

Macomb County Department of Roads
2021-2022 Budget

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



Mark A. Hackel
County Executive

October 1, 2021
through
September 30, 2022



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



INDEX

Description	Pages
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RESOLUTION

<i>2021/2022 Budget by Category</i>	<i>1 - 2</i>
<i>2021/2022 Budget Resolution</i>	<i>3 - 5</i>
<i>County Road System Mileage</i>	<i>6</i>

REVENUES

<i>Michigan Transportation Funds</i>	<i>7</i>
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EXPENDITURES

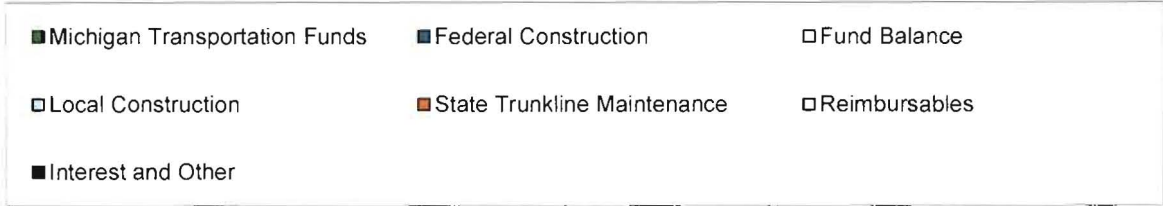
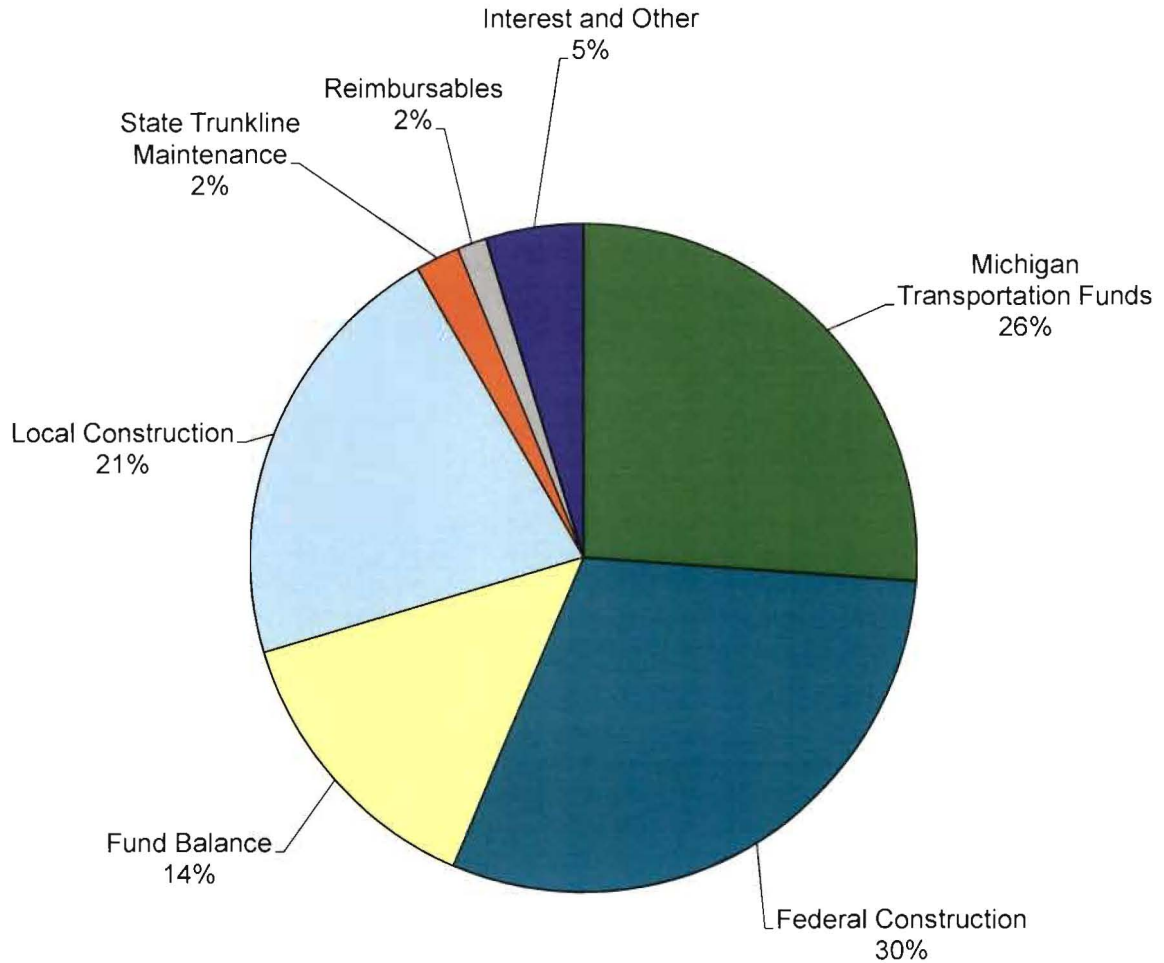
<i>Equipment and Capital Projects</i>	<i>8 - 14</i>
<i>Memberships and Conferences</i>	<i>15 - 20</i>
<i>Special Requests</i>	<i>21 - 29</i>
<i>Road Maintenance by Cost Activity</i>	<i>30 - 34</i>

