

OAKLAND COUNTY

OAKLAND COUNTY



ROAD COMMISSION

ROAD COMMISSION

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ADMINISTRATION

Paul Van Roekel County Highway Engineer
Oscar D. Loomis Administrative Asst. to County Highway Engineer
Leroy W. McEntee Assistant Corporation Counsel
R. G. Worland Secretary-Clerk of the Board
Bernard D. Speace Accounting Department Supervisor
Willard L. McRae Director of Personnel
Audrey G. Ellixson Director of Purchasing

ENGINEERING

William J. Fognini Director of Engineering
Frank C. Beach Planning Engineer
Harold J. Rathfoot, Jr. Plat Engineer
David B. Kahn Right of Way and Contracts Engineer
Dennis A. Grylicki Design Engineer
Jerome L. Kelly, Jr. Construction Engineer

TRAFFIC

Robert W. Osgood Traffic Engineer
Richard J. Folkers Assistant Traffic Engineer
Floyd Harp Superintendent of Electrical Division
Robert Schultz Superintendent of Traffic Services

MAINTENANCE

David A. Hasse Director of Highway Maintenance
James H. Bradley Maintenance Operations Engineer
Richard L. Kincaid Maintenance Operations Supervisor
Richard E. Hicks Superintendent of Equipment Repair
Gail Bracken, Jr. Asst. Supt. of Equipment Repair
Leonard Nickerson Superintendent of Forestry
Lionel Cahoon Superintendent of Milford District
Clarence Ike Asst. Supt. of Milford District
Edward M. Wright Superintendent of Davisburg District
George Keyser, Jr. Asst. Supt. of Davisburg District
Clarence A. Page Superintendent of Lake Orion District
Robert Shelton Asst. Supt. of Lake Orion District
Cecil R. Bracken Superintendent of Pontiac District
William Kleino Asst. Supt. of Pontiac District
Floyd H. McMillan Asst. Supt. of Pontiac
District (Southfield)

PERMITS AND SPECIAL USES

William R. Mercer Director of Permits and Special Uses
Robert M. McPherson Permit Engineer
Peter Waisanen Weighmaster

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1968 ANNUAL REPORT

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Prepared by

**The Board of County Road Commissioners of the
County of Oakland, Michigan**

BOARD OF OAKLAND COUNTY ROAD COMMISSIONERS



Frazer W. Staman
Commissioner

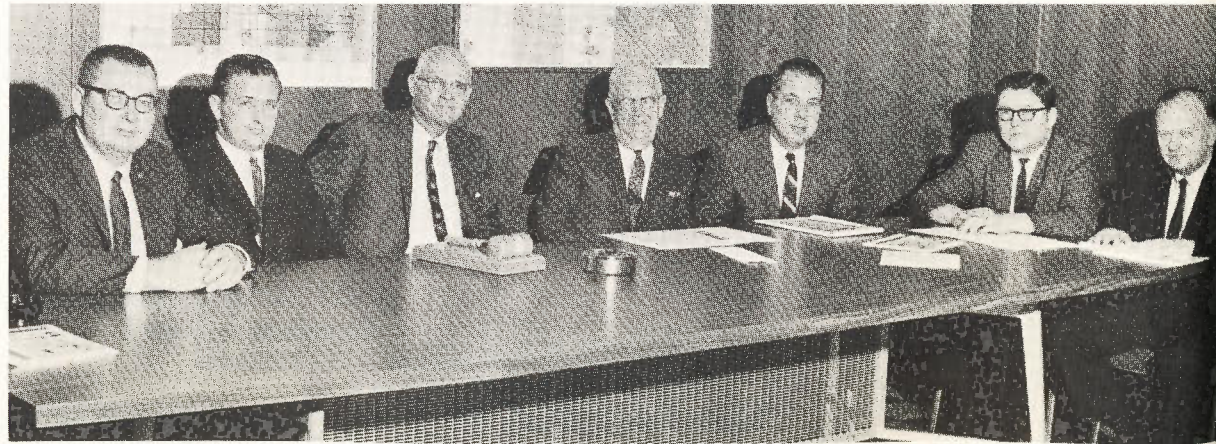


Sol D. Lomeson
Chairman



Paul W. McGovern
Vice-Chairman

George N. Grba
William M. Richards
Harry W. Horton (Chairman)
Thomas H. O'Donoghue
Lee Walker (Vice-Chairman)
E. Frank Richardson
Mahlon Benson, Jr.
(Left to Right)



PUBLIC WORKS COMMITTEE OF THE BOARD OF SUPERVISORS

To the Honorable Board of Supervisors
of the County of Oakland, Michigan

Gentlemen:

We are pleased to submit for your consideration and approval our annual report for the fiscal year ending December 31, 1968.

Included in this report is a summary of our activities of the past year relating to the construction and maintenance of roads and bridges, funds received and disbursed, and other information which will be of interest to you and the people of Oakland County.

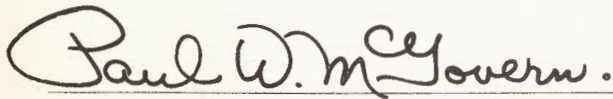
It is our hope in preparing this report that the members of the Oakland County Board of Supervisors and all others who may read it might become more fully aware of the organization and function of the Oakland County Road Commission, its accomplishments and its limitations.

Respectfully submitted, April, 1969

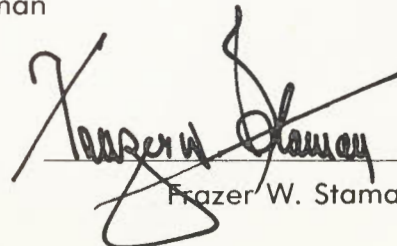
BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF OAKLAND, MICHIGAN



Sol D. Lomerson, Chairman

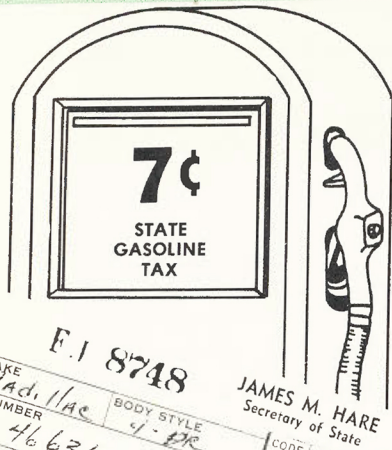


Paul W. McGovern, Vice-Chairman



Frazer W. Staman, Commissioner

FINANCING COUNTY ROADS...



The Oakland County Road Commission receives nearly all of its revenue from Gas and Weight Taxes collected, distributed and administered under what is known as Act 51, Public Acts of 1951 as amended.

Under this law the State Highway Commission is charged by the Michigan State Legislature with distribution of the Motor Vehicle Highway Fund (MVH) as well as the administration of the act. The act provides that all cities and villages, all 83 County Road Commissions and the Department of State Highways receive funds by definite formulas and that the counties, cities and villages are required to account to the State Highway Commission for said funds and to spend them as provided in the act.

REVENUE SOURCES

State gas tax (7¢ per gallon)
License plate fee (average \$22)

COUNTY ROAD COST FACTORS

One grader and operator are necessary for every 50 to 75 miles of gravel road at an annual cost of at least \$20,000.

Gravel for roads costs from \$2 to \$3 per cubic yard and it costs about \$885 per mile just to add one inch of gravel.

Calcium chloride costs at least \$320 per mile per year.

Adequate preparation of a road for paving and a 2 1/2" by 22' bituminous aggregate pavement will average over \$125,000 per mile.

Sealing an existing blacktop pavement with liquid asphalt and chips (single seal) costs about \$2,500 per mile.

To place a 2 1/2" blacktop cap over an existing pavement costs at least \$25,000 per mile.

Widening a 2 lane concrete road to 4 lanes will cost from \$250,000 to \$350,000 per mile and an all new 5 lane concrete pavement costs over \$500,000 per mile.

Salt for snow and ice control costs over \$10 per ton. It is common to use \$300 of salt per mile per year. Truck and driver cost an additional \$100 per mile per year.

Such things as tree trimming and removal, grass mowing, signs, roadside cleanup, engineering and administration are also sizable cost items that cannot be avoided.

ONE CAR FAMILY FUND GENERATOR

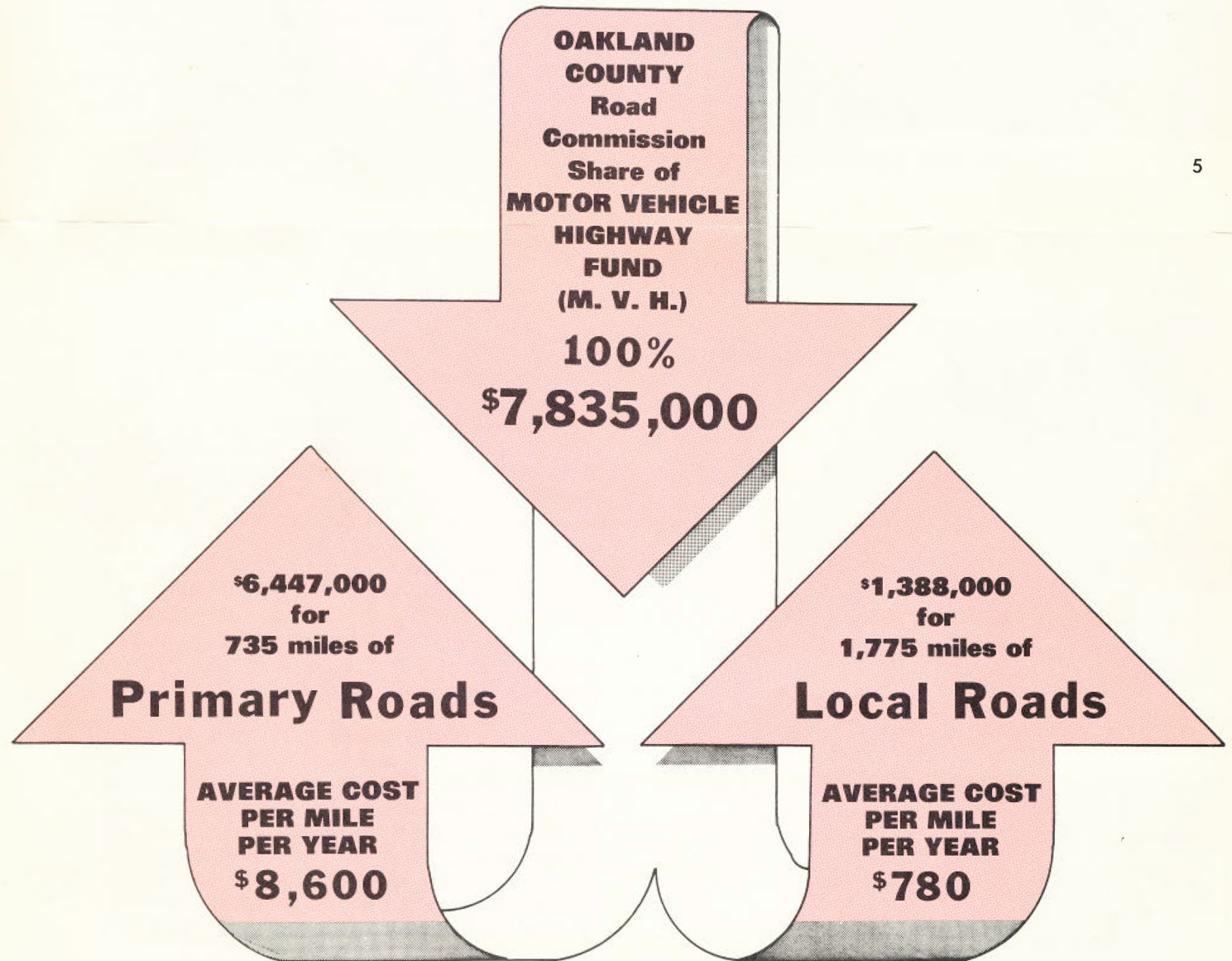
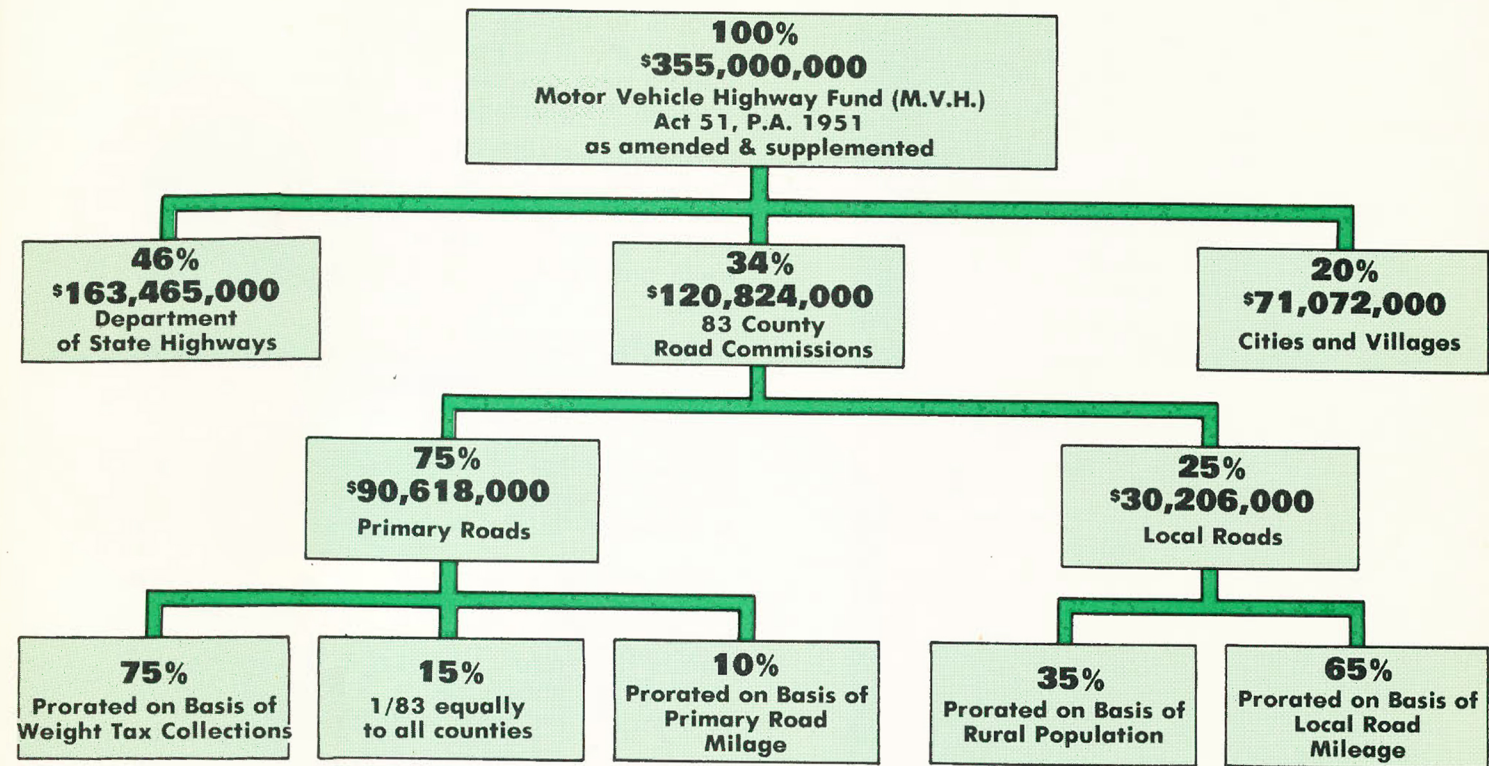
Let us examine how much an average ONE CAR FAMILY in Oakland County pays toward county roads annually. Assume they drove 12,000 miles.

