



As presented to the Association of Southern Michigan Road Commissions by
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The network of roadways that now serves Michigan began centuries ago as a network of Indian trails. These paths, worn deep by centuries of foot travel by the Indians, were located on high, dry ground along waterbeds and streams. They connected main Indian villages and led to the rich hunting and fishing grounds of the state. They linked the numerous rivers that covered the state, thus providing a continuous transportation system.

Nearly all of the principal highways radiating from Detroit, for example, once were narrow paths through forest and plain marked by blazed trees and campfire ashes. US-24 southward to Toledo originally was the westernmost segment of the Great Trail from Fort Pitt to Fort Detroit, linking up on the east with Braddock's Road from the Atlantic seaboard. On the Upper Peninsula, US-2 from Sault Ste Marie to Escanaba and M-35 from Escanaba to Menominee follow the Sault and Green Bay Trail. From these and other main thoroughfares, lesser trails branched off. Many of them now are state or county roads.

Shortly after the Territory of Michigan was established in 1805, the Governor set up road districts. Roads built within these territorial road districts were local "farm to market" routes designated solely to enable the predominantly farming population to reach their neighboring market centers. At this time there was no effort made to connect the widely-scattered market centers with roads.

The combined local road and street network was so limited prior to 1812 that it hindered the Federal military effort in the War of 1812 and also impeded the settlement and development of Michigan's interior. Consequently, the Federal Government, in 1816, began to build lengthy military roads between Michigan's forts and her undeveloped hinterland.

General Lewis Cass, who became Governor of the Michigan Territory in 1813, energetically sought to enlist the support of Congress for road construction - both as a means of speeding up settlement and of bolstering military defenses which had proved inadequate in the War of 1812. As a result of Cass's efforts, the Secretary of War in 1816 ordered that troops should be used to build a road between Fort Meigs (Toledo) and Detroit. The road was not completed, however, until 1829 (construction delays??). Before the Detroit-Fort Meigs road was finished, Congress authorized construction of several other roads connecting Detroit with the hinterland. The federal government encouraged the settlement of the Michigan territory in the years immediately following the War of 1812 by aiding the construction of major territorial roads. Thus, roads from Detroit to Monroe and Toledo, Port Huron, Saginaw, Grand Rapids and Chicago, through the southern tier of counties, were constructed by the federal government in the 1820s and 1830s. Although some of these thoroughfares were hardly

more than rutted, narrow, stump filled paths through dense forests, they provided some assistance to the thousands of travelers who flocked to Michigan to settle, especially after the completion of the Erie Canal in 1826.

The State of Michigan also became involved in highway development and other internal improvement schemes. Caught up in a national mania for improved transportation facilities, the framers of the state's first constitution, which was passed in 1835, specifically encouraged internal improvements. The state legislature authorized bond issues of \$5 million dollars to finance transportation improvements. The Panic of 1837 and subsequent depression had devastating effects upon Michigan's internal improvement programs. The state defaulted on payment of its bonds and its credit was seriously impaired. Moreover, the financial crisis led to a strong revulsion against internal improvement plans, which was reflected in the Constitution of 1850 which specifically stated the following "The state shall not be a party to, or interested in, any work of internal improvement, nor engage in carrying on any such work...."

In 1817, the Territorial Government gave the responsibility for building local rural roads to the townships, under the control and direction of the county commissioners. Supervision of township road building proved to be a difficult task for the county commissioners due to the extremely large size of Michigan's early counties (1 Upper Peninsula, 1 that combines sections of the Upper and Lower Peninsulas and 3 Lower Peninsula). Consequently, in 1827, the townships were given direct responsibility for road building within their boundaries. When Michigan became a state in 1837, the Constitution provided for continuance of the township road system. But the Federal Government created a void in long-distance road building by ceasing its road operations in the new state. Because the new state had little money to spend for proper maintenance, the roads already built soon fell into disrepair. Before long, Detroit's citizenry became upset about the situation. According to Silas Farmer's *History of Detroit*, published in 1884: "*Several meetings were held in order to devise means for improving the roads, andthe desire was general that the legislature be petitioned to take the Ypsilanti, Pontiac and Grand River Roads under its control and management, to put them in a state of repair and to collect tollsAll these meetings were barren of result, and the roads grew continually worse. Traffic within the interior was consequently light and as a natural result, a general dullness pervaded the city. Few wagons came in, not many stayed over night, and hotels built for the accommodation of farmers were unoccupied. Finally some of the business men took the subject into consideration, and it was resolved that the only remedy was to build plank roads across the low lands.*"