CONSTRUCTION PROGRAM

<i>Construction Program with Financing</i>	<i>35 - 52</i>
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2021/2022 Budgeted Revenues by Category



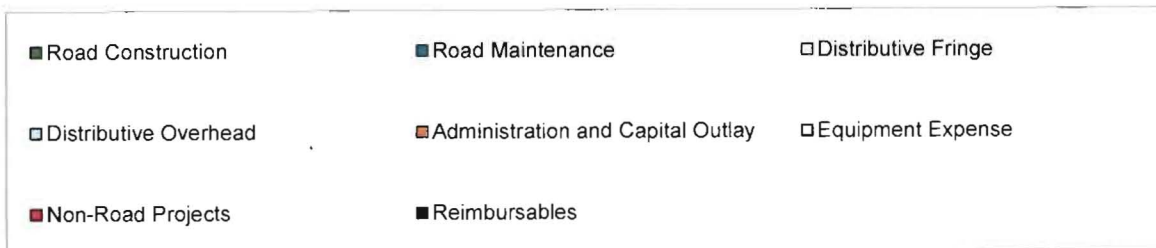
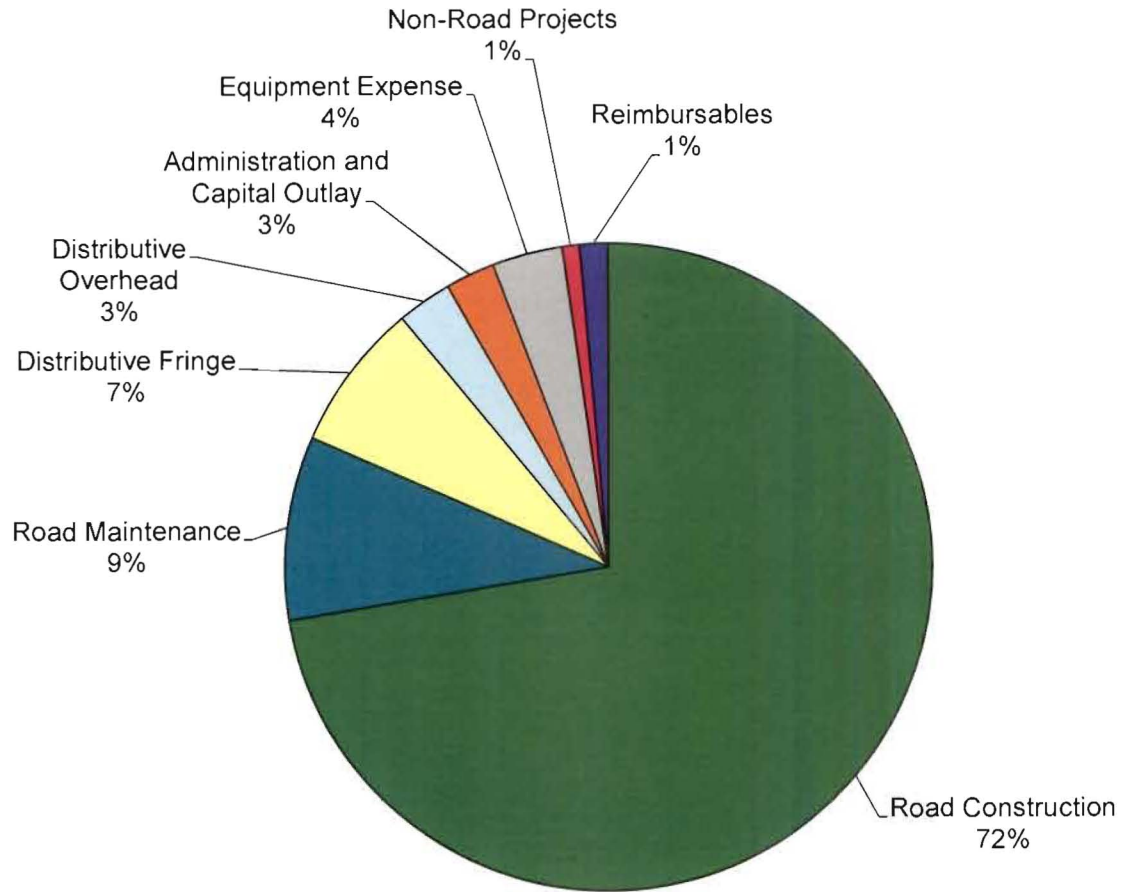


Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



2021/2022 Budgeted Expenditures by Category





Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



GENERAL APPROPRIATIONS ACT

BE IT RESOLVED, that revenues for the fiscal year commencing October 1, 2021 and ending September 30, 2022 are hereby appropriated by account consistent with the Uniform Chart of Accounts prescribed by the Department of Treasury, as follows:

Account No.	Description	2019/2020 Actual	2020/2021 Original Budget	2021/2022 Original Budget
490.000	Permit Fees	\$626,527	\$521,000	\$571,000
491.000	Tap-in Fees	500	1,200	1,200
493.000	Cab Card Fees	68,300	60,000	60,000
494.000	Review for Site Plan Fee	18,700	20,000	20,000
510.000	Grants	5,602,027	2,426,235	0
511.000	Federal Construction Projects	12,494,617	45,444,465	85,950,930
546.000	Michigan Transportation Fund	67,096,734	73,187,772	75,377,200
546.000	Build Michigan Fund	1,590,611	1,572,228	1,562,800
547.000	Local Bridge Fund	1,141,250	2,495,300	2,980,031
583.001	Cities	3,570,948	9,878,775	34,524,268
583.004	Townships	6,866,042	13,949,543	28,107,909
608.000	Subdivision Inspection	144,543	250,000	200,000
609.000	Driveway Installation Fees	11,000	15,000	15,000
610.000	Sundry Accounts Receivable	1,833,178	2,117,500	2,117,500
627.000	State Trunkline Maintenance	7,291,989	6,810,104	6,329,439
628.000	State Non-Maintenance	1,106,067	600,000	1,200,000
665.000	Interest Earned	1,675,989	1,115,017	515,338
669.000	Equipment Rental Credits	7,284,889	7,921,083	7,903,775
673.000	Sales of Property and Equipment	388,720	171,000	171,000
685.000	Accident Recovery	303,818	100,000	100,000
690.000	Depreciation Credits	4,235,154	4,962,110	5,240,400
	Miscellaneous Revenue	42,273	1,200	1,500
TOTAL REVENUES - COUNTY ROAD FUND . . .		\$123,393,876	\$173,619,532	\$252,949,290