12,000 miles at 12 miles per gallon	1,000 gal.
State gas tax per gallon, for 1,000 gal.	\$70.00
Cost of license plates	\$22.00
State Gas Tax	70.00
Total 100%	\$92.00

The gas and weight tax fund is split:	
46% to Department of State Highways	\$42.32
20% to Cities and Villages	\$18.40
34% to Counties	\$31.28

The County share of \$31.28 is split:	
75% for Primary Roads	\$23.46
25% for Local Roads	\$ 7.82

AMOUNTS SHOWN ARE ESTIMATED RECEIPTS FOR 1969



HOW MUCH DOES A TYPICAL CITY IN OAKLAND COUNTY SPEND PER MILE PER YEAR?

	PRIMARY ROADS	LOCAL ROADS
BIRMINGHAM	\$ 8,800.	\$1,600.
HUNTINGTON WOODS	10,700.	1,700.
OAK PARK	14,000.	1,950.
PONTIAC	14,500.	1,800.

THE AVERAGE ONE CAR FAMILY PAID ONLY A TOTAL OF \$31.28 AS ITS SHARE OF SUPPORTING THE 2,500 MILES OF COUNTY ROAD SYSTEM

"and what YOU should know about it"



Paul Van Roekel
County Highway Engineer

THE SITUATION...

Despite the fact that Oakland County has approximately 25% more miles of roads than any other county in Michigan, the needs of increasing population clearly call for even more and better roads.

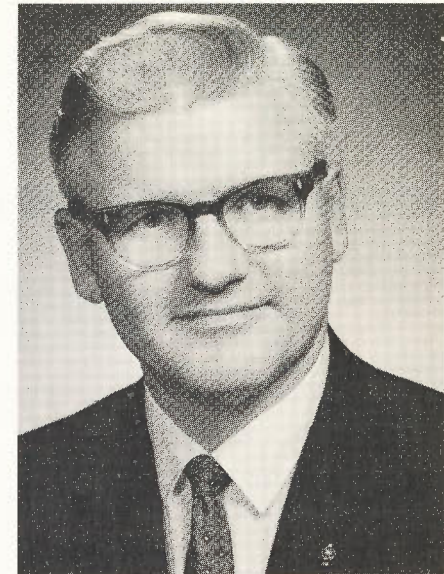
Oakland County's roadway system contains 2,508 miles of local and primary roads compared to 1,271 for Macomb and 1,503 for Wayne; Allegan is second to Oakland County in miles of county roads in Michigan. Aside from its nearly 2,500 miles of county roads plus their bridges, storm drain systems, etc., the Oakland County Road Commission is under contract to the State Highway Department to maintain 265 miles of state trunkline.

Unfortunately a great many of our county roads are far from adequate. A study conducted by the 63 communities of Oakland County in conjunction with the Oakland County Road Commission showed that within 10 years most of our primary road system will need extensive improvement. The study, dated May 28, 1968, points out that nearly \$175 million should be spent in construction over the next decade.

Currently only about \$3 million per year or roughly 1/6 of what is needed is being spent on construction. This is because the road commission has a limited income based almost entirely on gas and weight taxes as provided for by State Act 51 of 1951. The commission does not receive any financial support through general property tax except in a few township where voted millage has been approved.

It is evident that road conditions in Oakland County will deteriorate rapidly unless some source of additional income is found.

Two remedies for the situation are apparent. The first of these is to try to get voter approval for a county-wide millage proposal. Such a proposal appeared on the August, 1968 ballot and was soundly defeated at the polls. A second alternative is that the Oakland County Board of Supervisors include county road improvements in its Capital Improvement Program and provide funds each year on the basis of the needs which are most important to the greatest number of people.



R. G. Worland
Secretary-Clerk of the Board



Leroy W. McEntee
Assistant Corporation Counsel

THE PROCESS OF PROGRESS...AS WE SEE IT

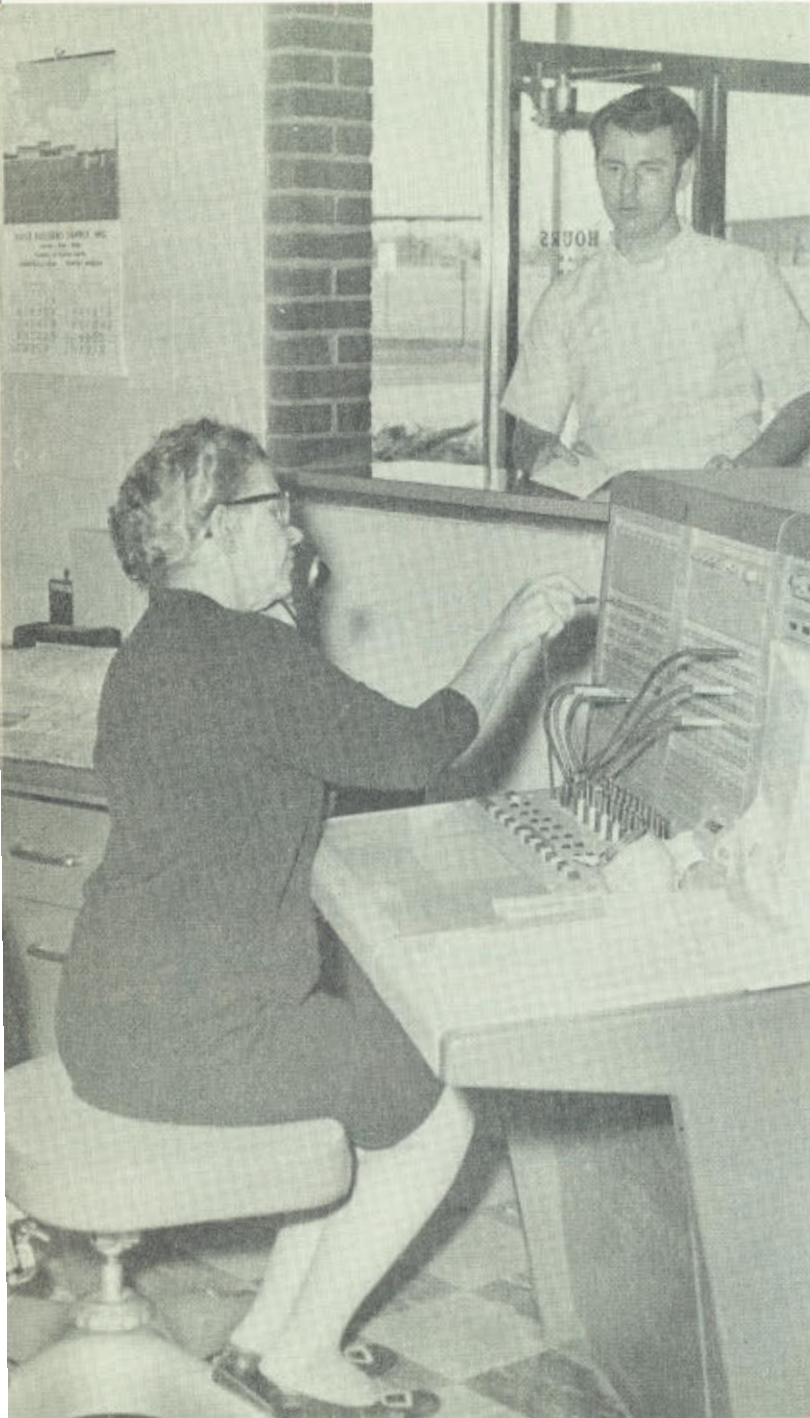
The Oakland County Road Commission employs modern technology and capable people to provide one product---service. As in any enterprise the key to success is people---people who are well trained and competent to solve the problems which arise daily.

Approximately 470 employees, including 60 in the engineering department, are constantly working to improve the county's road network. But an even larger staff will be necessary to keep pace with the growing need for better roads.

Early in 1968, personnel and space studies were conducted. These studies indicated that a 40% increase in manpower would be necessary by 1975. By 1980 it is likely that the present number of employees will have to be doubled. About half of this projected growth is expected in the maintenance department.

We are fully aware of the administrative problems posed by the expanding roadway program. To meet present and future road needs the road commission is continually striving to modernize its equipment and to re-organize and expand its facilities.

Partitioning of portions of the Engineering and Maintenance Departments at the main office building was completed in the latter part of 1968. The new layout will provide more efficient operation and better service to the public. Additional such remodeling is anticipated in the near future.



Rapid advances in the field of computer technology should have a profound effect on the operation of the road commission. Through use of electronic data processing equipment, our office records are kept continuously up to date.

In 1969 the Oakland County Road Commission will introduce computers into its engineering department. Such a move will enable us to refine our design work, improve construction, analyze maintenance problems more comprehensively and effect monetary savings in the years ahead.