Beginning in 1844, private turnpike companies attempted to fill this void with a network of toll roads, portions of which were constructed of wooden planks. Although these companies had to be chartered by the state and were required to construct and operate their roads according to certain standards specified by the state, these toll roads were entirely the responsibility of private enterprise. **This was significant because it marked the only time that public roads in Michigan were not a direct government responsibility.** One of the first plank road companies, the Detroit and Port Huron was chartered in 1844. Several more of these private toll road companies were established during the next few years, and in 1848 the State legislature passed a General Plank Road Act to regulate their operations.

Plank roads were required to be from two to four rods wide, 16 feet of this to be a "good, smooth, and permanent road." Eight feet of width was to be of 3-inch plank. For two-horse wagons and carriages, as well as "for every score of neat cattle," a toll of two cents per mile was permitted. For one-horse vehicles, the maximum rate was one cent per mile. Altogether more than 202 companies were chartered, although most never began operations. The Detroit and Pontiac plank road was opened late in 1849. The Detroit and Howell - 50 miles long, with 10 toll gates along Grand River Road was

completed in 1851. It was soon discovered, however, that the planks decayed rapidly and that the roads could not be kept up from the tolls received. *“Mark Twain, who traveled to Grand Rapids by stage to give a lecture, was asked how he had liked the trip. The road would not have been bad, he replied, if some unconscionable scoundrel had not now and then dropped a plank across it.”* Many companies abandoned operations after a few years and few were able to show a profit. However, this situation lasted only about 40 years as the toll roads proved to be economically impractical. **The support by the legislature of private toll companies did not meet the needs of a well-planned road system.**

Under Michigan law, the townships that controlled the construction and maintenance of roads were divided into numerous road districts, each under the charge of a highway commissioner or overseer. These road overseers operated independent of other road officials in other townships, and constructed and improved roads according to the wishes of their constituents. There was no overall township plan of roads; therefore a county system would have been inconceivable. In fact, the position of road overseer frequently alternated among prominent township residents, and it was clearly understood that, during such terms of office, the overseer would concentrate upon those roads adjacent to or near his own property. Nor was there any system of classification of roads according to relative importance or use.

The practice of working off one's road taxes, called the statute labor system, was the cornerstone of 19th century highway taxation policy in early Michigan. Each able-bodied male living within a local designated road district was directed to work off his road tax at the rate of not more than thirty days per year. The road supervisor, who was elected by residents of the road district, had authority to determine the time and place for each citizen to work. In the event that the citizen could not work, his road tax could be commuted at the rate of 62.5 cents per day. Every able-bodied male was expected to work a certain number of days a year on road construction or maintenance. The road overseer notified all such township residents of the time and place of work; those that failed to report were penalized. A resident who provided a wagon, scraper, yoke of oxen, team of horses, or other equipment would be assigned a reduced number of work days. The statute labor system provided little cash for the purchase of road equipment or the hiring of full-time road personnel. Indeed, there was the prevailing view that no experience or training was necessary to build or maintain roads. Anyone who could operate a scraper or a yoke of oxen could build roads, according to common belief.

The results of such amateur efforts were detrimental to an efficient system of roads; in fact, such efforts often left roads in worse condition than they were before such “repair work” had been initiated. One shrewd contemporary of the time observed:

“The experienced traveler who finds himself at the beginning of a newly mended road will betake himself to the nearest house and learn how far the improvement extends; if for the distance of 10 miles, he will then inquire by what circuit, not exceeding 15 miles in length, he can escape from the danger of repairs. After a time nature mends the damage done by the process of reconstruction, and the journeyer may find once again a way tolerable....”

Despite the inefficiency of Michigan's highway system, it was strongly defended by farmers of the state. They not only favored the use of amateur personnel as adequate for the task but they stoutly opposed any attempt to abolish the statute labor system in favor of taxation to finance roads. The depressed economic plight of Michigan farmers in the late 19th century helps explain this fear of increased taxation.

