⁶ *The Register and Leader*, Vol. 61, No. 238, February 24, 1911.
- ⁵⁹⁷ *Journal of the House of Representatives*, 1911, p. 175; House File, No. 46, introduced by Cunningham; *Laws of Iowa*, 1911, p. 65.
- ⁵⁹⁸ *Laws of Iowa*, 1911, pp. 66, 67.
- ⁵⁹⁹ *Des Moines Daily Capital*, February 19, 1912.
- ⁶⁰⁰ In the files of the Iowa State Highway Commission (Ames).
- ⁶⁰¹ *Des Moines Daily Capital*, March 16, 1912. Supervisor J. H. Mathis resigned before his case came to trial, and his example was followed by Frank T. Morris.
- ⁶⁰² *The Clinton Daily Advertiser*, Vol. 39, No. 2, April 15, 1912.
- ⁶⁰³ *The Register and Leader*, Vol. 63, No. 66, September 6, 1912.

CHAPTER X

⁶⁰⁴ According to *The Des Moines Evening Tribune* of June 21, 1912, "the United States is estimated to be paying out about \$1,000,000 a day, in different jurisdictions, for road improvement. It authoritatively is estimated that about one-half of this sum is utterly wasted." While this estimate of the amount of money now being expended for roads is obviously exaggerated, one is not so sure that the same can be said regarding the estimate of the sum being wasted under present systems of road administration.

⁶⁰⁵ Logan Waller Page on the *Progress and Present Status of the Good Roads Movement in the United States* in the *Yearbook of the Department of Agriculture*, 1910, p. 265.

⁶⁰⁶ Page's *Progress and Present Status of the Good Roads Movement in the United States* in the *Yearbook of the Department of Agriculture*, 1910, p. 268.

⁶⁰⁷ Page's *Progress and Present Status of the Good Roads Move-*

ment in the United States in the *Yearbook of the Department of Agriculture*, 1910, p. 270.

⁶⁰⁸ Jenks's *Road Legislation for the American State* in the *Publications of the American Economic Association*, Vol. IV, No. 3, p. 10.

⁶⁰⁹ Jenks's *Road Legislation for the American State* in the *Publications of the American Economic Association*, Vol. IV, No. 3, p. 43.

⁶¹⁰ Jenks's *Road Legislation for the American State* in the *Publications of the American Economic Association*, Vol. IV, No. 3, pp. 23, 24.

⁶¹¹ Page's *Highway Improvements*, to be published in the *American Yearbook*, 1911.

⁶¹² Page's *Highway Improvements*, to be published in the *American Yearbook*, 1911.

⁶¹³ Maurice O. Eldridge on *Public Road Mileage, Revenues, and Expenditures in the United States*, United States Department of Agriculture, Office of Public Roads — *Bulletin*, No. 32, pp. 8, 9.

⁶¹⁴ Page's *Highway Improvements*, to be published in the *American Yearbook*, 1911.

⁶¹⁵ Valuable data along this line has been prepared by Logan Waller Page, Director of Office of Public Roads, United States Department of Agriculture.

⁶¹⁶ Jenks's *Road Legislation for the American State* in the *Publications of the American Economic Association*, Vol. IV, No. 3, pp. 25, 26.

⁶¹⁷ *Report of the State Engineer of California*, 1908-1910, pp. 5, 6.

⁶¹⁸ *Third Report of the Illinois Highway Commission*, 1908-1909, pp. 13, 15.

⁶¹⁹ State Highway Department of Maine, 1909, *Bulletin*, No. 2, on *Road Administration*, p. 3.

⁶²⁰ *Report of the Special Joint Committee on Highways of the Wisconsin Legislature*, 1910, pp. 9, 19.

APPENDIX

- ⁶²¹ *General Laws of Alabama*, 1911, pp. 223-234.
- ⁶²² *Code of Alabama*, Vol. II, Civil, 1907, p. 1349.
- ⁶²³ *Session Laws of the Territory of Arizona*, 1909, p. 241.
- ⁶²⁴ *Revised Statutes of Arizona*, 1901, pp. 995-1010.
- ⁶²⁵ *Kirby's Digest of the Statutes of Arkansas*, 1904, pp. 1502-1523.
- ⁶²⁶ *Acts of Arkansas*, 1907, pp. 568-586.
- ⁶²⁷ *Acts of Arkansas*, 1911, pp. 209-226.
- ⁶²⁸ *The Statutes of California*, 1907, pp. 225-230.
- ⁶²⁹ *The Statutes of California*, 1907, pp. 806-819.
- ⁶³⁰ *Report of the State Engineer of California*, 1908-1910, p. 6.
- ⁶³¹ *Session Laws of Colorado*, 1909, pp. 154-161.
- ⁶³² *Public Acts of Connecticut*, 1905, pp. 432-436; 1909, pp. 1021, 1022.
- ⁶³³ *Public Acts of Connecticut*, 1907, pp. 885-890.
- ⁶³⁴ *Laws of Delaware*, 1904-1905, pp. 232-240.
- ⁶³⁵ *General Statutes of the State of Florida*, 1906, pp. 411-418.
- ⁶³⁶ *Laws of Florida*, 1909, p. 26.
- ⁶³⁷ *Laws of Florida*, 1911, pp. 167-174.
- ⁶³⁸ *Code of the State of Georgia*, 1911, pp. 171-213.
- ⁶³⁹ *The Revised Codes of Idaho*, Vol. I, Political and Civil, 1908, pp. 522-527.
- ⁶⁴⁰ *Session Laws of Idaho*, 1911, p. 168.
- ⁶⁴¹ *Revised Statutes of the State of Illinois*, 1909, pp. 1911-1983.
- ⁶⁴² *Burn's Annotated Indiana Statutes*, Revision of 1908, Vol. III, pp. 7648-7815.
- ⁶⁴³ *Laws of Kansas*, 1911, pp. 448-468.
- ⁶⁴⁴ *Russell's Statutes of Kentucky*, 1908, pp. 1321-1358.
- ⁶⁴⁵ *Acts of the State of Louisiana*, 1910, pp. 74-83.