To continue this high level of achievement, the road commission is constantly trying to find and train men and women who have the will to serve well. In work-study programs, developed in cooperation with colleges, we offer many students summer training with pay. Those who show promise are offered regular jobs when they graduate.

Current employees must also keep abreast of the latest developments which might affect their jobs. Technical skills are strengthened by on-the-job training programs conducted by staff personnel. During 1968 the Road Commission adopted a plan whereby it will pay tuition costs for any of its salaried personnel who wish to continue their education at an accredited institution.

Better trained employees, more suitable facilities and the latest equipment are the essential ingredients of progress at the Oakland County Road Commission. And progress is the key to better roads.



People use computers, not vice versa



DESIGNING TOMORROW TODAY

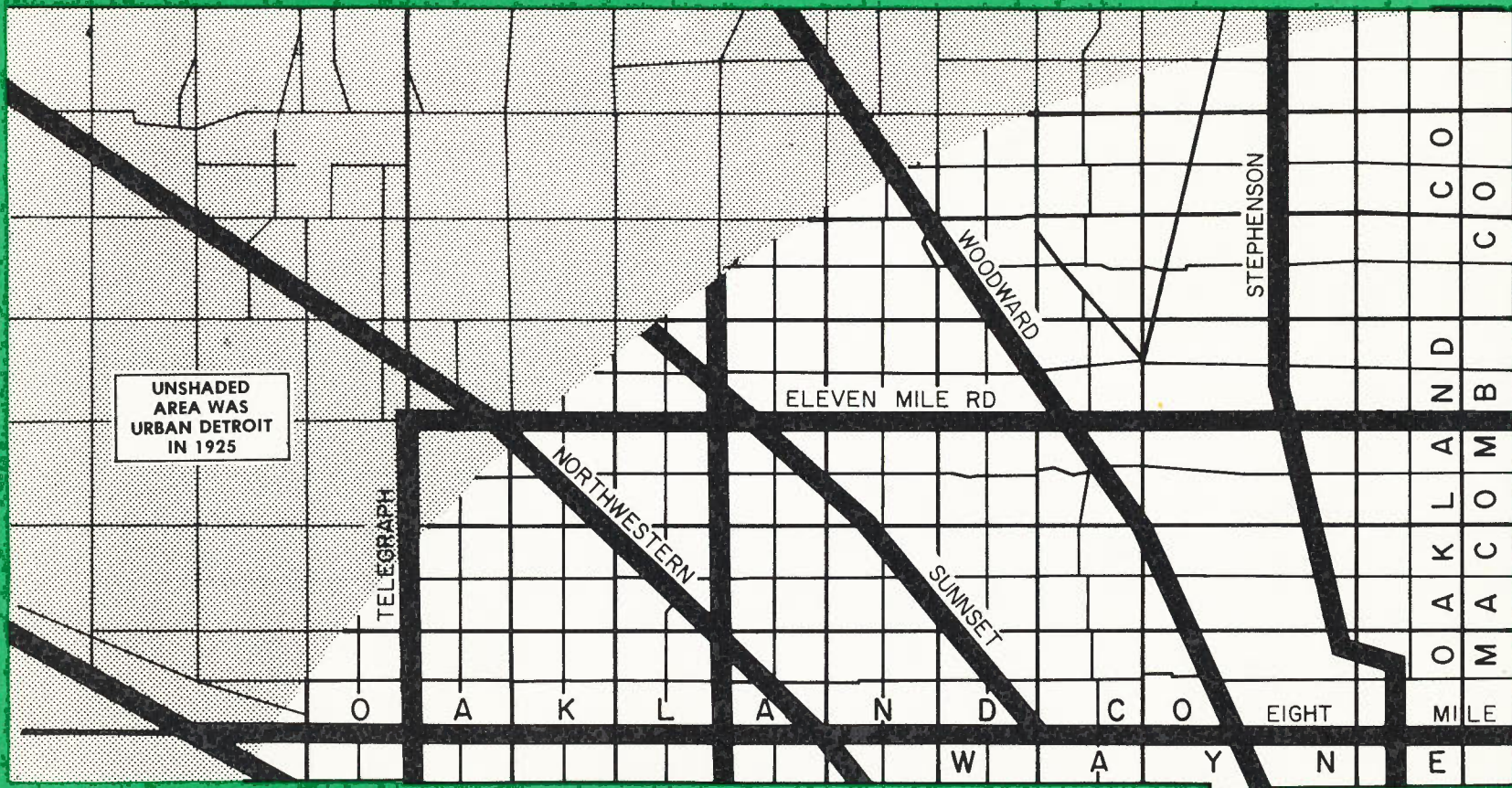
Many of the basic changes in community structure which have taken place in the past 50 years can be linked directly to the growth of the automotive industry and the far-sighted plans of road builders.

Decentralization of cities has been going on for quite a while, but it is only within the last few years that township such as Commerce, Waterford and Avon could be considered Metropolitan Detroit suburbs. This is because new and improved roads have cut commuting time to the downtown area to under an hour.

Increased residential development is not the only adjunct to urban expansion. Our whole way of life is changing. People rarely go to downtown stores to shop, instead, they drive to new shopping malls which have sprung up along major thoroughfares. The present, highly mobile, population no longer needs or wants the congestion of industrial, residential and commercial facilities that typified our cities a generation ago.

As towns and cities grow traffic problems increase proportionally---roads become busier and expenditures go up as better traffic control and more maintenance become mandatory. These and similar problems must be worked out by today's highway designers. They all call for foresight as well as knowledge in planning; for even if every change cannot be predicted, new requirements can and must be anticipated.

In 1925 a Master Plan of Detroit and environs was adopted by the road commissions of Wayne, Oakland and Macomb Counties as well as the city of Detroit. This Master Plan provided for roads with 120 feet right-of-way to be spaced about one mile apart with super highways having 204 feet right-of-way superimposed every three or four miles. This long range plan was the basis for many of our present major arterials such as Woodward, Northwestern and Base Line Road.



At the time the plan was adopted, it included all land within a 15 mile radius of downtown Detroit. This radius coincided with or extended past the urbanized area in all directions.

To provide for future expansion, the staffs of the metropolitan area road commissions have recently revised this plan. After analyzing the road requirements in the county the Planning Department of the OCRC formulated its own Master Plan which was accepted by the Board of Road Commissioners and is now incorporated in the Inter-County Highway Commission Master Plan.

This master plan is being presented to the local governmental units for their incorporation in zoning ordinances. It is essential that townships, villages, and cities be aware of the inter-county plan so that builders and developers don't build within future rights-of-way and also so that municipal planners might take advantage of the overall traffic pattern.



These photographs show how a modern, well planned highway is not only more functional than its archaic counterpart, but is more aesthetically pleasing and provides for safer and faster traffic flow.

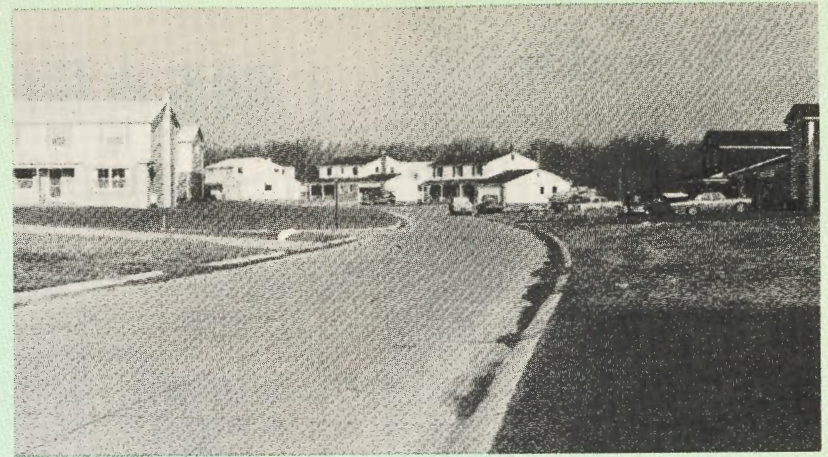


The Oakland County Master Plan, as revised in 1968, defines and locates both present and future road rights-of-way.

Before any road improvement program can be implemented, property for right-of-way must be acquired. The additional right-of-way is needed not only to widen pavement, but also to provide enough room for the relocation of existing utilities and sidewalks.

It is the responsibility of the Right-of-Way Department to secure the necessary land on which to build new roads. During 1968 the Oakland County Road Commission acquired 45 land deeds at a cost of \$60,505. An additional 48 titles were received as gifts.

The Right-of-Way Department also entered into hundreds of permissive use agreements. These agreements allowed the Road Commission to use private land for certain drainage, disposal and excavation purposes during construction.

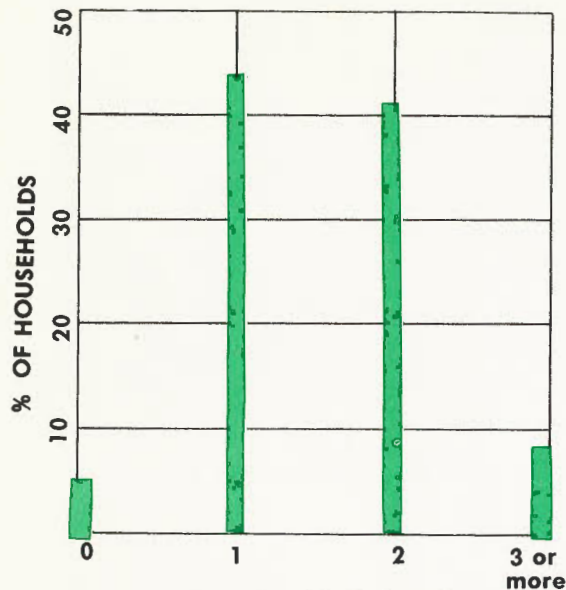


The Road Commission's Plat Division is concerned with the construction of subdivision streets.

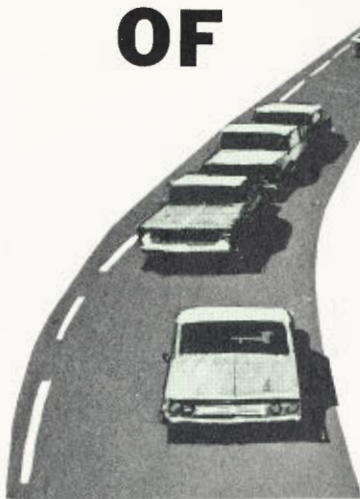
Before construction of a new subdivision can begin, a developer's plat must be approved by the OCRC which makes sure that adequate road provisions are included. The Plat Division then supervises construction and makes inspections of these new roads to make sure that they meet county specifications.

During 1968, 86 new plats were processed by the Plat Division. Thirty-three of these were for subdivision within incorporated municipalities and seven more were strip-type plats along existing county roads and as such required no new roads.

The remainder of the approved plats (46) were entirely under the jurisdiction of the county. These new subdivisions added 25.54 miles to the county road total. Construction costs for these road projects alone came to almost \$3,610,000.