In the midst of the toll road experiment, the state became more intimately involved in road building with the assistance of what was essentially an early form of Federal-Aid. Congress had granted to Michigan in 1850, certain wilderness lands referred to as swamp lands, with the stipulation that these lands, or the proceeds thereof, would be applied, so far as necessary, to the reclaiming of said lands. The State Legislature felt that one of the most efficient means of reclaiming these swamp lands was “the

construction of roads, with proper ditches and drains, through the more unsettled parts of the state, where such lands are chiefly located." Consequently, in 1859 the legislature designated certain state roads to be built by contractors who, upon completion of their roads, would be paid either with cash obtained from the sale of swamplands, or with actual swamplands. Approximately 5700 miles of roads were built and financed by this method before the state's supply of saleable swampland was exhausted.

After the failure of the toll road companies, and the approximately coincidental end of Swamp Land State Road building, it became apparent that the townships were not able to provide the necessary inter-community roads in Michigan. Overall, the township road system exemplified the popular 19th century belief that highway development was essentially a local problem and that such roads benefitted mainly those citizens living nearby.

Later in the 19th century, in 1881, the state legislature altered the statute labor system to tie it directly to the amount of property owned within a particular road district. Under the new law, each able-bodied male taxpayer was given the option of working off his road tax or paying it off in cash. The tax was limited to one-half day's labor or fifty cents for each \$100 of property owned by the taxpayer. The total tax levy for a given year was determined by the voters of each highway district. The only form of indirect user tax enacted was the Wide Tire Law of 1887 which provided that persons using tires with rims wider than three and one-half inches would receive rebates of one-fourth of their assessed highway taxes for each year.

The first significant improvements in the administration of Michigan's highways took place in 1883 when the state legislature passed Public Act 278, which created a Stone Road District in Bay County representing 8 townships. The Act provided for a district road board and authorized it to construct and maintain three stone or macadamized roads between and within the districts. The measure provided many noticeable advantages. It enlarged the road district, making possible a highway plan for a larger area; it created a more efficient road commission; and provided for the raising of funds for road improvements. The features of the Bay County Act, strongly supported by good roads leaders, resulted in the passage of the County Road Law in 1893 which encouraged other counties to follow the lead of Bay County. The legislature passed the County Road Act of 1893, which permitted a county, by a vote of the people, to establish a county road commission and levy a road tax. By 1905, only 18 of 83 counties had set up county road commissions; by 1916, 59 counties had followed suit. In 1907 another important objective of road reformers was achieved when the statute labor system was abolished and replaced by cash road taxes. This greatly improved the efficiency of road building programs throughout the state and made possible the hiring of full-time trained road personnel and the purchase of road equipment.

In Michigan and elsewhere in the United States, there was a bicycle craze during the 1880s and 1890s. Clubs were formed, and besides riding in towns and cities, men and women made long trips. Prizes (small gold and silver bars) were awarded to those sturdy cyclists who rode 50 or 100 miles in one day. So great was the desire for distinction that some riders earned a number of bars, which they wore on their shoulders as evidence of their prowess. The bicycle rider was the most persistent of those pioneers who were going about the country demanding better roads. Farmers were particularly bitter against the bicycle rider and his crusade for better roads. They labeled it as a selfish crusade and said that no one wanted good roads but the bicyclist. As their numbers increased, however, the bicyclists became an important force. The League of American Wheelmen was organized in 1879 and became the pioneering good roads organization of the country. Michigan contributed much to the leadership of this organization. The leader of the movement in Michigan was Horatio S. "Good Roads" Earle, chief of the League of American Wheelmen in Michigan in 1899, and national president in 1901. In 1900, as chief counsel of the Michigan division of the league, Earle brought the first International Road Congress to Port Huron, an event that drew hundreds of good roads advocates from throughout the country. For the

main event, Earle hitched together the first good-roads train ever assembled -- a traction engine, road roller, sprinkler, dump wagons and farm wagons - all loaded on flatcars and running on the railroad. They carried the delegates to a newly laid one-mile stretch of macadam road, built as an object lesson to show what ought to be done nationwide. Earle, as a member of the State Senate from Detroit at that time, introduced a successful legislative resolution providing for the appointment of a committee to study the possibility of road improvements and to offer a plan for such improvements. The Committee's report - which nowhere mentions the word "automobile" - advocated a constitutional amendment to remove the existing prohibition against using state funds for road improvements. In addition, it recommended that a state highway commission be set up and a state aid system inaugurated. Pointing out that New Jersey, Vermont and other states had recently adopted state aid systems, the report urged the Legislature to "pass the necessary laws to enable Michigan to take a stand among other up-to-date states on this question, so that within a few years it shall not be true if said "can tell by the bad roads when we get to Michigan."