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



GENERAL APPROPRIATIONS ACT

AND, BE IT FURTHER RESOLVED, that expenditures for the fiscal year commencing October 1, 2021 and ending September 30, 2022 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	2019/2020 Actual	2020/2021 Original Budget	2021/2022 Original Budget
451	Primary Road Construction	\$512,465	\$9,833,772	\$20,061,280
459	Primary Road Heavy Maintenance	40,016,107	67,715,950	161,589,543
460	Primary Bridge Heavy Maintenance	2,155,523	4,646,250	4,527,555
467	Primary Road Maintenance	10,749,420	14,480,000	14,960,500
481	Local Road Construction	96,291	3,244,043	4,123,074
489	Local Road Heavy Maintenance	6,752,217	9,564,107	20,216,061
490	Local Bridge Heavy Maintenance	726,201	1,095,000	2,250,603
494	Local Drain Assessment	105,076	150,000	200,000
497	Local Road Maintenance	6,228,919	8,497,000	8,483,000
505	Sundry Accounts Receivable	1,486,833	2,546,150	2,659,476
507	Subdivision Inspection	55,988	182,000	186,892
508	Permit Inspection	282,443	325,000	333,154
510	Direct Equipment	4,693,216	6,024,276	6,346,747
511	Indirect Equipment	1,831,506	2,720,750	2,758,865
512	Operating Equipment	579,510	1,245,000	1,245,000
513	Fringe Benefits	18,419,534	21,662,584	21,756,868
514	Distributive	7,160,758	7,692,123	8,032,398
515	Administration	(444,640)	597,596	639,710
516	Engineering	803,440	1,198,252	1,231,721
517	State Trunkline Maintenance	4,088,878	4,020,104	3,683,439
518	State Non-Maintenance	676,493	614,076	967,201
521	Non-Road Projects	119,028	6,156,362	2,511,510
901	Capital Outlay	9,919,860	5,581,630	5,383,920
906	Bond and Note Payments	16,845	13,517	11,338
TOTAL EXPENDITURES -				
COUNTY ROAD FUND		<u>\$117,031,910</u>	<u>\$179,805,541</u>	<u>\$294,159,855</u>
BUDGETED NET REVENUES (EXPENDITURES)		\$6,361,965	(\$6,186,009)	(\$41,210,565)
ACCUMULATED AVAILABLE FUND BALANCE				
FROM PRIOR YEARS - PROJECTED				<u>111,282,782</u>
PROJECTED FUND BALANCE AT END OF BUDGET YEAR				<u>\$70,072,217</u>



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



GENERAL APPROPRIATIONS ACT

Activity No.	Description	2019/2020 Actual	2020/2021 Original Budget	2021/2022 Original Budget
677	General Liability Fund	228,389	250,000	250,000
TOTAL EXPENDITURES -				
	GENERAL LIABILITY FUND	228,389	250,000	250,000
665.000	Interest Earned	106,651	100,000	50,000
699.000	Transfer-In Control	0	0	0
TOTAL REVENUES -				
	GENERAL LIABILITY FUND	106,651	100,000	50,000



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021 - 2022 STATISTICS

I - ROAD MILES

County-Wide Primary Mileage	432.19	miles
County-Wide Local Mileage	1,285.65	miles
State Trunkline Actual C/L Mileage	277.39	miles

II - FEDERAL AID MILES

Federal Aid Urban Primary Mileage	356.70	miles
Federal Aid Urban Local Mileage	1,077.66	miles

III - LANE MILES

State Trunkline Lane Miles Maintained by MCDOR	803.59	miles
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NUMBER OF STRUCTURES MAINTAINED by MACOMB COUNTY DEPARTMENT OF ROADS

Bridges	224	bridges
County Primary System	101	structures
County Local System	123	structures
Bridges Closed to Traffic	2	
Bridges Posted	24	

NUMBER OF DRAINAGE STRUCTURES 20' - 0" or LESS

Drainage Structures - Total	546
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%