MEASURES OF GROWTH



Cars per Household in Oakland County

POPULATION				COMMUNITY	AREA SQUARE MILES	OCCUPIED DWELLING UNITS			
APRIL 1, 1960	JULY 1, 1967	CHANGE				APRIL 1, 1960	JULY 1, 1967	CHANGE	
		NUMBER	%					NUMBER	%

1,332	1,650	318	24	Addison Twp.	35.37	384	490	106	28
15,946	21,000	5,054	32	Avon Twp.	35.08	4,073	5,400	1,327	33
23,275	23,660	385	2	Berkley	2.47	6,138	6,240	102	2
8,633	13,300	4,667	54	Beverly Hills	4.14	2,143	3,710	1,297	64
394	410	16	4	Bingham Farms	1.22	116	120	4	3
25,525	27,700	2,175	8	Farmington	4.48	7,624	8,310	686	9
2,378	3,950	1,572	66	Bloomfield Hills	5.00	674	1,110	436	65
22,530	38,500	15,970	71	Bloomfield Twp.	25.82	5,948	10,310	4,362	73
2,416	3,200	784	32	Brandon Twp.	34.65	604	810	206	34
769	920	151	20	Clarkston	.50	243	290	47	19
14,795	18,000	3,205	22	Clawson	2.13	3,809	4,700	891	23
9,608	12,500	2,892	30	Commerce Twp.	28.33	2,461	3,200	739	30
6,881	9,600	2,719	40	Farmington	1.90	1,780	2,530	750	42
25,526	38,200	12,674	50	Farmington Twp.	31.05	6,690	10,000	3,310	50
31,347	32,300	953	3	Ferndale	3.75	9,612	9,900	288	3
2,262	3,050	788	35	Franklin	2.62	628	850	222	35
1,306	1,560	254	19	Groveland Twp.	24.87	338	410	72	21
25,631	26,100	469	2	Hazel Park	2.08	7,218	7,400	182	2
4,855	6,210	1,355	28	Highland Twp.	35.23	1,323	1,680	357	27
3,269	3,670	401	12	Holly	2.06	968	1,090	122	13
2,282	3,130	848	37	Holly Twp.	34.45	572	790	218	38
8,746	9,070	324	4	Huntington Woods	2.54	2,340	2,430	90	4
10,121	13,700	3,579	35	Independence Twp.	35.69	2,468	3,450	982	40
2,761	2,800	39	1	Keego Harbor	.59	815	780	-35	-4
231	280	49	21	Lake Angelus	1.61	73	90	17	23
2,698	2,840	142	5	Lake Orion	1.33	808	850	42	5
3,556	4,060	504	14	Lathrup Village	1.44	1,011	1,150	139	14
359	370	11	3	Leonard	.80	98	100	2	2
2,880	3,780	900	31	Lyon Twp.	34.13	779	1,050	271	35
33,342	38,200	4,857	15	Madison Heights	6.98	8,545	9,760	1,215	14
4,323	4,700	377	9	Milford	2.48	1,161	1,260	99	8

POPULATION				COMMUNITY	AREA SQUARE MILES	OCCUPIED DWELLING UNITS			
APRIL 1, 1960	JULY 1, 1967	CHANGE				APRIL 1, 1960	JULY 1, 1967	CHANGE	
		NUMBER	%					NUMBER	%

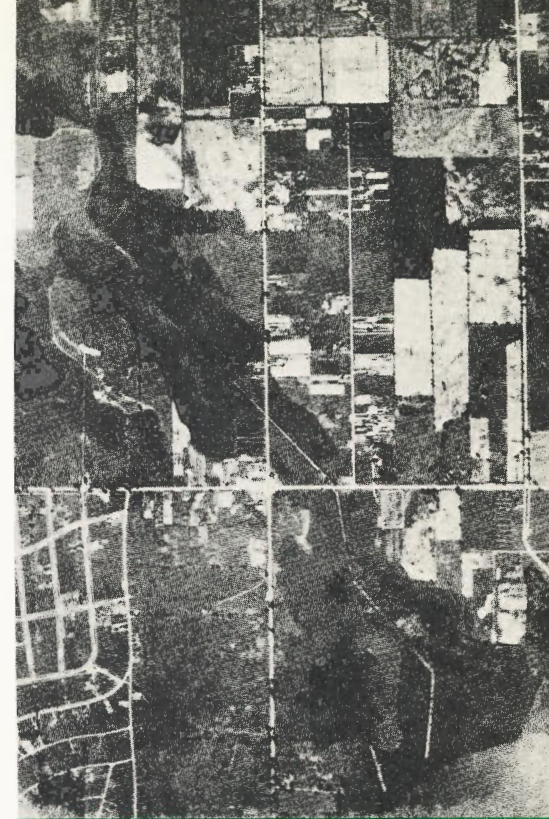
1,548	1,950	402	26	Milford Twp.	32.19	407	520	113	28
985	1,400	505	51	Northville (pt.)	.60	265	370	105	40
6,454	7,200	746	14	Novi (3)	31.34	1,682	1,880	198	12
2,469	3,500	1,031	41	Oakland Twp.	26.50	648	1,000	352	54
36,632	40,000	3,368	9	Oak Park	5.09	9,678	10,700	1,022	11
1,127	1,400	273	24	Orchard Lake	3.80	286	360	74	26
9,146	11,670	2,524	28	Orion Twp.	34.49	2,362	3,000	638	27
771	880	109	14	Ortonville	1.00	218	250	32	15
2,357	2,400	43	2	Oxford	1.50	740	750	10	1
3,204	4,700	1,496	47	Oxford Twp.	33.48	842	1,200	358	42
3,807	3,850	43	1	Pleasant Ridge	.54	1,185	1,200	15	1
82,233	85,300	3,067	4	Pontiac	19.07	23,224	24,100	876	4
8,959	12,300	3,341	37	Pontiac Twp.	17.10	2,439	3,400	961	39
482	700	218	45	Quakertown	1.37	121	180	59	49
5,431	6,900	1,469	27	Rochester	1.57	1,709	2,280	571	33
1,482	1,950	468	32	Rose Twp.	35.80	395	540	145	37
80,612	96,000	15,388	19	Royal Oak	11.48	22,803	27,600	4,797	21
8,147	13,000	4,853	60	Royal Oak Twp.	.04	1,873	3,410	1,537	82
31,531	65,000	33,469	106	Southfield (4)	25.89	8,740	17,700	8,960	102
1,753	1,970	217	12	South Lyon	1.27	519	580	61	12
2,664	3,300	636	24	Springfield Twp.	36.51	691	840	149	22
2,004	2,270	266	13	Sylvan Lake	.83	609	680	71	12
19,058	29,700	10,642	56	Troy (5)	33.46	5,041	8,450	3,409	68
3,550	4,200	650	18	Walled Lake	2.35	919	1,120	201	22
47,008	56,200	9,192	20	Waterford Twp.	35.03	12,734	15,250	2,516	20
13,867	21,700	7,833	56	W. Bloomfield Twp.	31.30	3,643	5,760	2,117	58
8,381	11,000	2,619	31	White Lake Twp.	36.57	2,226	2,930	704	32
1,531	1,850	319	21	Wixom	8.75	436	540	104	24
2,404	3,350	946	39	Wolverine Lake	1.64	611	860	249	41
684	860	176	26	Wood Creek Farms	1.00	148	190	42	28
690,259	865,000	174,741	25	TOTAL	897.64	188,908	237,900	48,992	25

Dispersal of urban populations into the surrounding land areas has been taking place for a number of years. By virtue of this fact Oakland County is now considered to be in the Metropolitan Detroit Area, a condition not fully anticipated when the county road system was being planned.

The number of vehicles registered in Oakland County has steadily increased and should go over the one million mark within the next five to ten years.

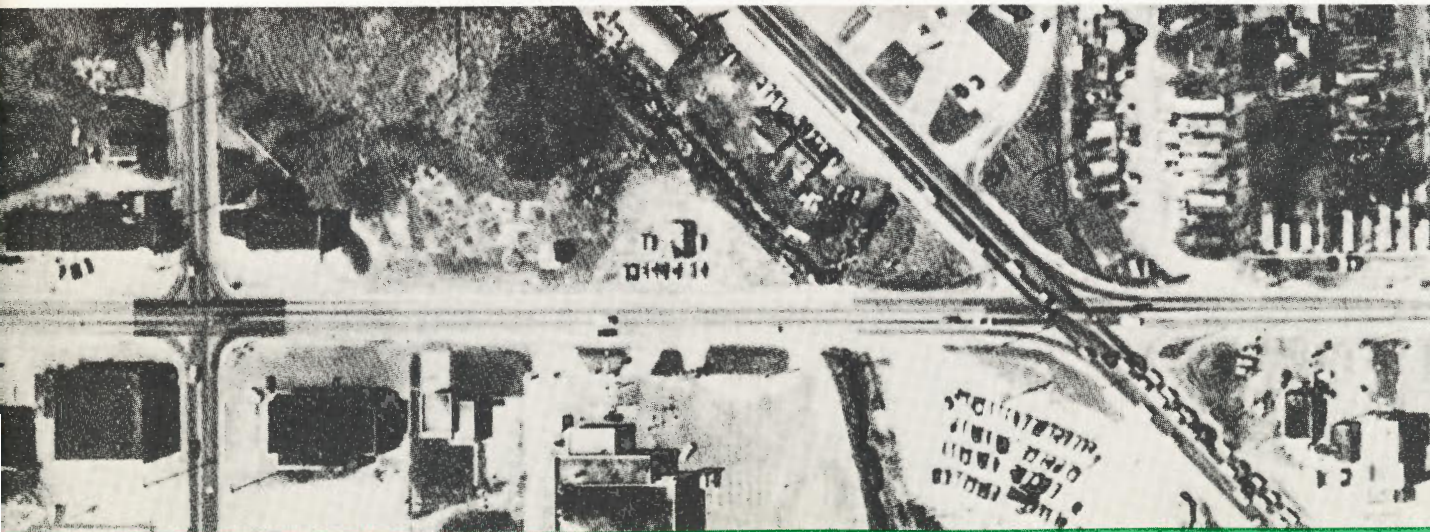
With the increase in the number of cars owned, there is a corresponding decrease in the average number of occupants per car. This, together with the formation of outlying commercial and industrial centers, has necessitated a change in traffic patterns and established flow lines linking the new centers of activity.

The greater traffic volume requires more sophisticated design and more expensive construction than ever before in the history of road improvement in Oakland County.



This 1936 aerial photo shows the then proposed Elizabeth Lake Road — M-59 Intersection in Waterford Township.

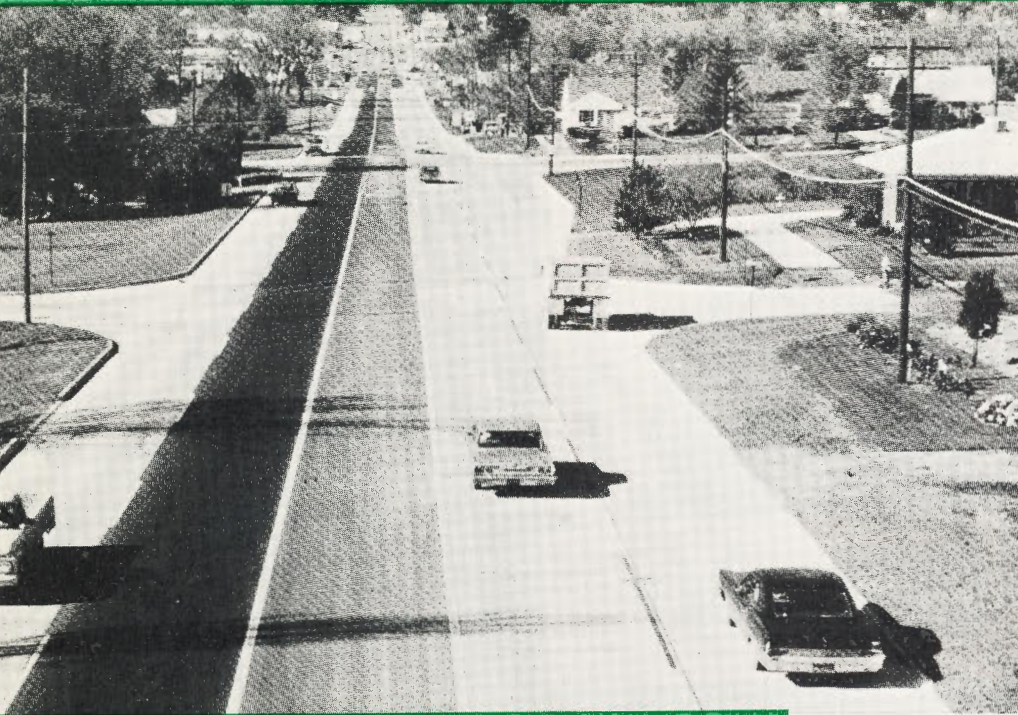
The almost unconfined sparsely built up area is common for most of Oakland County at that time period.



Contrary to the condition of 1936, this 1965 aerial photo classically illustrates the change of environment. This pattern of "Changing Land Use" is typical for the last four decades.



Elizabeth Lake Road between Josephine and M-59 in Waterford Township — widening of existing roadway from two to five lanes with the center lane for left turn only.



