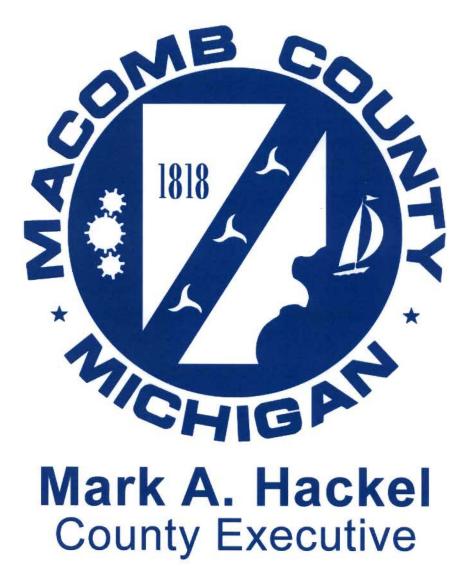
# Macomb County Department of Roads 2018-2019 Budget

Bryan E. Santo, P.E., Director of Roads



October 1, 2018 through September 30, 2019







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# **CONSTRUCTION PROGRAM**

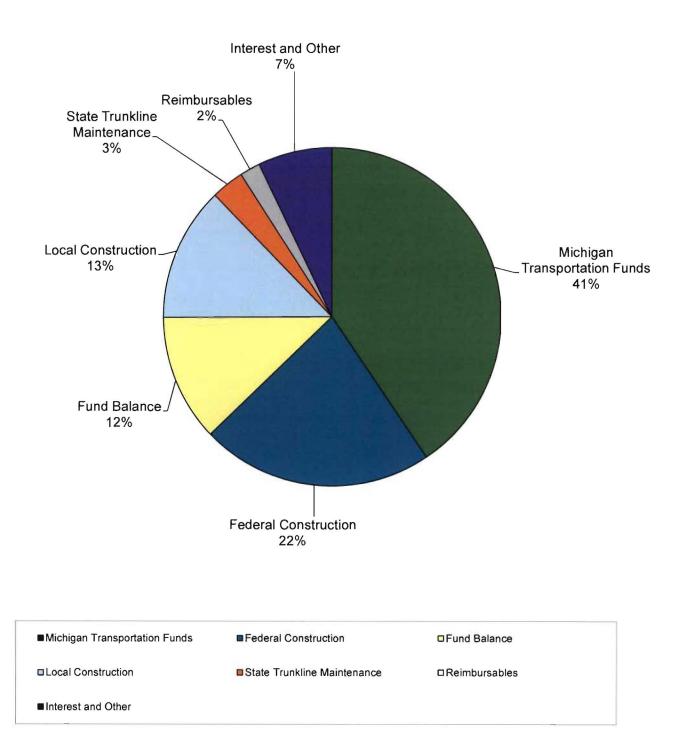
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# 2018/2019 Budgeted Revenues by Category

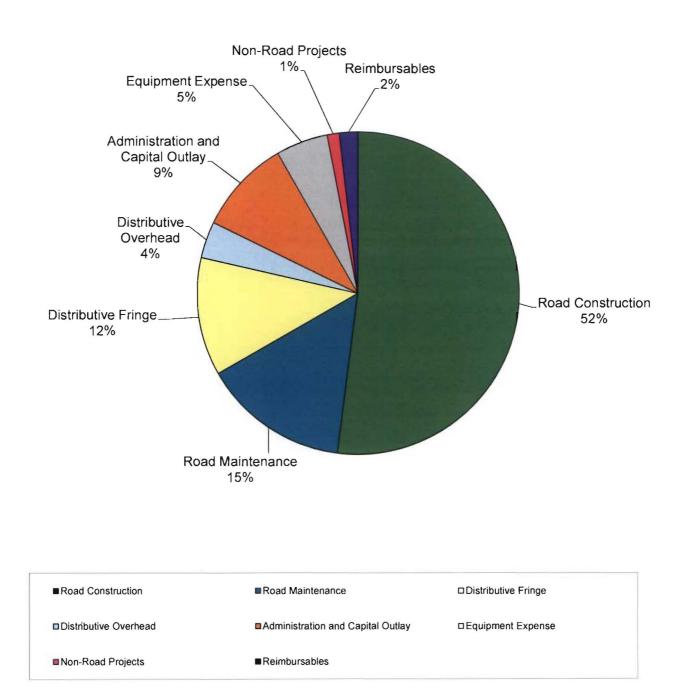








# 2018/2019 Budgeted Expenditures by Category









### GENERAL APPROPRIATIONS ACT

BE IT RESOLVED, that revenues for the fiscal year commencing October 1, 2018 and ending September 30, 2019 are hereby appropriated by account consistent with the Uniform Chart of Accounts prescribed by the Department of Treasury, as follows:

Account No.	Description	2016/2017 Actual	2017/2018 Original Budget	2018/2019 Original Budget
490.000	Permit Fees	\$382,135	\$480,000	\$476,000
490.000	Tap-in Fees	پ <sup>3</sup> 562,135 625	1,200	1,200
493.000	Cab Card Fees	64,500	60,000	60,000
493.000	Review for Site Plan Fee			
• 10 · 10 • 00 · 000 · 000		26,800	20,000	20,000
510.000	Grants	652,800	0	0
511.000	Federal Construction Projects	10,654,285	28,347,066	35,164,949
546.000	Michigan Transportation Fund	51,974,632	55,355,000	68,960,000
546.000	Build Michigan Fund	1,504,607	1,500,000	1,500,000
547.000	Local Bridge Fund	2,106,487	0	3,569,150
583.001	Cities	3,218,713	3,825,651	11,493,987
583.002	County Appropriation	0	0	0
583.004	Townships	4,574,135	10,609,432	10,842,087
608.000	Subdivision Inspection	225,658	250,000	250,000
609.000	Driveway Installation Fees	8,127	15,000	15,000
610.000	Sundry Accounts Receivable	1,744,541	2,344,000	2,117,500
627.000	State Trunkline Maintenance	5,468,427	5,494,241	5,494,241
628.000	State Non-Maintenance	1,818,218	300,000	457,500
665.000	Interest Earned	478,700	261,217	453,613
669.000	Equipment Rental Credits	7,064,118	7,328,542	7,431,842
673.000	Sales of Property and Equipment	120,919	171,000	171,000
680.000	Other Construction Contributions	236,373	2,000,000	0
685.000	Accident Recovery	230,650	100,000	100,000
690.000	Depreciation Credits	3,475,772	3,912,260	4,203,360
	Miscellaneous Revenue	2,105	1,850	1,850
TOTAL REVEN	NUES - COUNTY ROAD FUND	\$96,033,327	\$122,376,459	\$152,783,279





Macomb County Department of Roads October 1, 2018 thru September 30, 2019



### **GENERAL APPROPRIATIONS ACT**

AND, BE IT FURTHER RESOLVED, that expenditures for the fiscal year commencing October 1, 2018 and ending September 30, 2019 are hereby appropriated on an activity basis consistent with the Uniform Chart of Accounts prescribed by the Department of Treasury, as follows:

Activity No.	Description	2016/2017 Actual	2017/2018 Original Budget	2018/2019 Original Budget
451	Primary Road Construction	\$3,803,273	\$6,771,751	\$9,768,626
459	Primary Road Heavy Maintenance	19,389,738	38,934,823	64,025,791
460	Primary Bridge Heavy Maintenance	2,898,679	2,065,500	5,438,250
467	Primary Road Maintenance	10,007,766	13,301,488	14,028,500
481	Local Road Construction	796,063	2,445,000	72,306
489	Local Road Heavy Maintenance	7,011,090	14,673,790	10,552,105
490	Local Bridge Heavy Maintenance	1,702,490	3,744,860	394,239
494	Local Drain Assessment	106,765	110,000	150,000
497	Local Road Maintenance	5,806,868	7,551,544	8,090,500
505	Sundry Accounts Receivable	1,521,002	2,344,000	2,344,000
507	Subdivision Inspection	105,365	170,000	170,000
508	Permit Inspection	195,091	305,000	305,000
510	Direct Equipment	4,088,464	4,783,700	5,393,900
511	Indirect Equipment	1,778,013	2,433,500	2,460,750
512	Operating Equipment	578,916	1,245,000	1,245,000
513	Fringe Benefits	17,721,735	20,126,995	20,616,213
514	Distributive	5,621,834	6,382,730	6,355,460
515	Administration	(64,354)	423,455	452,819
516	Engineering	959,945	1,215,000	1,215,000
517	State Trunkline Maintenance	3,110,617	3,448,778	3,448,778
518	State Non-Maintenance	832,358	457,500	457,500
521	Non-Road Projects	732,673	1,269,100	1,386,835
901	Capital Outlay	3,396,628	14,493,821	14,764,138
902	Capital Projects Fund	457,029	511,217	703,613
906	Bond and Note Payments	18,799	5,217	22,113
TOTAL EXPEN				
С	OUNTY ROAD FUND	\$92,576,848	\$149,213,768	\$173,861,435
BUDGETED N	ET REVENUES (EXPENDITURES)	\$3,456,479	(\$26,837,309)	(\$21,078,156)
	ED AVAILABLE FUND BALANCE PR YEARS - PROJECTED			63,340,659
PROJECTED F	UND BALANCE AT END OF BUDGET Y	EAR		\$42,262,502