When Governor Fred Warner signed a bill creating the Michigan State Highway department in 1905, his first and logical choice to head the new agency was Horatio S. "Good Roads" Earle of Detroit. Earle had just finished a 2-year stint as Michigan's "unconstitutional" highway commissioner, without pay or official title. He had been appointed to the job in 1903, but the attorney general declared that the law creating a highway department and financial aid system for road building was in conflict with the state constitution. Earle, undeterred, began a statewide campaign to amend the constitution so the state could pay "reward" money to counties and townships that improved their roads. In 2 years, he visited nearly every city and village in the state, spoke at county fairs, called on newspaper editors, addressed civic and farm groups and wrote countless letters. Opponents resisted him at every turn. They heckled him from audiences, occasionally hired drunks to disrupt meetings and on at least one occasion, paid people a dollar apiece to stay home on the night Earle came to town. Even after the constitutional amendment was passed and the state legislature supported its use, rural opposition to the measure continued as farmers made several attempts to repeal the State Reward Law and to abolish the state highway dept. Opposition to reforms in the administration of highways was not limited to farmers, however. The distinguished automobile pioneer, Henry Ford, gave little support to the good roads movement. He believed that his automobiles, especially the famous Model T, not only could withstand any kind of road conditions, but that roads required only minimal improvements to make auto travel passable.

Michigan's state aid plan differed from many other states because it reflected the strong rural opposition to centralized highway administration. In addition to the establishment of a state highway dept, the legislation included a State Reward Law, which provided for state aid to townships and counties for roads constructed according to standards established by the state highway dept. These rewards varied from \$250 to \$1,000 per mile depending on the type of road constructed: clay base with gravel surface, all gravel, stone base with gravel surface, gravel base with stone surface and macadam. \$90,000 was appropriated to carry out the work from 1905 to 1907.

In 1905, there were 2,700 automobiles in Michigan, each paying a nominal fee of 50 cents per year. They were considered pretty much a nuisance, particularly by farmers whose livestock was frightened by the chugging motors. According to the best available authority, there were 68,000 miles of road in Michigan in 1905. Of this total, about 30,000 miles were clay, more than 26,000 miles were sand, and nearly 3,000 miles were swamp roads. Less than 8,000 miles of roads were improved - 7,700 with gravel and 245 miles with stone or macadam. The League of America Wheelmen, around 1905, gave way to a new organization - the American Road Makers Association, which was to become the parent of the American Road Builder's Association.

Shortly after the State Highway Department was created, Michigan acted as host to the 3rd annual convention of the American Road Makers. The convention was held in Port Huron late in August 1905.

“Good Roads” Earle stirred the interest of Michigan motorists in the convention by offering prizes to those who made the trip in the fastest time. He was roundly criticized for making a “race track” out of early Michigan roads by the editor of the Grange’s Michigan Patron.

In 1913, Frank F. Rogers became Michigan’s first elected commissioner, defeating “Good Roads” Earle, who ran on the Bull Moose ticket. Also in 1913, the legislature passed the State Trunkline Act. This amounted to approximately a 3,000 mile system to be built by the townships and counties with the state paying double the regular reward for each road type. Quick enthusiasm greeted the new trunkline highway act. This enthusiasm led to the first Road Bee Day in Michigan. The Huron Shore Road Association set aside June 9, 1913, for a day of work and festivity. A historian of that date reports that 200 miles of road were improved during the Bee. Six years later, the legislature authorized the State Highway Commissioner to initiate trunkline highways and to take full charge of their construction. It is significant that under the 1913 Act the state gave financial assistance to local units of government in building state trunkline highways; whereas under the 1919 law, local units of government financially aided the state in constructing state trunkline highways.

The Covert Road Law, enacted by the Legislature in 1915, also encouraged road construction in Michigan, especially secondary roads. The Act also increased the counties’ share in the cost of building trunk line roads. The law permitted the organization of districts for the financing and construction of highways. This law became an effective agency for the development of many miles of improved local roads, although, in later years it was put to such ambitious use that most of its provisions were repealed in 1933. The legislature also enacted a weight tax law levying a tax on motor vehicles and returning half of the revenue to the counties.