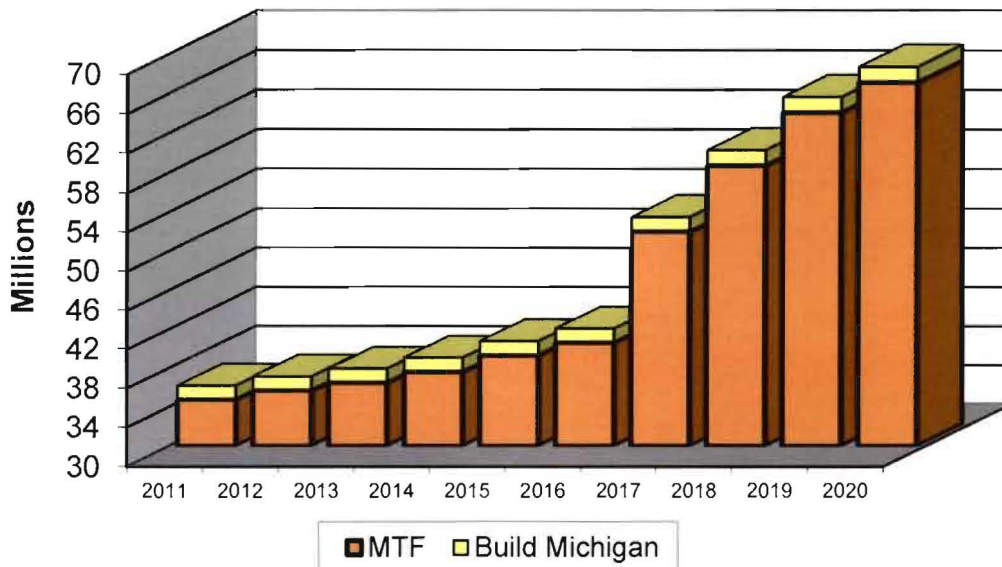


MICHIGAN TRANSPORTATION FUNDS

Fiscal Year 2021/2022 Budget

	Gas & Weight Funds	Build Michigan Funds
October	\$5,632,000	\$116,000
November	5,714,000	116,000
December	6,883,000	116,000
January	7,355,000	116,000
February	7,962,200	116,000
March	6,085,000	116,000
April	5,059,000	116,000
May	4,356,000	116,000
June	6,079,000	116,000
July	6,106,000	116,000
August	7,412,000	116,000
September	6,724,000	286,800
Engineering	10,000	0
	<u>\$75,377,200</u>	<u>\$1,562,800</u>

Actual Revenue for the last 10 years





Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT and CAPITAL PROJECTS

S U M M A R Y

CAPITALIZED EQUIPMENT:

901	976.000	Numbered Equipment - Unlicensed	\$227,000
901	977.000	Shop Equipment	121,100
901	980.002	Computer Hardware	20,000
901	980.003	Computer Software	65,000
901	981.000	Numbered Equipment - Licensed	4,630,420

<i>TOTAL CAPITALIZED EQUIPMENT</i>			<u>\$5,063,520</u>
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NON-CAPITALIZED EQUIPMENT:

	728.050	Computer Equipment	\$48,660
	728.060	Computer Software	5,000
	728.090	Shop Equipment	8,200
	780.000	Mechanic Tools	11,500
	790.000	Small Road Tools	700
	931.090	Bldg. Repair/Maintenance-Admin.	1,000
	807.000	Computer Service Contracts	23,219

<i>TOTAL NON-CAPITALIZED EQUIPMENT</i>			<u>98,279</u>
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CAPITAL PROJECTS:

901	974.054	Land Improvements - Shelby	\$10,000
901	975.016	Buildings - Salt Storage Washington	40,000
901	975.041	Buildings - Shelby Salt Dome	80,000
901	975.053	Bldg. Improvements - Clinton	12,400
901	975.054	Bldg. Improvements - Shelby	10,000
901	975.xxx	Capital Improvements-Service Cntrs	100,000
901	975.074	Bldg. Improve. - Shelby Salt Dome	60,000
901	975.091	Bldg. Improvements - Admin. Bldg.	8,000