### GENERAL APPROPRIATIONS ACT

Activity No.	Description	2016/2017 Actual	2017/2018 Original Budget	2018/2019 Original Budget
677	General Liability Fund	198,446	450,000	250,000
TOTAL EXPEN G	DITURES - ENERAL LIABILITY FUND	198,446	450,000	250,000
902	Capital Projects Fund	0	0	0
TOTAL EXPEN	DITURES - APITAL PROJECTS FUND	0	0	0
665.000 699.000	Interest Earned Transfer-In Control	53,596 0	12,000	45,000
TOTAL REVEN G	UES - ENERAL LIABILITY FUND	53,596	12,000	45,000
665.000 699.000	Interest Earned Transfer-In Control	12,281 457,029	2,300 511,217	12,000 703,613
TOTAL REVEN C.	UES - APITAL PROJECTS FUND	469,310	513,517	715,613





Macamb County Department of Roads October 1, 2018 thru September 30, 2019



# 2018 - 2019 STATISTICS

### I - ROAD MILES

County-Wide Primary Mileage	432.63	miles
County-Wide Local Mileage	1,286.05	miles
State Trunkline Actual C/L Mileage	210.11	miles

### II - FEDERAL AID MILES

Federal Aid Urban Primary Mileage	357.14	miles
Federal Aid Urban Local Mileage	1,077.66	miles

### III - LANE MILES

State Trunkline Lane Miles Maintained by MCDOR	662.35	miles
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### NUMBER OF STRUCTURES MAINTAINED by MACOMB COUNTY DEPARTMENT OF ROADS

Bridges	217	bridges
County Primary System	100	structures
County Local System	117	structures
Bridges Closed to Traffic	1	
Bridges Posted	15	

#### NUMBER OF DRAINAGE STRUCTURES 20' - 0" or LESS

Drainage Structures - Total	544
Drainage Structures Closed to Traffic	0
Drainage Structures Posted	0

#### EXTERNAL FORMULA DISTRIBUTION, ACT 51, P.A. 1951 AS AMENDED

Michigan Department of Transportation	39.10%
Counties	39.10%
Cities	21.80%



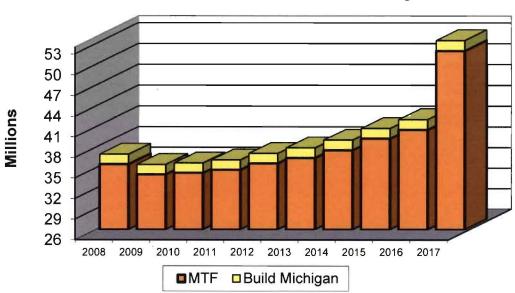




# MICHIGAN TRANSPORTATION FUNDS

Fiscal Year 2018/2019 Budget

	Gas &	Build
	Weight	Michigan
	Funds	Funds
October	\$5,206,000	\$115,000
November	5,003,000	115,000
December	5,364,000	115,000
January	6,607,000	115,000
February	6,620,000	115,000
March	6,305,000	115,000
April	5,768,000	115,000
May	5,692,000	115,000
June	5,662,000	115,000
July	5,109,000	115,000
August	5,693,000	115,000
September	5,921,000	235,000
Engineering	10,000	0
	\$68,960,000	\$1,500,000



# Actual Revenue for the last 10 years







## FISCAL YEAR 2018/2019 EQUIPMENT and CAPITAL PROJECTS

### SUMMARY

### CAPITALIZED EQUIPMENT:

901	976.000	Numbered Equipment - Unlicensed	\$681,100
901	977.000	Shop Equipment	185,000
901	978.000	Engineering Equipment	9,500
901	980.002	Computer Hardware	50,000
901	980.003	Computer Software	65,000
901	981.000	Numbered Equipment - Licensed	3,285,538
TOTAL CAPITALIZED EQUIPMENT		\$4,276,138	

### NON-CAPITALIZED EQUIPMENT:

728.010	Office Machines	\$1,500
728.050	Computer Equipment	50,000
728.060	Computer Software	5,000
728.090	Shop Equipment	8,000
729.000	Engineering Supplies	6,400
779.000	Parts/Supplies for Equipment	500
780.000	Mechanic Tools	5,500
807.000	Computer Service Contracts	15,000
TOTAL NON-CAPITAL	IZED EQUIPMENT	\$91,900

CAPITAL PROJECTS:

901	975.xxx	Capital Improvements-Svcs Cntrs	\$100,000
901	975.021	Buildings - Washington Svcs Cntr	5,000
901	975.024	Buildings - New Haven Salt Dome	10,000
901	975.030	Buildings - Clinton Service Center	10,000
901	975.031	Buildings - Warren Salt Dome	70,000
901	975.037	Buildings - Rasch	172,000
901	975.050	Bldg Improvements - Washington	25,000
901	975.052	Bldg Improvements - New Haven	23,000
901	975.053	Major Building Improvements	10,000,000
901	975.054	Bldg Improvements - Shelby	58,000
901	975.090	Bldg Improvments - Administration	15,000

#### TOTAL CAPITAL PROJECTS

### \$10,488,000

#### TOTAL EQUIPMENT and CAPITAL PROJECTS \$14,856,038







		Trade-In	Cost	Account Number
	(02) FINANCE AND M.I.S.	5		
1	Shredder		\$1,500	728.010
12	Personal Computers		10,000	728.050
10	Laptops		10,000	728.050
8	CAD Workstations		15,000	728.050
4	Network/Infrastructure Equipment		10,000	980.002
10	Mobile Device/Tablets or Laptop Replacements (Engineering)		10,000	728.050
	Technology Contingency		40,000	980.002
2	Printers		5,000	728.050
	Precision Computer Solutions - Capitalized		65,000	980.003
	Precision Computer Solutions - Expensed		15,000	807.000
	Miscellaneous Desktop Software (Adobe, Visio, Etc.)		5,000	728.060
	5		\$186,500	

	(11) WASHINGTON TOWNSHIP SERVICE CENTER			
1	John Deere Grader	620108	\$300,000	981.000
	Sandvick Blades for above	6202	10,000	976.000
1	Single Axle with Dump Body	1509	130,000	981.000
	Salt Spreader for above		20,000	976.000
	Front Swing Plow for above		15,000	976.000
1	F-150 4X4 Pick Up Truck	121011	26,000	981.000
	Ground Temp Sensor for above		1,000	976.000
2	Solar Powered Trailer Mounted Arrowboard	622710/625106	16,000	981.000
2	Sandvik Blades for Graders	-	13,000	976.000
		-	\$531,000	







		Trade-In	Cost	Account Number
	(12) NEW HAVEN SERVICE CENTER			
1	Tandem Axle Dump Body	171208	\$190,000	981.000
	Wing Plow for Above		20,000	976.000
	UB Blade, Salt Spreader for above		20,000	976.000
1	Front Plow for Tandem Axle		20,000	976.000
1	Backhoe	658603	135,000	976.000
1	Trailer for Backhoe	6234	10,000	981.000
1	Hammer Attachment for Backhoe	651203	10,000	976.000
1	Tractor with Dual Flail Mowers	6359	110,000	981.000
1	Tractor with Long Arm Attachment	6323	130,000	981.000
1	AC Recharge Unit for Mechanics		3,000	728.090
1	Front Plow for Tandem Axle	6818	20,000	976.000
			\$668,000	