Congress signified the importance of road building to the nation as a whole by passing the Federal-aid Road Act of 1916. This Act appropriated Federal Funds, which were to be matched with state funds, for the construction of rural post roads. In 1917, the legislature passed the necessary legislation, approved by the voters of Michigan as an amendment to the Constitution of 1908, to qualify Michigan for aid under the Federal Aid Act of 1916. In 1917, Congress stipulated that each state designate a Federal-aid highway system which was not to exceed 7 percent of total road mileage in the state.

America’s entry into World War I brought a demand for a new type of maintenance service — **snow removal**. In 1918, the necessity for all-weather roads for the transportation of products from factories supplying war materials brought special snow removal activity upon five routes, none of which were in the Upper Peninsula. The War Loan Board participated in the \$13,200 snow removal appropriation for the 590 miles of these strategic routes. Three years later, the demand for snow removal had been sufficient that this service was regarded as desirable in some of the mining regions and in the vicinity of industrial centers of the U.P.

The legislature in 1925 initiated a series of far-reaching changes in the administration and financing of the state’s highway network. Other states by this time had begun to place a larger share of the burden of road costs on the chief beneficiary - the road user - and Michigan followed the national trend. Passage of the Gasoline Tax Act in 1925 completed the structure that produced the normal revenues of the State Highway Dept., although the levy was first fixed at only 2 cents. Two years later, the tax was raised to 3 cents a gallon. On January 1, 1926, the State Highway Dept. assumed the entire cost of construction and maintenance on the trunkline highways for the first time.

The Depression of the 30's was already in its initial stages. With property tax collections plummeting and tax delinquency mounting, there were immediate and widespread demands for a reduction in real estate taxation and for the support of a larger share of local road improvements from

more state motor vehicle revenues. These demands led to passage in 1931 of the McNitt Act. State tax revenues were earmarked to provide the most-needed relief demanded by local government. The Legislature in 1932 decreed that the entire weight tax be returned to the counties.

To accomplish this change, the act provided for a 20 percent per year retirement of township roads each year with a first year appropriation of \$2 million dollars from state revenues, increasing \$500,000 per year, up to \$4 million dollars per year. This money was to be apportioned among the counties on a pro rata basis according to township road mileage. Township tax levies for highway purposes were restricted to the retirement of previously incurred debt and to the improvement of local roads within a three-mill tax limit. The McNitt Act of 1932 was intended primarily as a property tax relief measure, which returned vehicle weight tax to the counties, but it brought about major reform in local road administration as well. While county road administration in Michigan had reached a level of competence not surpassed in any state in the country, road building by 1,269 separate township authorities was widely recognized as wasteful and inefficient. The argument was made that the largest township covers but a small area and has such small taxing powers, that it is entirely unfit to cope with even a small fraction of the road problems in the highly motorized age of 1931. *The following were cited by Frank F. Rogers in the "History of the Michigan State Highway Department" as the advantages of a County Road system:*

1. An equitable plan for raising highway funds, spreading a tax on all of the property of the county including that within the cities. In 1929, over \$9 million dollars were raised this way.
2. Important roads are made continuous throughout the county and by cooperating with adjoining counties may become continuous for much greater distances, an important feature in main market roads.
3. Money enough is secured to improve the worst and most expensive places on the main county roads (for example, bad hills, marshes and bogs)
4. The Board is practically continuous. Except in case of accident or death, there are always two experienced men on the Board. Only one goes off at a time, while on average, more than 1/2 of township commissioners go out of office each year.
5. The county can afford enough road building equipment to economize on both construction and maintenance.
6. It has been satisfactory for now (1933) and all of the counties have adopted it.
7. It produces results! The counties now have more than 17,000 miles of improved roads - more than twice the mileage on the state trunkline system.

The McNitt Act provided for the consolidation of the 68,000 miles of township roads into 83 existing county road systems at a rate of 1/5 of the total mileage each year for five years. County road systems were increased by the McNitt Act from 17,000 to about 85,000 miles, with virtual elimination of previous methods of support for township roads. A large proportion of the township road mileage consisted of semi-improved or unimproved roads which did not permit economical maintenance. County highway commissions found it necessary to spend considerable sums to improve these roads to a standard high enough to make possible some form of minimum maintenance. Allocations from motor vehicle revenues were insufficient to meet the counties' heavily increased road obligations. At the same time, imposition of a state-wide 15-mill property tax limitation by constitutional amendment in 1932 made it difficult for the counties to raise local taxes for highway purposes.