<i>TOTAL CAPITAL PROJECTS</i>			<u>\$320,400</u>
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<i>TOTAL EQUIPMENT and CAPITAL PROJECTS</i>			<u>\$5,482,199</u>
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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT AND CAPITAL PROJECTS

	Trade-In	Cost	Account Number
<i>(02) FINANCE AND M.I.S.</i>			
29 Desktops for Replacement		\$19,300	728.050
10 Laptops for Replacement		8,360	728.050
5 CAD Workstations		16,000	728.050
Technology Contingency		20,000	980.002
Storage Maintenance		8,219	807.000
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
		<u>\$156,879</u>	
 <i>(04) ADMINISTRATION</i>			
Miscellaneous Office Equipment		<u>\$5,000</u>	728.050
		<u>\$5,000</u>	
 <i>(11) WASHINGTON TOWNSHIP SERVICE CENTER</i>			
~ 1 Tandem Axle Dump Body	171509	\$181,980	981.000
Wing Plow for above		15,000	981.000
Underbody Blade for above		9,500	981.000
Salt Spreader for above		4,500	981.000
Rex Roth for above		13,500	981.000
Road Temp Sensor for above		900	981.000
1 John Deere Motor Grader - 672G	621012	335,000	981.000
1 F-750 Cab & Chassis	100603	56,000	981.000
55FT Aerial Boom and Chipper Box		98,000	981.000
1 F-150 4x4 Pick Up	125416	29,000	981.000
1 Cooltech Dual 2K AC Machine	1023	4,200	728.090
1 New Holland T5 Tractor	633003	100,000	981.000
Side Flail For above		20,000	981.000
Rear Flail for above		20,000	981.000
		<u>\$887,580</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT AND CAPITAL PROJECTS

	Trade-In	Cost	Account Number
<i>(12) NEW HAVEN SERVICE CENTER</i>			
1 John Deere Motor Grader 672-G	620810	\$335,000	981.000
1 Tandem Axle Dump Body	171109	185,000	981.000
Wing Plow for above		17,000	981.000
Underbody Blade for above		10,500	981.000
Salt Spreader for above		5,500	981.000
Rex Roth for above		15,000	981.000
Road Temp Sensor for above		1,000	981.000
1 F-150 4x4 Pick Up	124817	29,000	981.000
1 Mechanical Sweeper	160210	270,000	981.000
		<u>\$868,000</u>	
 <i>(13) CLINTON TOWNSHIP SERVICE CENTER</i>			
~ 1 Tandem Axle RDS Conveyor Body	170806	\$159,380	981.000
Wing Plow for above		15,000	981.000
Underbody Blade for above		9,500	981.000
Salt Spreader for above		4,500	981.000
Rex Roth for above		13,500	981.000
RDS for above		34,000	981.000
Pre-Wet System for above		4,500	981.000
Road Temp Sensor for above		900	981.000
~ 1 Tandem Axle Dump Body	178305	181,980	981.000
Wing Plow for above		15,000	981.000
Underbody Blade for above		9,500	981.000
Salt Spreader for above		4,500	981.000
Rex Roth for above		13,500	981.000
Road Temp Sensor for above		900	981.000
~ 1 New Holland T5 Tractor	6324	78,000	981.000
Mid Mount Flail for above		19,000	981.000
Rear Mount Flail for above		19,000	981.000
1 F-250 4x4 Extended Cab Pick Up	129613	30,000	981.000
Front V Plow for above	429613	12,000	981.000
1 Tandem Axle Dump Body	171808	185,000	981.000
Wing Plow for above		17,000	981.000
Underbody Blade for above		10,500	981.000
Salt Spreader for above		5,500	981.000
Rex Roth for above		15,000	981.000
Road Temp Sensor for above		1,000	981.000