#### (13) CLINTON TOWNSHIP SERVICE CENTER

1	Tandem Axle Dump Body	178305	\$190,000	981.000
	Wing Plow for Above		20,000	976.000
	UB Blade, Salt Spreader for above		20,000	976.000
1	Tandem Axle Dump Body	178405	190,000	981.000
	Wing Plow for Above		20,000	976.000
	UB Blade, Salt Spreader for above		20,000	976.000
1	Tandem Axle RDS Conveyor Body	170605	190,000	981.000
	Wing Plow for above		20,000	976.000
	UB Blade, Salt Spreader for above		20,000	976.000
1	Tandem Axle RDS Conveyor Body	170806	190,000	981.000
	Wing Plow for above		20,000	976.000
	UB Blade, Salt Spreader for above		20,000	976.000
1	Semi Truck w/5th Wheel	1746	160,000	981.000
	UB Blade for above		20,000	976.000
	Hydraulic Winch for above		14,000	976.000
	Ground Temp Sensor for above		1,000	976.000
1	V-Bottom 24 Yard Trailer	6280	95,000	981.000
1	F-150 4X4 Pick Up Truck	121411	26,000	981.000
	Ground Temp Sensor for above		1,000	976.000
			\$1,237,000	







		Trade-In	Cost	Account Number
		Hadem	Cost	rumber
	(14) SHELBY TOWNSHIP SERVICE CENTER			
1	Elgin Mechanical Sweeper		\$250,000	981.000
1	Tandem Axle RDS Conveyor Body	174105	190,000	981.000
	Wing Plow for above		20,000	976.000
	UB Blade, Salt Spreader, Pre-Wet Tank for above		20,000	976.000
1	Front Plow for above	474105	20,000	976.000
1	Tandem Axle RDS Conveyor Body	154004	190,000	981.000
	Wing Plow for above		20,000	976.000
	UB Blade, Salt Spreader, Pre-Wet Tank for above		20,000	976.000
1	Front Plow for above	454004	20,000	976.000
1	Tandem Axle RDS Conveyor Body	174206	190,000	981.000
	Wing Plow for above		20,000	976.000
	UB Blade, Salt Spreader, Pre-Wet Tank for above		20,000	976.000
1	Front Plow for above	474206	20,000	976.000
2	Solar Powered Trailer Mounted Arrowboard	6275/623506	16,000	981.000
1	14" Concrete Cut Off Saw	663509	1,100	976.000
1	Plasma Cutter		2,000	728.090
			\$1,019,100	
	(15) VEHICLE MAINTENANCE			
	Shop Tools		\$5,000	780.000
1	Dewalt 15 amp 14" Chop Saw		500	780.000
1	Lift Platform for Mobile Units		30,000	977.000
		_	\$35,500	
	(16) SUPERINTENDENTS OFFICE			
1	All Wheel Drive Vehicle	112815	\$28,000	981.000

l	All Wheel Drive Vehicle	112815	\$28,000	981.000
			\$28,000	







			Trade-In	Cost	Account Number
~	1	(22) ELECTRICAL SHOP F450 Cab, Chassis, Service Body, Generator and 29' aerial	101211/181211	\$96,074	981.000
	1	Single Person Bucket F-150 4X4 Pick Up Truck with Roll Up Tonneau Cover	676811 121111	27,000	981.000
~	2	F-650 - 26,000 GVRW Cab, Chassis, Flatbed Stake Body, Gasoline Fuel, Single Axle Back-Up Truck with Counter Weight, Crash Attenuator and Arrowboard to be Transferred from Existing Truck	151805/152005	239,464	981.000
				\$362,538	
		(23) SIGN SHOP			
	1	Trailer Mounted Arrow Board	622102	\$8,000	981.000
	1	Trailer Mounted Arrow Board Work Light Bar (for Stake/Barricade Truck)	629413	8,000 500	981.000 779.000
	1	Panel Saw	6086	3,000	728.090
				\$19,500	1201070
	21	(24) ENGINEERING			
	1 1	Concrete Beam Tester and Molds Sieves, 12" Diameter, Complete Set		\$3,500 1,700	729.000 729.000
	1	Concrete Pressure Meter and Case		1,700	729.000
	1	Survey Vehicle	130112	36,000	981.000
	2	F-150 4x4 Pick-Ups with Light Bar and Tool Box	126408/126010	54,000	981.000
	1	Total Station Field Controller and Related Components		9,500	978.000
				\$105,900	







	Trade-In	Cost	Account Number
(31) PURCHASING			
Emergency Fund		\$40,000	976/977
		\$40,000	

~	TOTAL CARRY-OVERS FROM 2017/2018 BUDGET TOTAL NEW REQUESTS FOR 2018/2019 BUDGET	\$335,538 3,897,500
	TOTAL FIXED ASSETS	\$4,233,038







		Trade-In	Cost	Account Number
	CAPITAL PROJECTS			
~	Construction/Equipment Maintenance Building at Clinton Service Center		\$10,000,000	975.053
	Retrofit CFL to LED Lighting - Admin Bldg		5,000	975.090
	HVAC Building Management System (replace antequated system) Admin		10,000	975.090
	LED Lighting Upgrade at Washington Service Center		5,000	975.050
	LED Parking Lot Lights and Poles at Washington Service Center		5,000	974.021
~	Repair/Replace Roof on Washington Service Center Offices		20,000	975.050
	Mound Yard Salt Shed Repair - Wood and Paint		60,000	975.031
	Mound Yard Salt Shed Roof Repair		10,000	975.031
	LED Lighting Upgrade at Clinton Service Center		5,000	975.030
~	Replace Roof on Shelby Service Center Front Office		15,000	975.054
~	In-Ground Hoist Shelby Service Center in Mechanics Garage		135,000	977.000
~	Paint Shelby Service Center Mechanics Garage		38,000	975.054
	LED Lighting Upgrade at Shelby Service Center		5,000	975.054
~	Tile Offices and Breakroom at New Haven Service Center (1300 sq. ft.)	5	18,000	975.052
~	Paint Salt Shed and Repair T1-11 at New Haven Service Center		10,000	975.024
	LED Lighting Upgrade at New Haven Service Center		5,000	975.052
	LED Lighting Upgrade at Vehicle Maintenance		5,000	975.030
~	Replace Roof on 23000 Rasch Street Building		150,000	975.037
~	Replace Roof on the 23000 Rasch Street Pole Barn		10,000	975.037
	Replacement Overhead Doors (14' wide x 10' high) for Pole Barn - Electrical De	ept	12,000	975.037
	Capital Improvements for all Service Centers		100,000	975.XXX
			\$10,623,000	

#### TOTAL FIXED ASSETS AND CAPITAL PROJECTS FOR 2018/2019

#### \$14,856,038







# MEMBERSHIPS and CONFERENCES FISCAL YEAR 2018/2019

# SUMMARY

	Memberships	Conferences
FINANCE & I.T.	\$930	\$20,360
HUMAN RESOURCES	209	2,495
ADMINISTRATION	2,000	2,950
WASHINGTON TOWNSHIP SERVICE CENTER	200	0
NEW HAVEN SERVICE CENTER	200	0
CLINTON TOWNSHIP SERVICE CENTER	200	0
SHELBY TOWNSHIP SERVICE CENTER	200	0
VEHICLE MAINTENANCE	200	0
SUPERINTENDENT'S OFFICE	200	0
RIGHT OF WAY	475	5,220
TRAFFIC	1,875	12,000
ELECTRICAL	800	5,800
SIGN	100	4,000
ENGINEERING	975	22,350
STOCKROOM	400	2,100
PERMITS	905	5,225
AGENCY	71,400	0
GRAND TOTAL	\$81,269	\$82,500







	Employee	Membership	Conference	Location
(02) FINANCE & I.T.				
Government Finance Officers Association	M. Mykytiak/M. Schenden	\$550	\$0	
Michigan Government Finance Officers Association	M. Mykytiak/M. Schenden	350	500	
County Road Association of Michigan Conferences	M. Mykytiak/M. Schenden	0	600	TBD
Southern Michigan Road Coinm Finance Association	M. Mykytiak	30	60	Various
Continuing Education	Finance Staff	0	500	
MCDR Computer Users	End User Desktop Training	0	2,500	
CAD/GIS	CAD/GIS Users	0	6,000	
MCDR IT Staff	Technical Training	0	10,000	
Precision Users Self Help Meetings	Precision Users	0	200	Various
		\$930	\$20,360	

#### (03) HUMAN RESOURCES

Society for Human Resource Management	S. Ling	\$209	\$O
Labor/Arbitration Institute	S. Ling	0	495
County Road Association of Michigan Conference	S. Ling/ B. Jacks	0	2,000
		\$209	\$2,495