As a result, the counties were forced to curtail improvements on their primary road systems in order to maintain local roads. Moreover, elimination of local property taxes for highway purposes created a demand for improvement of the former township roads to standards far beyond those justified - the result of eliminating local financial responsibility. Thus the tendency was to drain revenues from heavily traveled county roads to those more lightly traveled and to reduce standards of improvement on all roads to the level of local roads.

Apportionment of motor vehicle revenues for former township roads among the counties on a mileage basis, without taking into account varying traffic loads as between counties, further contributed to unsound dispersion of available highway funds. Under this method of apportionment amounting to about \$57 per mile per year, a mile of road serving one or two farms received the same allotment of funds as a mile of road in a metropolitan area carrying several thousand vehicles a day. The McNitt Act remained on the books until it was incorporated into Act 51 and was never revised except to open road mileage for recertification every two years and through amendment in 1937, to add to county road systems the entire mileage of streets and alleys in recorded plats of unincorporated subdivisions.

The Dykstra Act of 1931 made provision for larger state participation in urban street costs. The state was permitted to pay amounts ranging from 50% of the cost of trunkline construction in cities of over 50,000 population to 100% in cities of less than 20,000 population.

As the depression approached its lowest ebb, with farm prices touching bottom, urban unemployment rising to record high levels, and with many local units defaulting on road bonds issued under the Covert Act, the State Legislature attempted to meet the emergency by passage in 1932 of the Horton Act, which drastically revised the distribution of state motor vehicle tax revenues. Although often amended in later years, this emergency legislation remains the keystone in the financial structure of Michigan's road and street systems. Under the terms of the Act, as subsequently amended, the entire proceeds of the weight tax were allocated to the counties. The tax on passenger cars was reduced from 55 cents per hundred pounds to 35 cents in 1934. In addition, the counties were allocated \$6,550,000 yearly from gasoline tax revenues. Of this latter sum, \$4 million dollars represented funds for township roads taken over under the McNitt Act and was to be distributed on a mileage basis. Of the weight tax proceeds, along with the remaining \$2,550,000 of gasoline tax funds, seven-eighths was to be apportioned among the counties on the basis of weight tax collections (thus reflecting county motor vehicle registrations), while the remaining one eighth was to be distributed equally among the 83 counties. All of the funds allocated to the counties were earmarked for specific purposes. Excluding the \$4 million for township roads, half of the revenues apportioned to each county were to be used for general highway needs and the remaining half distributed according to a fixed schedule of priorities established to meet the most pressing needs of the time.

In 1938, a constitutional amendment requiring that motor vehicle tax funds be used exclusively for highway purposes was proposed to Michigan voters and approved in every county in the state.

The war years of the 1940s accentuated national interest in highway transportation. A study conducted at that time led to the establishment of a National System of Interstate Highways, not to exceed 40,000 miles, to aid in the defense and development of the nation. The Interstate System, including 978 miles of highways in Michigan, was approved by the federal government in 1947. This system has subsequently been expanded.

Road developments in Michigan during the war period was largely financed through federal funds made available under the Defense Highway Act of 1941. With a decrease of highway revenues during the war period and rising costs of construction and maintenance, highway agencies, under the Good Roads Federation, early in 1946, undertook a detailed engineering analysis of road conditions and highway needs in Michigan with the cooperation of the Bureau of Public Roads. The state legislature in 1947 created a joint committee to cooperate with the Highway Study Committee of the Good Roads Federation.

The Study was completed in 1948 and presented to the governor and Legislature and stated the following. "For 15 years the Depression and the war have prevented normal highway development to

meet expanding needs. Since 1932, despite spectacular increases in motor vehicle traffic, construction on all classes of roadways has been far below the rate in pre-Depression years. About one-fifth less money is being spent on roads and streets in 1948 than in the late 1920s. The result has been a slow but steady deterioration of a great and basic public service. The effects of this deterioration now hamper and, if allowed to continue, soon will severely handicap the business, social and recreational activities of nearly every person in the state. There are many signs of this deterioration: the low standard of improvements on thousands of miles of rural roads; worn and inadequate pavements; mounting congestion and frustrating delays on important thoroughfares in city and country; and the rising accident toll on roadways of all kinds.