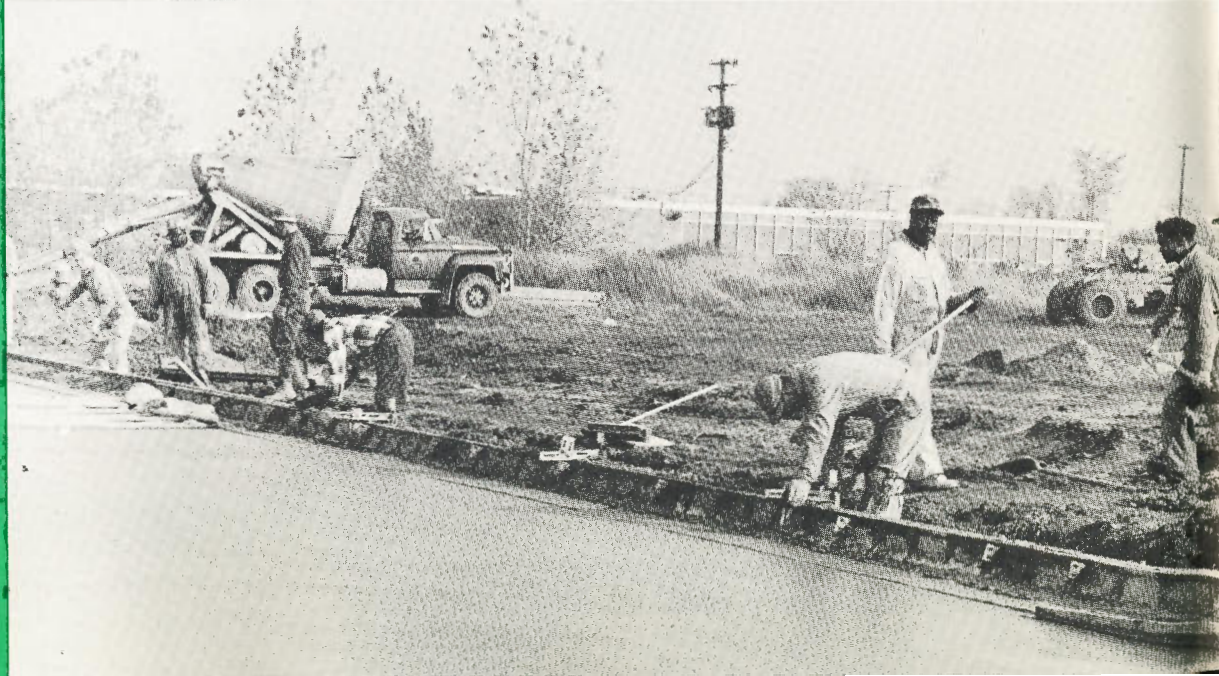
To determine whether or not a certain road improvement is advisable and to select an economically, as well as structurally sound road cross-section for a new road three important principles must be kept in mind.

1. Improved roads are not luxuries to be enjoyed only if they can be afforded but are essential to the welfare of the community.
2. Consideration of factors such as future traffic requirements, safety and the needs of the community it serves.
3. There is no such thing as a permanent road.

Roadway improvements cost tax dollars! Our road network faces a critical shortage in construction funds. In order to meet urgent needs in 1967 a **FOUR MILLION DOLLAR** bonding program was initiated to supplement our 1968 Motor Vehicle Highway Fund construction revenue.

Every project step must be controlled carefully to produce today's high-quality, uniform and even-riding concrete or asphalt pavements.

Well trained inspection and field testing personnel - men who are backed up at their construction division office and central testing laboratory - perform such supervision of the actual construction to make sure that plans are followed and work schedule is maintained.



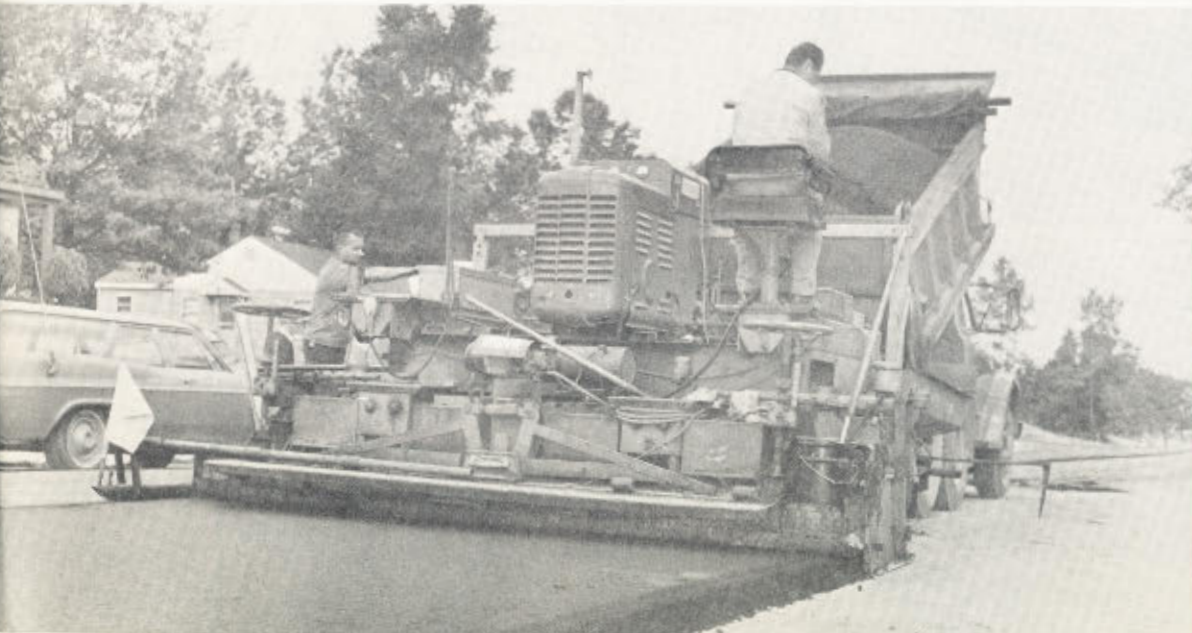
The subject here--1968--saw the investment of over five million dollars in roadway improvement. Some 7.8 miles of County Primary roads and 12.4 miles of Local Roads (township mile roads) were constructed.

Residential street repair and resurfacing by the Oakland County Road Commission, financed jointly by Bloomfield Township and the Road Commission, involved 2.5 miles at a contract cost of \$97,685.

Due to an expansion of the Federal Aid Secondary program, funds were made available for the pavement of 5.39 miles of 4 and 5 lane roads. The Oakland County Road Commission provided the necessary design and the construction supervision was performed by the Department of State Highways.

Yes, roadway improvement is expensive, but to the motorist, the savings in operating costs, time, and repair more than offset their expenditures.

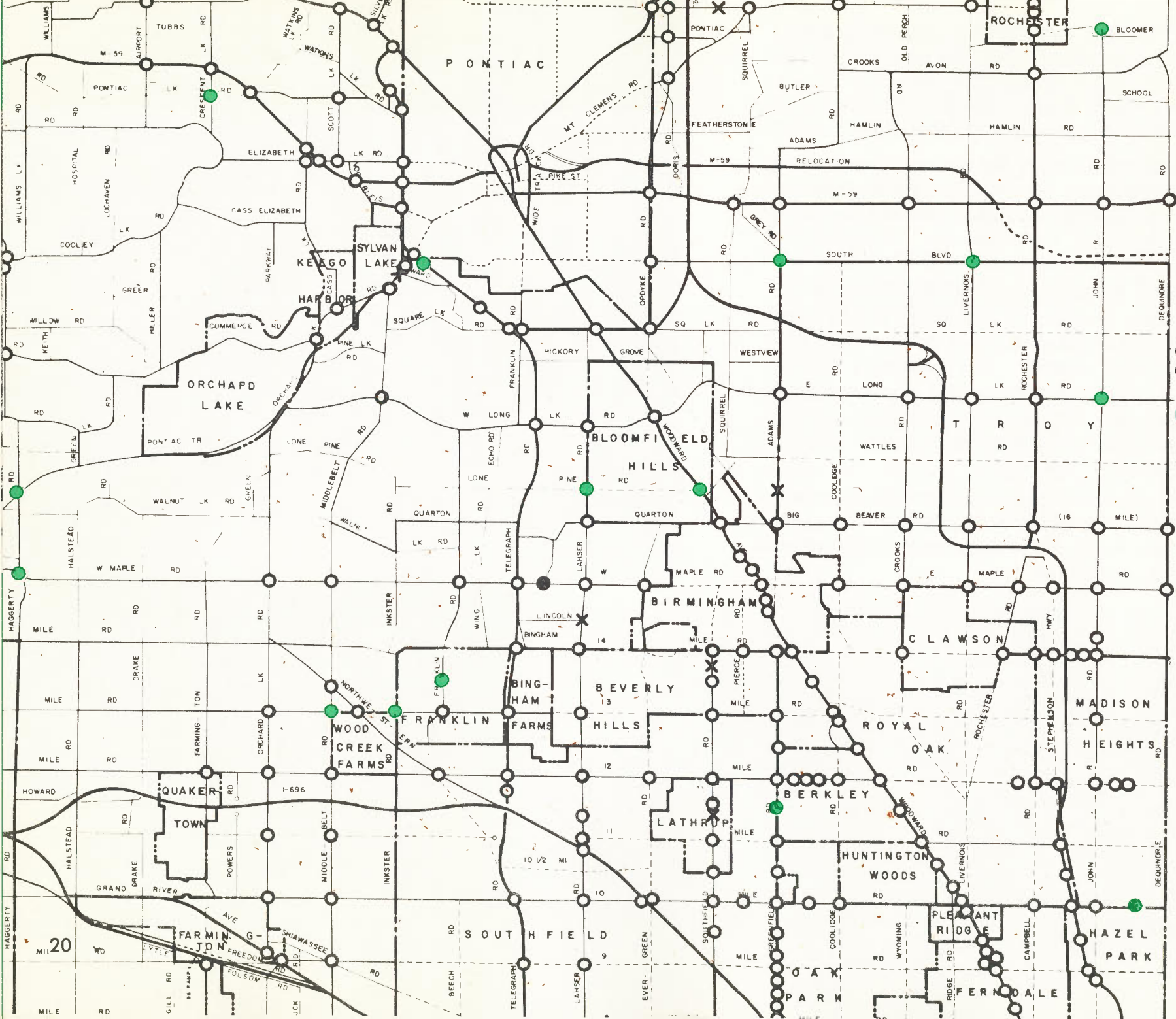
Hospital Road from Cooley Lake Road north to Oakland Community College entrance in Waterford Township — 22' wide 8" full depth asphalt pavement.



During 1968 several Full Depth Asphalt Paving Projects were completed.

Under the "Thick Multi-Layer" Concept the whole road structure down to natural ground, is of asphaltic material, forming a flexible but strong pavement X-section, replacing the gravel base.

This type of pavement has shown good adaptability to upgrade some of our local roads.



- Traffic
- Signals
- Flashers
- X School Crossings

20

(16 MILE)

PONTIAC

ROCHESTER

SYLVAN LAKE

BLOOMFIELD HILLS

BIRMINGHAM

BINGHAM HILLS

ORCHARD LAKE

QUAKER TOWN

FARMINGTON

SOUTHFIELD

LATHROP

BERKLEY

HUNTINGTON WOODS

PLEASANT RIDGE

HAZEL PARK

PONTIAC

FEATHERSTONE

ADAMS

RELOCATION

M-59

SOUTH BLVD

LIVERNOS

LONG

ROCHESTER

WATTLES

TROROY

BEAVER

CROOKS

MAPLE

CRAWSON

ROYAL OAK

ROCHESTER

STEPHENSON

MADISON HEIGHTS

WOODWARD

LIVERNOS

WYOMING

CAMPBELL

FERNOVALE

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1968 INTERSECTION TRAFFIC SIGNAL INSTALLATIONS

Traffic control signals are often necessary to provide for the orderly and safe movement of vehicles on congested roads.

During 1968 the Traffic Department installed 13 new signals to bring the total number of county-operated traffic lights to 344.

In keeping with our high standard of maintenance for these devices, a total of 32 were completely stripped down, rewired, repainted and then built back up. Last year new bulbs were put into every traffic light as well as the 145 other electronic traffic devices operated by the Road Commission. This routine maintenance operation used 14,486 lamps.