#### (04) ADMINISTRATION

APA - American Planning Association	J. Crumm	\$340	\$0	
APA - Michigan Chapter	J. Crumm	100	0	
American Institute of Certified Planners	J. Crumm	210	0	
Planning MI Yearly Conference	J. Crumm	0	850	TBD
ASCE	B. Santo	325	0	
NSPE	B. Santo	350	0	
NAFA (Fleet Management Association)	T. Goike	500	800	
MPPOA	T. Goike	75	0	
Specialty Equipment Manufacturers Association	T. Goike	100	600	
Continuing Education	Administration Employees	0	700	
		\$2,000	\$2,950	







	Employee	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
(11) WASHINGTON TOWNSHIP SERVICE CENTER APWA - Membership	D. Wancour	\$200 \$200	\$0 \$0	
<i>(12) NEW HAVEN SERVICE CENTER</i> APWA - Membership	K. Paige	\$200 \$200	\$0 \$0	
(13) CLINTON TOWNSHIP SERVICE CENTER APWA - Membership	J. Rogers	\$200 \$200	\$0 \$0	
<i>(14) SHELBY TOWNSHIP SERVICE CENTER</i> APWA - Membership	D. DiCicco	\$200 \$200	\$0 \$0	
(15) VEHICLE MAINTENANCE APWA - Membership	G. Zukowski	\$200 \$200	\$0 \$0	
(16) SUPERINTENDENT'S OFFICE APWA - Membership	L. Ciavatta	\$200 \$200	\$0 \$0	







	Employee	Membership	Conference	Location
(18) RIGHT OF WAY				
Broker Continuing Education	ROW Personnel	\$0	\$70	
Broker License Renewal	ROW Personnel	200	0	
IRWA - Membership	ROW Personnel	275	0	
IRWA - General Meetings	ROW Personnel	0	300	
IRWA - Fall Seminar	ROW Personnel	0	750	TBD
IRWA - Miscellaneous Classes	ROW Personnel	0	1,100	
Miscellaneous Classes	ROW Personnel	0	3,000	
		\$475	\$5,220	
(21) TRAFFIC				
American Society of Civil Engineers	A. Merchant	\$275	\$0	
ITE - Institute of Transportation Engineers	Traffic Employees	1,200	3,900	Various
Traffic Safety Summit	Traffic Employees	0	1,800	East Lansing
Intelligent Transportation Society of Michigan	Traffic Employees	0	2,500	Various
Michigan Electrical License Renewal	K. Webb	60	0	,
Traffic Webinars	Traffic Employees	0	600	
State Engineering License Renewal	Engineers	240	0	
IMSA - International Municipal Signal Association	Traffic Employees	100	3,200	TBD
nuore mematonal memorpar orginar association	Tunne Employees	\$1,875	\$12,000	
		φ <u>τ</u> ,στ <u>σ</u>		
(22) ELECTRICAL				
IMSA - International Municipal Signal Association	Electrical Employees	\$300	\$3,000	
NEC Code Update Class	Electrical Employees	0	2,500	
MI Traffic Safety Summit	Electrical Employees	0	300	
Michigan Electrical License Renewal	Electrical Employees	500	0	
		\$800	\$5,800	
(23) SIGN DEPARTMENT				
(23) SIGN DEFARTMENT IMSA - International Municipal Signal Association	Sign Employees	\$100	\$4,000	
imon - international municipal orginal Association	orgin Employees	\$100	\$4,000	
		φ100	φ <del>1</del> ,000	







Employee	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
C. Head	\$0	\$300	
W. Schell	0	1,300	
Bucholtz, Papas, Moceri, Prize, Pilgrim	0	4,750	Lansing
Prevost	0	950	Lansing
Constantine, Holmberg, Bucholtz, Tomassi, Papas, Schrade	0	6,600	Ferris State
Pilgrim, Rogers, Prevost	0	3,750	Ferris State
Inspectors	0	800	On-line
Wanagat, Blanchard, Newton, Schell	0	600	Auburn Hills
Chechack/Matz	275	1,100	TBD
Armbruster, Blanchard, Newton, CEII, Pawloski	400	0	
J. Armbruster	300	0	
Schell	0	1,200	
Engineers	0	1,000	
	\$975	\$22,350	
	C. Head W. Schell Bucholtz, Papas, Moceri, Prize, Pilgrim Prevost Constantine, Holmberg, Bucholtz, Tomassi, Papas, Schrade Pilgrim, Rogers, Prevost Inspectors Wanagat, Blanchard, Newton, Schell Chechack/Matz Armbruster, Blanchard, Newton, CEII, Pawloski J. Armbruster Schell	C. Head\$0W. Schell0Bucholtz, Papas, Moceri, Prize, Pilgrim0Prevost0Constantine, Holmberg, Bucholtz, Tomassi, Papas, Schrade0Tomassi, Papas, Schrade0Pilgrim, Rogers, Prevost0O Prevost0Managat, Blanchard, Newton, Schell0Chechack/Matz275Armbruster, Blanchard, Newton, CEII, Pawloski J. Armbruster300Schell0O Engineers0	C. Head\$0\$300W. Schell01,300Bucholtz, Papas, Moceri, Prize, Pilgrim04,750Prevost0950Constantine, Holmberg, Bucholtz, Tomassi, Papas, Schrade06,600Tomassi, Papas, Schrade06,600Prevost03,750Prevost0800Wanagat, Blanchard, Newton, Schell0600Chechack/Matz2751,100Armbruster, Blanchard, Newton, CEII, Pawloski J. Armbruster3000Schell01,200Engineers01,000

#### (31) PURCHASING/STOCKROOM

Michigan Public Purchasing Officers Association	Strizic/Giedrocz	\$400	\$1,100	Various
National Institute of Governmental Purchasing Training	Purchasing Staff	0	600	
MPPOA	Purchasing Staff	0	400	Various
		\$400	\$2,100	







	Employee	<u>Membership</u>	Conference	Location
(32) PERMITS				
Michigan Concrete Association Level I	M. Florka	\$0	\$1,500	
Michigan Density Control Certification	M. Florka	0	1,500	
PUSH Meetings (Precision Training)	Smith/Murphy	0	500	
Michigan Concrete Association	Bush, Danna, Thompson	0	1,725	
Society of Detroit Engineers	S. Kahlon	150	0	
American Society of Civil Engineers	S. Kahlon	325	0	
National Society of Professional Engineers	S. Kahlon	350	0	
Department of Licensing and Regulatory Affairs	S. Kahlon	80	0	
		\$905	\$5,225	

AGENCY		
Weighmaster	\$20,000	\$0
Miss Dig Fee	5,500	0
County Road Association of Michigan	41,000	0
National Institute of Governmental Purchasing	400	0
OPIS	450	0
MI Deal	650	0
Intelligent Transportation Society of America	3,000	0
Intelligent Transportation Society of Michigan	400	0
	\$71,400	\$0

TOTALS	\$81,269	\$82,500







Service or Item Requested	Amount Requested	Total
(02) FINANCE & IT		
Audit Fee	\$40,000	
Checks, Forms, Folders, Envelopes, Binders, Labels etc.	5,000	
Actuarial Fee - OPEB	18,000	
Actuarial Fee - GASB 74	4,500	
Actuarial Fee - GASB 75	4,500	
Miscellaneous - Network Activity	5,000	
Miscellaneous - Service/Subscription/Maintenance	22,195	
Maintenance - Cisco Hardware Maintenance/Support	32,000	
Maintenance - General PC & Peripherals	20,000	
Maintenance - Formax Folder / Sealer Machine	900	
Service - Bentley Software Support (Engineering)	35,000	
Service - AT&T Internet Service Provider (ISP)	30,000	
Service - AT&T ASE Fiber Network	30,000	
Service - DocuSphere Content Manager Software Support (Imaging)	5,000	
Service - Fuel Master Fuel System Support	2,300	
Service - GIS Software Maintenance (ArcEditor-6 Licenses)	4,700	
Service - Symantec Endpoint Protection (181 licenses)	2,250	
Service - County Charge-Backs for IT Services	50,000	
(Continued)		







Service or Item Requested	Amount Requested	Total
(02) FINANCE & IT - (Concluded)		
Service - WinSvrDataCtr ALNG LicSAPk MVL 2 Proc	\$8,000	
Service - O365GovE3 ShrdSvr ALNG SubsVL MVL PerUsr	26,700	
Service - WinEntforSAwMDOP ALNG UpgrdSAPk MVL Pltfm	20,000	
Service - CoreCALBridgeO365 ALNG LicSAPk MVL PItfrm UsrCAL Service - Microsoft SQL SQL SvrStdCore ALNG LicSAPk MVL	9,700	
2LicCoreLlc	12,000	
		\$387,745
(03) HUMAN RESOURCES		
CDL Reimbursement	\$2,000	
Mileage Reimbursement - Sharon Ling	300	
Training	5,000	
Surveillance	5,000	
Arbitration Fees	10,000	
Independent Medical Exams	8,000	
Legal Fees	125,000	
Random Drug Testing	15,000	
Pre-employment Physicals	5,000	
		\$175,300