⁶⁴⁶ Wolff's *Constitution and Revised Laws of Louisiana*, 1904, Vol. II, pp. 1724-1735.

⁶⁴⁷ *Laws of Maine*, 1907, pp. 118-129; also *Laws of Maine*, 1909, pp. 65-75.

⁶⁴⁸ *Laws of Maryland*, 1908, pp. 247-258.

⁶⁴⁹ *Revised Laws of Massachusetts*, 1902, pp. 484-490.

⁶⁵⁰ *Public Acts of Michigan*, 1909, pp. 544-642.

⁶⁵¹ *Public Acts of Michigan*, 1907, pp. 339-341.

⁶⁵² *Laws of Minnesota*, 1905, pp. 198-202.

⁶⁵³ *Laws of Minnesota*, 1907, pp. 707, 708.

⁶⁵⁴ *Mississippi Code of 1906*, pp. 1201-1219.

⁶⁵⁵ *Laws of Mississippi*, 1910, p. 145.

⁶⁵⁶ *Laws of Missouri*, 1909, pp. 727-770.

⁶⁵⁷ *Laws of Missouri*, 1911, p. 371.

⁶⁵⁸ *Revised Code of Montana*, 1907, pp. 373-402.

⁶⁵⁹ *The Compiled Statutes of Nebraska*, Fifteenth Edition, 1911, pp. 1689-1736.

⁶⁶⁰ *Laws of Nebraska*, 1911, p. 404.

⁶⁶¹ *Compiled Laws of Nevada*, 1861-1900, pp. 102-112.

⁶⁶² *Laws of New Hampshire*, 1905, pp. 421-426; also *Laws of New Hampshire*, 1909, pp. 532-535.

⁶⁶³ *Laws of New Hampshire*, 1907, pp. 57-59.

⁶⁶⁴ *General Statutes of New Jersey*, 1709-1895, Vol. III, p. 2902.

⁶⁶⁵ *Laws of New Mexico*, 1909, pp. 107-109.

⁶⁶⁶ *Laws of New Mexico*, 1905, pp. 344-354.

⁶⁶⁷ *Laws of New York*, 1908, Vol. II, pp. 941-985.

⁶⁶⁸ *Laws of New York*, 1908, Vol. II, p. 928.

⁶⁶⁹ Pell's *Revisal of North Carolina*, 1908, Vol. I, pp. 1423-1451.

⁶⁷⁰ *Laws of North Dakota*, 1909, p. 158.

⁶⁷¹ *Laws of North Dakota*, 1911, pp. 236-239.

- ⁶⁷² Page and Adams's *Annotated General Code of Ohio*, Vol. I, pp. 417-450.
- ⁶⁷³ *Session Laws of Oklahoma*, 1910-1911, p. 221.
- ⁶⁷⁴ *Compiled Laws of Oklahoma*, 1909, pp. 1562-1593.
- ⁶⁷⁵ *Laws of Oregon*, 1909, pp. 295, 296.
- ⁶⁷⁶ *General Laws of Oregon*, 1911, pp. 265-278.
- ⁶⁷⁷ *Laws of Pennsylvania*, 1911, pp. 468-533.
- ⁶⁷⁸ *General Laws of Rhode Island*, 1909, pp. 322-325.
- ⁶⁷⁹ *Code of South Carolina*, 1902, Vol. I, pp. 505-531.
- ⁶⁸⁰ *Acts of South Carolina*, 1909, pp. 158-161.
- ⁶⁸¹ *Compiled Laws of South Dakota*, 1909, Vol. I, pp. 389-422.
- ⁶⁸² *Acts of Tennessee*, 1909, pp. 1994, 1995.
- ⁶⁸³ Supplement to Sayles's *Annotated Civil Statutes of Texas*, 1897-1908, pp. 510-516.
- ⁶⁸⁴ *Laws of Utah*, 1909, pp. 282-287.
- ⁶⁸⁵ *Laws of Utah*, 1911, p. 58.
- ⁶⁸⁶ *Public Statutes of Vermont*, 1906, pp. 773-778.
- ⁶⁸⁷ *Acts of the General Assembly of Virginia*, 1906, pp. 71-73.
- ⁶⁸⁸ *Acts of the General Assembly of Virginia*, 1909, pp. 90-93.
- ⁶⁸⁹ *Laws of Washington*, 1909, pp. 649-653.
- ⁶⁹⁰ *Laws of Washington*, 1911, pp. 114, 115.
- ⁶⁹¹ *Acts of West Virginia*, 1909, pp. 438-441.
- ⁶⁹² *Acts of West Virginia*, 1909, pp. 389-438.
- ⁶⁹³ *Laws of Wisconsin*, 1911, pp. 353-368.
- ⁶⁹⁴ *Wyoming Compiled Statutes*, 1910, pp. 662-675.
- ⁶⁹⁵ *Session Laws of Wyoming*, 1911, pp. 58-60.

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