Skilled hands and modern equipment are necessary to install and maintain today's traffic signals.



This boring tool is used to drill across, underneath the pavement, allowing the traffic to move on without interruption.

Electrical conduit connecting the traffic signal to its timing device, is then placed in the channel.



1968 PRIMARY ROAD CONSTRUCTION

The following projects were substantially completed in 1968, Financial participation in 1968 is shown on page 24.

Project Number	Road Improved	Lenth Miles	Termini	Type of Construction	Contractor	Estimated Total Cost
CWB-493	Cranbrook Road	0.5	14 Mile Road to Lincoln	Grading, drainage and 24' concrete pavement (2 lanes)	Sterling Garrett	\$209,000
CWB-513	Twelve Mile Rd.	1.1	Southfield Rd. to Greenfield Road	Grading, drainage and 50' concrete pavement with Integral curbs (4 lanes)	John Carlo, Inc.	460,000 (1)
CWB-540	Greenfield Road	1.5	800' south of 11 Mile to Edwards Street	Grading, drainage and 59' concrete pavement with Integral curbs (5 lanes)	Tony Angelo	693,000 (2)
FA-642	Farmington Road	0.9	8 Mile Rd. to 9 Mile Rd.	Grading, drainage and 50' concrete pavement with Integral curbs (4 lanes)	Sterling Garrett	515,000 (3)
PR-654	Ten Mile Road at Orchard Lake		Intersection	Widen to 4 lanes in all four directions with full depth bituminous aggregate surfacing	D.J. McQuestion	61,000
PR-655	Opdyke Road at Mt. Clemens Rd.		Intersection	Widen to 4 lanes in all four directions with concrete pavement	Edward R. White	39,100
PR-656	Opdyke Road at Featherstone Rd.		Intersection	Widen Opdyke Road to 4 lanes with concrete pavement	Edward R. White	36,800
PR-694	Cass-Elizabeth and Parkway		Intersection	Widen to 3 and 4 lanes with full depth bituminous aggregate surfacing	D.J. McQuestion	30,000
FA-696	Elizabeth Lk. Rd.	1.0	M-59 to Josephine St.	Grading, drainage and widen to 62' with concrete pavement and Integral curbs (5 lanes)	Anderson & Ruzzin	445,000 (4)
FA-699	West Maple Rd.	1.0	Telegraph Rd. to Franklin Rd.	Grading, drainage and widen to 50' with concrete pavement and integral curbs (5 lanes)	Anderson & Ruzzin	400,000 (4)
PR-726	Commerce Rd.	0.3	East and West of Burns Rd.	Grading, drainage and 22' by 2 1/2" Bituminous Aggregate Surfacing (2 lanes)	J.D. Armstrong	44,000
PR-729	Novi Road	1.1	I-96 to 12 1/2 Mile Rd.	Grading, drainage and 24' concrete pavement (2 lanes)	Sterling Garrett	258,000
PR-748	Crooks Road	0.8	Maple Rd. to Big Beaver Rd.	Heavy Maintenance - 1 1/2" Bituminous Aggregate Surfacing overlay of existing pavement	Stolaruk Asphalt	9,200
CW-753	Coolidge Hwy.		At Woodward Avenue	Widening - south and west of Woodward	McCarthy Const.	24,100 (5)

(1) Southfield to pay 22%
Lathrup Village to pay 3%

(2) Southfield to pay 14.6%
Berkley to pay 14.6%

(3) Federal Aid Secondary Funds to pay 50%
City of Farmington to pay 25%

(4) Federal Aid Secondary Funds to pay 50%

(5) Project by City of Royal Oak
OCRC to pay \$12,035.63

1968 LOCAL ROAD CONSTRUCTION

The following projects were substantially completed in 1968, Financial participation in 1968 is shown on page 24

Project Number	Road Improved	Length		Type of Construction	Contractor	Estimated Total Cost
		Miles	Termini			
TM-614	Walnut Lake Rd.	1.4	Farmington Rd. to Drake Rd.	Grading, Drainage and 22' by 2 1/4" Full Depth Bituminous Aggregate Surfacing (2 lanes)	Sterling Garrett	\$227,000
TM-669B	Drake Road	1.1	Grand River to 11 Mile Rd. (Westerly)	22' by 2 1/4" Bituminous Aggregate Surfacing (2 lanes)	Stolaruk Asphalt Paving	29,000
BU-672C	Rattalee Lk. Rd. & Comm. Garage Site	0.2	Sherwood to Dixie Hwy. Garage Parking Lot & Driveways	22' by 2 1/4" Bituminous Aggregate Surfacing (3 lanes on Rattalee Lk. Rd., Bituminous Aggregate Surfacing of Garage Parking Lot & Driveways)	Ajax Asphalt Paving	39,500
TM-701B	Square Lake Rd.	1.0	Eastways Rd. to Adams Rd.	22' by 2 1/4" Bituminous Aggregate Surfacing (2 lanes)	Stolaruk Asphalt Paving	30,200
TM-711B	Sleeth Road	2.0	Wixom Rd. to Bass Lk. Rd.	22' by 2 1/4" Bituminous Aggregate Surfacing (2 lanes)	Detroit Concrete Products Corp.	47,400
TM-713B	Eston Road	0.5	Clarkston Rd. to Algonquin Rd.	22' by 2 1/4" Bituminous Aggregate Surfacing (2 lanes)	Stolaruk Asphalt Paving	13,700
TM-714	Powers and 11 Mile Rd.	1.5	Powers - 10 Mile Rd. to 11 Mile Rd. & 11 Mile Rd. - Powers Rd. to Orchard Lake Rd.	Grading, Drainage and 22' by 2 1/4" Bituminous Aggregate Surfacing (2 lanes)	D.J. McQuestion	250,000
TM-716	Fish Lake Road	0.5	Quick Rd. to Tinsman Rd.	Grading, Drainage and Aggregate Base (2 lanes)	M & B Equipment Co.	79,000
TM-731	Newton Road	1.7	Oakley Pk. Rd. to Commerce Rd.	Grading, Drainage and Aggregate Base (2 lanes)	Groleau Brothers	164,000
TM-732	Canal Road Oakside Ride	0.7	Wise Rd. to Oakside Dr. Canal Rd. to Howick Rd.	Drainage, Base Repair and 20' by 4" Bituminous Aggregate Surfacing (2 lanes)	Groleau Brothers	44,000
TM-733	Walnut Lake Rd.	1.0	Franklin Rd. to Inkster Rd.	Grading, Drainage and 22' by 2 1/4", 8" Full Depth Bituminous Aggregate Surfacing (2 lanes)	Ben P. Fyke & Sons	200,000
TM-735	Hospital Road	0.8	Cooley Lk. Rd. to Entrance of Oakland Community College	Grading, Drainage and 22' by 2 1/4", 6" Full Depth Bituminous Aggregate Surfacing (2 lanes)	Groleau Brothers	109,000 (1)
SL-736	Johns Road		Lyon Drain between 11 Mile Rd. and 12 Mile Rd.	Replace Bridge with Twin 9' 4" x 6' 3" CM Plate Pipe Arch	OCRC Maintenance	13,000
MS(B)754	Bloomfield Twp. Subdivison Sts.		Various locations on bituminous surfaced sts. in Blmfd. Twp.	Base Repair & Full Depth Bituminous Aggregate Surfacing or Thin Overlay repair with Bituminous Aggregate Surfacing	Ann Arbor Const. & Lind Asphalt Paving	95,300
TM-756	W. Lincoln Rd.	0.3	Greenfield to Lincoln Terrace Dr.	Concrete Pavement Widening to 4 lane Blvd. Rd.	Oak Const. Co.	31,000 (2)
TM-757	Davisburg Road	1.0	Dixie Hwy. east to Bridge Lk. Rd.	Improve Drainage & aggregate Base Restoration	OCRC Maintenance	11,500

(1) Waterford Township and Oakland Community College each to pay 25%

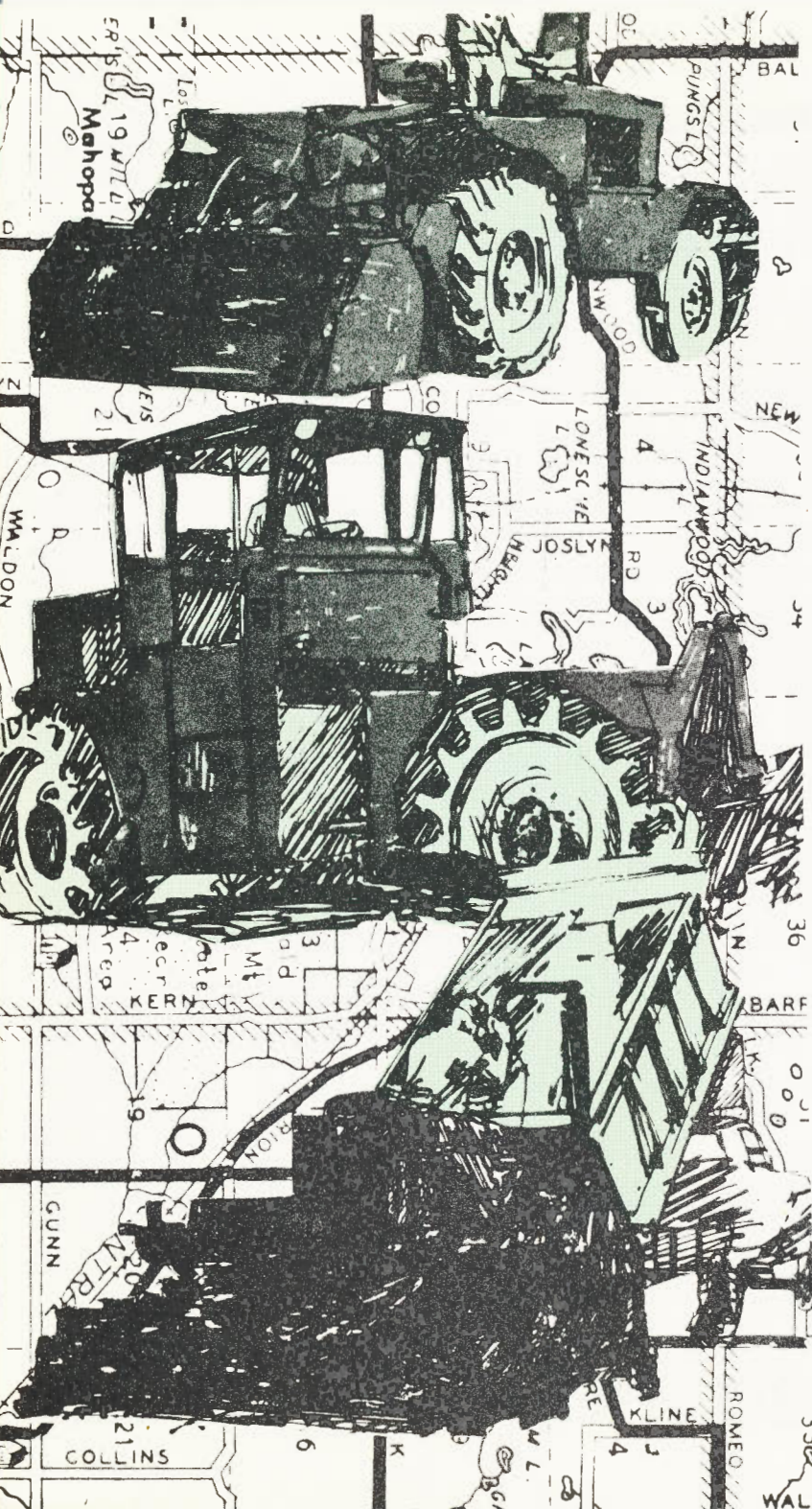
(2) Oak Park Project - OCRC paid \$16,669.58 as its share of the project.