Service or Item Requested	Amount Requested	Total
(04) ADMINISTRATION		
Office Furniture	\$1,000	
Admin Building Cleaning (Janitorial, Carpet, Window, Etc)	6,000	
Lobbyist	20,000	
Accurate Alarm (Nightwatch)	18,000	
Radio User Fees - 800Mzh	20,000	
Auto Sentry Alarm	3,600	
117 Building Maintenance	30,000	
DPW Projects	150,000	
Phragmites Maintenance	30,000	
Moving Road Claims	100,000	
Legal Matters/Settlements/Deductibles	50,000	
GIS Consulting Services Michigan Natural Features Inventory Access (for studies and SHPO access to Michigan Historical information)	1,000	
Consulting Services (Master Plan, Asset Mgmt, Safety)	40,000	
Landscaping for Admin Building Grounds	4,500	
Postage/Meter	20,000	
Tree Program (MDOT)	10,000	
Admin Building Parking Lot Repairs	5,000	
MDEQ Testing - Clinton Service Center	50,000	
MDEQ Underground Storage Tank Registrations (all S.C's)	1,500	
Office Chair	200	
		\$561,800







Service or Item Requested	Amount Requested	Total
(11) WASHINGTON SERVICE CENTER		
Office Chairs	\$1,600	
		\$1,600
(13) CLINTON SERVICE CENTER		
Office Chairs	\$1,000	
8 ft Folding Table	250	
		\$1,250
(14) SHELBY SERVICE CENTER		
Office Furniture for Clerk & Assistant Foreman	\$4,100	
Office Chair for Clerk	350	
Tall Jack Stands for Heavy Trucks	4,000	
		\$8,450







Service or Item Requested	Amount Requested	Total
(15) VEHICLE MAINTENANCE		
All Data Online Repair Manuals - All Service Centers	\$4,000	
Noregon System JPRO - Annual	9,000	
Allison DOC for Fleets - Annual	5,000	
Update Genysis Software - Annual	1,500	
Sandblast and Paint Trucks & Equipment	20,000	
Contract out Major Repairs on Equipment	100,000	
Undercoat New Equipment	10,000	
Motorola Radio Maintenance	20,000	
		\$169,500







(16) SUPERINTENDENTS OFFICEEmergency Road Repairs\$120,000DEQ Compliance Fees at MCDOR Facilities75,000MIOSHA Inspection & Certification at MCDOR Facilities75,000Deicing Chemicals for Winter Maintenance50,000Landfill Fees85,000Software Maintenance Upgrades & Equipment for GPS Systems75,000Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors70,000Contracts Snow - Primary170,000Contracts Snow - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local125,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Derugency Repairs at Service Centers120,000MCDOR Drainage Easement, Seawall Repair35,000	Service or Item Requested	Amount Requested	Total
DEQ Compliance Fees at MCDOR Facilities75,000MIOSHA Inspection & Certification at MCDOR Facilities75,000Deicing Chemicals for Winter Maintenance50,000Landfill Fees85,000Software Maintenance Upgrades & Equipment for GPS Systems75,000Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors70,000Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contract Iabor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	(16) SUPERINTENDENTS OFFICE		
MIOSHA Inspection & Certification at MCDOR Facilities75,000Deicing Chemicals for Winter Maintenance50,000Landfill Fees85,000Software Maintenance Upgrades & Equipment for GPS Systems75,000Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors70,000Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Emergency Road Repairs	\$120,000	
Deicing Chemicals for Winter Maintenance50,000Landfill Fees85,000Software Maintenance Upgrades & Equipment for GPS Systems75,000Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors7000Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Primary20,000DPW Patching - Local20,000Contractors Snow - Local125,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	DEQ Compliance Fees at MCDOR Facilities	75,000	
Landfill Fees85,000Software Maintenance Upgrades & Equipment for GPS Systems75,000Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors170,000Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contract Labor120,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	MIOSHA Inspection & Certification at MCDOR Facilities	75,000	
Software Maintenance Upgrades & Equipment for GPS Systems75,000Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors77,000Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Deicing Chemicals for Winter Maintenance	50,000	
Safety and Training25,000Snow/Patching/Mowing Contracts-Municipalities & Contractors170,000Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Landfill Fees	85,000	
Snow/Patching/Mowing Contracts-Municipalities & ContractorsContracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Software Maintenance Upgrades & Equipment for GPS Systems	75,000	
Contracts Mowing - Primary170,000Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Safety and Training	25,000	
Contracts Snow - Primary34,000Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Snow/Patching/Mowing Contracts-Municipalities & Contractors		
Contracts Sweeping - Primary14,000DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Contracts Mowing - Primary	170,000	
DPW Patching - Primary20,000DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Contracts Snow - Primary	34,000	
DPW Patching - Local20,000DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Contracts Sweeping - Primary	14,000	
DPW Snow - Local25,000Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	DPW Patching - Primary	20,000	
Contractors Snow - Local125,000Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	DPW Patching - Local	20,000	
Tree Removal Contract120,000Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	DPW Snow - Local	25,000	
Contract Labor3,000Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Contractors Snow - Local	125,000	
Utility Damage during Mowing Operations15,000Phragmites Management20,000Emergency Repairs at Service Centers120,000	Tree Removal Contract	120,000	
Phragmites Management20,000Emergency Repairs at Service Centers120,000	Contract Labor	3,000	
Emergency Repairs at Service Centers 120,000	Utility Damage during Mowing Operations	15,000	
	Phragmites Management	20,000	
MCDOR Drainage Easement, Seawall Repair 35,000	Emergency Repairs at Service Centers	120,000	
	MCDOR Drainage Easement, Seawall Repair	35,000	
			\$1,226,00







Service or Item Requested	Amount Requested	Total
(18) RIGHT OF WAY		
Land Access Subscription	\$1,500	
Contract Labor	150,000	
Condemnation Awards	400,000	
		\$551,500
(21) TRAFFIC		
Communication Pole Equipment Maintenance	\$50,000	
Controller Software Upgrades and Maintenance	85,000	
Field Network Architecture - VLAN (carry over)	260,000	
Field Network Architecture - VLAN (new amount)	325,000	
FCC Frequency Protection Service	1,000	
Communication Poles UPS System (carry over)	230,000	
Stockroom Material and Loaners for ITS Maintenance	40,000	
Connected Vehicle - Vehicle & Infrastructure Units	135,000	
Acyclica Deployment	100,000	
FCC Licensing	50,000	
Office Chairs	750	
		\$1,276,750







Service or Item Requested	Amount Requested	Total
(22) ELECTRICAL		
Replacement & Upgrades to Storm Water Purnp Stations	\$250,000	
Emergency Repairs to Stormwater Pump Stations	30,000	
Various Sizes of Traffic Signal Bags	5,000	
Office Chairs	1,200	
Calibration & Testing of ATSI Testing Equipment	3,200	
		\$289,400
(23) SIGN DEPARTMENT		
Annual Maintenance for Mimaki Heat Laminator	\$4,000	
Pedestal Fan	500	
Stools	200	
Storage Containers	1,500	
Table Saw Mobile Base	350	
		\$6,550







Service or Item Requested	Amount Requested	Total
(24) ENGINEERING		
Subscriptions & Publications	\$500	
Cell Phone GPS (Survey Equipment)	1,600	
Miscellaneous Lab/Testing Equipment Service/Calibration	9,000	
GPS Firmware Maintenance	1,800	
NRC Nuclear License for Troxler Gauges	9,000	
Dosimeter Badge Service Contract	3,500	
Environmental Contracts	20,000	
Miscellaneous Geotechnical/Testing Services	20,000	
Construction Stakes	4,500	
Bridge and Road Design Contracts	100,000	
Miscellaneous GIS Consulting Services	3,000	
Miscellaneous CAD Consulting Services	3,000	
Certification GIS Consulting Services	3,000	
KIP Maintenance Contract	5,000	
Miscellaneous Lab Equipment	12,000	
Miscellaneous Survey Equipment	5,000	
Monument Boxes	3,000	
		\$203,900