Since there has not been enough road building money to go around, it is not surprising that keen competition for funds has developed among highway agencies. At different times, one or another of them has succeeded in persuading the Legislature to adopt measures for its individual relief. Meanwhile the proposals put forward to step up highway funds to a level more commensurate with the need have been opposed because all of the facts were not available. In recent years (again 1947) it has become more and more apparent that piecemeal remedies and rivalries between highway agencies and organizations will solve none of the basic problems. These conditions actually are impeding sound development of highway transportation. The basic highway problem is clear enough: how to accomplish the double-barreled job of catching up with the accumulated backlog of deficiencies and of meeting current needs as they arise.

The solution can be determined only on the basis of all the facts, ie...a Needs Study!"The report found that \$1.5 billion was needed over a 15-year period to bring the entire highway system of Michigan - state, county and city - up to safe and tolerable standards. Recommendations for weight and gas tax increases were made to produce about \$30 million dollars of additional revenue annually. The total Motor Vehicle Highway Fund was to be distributed 44% to the State highway dept, 37% to the counties and 19% to the cities - as agreed to by these agencies, with local contributions for former township or local roads and residential streets. The 1948 Legislature did not pass the legislation to effect these recommendations and the 1949 special session also failed to do so. 1950 was an election year for the governor and legislators, so nothing was done until 1951.

The great need for new roads, revealed by a 1951 Michigan Good Roads Federation study, resulted in the passage of Act 51 by the 1951 legislature. Act 51 of Michigan Public Acts 1951, as amended, clarified the tri-level responsibility for highway administration, which essentially had existed since 1931. It provides for continuous classification of all roads and streets in the state into three systems - state, county and municipal, and to sub-classifications within each system. This act also established the Motor Vehicle Highway Fund (precursor to the Michigan Transportation Fund), comprised of highway user tax dollars, to finance the operation of this tri-jurisdiction plan of highway administration. The exclusive "earmarking" of highway user taxes for highway purposes and the distribution formula of the MVH Fund have ensured the implementation of essential highway development programs at all levels. Act 51 increased the state gas tax from 3 to 4 ½ cents per gallon and increased weight taxes on commercial vehicles in addition. The new statute provided that 44% of the money would go to the state highway dept, 19% to incorporated cities and villages and 37% to counties. The increase in funds made available under the 1951 act, however, failed to make a huge dent in the backlog of road needs that had piled up during the war years. Recognizing this situation, the state Legislature sponsored a needs study in 1955 under the direction of the Automotive Safety Foundation. The study showed the needs picture of 1951 had been greatly antiquated in the short span of 4 years. Following the 1955 study, the state Legislature that year passed Act 87, which increased the gas tax from 4 ½ cents to 6 cents a gallon, increased some commercial vehicle weight taxes and prescribed that increased revenues should be spent on an arterial system of the more heavily traveled roads in the state. The State highway department received 75 percent of this money and the counties received 25 percent. The 1956 Federal-

aid Highway Act set up the Highway Trust Fund, a realistic financial mechanism which expedited construction of the renamed National System of Interstate and Defense Highways.

In the first half of 1957, the Michigan Legislature amended previous highway legislation, repealing provisions of Act 87 and putting all highway revenues previously collected under the statute and Act 51 of 1951 into one fund, instead of two separate funds, and revising the basis on which it was to be divided. Under the new Act, the state highway department received 47% of the MVH fund, the counties 35%, and the cities and villages 18%.

To conclude, we thought it might be interesting to note a few famous firsts, straight from the early county road commissions

1. In 1909, Wayne County built the first mile of rural concrete highway in the world on Woodward Avenue between Six and Seven Mile Roads in Detroit. From far and near, road builders came to see how concrete stood up under the heavy traffic of that period. The success of this experiment speeded the development of modern automobile highways. It cost \$13,537, including \$1,000 in state aid.
2. The first roadside picnic tables were established on old US-16 in Boston Township, Ionia County in 1929, through the initiative of Alan Williams, then county engineer. The table was built of salvage planks formerly used for guardrails. The idea immediately caught on and was adopted by the State Highway Department. The Ionia County Road Commission made the state's tables until the work became too great.
3. Edward N. Hines of the Wayne County Road Commission invented the center line in 1911 to separate traffic moving in opposite directions. It has been called the most important traffic safety device ever conceived.

Many of us in the road business have heard and used the phrase that the road just "grew" there. Now we really know what happened.

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