1968
STATEMENT OF LOCAL ROAD CONSTRUCTION

<u>Project</u>	<u>Road</u>	<u>Amount</u>	<u>MVH Funds</u>	<u>Townships and Other Contributions</u>	
TM-708	Tienken Road	4,749.19	2,151.39	2,597.80	Avon
TM-671	Tienken Road	19,117.33	9,399.91	9,717.42	Avon
TM-693	Hitchman Haven Sub.	802.26	367.18	435.08	Avon
TM-702	Tienken Road	1,380.89	642.51	738.38	Avon
		26,049.67	12,560.99	13,488.68	
TM-701	Square Lake Road	33,436.34	15,695.16	17,741.18	Bloomfield
TM-701-B	Square Lake Road	30,128.54	15,049.63	15,078.91	Bloomfield
TM-733	Walnut Lake Road	121,918.22	69,300.17	52,618.05	Bloomfield
MSB-754	Subdivision Streets	86,169.38	41,226.10	44,943.28	Bloomfield
TM-766	Square Lake Road	282.97	141.49	141.48	Bloomfield
		271,935.45	141,412.55	130,522.90	
TM-765	East Glass Road	2,025.48	1,012.74	1,012.74	Brandon
TM-564	Oakley Park Road	3,225.93	3,225.93		Commerce
TM-660	Bass Lake Road	996.20	482.08	514.12	Commerce
TM-711	Sleeth Road	46,541.83	25,719.52	20,822.31	Commerce
TM-711B	Sleeth Road	47,407.32	24,682.00	22,725.32	Commerce
TM-731	Newton Road	107,742.79	62,257.55	45,485.24	Commerce
TM-732	Canal & Oakside Roads	40,176.23	24,301.77	15,874.46	Commerce
		246,090.30	140,668.85	105,421.45	
TM-639	9 Mile & Gill	1,324.85	1,324.85		Farmington
TM-669	Drake Road	15,427.95	7,354.46	8,073.49	Farmington
TM-669B	Drake Road	24,320.97	12,176.21	12,144.76	Farmington
TM-714	Powers Road	167,327.04	96,039.83	71,287.21	Farmington
TM-741	Robinson-Salvador-Osmus	3,576.66	1,875.10	1,701.56	Farmington
TM-770	Gill Road	278.88	278.88		Farmington
		212,256.35	119,049.33	93,207.02	
TM-716	Fish Lake Road	64,375.60	37,344.63	27,030.97	Holly
TM-713	Eston Road	11,748.10	5,843.83	5,904.27	Independence

1968
STATEMENT OF LOCAL ROAD CONSTRUCTION

<u>Project</u>	<u>Road</u>	<u>Amount</u>	<u>MVH Funds</u>	<u>Townships and Other Contributions</u>	
TM-713B	Eston Road	9,777.50	4,941.91	4,835.59	Independence
		<u>21,525.60</u>	<u>10,785.74</u>	<u>10,739.86</u>	
TM-720	Cole Road	4,922.64	2,215.19	2,707.45	Orion
WO-6514	Waldon Road	6,946.99	3,126.14	3,820.85	Orion
		<u>11,869.63</u>	<u>5,341.33</u>	<u>6,528.30</u>	
TM-756	West Lincoln	11,386.49	11,386.49		Royal Oak
TM-757	Davisburg Road	11,547.07	5,274.23	6,272.84	Springfield
TM-717	Van Zandt Street	31,224.28	14,273.85	16,950.43	Waterford
TM-735	Hospital Road	58,378.26	41,286.32	17,091.94	Waterford
		<u>89,602.54</u>	<u>55,560.17</u>	<u>34,042.37</u>	
TM-614	Walnut Lake Road	200,682.67	103,496.14	97,186.53	West Bloomfield
TM-767	Farmington Road	371.24	185.62	185.62	West Bloomfield
		<u>201,053.91</u>	<u>103,681.76</u>	<u>97,372.15</u>	
TM-718	Inkster Road	9,926.09	5,083.71	4,842.38	Village of Franklin
TM-735	Hospital Road	17,091.94		17,091.94	Oak. Comm. College
TM-741	Robinson-Salvador-Osmus	1,528.02		1,528.02	Clarencevill Sch. Dist.
T-712	Watkins Boulevard	5,176.22	2,438.43	2,737.79	Huron Valley Schools
T-768	Service Roads	867.64	867.64		Board of Auditors
Total Local Road Construction		1,204,308.00	652,468.59	551,839.41	
SL-635	Winkler Mill Bridge	2,729.43	2,729.43		Avon
SL-734	La Mothe Street Bridge	3,082.47	1,792.83	1,289.64	Waterford
SL-736	Johns Road Bridge	13,060.64	6,358.30	6,702.34	Lyon Twp.
Total Local Road Structure Construction		18,872.54	10,880.56	7,991.98	
TOTAL LOCAL ROAD CONSTRUCTION & STRUCTURE CONSTRUCTION		1,223,180.54	663,349.15	559,831.39	



When Construction Ends - Maintenance Begins

All year around the Maintenance Department faces the enormous task of keeping the county roads - presently 2,508 miles spread out over 900 sq. miles - in usable and safe condition. This service must be done with a minimum of expense and the least inconvenience to the motorist and adjacent property owners.

Linked by two-way radio equipment, the central office and the five district stations are in constant contact with maintenance crews working throughout the county. Highly mobile and well mechanized, these crews use a wide variety of specialized equipment, depending on the type of job to be done. This efficiency is made possible by operating our own motor-pool and the fine service provided by its heavy equipment maintenance shop.

Maintenance functions are varied but in essence, can be grouped in three categories.

- Routine and Preventative Maintenance
- Maintenance Betterments
- Emergency Maintenance

The following pages are self-explanatory. They do not cover all phases of maintenance, but rather a summary of selected operational highlights.

STATE AND COUNTY ROAD MILEAGE IN OAKLAND COUNTY

STATE TRUNK LINE HIGHWAYS	1968 Miles		1967 Miles	
Two Lane Pavement	39.97		39.97	
Four or More Lanes of Pavement	86.33		86.33	
Freeways (Limited Access)	90.34	265.77	90.34	265.77
Ramps	49.13		49.13	
PRIMARY COUNTY ROADS				
Gravel Surface	118.78		119.08	
Bituminous Surface Treated Gravel	185.31		186.35	
Mixed Bituminous Surface on Gravel Base	132.27	735.86	128.71	729.37
Mixed Bituminous Surface on Concrete Base	226.03		224.57	
Concrete	71.39		68.58	
Full Depth Asphalt	2.08		2.08	
LOCAL COUNTY ROADS				
Gravel Surface	1,258.16		1,264.50	
Bituminous Surface Treated Gravel	39.20		44.38	
Mixed Bituminous Surface on Gravel Base	390.68	1,772.89	385.28	1,762.36
Mixed Bituminous Surface on Concrete Base	2.81			
Concrete	71.39		68.20	
Full Depth Asphalt	10.65			
TOTAL MILES		2,774.52		2,757.50



A special piece of equipment is this "Sewer Jet Cleaner.". Water at 1000 psi is thrust into the culvert clogged with debris, washing the material back into the ditch where it is easily removed.

Seeding and fertilizing, of grass and control of noxious weed is speeded up by use of this "Hydro-spray truck".



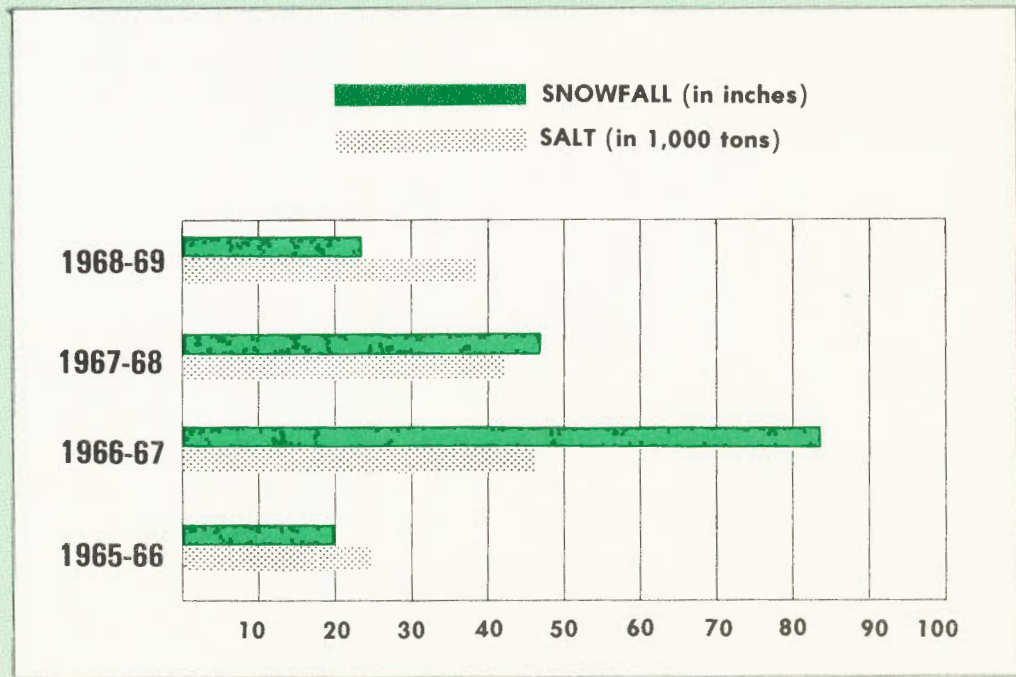
Routine Maintenance consists of such operations as blading shoulders and gravel roads, applying sodium chloride as gravel road stabilizing agent, calcium chloride for dust control, seal coating, bituminous patching, road ditch and culvert clean out, sweeping, rubbish removal, replacing of guard posts and roadside maintenance.

Periodically Preventative Maintenance like cleaning and filling varied joints and pavement cracks, maintenance on bridge decks and railings is of upmost importance to the restoration of existing pavements and structures.

Motorists today expect the roads to be open, day or night, throughout the winter. To provide this kind of service - and this is vital to public safety and the area economy - extensive night and weekend work was required.

Inasmuch as our personnel now must work many overtime hours, snow removal and ice control represent one of our more expensive maintenance operations.

The adjoining graph visually depicts salt used to control snow and ice on county roads, and state trunklines maintained by us.





The program of maintenance Betterment includes grading roads, widening shoulders, placing steel beam guard rails, ditching, slope shaping as well as bituminous resurfacing. Most intersection alterations also fall into this category of maintenance. Intersection improvements include improving the geometrics to provide better visibility, adding turn lanes, and installing traffic control devices.



Pavement markings, painted or repainted totaled 800 miles of center lane and edge-lines on county roads and state trunklines.

In addition, numerous construction signs and barricades, fabricated in our own sign shop, were furnished by the Oakland County Road Commission to be installed on county road construction sites for the convenience and safety of the public.



During the months of June and July, intense rainstorms and consequent flood damage on road beds, traffic control devices, culverts, and bridges, required extensive Emergency Maintenance to reopen roads to traffic.





CONCERN FOR THE USE OF ROAD RIGHT-OF-WAY

The Department of Permits and Special Uses is now in its second year of operation and its importance has become more and more apparent as time goes by.

It is this department which is concerned most directly with use of the road right-of-way. Anyone who plans any kind of construction, excavation or surface work which might affect the right-of-way is required to obtain a permit before work can begin.

During 1968, 11,258 permits were issued. They were for everything from installation of 3/4 inch pipe for home water services to excavation for sewer lines 8 feet in diameter.

To minimize future relocations of now proposed private and public utilities, the staff of the Permits and Special Uses Department must make detailed analysis of every construction plan. Field personnel then make inspections to insure that the terms and conditions under which the permit was issued are followed.

Another responsibility of this new department is the enforcement of load-limits on county roads. All special hauling permits are also handled through the Department of Permits and Special Uses.



Recently reorganized and newly equipped and staffed, the three-man weighmaster patrol team, deputized by the Sheriff's Department, maintain a constant check on all county roads.