Service or Item Requested	Amount Requested	Total	
(31) PURCHASING/STOCKROOM			
Contract Labor	\$5,000		
Inventory Storage	1,000		
Emergency Fund - Non-Capital Equipment & Purchases	10,000		
		\$16,00	
(32) PERMITS			
Laminator Machine Maintenance Contract	\$700		
Printing - Miscellaneous Forms, Permits, Daily Cards etc.	4,000		
		\$4,700	

GRAND TOTAL \$4,880,445







# ROAD MAINTENANCE COSTS FISCAL YEAR 2018/2019

# SUMMARY

### TOTAL FIELD BUDGET for:

	Primary Road	Local Road	State Trunkline	Totals
MAINTENANCE	\$7,118,500	\$7,089,500	\$2,676,778	\$16,884,778
TRAFFIC	2,244,000	676,000	554,500	3,474,500
SUPERVISION	625,000	325,000	217,500	1,167,500
TOTAL COUNTY	\$9,987,500	\$8,090,500	\$3,448,778	\$21,526,778
Total Fringe Benefits	3,100,000	2,200,000	1,000,000	6,300,000
SUBTOTAL	\$13,087,500	\$10,290,500	\$4,448,778	\$27,826,778
Total Overhead	2,355,750	1,852,290	1,045,463	5,253,503
GRAND TOTAL	\$15,443,250	\$12,142,790	\$5,494,241	\$33,080,281







## ROAD MAINTENANCE COSTS

	Activity Code & Description	Primary Road	Local Road	State Trunkline	Totals
M100	Blow-up Repair	0	0	0	0
M101	Joint & Crack Filling	170,000	150,000	30,000	350,000
	Replace Concrete Pavement	170,000	450,000	20,000	640,000
	Patrol Patching	1,600,000	480,000	0	2,080,000
M104	8	100,000	90,000	20,000	210,000
M105	Sawing Pavement	50,000	50,000	0	100,000
	Grade Gravel Surface	75,000	900,000	10,000	985,000
	Patch Gravel Surface	90,000	1,450,000	0	1,540,000
M109		20,000	75,000	0	95,000
M110	State Trunkline/Freeway Patching	0	0	536,316	536,316
109	SURFACE MAINTENANCE	\$2,275,000	\$3,645,000	\$616,316	\$6,536,316
M120	Dust Layer Surface	50,000	350,000	0	400,000
	CHLORIDE APPLICATION	\$50,000	\$350,000	\$0	\$400,000
M130	Blading Shoulders	230,000	30,000	10,000	270,000
M131	Berm Removal	10,000	20,000	5,000	35,000
M132	Patch Gravel Shoulder	150,000	20,000	5,000	175,000
119	SHOULDER MAINTENANCE	\$390,000	\$70,000	\$20,000	\$480,000
M140	Tree Removal	50,000	90,000	15,000	155,000
M141	Tree/Brush Trimming	90,000	100,000	20,000	210,000
M142	Stump Removal	10,000	10,000	0	20,000
M143	Log Removal	2,500	2,500	0	5,000
M144	Tree Removal Contracts	40,000	80,000	0	120,000
121	TREES & SHRUBS	\$192,500	\$282,500	\$35,000	\$510,000
M150	Clean Catch Basins	50,000	50,000	25,000	125,000
M151	Repair Catch Basins	60,000	175,000	20,000	255,000
M152	Build Catch Basins	3,000	20,000	0	23,000
M153	Ditch Cleanout	100,000	410,000	7,000	517,000
M154	Powerflushing Culverts	25,000	95,000	10,000	130,000
M155	Culvert/Underdrain Maintenance	55,000	150,000	10,000	215,000
M156	Erosion Control	35,000	55,000	8,000	98,000
M157	Drainage Contracts	0	0	0	0
122	DRAINAGE STRUCTURES	\$328,000	\$955,000	\$80,000	\$1,363,000







# ROAD MAINTENANCE COSTS

	Activity Code & Description	Primary Road	Local Road	State Trunkline	Totals
	Retivity code & Description	Road	Road	Tunkine	Totals
MICO	Full Width Litter Diskur	0	0	58,000	58,000
	Full Width Litter Pickup Patrol Litter Pickup	35,000	13,000	5,000	53,000
	•	,		12,000	24,000
W1102	Litter Hauling Contract	6,000	6,000	12,000	24,000
124	ROADSIDE CLEANUP	\$41,000	\$19,000	\$75,000	\$135,000
M170	Swath Mowing	300,000	150,000	35,000	485,000
M171	Mowing Contracts	170,000	0	0	170,000
M172	Weedspray Contracts	0	0	. 0	0
126	GRASS AND WEED CONTROL	\$470,000	\$150,000	\$35,000	\$655,000
M180	Approach Sweeping	6,000	3,000	0	9,000
M181	Curb Sweeping	350,000	80,000	0	430,000
M182	Freeway Sweeping	0	0	100,000	100,000
M183	Sweeping Contracts	15,000	0	0	15,000
M184	Sweeping Disposal	50,000	5,000	0	55,000
132	SWEEPING AND FLUSHING	\$421,000	\$88,000	\$100,000	\$609,000
M190	R.O.W. Fence Repair	5,000	3,000	35,000	43,000
137	R.O.W. FENCE REPAIR	\$5,000	\$3,000	\$35,000	\$43,000
M200	Other Routine Maintenance	25,000	25,000	10,000	60,000
139	OTHER ROUTINE MAINTENANCE	\$25,000	\$25,000	\$10,000	\$60,000
M210	Maintain Snow Route RT	1,060,000	100,000	527,363	1,687,363
M211	Maintain Snow Route OT	1,479,000	180,000	850,000	2,509,000
M212	Scrape/Salt Non-Route Road RT	20,000	700,000	0	720,000
M213	Scrape/Salt Non-Route Road OT	2,000	270,000	0	272,000
	Erect/Remove Snow Fence	50,000	20,000	5,000	75,000
M215	Winter Maintenance Contract	40,000	0	0	40,000
M216	Anti-Ice System	0	0	5,000	5,000
M220	Night Patrol	30,000	2,000	75,019	107,019
M230	Other Winter Maintenance	10,000	10,000	188,080	208,080
141	SNOW AND ICE REMOVAL	\$2,691,000	\$1,282,000	\$1,650,462	\$5,623,462







# ROAD MAINTENANCE COSTS

Activity Code & Desc	cription	Primary Road	Local Road	State Trunkline	Totals
M240 Bridge Repair		200,000	200,000	0	400,000
151 STRUCTURE MAINTER	NANCE	\$200,000	\$200,000	\$0	\$400,000
M250 Structure Painting		10,000	10,000	0	20,000
152 STRUCTURE PAINTIN	G	\$10,000	\$10,000	\$0	\$20,000
M280 Emergency Road Maint	enance	20,000	10,000	20,000	50,000
190 EMERGENCY ROAD M	IAINTENANCE	\$20,000	\$10,000	\$20,000	\$50,000
TOTAL FIELD BUDGET for MAINTENANCE		\$7,118,500	\$7,089,500	\$2,676,778	\$16,884,778
M500 Replace Steel Beam Guardina M501 Replace Steel Beam Guardina		240,000 18,000	220,000 18,000	90,000 7,500	550,000 43,500
130 GUARDRAIL AND POS	T	\$258,000	\$238,000	\$97,500	\$593,500
M542 Pumphouse Energy		7,000	0	0	7,000
153 PUMPHOUSE ENERG	Y	\$7,000	\$0	\$0	\$7,000
<ul> <li>M510 Sign Maintenance RT</li> <li>M511 Sign Maintenance OT</li> <li>M512 Sign Shop Work RT</li> <li>M513 Sign Shop Work OT</li> <li>M514 Overhead Signs - Electr</li> <li>M515 Overhead Signs - Non E</li> <li>M516 Other Traffic Maintenar</li> </ul>	lectrical	$225,000 \\ 35,000 \\ 0 \\ 2,000 \\ 0 \\ 205,000$	215,000 30,000 0 0 0 0 0 0	200,000 25,000 0 0 0 0 0	640,000 90,000 0 2,000 0 205,000
160 TRAFFIC SIGNS		\$467,000	\$245,000	\$225,000	\$937,000
<ul> <li>M520 Relamp Electrical Device</li> <li>M521 Relamp Electrical Device</li> <li>M522 Signal Trouble Call RT</li> <li>M523 Signal Trouble Call OT</li> <li>M524 Controller Maintenance</li> <li>M527 Signal Operations Adjust</li> <li>M528 Remove/Replace Signal</li> <li>M529 Emergency Signal Remove</li> <li>M530 Emergency Signal Remove</li> </ul>	stment sove/Repair RT	95,000 35,000 50,000 110,000 80,000 8,000 14,000 15,000 80,000	0 0 0 0 0 0 0 0 0 0	33,000 15,000 15,000 35,000 30,000 9,000 2,000 15,000 40,000	$128,000 \\ 50,000 \\ 65,000 \\ 145,000 \\ 110,000 \\ 17,000 \\ 16,000 \\ 30,000 \\ 120,000$