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT AND CAPITAL PROJECTS

	Trade-In	Cost	Account Number
<i>(13) CLINTON TOWNSHIP SERVICE CENTER - (continued)</i>			
1 Tandem Axle Dump Body	174311	185,000	981.000
Wing Plow for above		17,000	981.000
Underbody Blade for above		10,500	981.000
Salt Spreader for above		5,500	981.000
Rex Roth for above		15,000	981.000
Road Temp Sensor for above		1,000	981.000
1 F-450 4x4 with Chipper Box and Toolboxes	1006	76,000	981.000
Front Plow for above		10,000	981.000
1 John Deere Front End Loader 724P	6507	300,000	981.000
2 Trailer Mounted Arrowboards	TBD	17,000	981.000
		<u>\$1,495,660</u>	
 <i>(14) SHELBY TOWNSHIP SERVICE CENTER</i>			
~ 1 Tandem Axle RDS Conveyor Body	1747	\$159,380	981.000
Wing Plow for above		15,000	981.000
UB Blade for above		9,500	981.000
Salt Spreader for above		4,500	981.000
Rex Roth for above		13,500	981.000
RDS for above		34,000	981.000
Pre-Wet System for above		4,500	981.000
Road Temp Sensor for above		900	981.000
~ 1 Single Axle RDS Body	154606	127,000	981.000
RDS for above		34,000	981.000
Underbody Blade for above		9,500	981.000
Rex Roth for above		13,500	981.000
Sander/Auger for above		4,200	981.000
Road Temp Sensor for above		900	981.000
1 Argo Chem Anti Delce Tank PH5E		15,000	976.000
1 F-450 12FT Stake Body	103403	62,000	981.000
1 F-450 Single Axle Dump	150108	65,000	981.000
Front Plow for above	450108	10,000	981.000
1 F-450 Single Axle Dump	150208	65,000	981.000
Front Plow for above	450208	10,000	981.000
1 New Holland T5 Tractor	6301	100,000	981.000
Side Flail For above		20,000	981.000
Rear Flail for above		20,000	981.000
1 Morbark Single Axle Chipper		80,000	981.000
1 John Deere Skid Steer 333G		60,000	981.000
Concrete Planner for above		22,000	981.000
Stump Grinder for above		19,000	981.000
HYD Hammer for above		14,000	981.000
		<u>\$992,380</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT AND CAPITAL PROJECTS

	Trade-In	Cost	Account Number
<i>(15) VEHICLE MAINTENANCE</i>			
~ Generator for New Building		\$150,000	976.000
Shop Tools		11,500	780.000
4 Noregon J Pro Diagnostic Kits (windows 10 on laptop - all Service Centers)		27,200	977.000
3 EZ Tech Diagnostic Kits for Navistar (for Service Centers 1, 2 & 4)		20,400	977.000
1 Rotary Column Lifts 1 set 4		36,000	977.000
		<u>\$245,100</u>	
 <i>(21) TRAFFIC</i>			
1 Distance Measuring Instrument (DMI) for pickup 128018		\$700	790.000
		<u>\$700</u>	
 <i>(22) ELECTRICAL</i>			
1 F-550 Cab & Chassis, Service Body	100912/180912	\$112,000	981.000
29 Foot Duralift Boom w/Single Person Bucket for above	676412		
3000 Watt Power Inverter instead of Generator for above			
1 F550 Cab & Chassis, Fiberglass Service Body, 40' Duralift Insulated Boom	108610/188610	145,000	981.000
and Bucket with Material Handler, 3000 Watt Inverter instead of Generator	676510		
1 7'x12' High Side Dual Axle Dump Trailer 14,000 lb GVR	6231	11,000	981.000
		<u>\$268,000</u>	
 <i>(23) SIGN</i>			
1 TL3 Scorpion Crash Attenuator (freeway)		\$25,000	976.000
1 TL2 Scorpion Crash Attenuator (primary)		17,000	976.000
1 Crew Cab Stake Truck with Lift Gate, Arrow Board & Beacons	103513	80,000	981.000
		<u>\$122,000</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT AND CAPITAL PROJECTS