DISTRIBUTION OF 1968 MOTOR VEHICLE HIGHWAY FUNDS

Received Total 100% \$6,970,922.40

36% Primary Road Construction

39% Primary Road Maintenance

5% Local Road Construction

20% Local Road Maintenance

1968

COUNTY

HIGHWAY

REVENUE

RECEIPTS

and

OPERATING

EXPENDITURES

REVENUE RECEIPTS

State Funds	
Motor Vehicle Highway Funds	
Engineering Services	
Primary Road Fund	4,130.00
Local Road Fund	870.00
Total Engineering Service	5,000.00
County Primary Road Fund	
Amount of Allocation	5,750,198.17
Less: Optional Transfer	506,209.33
Net for Primary Roads	5,243,988.84
County Local Road Fund	
Amount of Allocation	1,215,724.23
Add: Optional Transfer	506,209.33
Net for Local Roads	1,721,933.56
Total Motor Vehicle Highway Funds	6,970,922.40
Federal Funds	
Federal Aid Secondary	444,775.04
Total Federal Funds	444,775.04
County Raised Revenue	
Township Contributions	584,113.79
Other Contributions	233,504.97
Total County Raised Revenue	817,618.76
Miscellaneous Receipts	
Salvage Sales	1,368.54
Interest Earned	45,896.66
Sundry Refunds	2,016.14
Sale of Maps & Plans	1,208.00
Permit Fees	15,870.00
Abandonment Fees	625.00
Total Miscellaneous Receipts	66,984.34
Total Revenue Receipts	8,300,300.54
Non-Revenue Receipts	
Proceeds from Bond Sale	
Primary Road Fund	4,685,450.00
Local Road Fund	314,550.00
Total Non-Revenue Items	5,000,000.00

TOTAL RECEIPTS

13,300,300.54

OPERATING EXPENDITURES	Primary Roads	Local Roads	
Construction (all cost except Administration)			
Roads	2,934,764.87	1,204,308.00	
Bridges		18,872.54	
Total Construction Expense	2,934,764.87	1,223,180.54	4,157,945.41
Maintenance (All Cost except Administration)			
General Maintenance - Roads	1,860,319.81	1,357,946.14	
General Maintenance - Structures	177.54	2,198.28	
Snow and Ice Control	482,583.50	172,894.88	
Traffic Control	303,822.04	65,863.84	
Maintenance Agreements	128,589.36		
Total Maintenance Expenditures	2,775,492.25	1,598,903.14	4,374,395.39
Roadside Parks & Motor Parkways			
Maintenance	2,957.77		
Total Roadside Park Expenditures			2,957.77
Equipment Account			
Direct Expense	1,091,086.02		
Indirect Expense	458,374.51		
Operating Expense	106,893.28		
Total Equipment Expense		1,656,353.81	
Credits to Equipment Account			
Equipment Rental		1,572,011.30	
Net Equipment Account Expense			84,342.51
Interest Expense - Primary Roads			255,165.94
Administrative Expense		880,381.81	
Credits to Administrative Expense			
Handling Charges on Material Sold	16,023.91		
Overhead - State Trunkline Maintenance	67,502.69		
Plat Fees	8,119.92		
Purchase Discounts	8,695.57		
Total Credits to Administrative Expense			100,342.09
Net Administrative Expense			780,039.72

Administration Proration		
Primary Road System	587,259.60	
Local Road System	192,780.12	
TOTAL OPERATING EXPENDITURES		9,654,846.74

NON-EXPENSE DEBITS

Capital Outlay		
Land & Improvements	53,619.19	
Buildings	58,847.92	
Equipment	602,962.94	
Total Capital Outlay		715,430.05

Less: Non-Revenue Credits

Equipment Retirement	19,760.79	
Depreciation & Depletion	540,832.58	
Total Non-Revenue Credits		560,593.37

NET CAPITAL OUTLAY EXPENDITURES **154,836.68**

Gain on Disposal of Equipment **-23,059.71**

Long Term Debt Payments		
County Primary Road Bonds	250,000.00	
Expressway Bonds		
Farmington-Brighton Expressway	15,000.00	
Northwestern Expressway	90,000.00	
Total Long Term Debt Payments		355,000.00

TOTAL NON-EXPENSE DEBITS **486,776.97**

TOTAL EXPENDITURES **10,141,623.71**

Increase in Available Operating Funds **3,158,676.83**

TOTAL EXPENDITURES & FUND EQUITY ADJUSTMENT	13,300,300.54
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SUMMARIZED CASH BUDGET FOR 1969

	1966 (Actual)	1967 (Actual)	REVENUE 1968 (Actual)	1969 (Estimated)
MOTOR VEHICLE HIGHWAY FUNDS				
Primary Roads	\$ 4,711,226	\$ 4,976,751	\$ 5,348,198*	\$ 6,447,000
Local Roads	1,062,427	1,097,960	1,215,724	1,388,000
Total	\$5,773,653	\$6,074,711	\$ 6,563,922	\$ 7,835,000
OTHER REVENUE				
Participation by Cities & Counties	\$ 399,447	\$ 608,093	\$ 626,724	\$ 530,000
Interest Earned	21,259	4,285	46,400	20,000
State Maintenance Contract	771,609	1,233,235	1,181,051	1,750,000
Short Term Notes		500,000	1,004,000	
Matching Projects, Townships	235,294	374,827	358,394	400,000
Calcium Chloride	126,131	130,963	114,739	120,000
Escrow Funds	342,089	292,875	402,963	350,000
Numerous Other Accounts	544,636	575,928	615,350	567,000
Total Other Revenue	\$2,440,465	\$3,720,206	\$4,349,621	\$ -3,737,000
TOTAL REVENUE	\$8,214,118	\$9,794,917	\$10,913,543	\$11,572,000
EXPENDITURES				
CONSTRUCTION				
Federal Aid Projects (County Share)	\$ 276,319	\$ 28,400	\$	\$ 160,000
Primary Road Contracts & Right of Way	1,476,459	1,907,571	646,223	1,090,000
Local Road Contracts & Right of Way	782,216	792,001	711,239	800,000
Bond Payments	490,888	493,987	615,371	875,000
Total	\$3,025,882	\$3,221,959	\$ 1,972,833	\$ 2,925,000
OTHER EXPENDITURES				
Material, Supplies & Parts	\$1,221,403	\$1,415,783	\$ 1,799,269	\$ 1,949,000
Payroll, Hourly	2,368,910	2,678,609	2,827,194	3,000,000
Distributive Expense, Insurance	775,083	889,852	1,022,963	1,095,000
Pension, Employer share	75,305	106,066	91,168	100,000
Notes Payable			524,250	240,000
Capital Outlay	354,333	370,790	501,132	503,000
Administrative Expense	892,696	1,051,215	1,343,136	1,400,000
Escrow Funds	339,699	247,465	229,246	350,000
Miscellaneous	1,932	5,186	17,331	10,000
Total Other Expenditures	\$6,029,361	\$6,764,966	\$ 8,355,689	\$ 8,647,000
TOTAL EXPENDITURES, excluding bond funds	\$9,055,243	\$9,986,925	\$10,328,522	\$11,572,000
BOND FUNDS USED			\$ 2,591,263	\$ 1,434,000

* Does not include \$407,000 of 1968 funds advanced for 1967.

1969 PROPOSED CONSTRUCTION, PRIMARY ROADS

<u>Project Number</u>	<u>Road to be Improved</u>	<u>Termini</u>	<u>Length Miles</u>	<u>Type of Construction</u>	<u>Estimated Total Cost</u>
PR-596	Orchard Lk. Rd.	Pontiac Trail Intersection		Widen with Full Depth Bituminous Aggregate Surfacing	50,000.00
FA-648	Walton Blvd.	Squirrel Road to Adams Road	1.5	Grading, Drainage and 24' Concrete Pavement South of the existing roadway & Bituminous Aggregate Surfacing of existing roadway. (4 lane divided highway)	850,000.00
PR-727	Joslyn Road	Waldon Road to Clarkston Road	2.3	Grading, Drainage & Aggregate Base (2 lanes)	230,000.00
PR-727B	Joslyn Road		2.3	Bituminous Aggregate Surfacing (2 lanes)	70,000.00
CW-728	Maple Road	Coolidge Highway to Crooks Road	1.0	Grading, Drainage and 62' Concrete Pavement with Integral Curbs (5 lanes)	880,000.00
CW-737	Greenfield Rd.	Edwards St. to North of Thirteen Mile Rd.	0.9	Grading, Drainage and 62' Concrete Pavement with Integral Curbs (5 lanes)	670,000.00
FA-739	Seymour Lk. Rd.	Sashabaw Road to Baldwin Road	2.4	Grading, Drainage and Aggregate Base (2 lanes)	360,000.00
PR-744	Grange Hall - Holly Road	Intersection		Widen to 4 lanes with Full Depth Bituminous Surfacing	40,000.00
PR-745	Lahser Road & Quarton Road	Intersection		Widen to 4 lanes with Full Depth Bituminous Aggregate Surfacing	75,000.00
PR-758	14 Mile Road	Northwestern Hwy. to Middlebelt Road	0.9	Grading, Drainage and Full Depth Bituminous Surfacing (2 lanes)	150,000.00
PR-760	Orchard Lk. Rd. & West Maple	Intersection		Widen to 4 lanes with Full Depth Bituminous Aggregate Surfacing	75,000.00
PR-761	Dequindre Rd.	Eight Mile Road to Nine Mile Road	2.0	Recap existing pavement (4 lanes)	100,000.00
PR-762	Maple Rd. and Haggerty Road	Intersection		Widen with Full Depth Bituminous Aggregate Surfacing (4 lanes)	50,000.00
PRT-769	Long Lk. Rd.	Stoneleigh	0.1	West bound passing lane with Full Depth Bituminous Surfacing	11,000.00

- (1) Federal Aid Secondary Funds to pay 50%
- (2) City of Troy to pay 50%
- (3) Cities of Southfield, Royal Oak, Berkley and Beverly Hills to pay 25% of cost for 4 lanes and 50% of cost for 5th lane.
- (4) Macomb County to pay 50%

1969 PROPOSED CONSTRUCTION LOCAL ROADS

<u>Project Number</u>	<u>Road to be Improved</u>	<u>Township</u>	<u>Length Miles</u>	<u>Termini</u>	<u>Type of Construction</u>	<u>Estimated Total Cost</u>
TM-716B	Fish Lk. Rd.	Holly	0.5	Quick Rd. to Tinsman Rd.	Bituminous Aggregate Surfacing (2 lanes)	* 13,000.00
TM-731B	Newton Rd.	Commerce	1.7	Oakley Park Rd. to Commerce Rd.	Bituminous Aggregate Surfacing (2 lanes)	* 49,000.00
SL-734	LaMothe St.	Waterford		Between Elizabeth & Crescent Lakes	(O.C.R.C. Maintenance Division) Replace Bridge with 8'6" Diameter C.M.P.	* 6,500.00
TM-765	E. Glass Rd.	Brandon	1.0	Viola St. to Granger Rd.	(O.C.R.C. Maintenance Division) Drainage, and base restoration	* 40,000.00
TM-766	Square Lk. Rd.	Bloomfield	1.1	Robindale to Cloverlawn	Grading, Drainage and Full Depth Bituminous Aggregate Surfacing (2 lanes)	* 169,000.00
TM-767	Farmington Rd.	W. Bloomfield	0.3	Walnut Lake Rd. to Bantry Dr.	Grading, Drainage and Full Depth Bituminous Aggregate Surfacing (2 lanes)	* 31,000.00
T-768	County Service Drive	Waterford	0.3	From Watkins Lake Rd. around county service center building	New Service Drive - Grading, Drainage, and 28' Full Depth Bituminous Aggregate Surfacing with curb and gutter (1/2 of Proposed Boulevard Drive)	156,000.00(1)
TM-770	Gill Road	Farmington	0.6	9 Mile to Rhonswood	(O.C.R.C. Maintenance Division) Drainage and aggregate base restoration	* 19,400.00
TM-771	Inkster Rd.	Bloomfield & W. Bloomfield	0.8	Beacon Hill to Maple Rd.	Grading, Drainage and Full Depth Bituminous Aggregate Surfacing (2 lanes)	* 134,000.00
TM-772	Martin & Richardson Rds.	Commerce	0.7	Martin from Oakley Park to Richardson from Martin to Union Lake Rd.	Grading, Drainage and Full Depth Bituminous Aggregate Surfacing (2 lanes)	* 106,000.00

(1) Cost of construction to be paid by Oakland County Road Commission will provide engineering and inspection only.

(2) Cost of construction to be paid by Bloomfield Township Road Commission will provide engineering and inspection only.

* These local road construction projects are in the process of being set up as matching projects or have already been approved. Each township will pay 50% of the total final cost and the Road Commission will pay the other 50% from funds budgeted for matching purposes. Several more projects will be added during 1968 as other townships submit projects and their share of the funds.