#### ROAD MAINTENANCE COSTS

Activit	y Code & Description	Primary Road	Local Road	State Trunkline	Totals
M531 Install S	lignals	10,000	0	5,000	15,000
	Shop Work	10,000	0	0	0
-	Adernization	0	0	0	0
M540 Signal E		330,000	0	3,000	333,000
	shergy		0		
161 TRAFF.	IC SIGNALS	\$827,000	\$0	\$202,000	\$1,029,000
M550 Traffic	Counter Maintenance	60,000	30,000	0	90,000
239 TRAFF.	IC COUNTER MAINTENANCE	\$60,000	\$30,000	\$0	\$90,000
M560 Paint G	uidelines RT	415,000	105,000	0	520,000
M561 Paint G	uidelines OT	13,000	3,000	0	16,000
M562 Paveme	nt Messages RT	181,000	49,000	0	230,000
M563 Paveme	nt Messages OT	13,000	4,000	0	17,000
162 PAVEM	ENT MARKINGS	\$622,000	\$161,000	\$0	\$783,000
M570 Delinea	tor Maintenance RT	3,000	2,000	5,000	10,000
M571 Delinea	tor Maintenance OT	0	0	0	0
164 DELINI	EATOR MAINTENANCE	\$3,000	\$2,000	\$5,000	\$10,000
M580 Attenua	tor Maintenance RT	0	0	23,000	23,000
M581 Attenua	tor Maintenance OT	0	0	2,000	2,000
165 ATTEN	UATOR MAINTENANCE	\$0	\$0	\$25,000	\$25,000
TOTAL FIELD	<b>BUDGET</b> for TRAFFIC	\$2,244,000	\$676,000	\$554,500	\$3,474,500







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
	Dequindre Road	- Long Lake to Bu	urning Bush (NC	<u>60% - HM 40%)</u>	) - (Carry-over)	
Recons	truct and Widen					
NC			45,000	330,000		375,000
HM			30,000	220,000		250,000
Total			75,000	550,000		625,000
					MCDR	625,000
<u>W. O.</u> Rehabi HM	<u>Garfield - 14 Mile</u> iliation 122,000	<u>Road to 15 Mile</u>	<u>Road - (Carry-ove</u> 228,900	er) 1,525,625		1,876,525
					STPU	1,220,500
					FRASER	328,013
				_	MCDR	328,012
	<u>Hayes Road - 10 N</u> ilitation	Mile Road to 11 M	<u> 1ile Road</u>			
НМ	224,000		420,000	2,800,000		3,444,000
					STPU	2,240,000
					WARREN	301,000
					ROSEVILLE	301,000
					MCDR	602,000







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing	,
	<u>Jefferson Avenue</u> Replacement	<u>x Salt River - (Ca</u>	arry-over)				
НМ	27,000	50,000	563,500	3,757,000		4,397,500	в
				LO	CAL BRIDGE MCDR	3,569,150 828,350	
	<u>Mound Road - N</u> tation - Advance C		d to 18 Mile Road -	<u>- (Carry-over)</u>			
НМ			525,000	3,500,000		4,025,000	
				STERLIN	NG HEIGHTS MCDR	2,012,500 2,012,500	
	<u>Mound Road - N</u> 2 Construct Convers		d to 18 Mile Road .	- (Carry-over)		~	1
НМ						0	
				STERLIN	NHPP NG HEIGHTS MCDR	3,130,700 -1,565,350 -1,565,350	,
<u>W. O.</u> Rehabili	<u>Mound Road - I-6</u> taion	596 to 14 Mile R	oad				
НМ	520,000		975,000	6,500,000		7,995,000	
					WARREN MCDR	3,997,500 3,997,500	







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
	<u>Romeo Plank at</u> ct Roundabout	<u> 25 Mile_Road - ((</u>	Carry-over)			
НМ		250,000	150,000	1,000,000		1,400,000
				M	ACOMB TWP MCDR	700,000 700,000
	<u>Romeo Plank - N</u> ruct and Widen	l. of 21 Mile Roa	d to 23 Mile Road	<u>(NC 60% - HM 4</u>	10%) - (Carry-over)	
NC HM Total	180,000 120,000 300,000					180,000 120,000 300,000
				M.	ACOMB TWP MCDR	150,000 150,000
<u>W. O.</u> Rehabili	<u>Schoenherr - N. c</u> itation	of Plumbrook to	<u>19 Mile Road</u>			
НМ	320,000		600,000	4,000,000		4,920,000
				STERLIN	NG HEIGHTS MCDR	2,460,000 2,460,000
<u>W. O.</u> Resurfac	<u>Shelby Township</u> cing	Resurfacing				
НМ	246,000		461,250	3,075,000		3,782,250
					SHELBY TWP MCDR	1,891,125 1,891,125







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing	
<u>W. O.</u> Bridge	<u>South River Roa</u> Repair	<u>d Bridge - (Carr</u>	<u>y-over)</u>				
HM	24,000		45,000	300,000		369,000	В
					MCDR	369,000	-
	<u> 12 Mile Road - I</u> vilitation	Dequindre to Ry	<u>an</u>				
HM	200,000		375,000	2,500,000		3,075,000	
					WARREN MCDR	1,537,500 1,537,500	
<u>W. O.</u> Rehabil	<u>14 Mile Road - I</u> litation	Dequindre to Ry	<u>an</u>				
HM	217,400		407,700	2,717,800		3,342,900	
				STERLIN	STPU WARREN NG HEIGHTS MCDR	2,174,253 292,162 292,162 584,323	
<u>W. O.</u> Resurfa	21 Mile Road - S	Schoenherr to G	arfield				€.
HM	190,000		356,000	2,375,000		2,921,000	
					STPU Shelby Twp Acomb Twp McDr	1,900,000 255,250 255,250 510,500	







HM       457,200       3,048,000         Total       1,143,000       7,620,000         TEDFC MACOMB TWP MCDR         W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%)         Reconstruct and Widen         NC       252,000       600,000       540,000       3,600,000         HM       168,000       400,000       360,000       2,400,000	nancing
NC 685,800 4,572,000 HM 457,200 3,048,000 Total 1,143,000 7,620,000 TEDFC MACOMB TWP MCDR W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%) Reconstruct and Widen NC 252,000 600,000 540,000 3,600,000 HM 168,000 400,000 360,000 2,400,000	
HM       457,200       3,048,000         Total       1,143,000       7,620,000         TEDFC MACOMB TWP MCDR         W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%)         Reconstruct and Widen         NC       252,000       600,000       540,000       3,600,000         HM       168,000       400,000       360,000       2,400,000	
HM       457,200       3,048,000         Total       1,143,000       7,620,000         TEDFC MACOMB TWP MCDR         W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%)         Reconstruct and Widen         NC       252,000       600,000       540,000       3,600,000         HM       168,000       400,000       360,000       2,400,000	5,257,800
TEDFC MACOMB TWP MCDR           W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%) Reconstruct and Widen           NC         252,000         600,000         540,000         3,600,000           HM         168,000         400,000         360,000         2,400,000	3,505,200
W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%)           Reconstruct and Widen           NC         252,000         600,000         540,000         3,600,000           HM         168,000         400,000         360,000         2,400,000	8,763,000
W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%)           Reconstruct and Widen           NC         252,000         600,000         540,000         3,600,000           HM         168,000         400,000         360,000         2,400,000	7,010,400
W. O. 23 Mile Road - Card Road to North Avenue (NC 60% - HM 40%)         Reconstruct and Widen         NC       252,000       600,000       540,000       3,600,000         HM       168,000       400,000       360,000       2,400,000	876,300
Reconstruct and Widen           NC         252,000         600,000         540,000         3,600,000           HM         168,000         400,000         360,000         2,400,000	876,300
NC 252,000 600,000 540,000 3,600,000 HM 168,000 400,000 360,000 2,400,000	
HM 168,000 400,000 360,000 2,400,000	
HM 168,000 400,000 360,000 2,400,000	4,992,000
Total 420,000 1,000,000 900,000 6,000,000	3,328,000
1044 120,000 1,000,000 900,000 0,000,000	8,320,000
TEDFC	5,520,000
MACOMB TWP	1,400,000
MCDR	1,400,000
<u>W. O. 29 Mile Road x North Branch Clinton River - (Carry-over)</u> Superstructure Repair	
HM 60,000 500,000	560,000 <b>E</b>
MCDR	560,000
W. O. 2019 Bridge Inspection - Primary	
County Wide	
НМ 75,000	75,000 <b>E</b>
MCDR	73,000 E







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
<u>W. O.</u> County	<u>2019 MDOT Fi</u> Wide	nal Accountings				
HM				100,000		100,000
					MCDR	100,000
<u>W. O.</u> County		Preservation - Pri	<u>mary - (Carry-over)</u>			
HM			100,000	900,000		1,000,000
					MCDR	1,000,000
<u>W. O.</u> County	<u>2019 Pavement</u> Wide	Preservation - Pri	mary			*
HM	70,000		200,000	2,000,000		2,270,000
					MCDR	2,270,000
<u>W. O.</u> County	2019 Survey & Wide	Design				
HM	300,000					300,000
					MCDR	300,000
<u>W. O.</u> County		esurfacing, Resto	ration, and Rehabil	litation		
HM	800,000		1,500,000	10,000,000		12,300,000
		×		CIT	TES & TWPS MCDR	3,075,000 9,225,000



Macamb County Department of Roads October 1, 2018 thru September 30, 2019



## **CONSTRUCTION - PRIMARY ROADS and BRIDGES**

	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing	
<u>W. O. 2</u> County V	2019 Rural Pave Vide	<u>ment</u>					
НМ	14,100		42,000	351,600		407,700	
					STPR MCDR	281,278 126,422	
<u>W. Q. 2</u> County V	2019_Primary Rc Vide	oad_Bridges					
НМ	35,000		60,000	500,000		595,000 I	В
					MCDR	595,000	
<u>W. O. 2</u> County V	2019 Signal Moc Vide	lernizations					
НМ	90,000		120,000	986,000		1,196,000	
					MCDR	1,196,000	
<u>W. O. 2</u> County V	2019 New Signal Vide	<u>ls</u>					
НМ	23,000		35,000	440,000		498,000	
					MCDR	498,000	
<u>W. O. 2</u> County V	2 <u>019 LED Retro</u> Vide	<u>fit</u>					
НМ	40,000		20,000		290,000	350,000	
					MCDR	350,000	







Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
<u>W. O. 2017 Safety Proje</u> Garfield, 12 Mile Road, 23					
НМ		15,000	168,000		183,000
				HSIP MCDR	120,000 63,000
<u>W. O. 2017 Safety Proje</u> Van Dyke, Schoenherr, Hay					
НМ		15,000	159,200		174,200
			-	HSIP MCDR	104,400 69,800
<u>W. O. 2017 Safety Proje</u> Harper, 14 Mile, 18 Mile,					
НМ		25,000	196,200		221,200
				HSIP MCDR	114,300 106,900
<u>W. O. 2016 Congestion</u> Communication Load Distr		ir Quality - (Carry-c	<u>over)</u>		
НМ		85,000	1,034,300		1,119,300
				CMAQ MCDR	650,000 469,300







Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
<u>W. O. 2017 Congestic</u> Communication Load Di	-	<u>air Quality - (Carry-c</u>	over)		
НМ		114,000	1,930,000		2,044,000
				CMAQ MCDR	1,575,000 469,000
<u>W. O. 2017 Congestic</u> Traffic Surveillance Came		<u>air Quality - (Carry-c</u>	over)		
HM		15,000	200,600		215,600
				CMAQ MCDR	164,800 50,800
<u>W. O. 2017 Congestic</u> Wireless Interconnect	on Mitigation & A	<u>air Quality - (Carry-c</u>	over)		
HM		15,000	150,200		165,200
				CMAQ MCDR	113,200 52,000
<u>W. O. 2017 Congestic</u> Advance Traffic Manager			over)		
НМ		34,000	488,000		522,000
				CMAQ MCDR	350,000 172,000







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
<u>W. O.</u>	2018 Congestion	Mitigation & A	Air Quality - (Carry-	<u>over)</u>		
Connec	cted Vehicle RSU's a	nd Travel Time A	Analytics			
НМ			120,000	3,040,000		3,160,000
		_			CMAQ MCDR	2,662,000 498,000
	2019 Congestion cted Vehicle RSU's a	-				
HM	160,000		220,000	2,219,500		2,599,500
					CMAQ MCDR	1,930,000 669,500
	2020 Congestion cted Vehicle RSU's a	•				
НМ	160,000					160,000
					MCDR	160,000
	<u>2019 Safety</u> les of Centerline Sinı	usodial Rumble St	riþs			
НМ	15,000		25,000	368,000		408,000
					HSIP MCDR	288,000 120,000







	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
	<u>2019 Safety</u> tes at 84 Locations					
НМ	20,000		40,000	402,500		462,500
					HSIP	315,000
					MCDR	147,500
	<u>2019 Safety</u> ns with Backplates 15,000	at 8 Locations	25,000	396,750		436,750
					HSIP	310,500
					MCDR	126,250
	<u>2020 Safety</u> ions and Design					
НМ	50,000					50,000
					MCDR	50,000







_	Design	R.O.W	Construction Engineering	Contract	Sign & Signal	Totals & Financing
	-	perations Center nance and Equipm	ent			
НМ				2,750,000		2,750,000
					CMAQ MCDR	2,200,000 550,000

#### TOTALS . . . PRIMARY ROADS and BRIDGES

\$4,602,500	\$1,300,000	\$10,110,350	\$77,576,275	\$290,000	\$93,879,125







#### CONSTRUCTION - LOCAL ROADS and BRIDGES

Design	R-O-W	Constr Engineering	Contract	Sign & Signal	Totals & Financing		
<u>W. O. Macomb Orchard Trail - E. of M-53 to W. of Powell Road - (Carry-over)</u> Non-Motorized							
НМ		15,000	150,000		165,000		
				ISTEA DEMO MCDR	100,000 65,000		
<u>W. O. Riverbends Par</u> Non-Motorized	rk - (Carry-over)	!					
NC 41,500		77,500	517,600		636,600		
				ISTEA DEMO SHELBY TWP	414,100 222,500		
<u>W. O. Riverbends Par</u> Non-Motorized	rk - (Carry-over)	!					
NC 46,000		86,500	576,500		709,000		
				TAP SHELBY TWP	276,518 432,482		
<u>W. O. 30 Mile Road/Powell Road - E. of M-53 &amp; N. of 30 Mile - (Carry-over)</u> Pave Gravel							
НМ		205,800	1,372,000		1,577,800		
			WASH	INGTON TWP MCDR	946,680 631,120		







## CONSTRUCTION - LOCAL ROADS and BRIDGES

Design	R-O-W	Constr Engineering	Contract	Sign & Signal	Totals & Financing		
<u>W. O. 2019 Bridge In</u> County Wide	nspection - Local	÷					
НМ			75,000		75,000	в	
				MCDR	75,000		
<u>W. O. 2019 Large C</u> County Wide	ulvert Replacem	<u>ent</u>					
HM 40,000		75,000	500,000		615,000		
				MCDR	615,000		
<u>W. O. 2019 Limesto</u> County Wide	on <b>e</b> Program - Lo	<u>cal</u>					
НМ			1,750,000		1,750,000		
				TOWNSHIPS MCDR	175,000 1,575,000		
<u>W. O. 2018 Pavement Preservation - Local - (Carry-over)</u> County Wide							
НМ		100,000	900,000		1,000,000		
				MCDR	1,000,000		





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#### CONSTRUCTION - LOCAL ROADS and BRIDGES

_	Design	R-O-W	Constr Engineering	Contract	Sign & Signal	Totals & Financing	
	<u>2019 Paveme</u> y Wide	nt Preservation - I	Local				
HM	70,000		200,000	2,000,000		2,270,000	
					MCDR	2,270,000	
	2019 Subdivis y Wide	sion Reconstructi	<u>on</u>				
НМ	224,000		480,000	3,296,000		4,000,000	
					TOWNSHIPS MCDR	2,000,000 2,000,000	
TOTALS LOCAL ROADS and BRIDGES							
_	\$421,500	\$0	\$1,239,800	\$11,137,100	\$0	\$12,798,400	