	Trade-In	Cost	Account Number
<i>(24) ENGINEERING</i>			
1 Concrete Compression Machine (250k Machine w/VFD Integrated Package)		\$12,500	977.000
1 HMA/Soils Oven (OV-5002)		4,000	728.090
1 Pick Up Truck 4x4 with Light Bar and Tool Box	123511	29,000	981.000
		<u>\$45,500</u>	
 <i>(31) PURCHASING</i>			
Emergency Fund		\$40,000	976/977
1 Hydraulic Chain Cutter		5,000	977.000
		<u>\$45,000</u>	
 <i>(32) PERMITS & LOCAL ROADS</i>			
1 F-150 Pick-up Truck 4X4	125216	\$29,000	981.000
		<u>\$29,000</u>	

~	TOTAL CARRY-OVERS FROM 2020/2021 BUDGET	\$1,388,420
	TOTAL NEW REQUESTS FOR 2021/2022 BUDGET	<u>3,772,379</u>
	TOTAL FIXED ASSETS	\$5,160,799



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 EQUIPMENT AND CAPITAL PROJECTS

	Trade-In	Cost	Account Number
CAPITAL PROJECTS			
Boiler Chemical Filter for Administration Building		\$8,000	975.091
Administration Shed Garage Door (with installation fee)		1,000	931.090
~ Repair/Replace Roof on Salt Barn at Washington Service Center		40,000	975.016
~ Repair & Paint Salt Dome at Shelby Service Center		60,000	975.074
~ Replace Gate Openers - Front & Middle Gates with Key Pad - Shelby SC		10,000	974.054
~ Metal Roof & Gutter Repairs on Parking & Mechanic Garage at Shelby SC		10,000	975.054
~ Asphalt Pad for New Salt Dome at Shelby Service Center		80,000	975.041
Replace Carpet with Porcelain Tile Two (2) Offices 400 sq ft at Stockroom		6,400	975.053
Repair Heat Element West Side of Warehouse at Stockroom		6,000	975.053
Capital Improvements for all Service Centers		100,000	975.XXX
		<u>\$321,400</u>	
 TOTAL FIXED ASSETS AND CAPITAL PROJECTS FOR 2021/2022		 <u><u>\$5,482,199</u></u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



MEMBERSHIPS and CONFERENCES FISCAL YEAR 2021/2022

SUMMARY

	<u>Memberships</u>	<u>Conferences</u>
FINANCE & I.T.	\$930	\$20,260
HUMAN RESOURCES	219	0
ADMINISTRATION	2,340	3,525
WASHINGTON TOWNSHIP SERVICE CENTER	250	0
NEW HAVEN SERVICE CENTER	250	0
CLINTON TOWNSHIP SERVICE CENTER	250	0
SHELBY TOWNSHIP SERVICE CENTER	250	0
VEHICLE MAINTENANCE	250	0
SUPERINTENDENT'S OFFICE	250	0
RIGHT OF WAY	300	5,280
TRAFFIC	2,125	13,650
ELECTRICAL	830	5,500
SIGN	330	4,000
ENGINEERING	700	24,175
STOCKROOM	500	2,200
PERMITS	3,780	3,500
AGENCY	<u>86,200</u>	<u>0</u>
 GRAND TOTAL	 <u><u>\$99,754</u></u>	 <u><u>\$82,090</u></u>



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 MEMBERSHIPS and CONFERENCES

	<u>Employee</u>	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
<i>(02) FINANCE & I.T.</i>				
Government Finance Officers Association	M. Mykytiak	\$550	\$0	
Michigan Government Finance Officers Association	M. Mykytiak	350	500	
County Road Association of Michigan Conferences	M. Mykytiak	0	600	TBD
Southern Michigan Road Comm. Finance Association	M. Mykytiak	30	60	Various
Continuing Education	Finance Staff	0	500	
End User Desktop Training	MCDR Computer Users	0	2,500	
CAD/GIS Training	CAD/GIS Users	0	6,000	
Technical Training	MCDR IT Staff	0	10,000	
Precision Users Self Help Meetings	Precision Users	0	100	Various
		<u>\$930</u>	<u>\$20,260</u>	

(03) HUMAN RESOURCES

Society for Human Resource Management	S. Ling	<u>\$219</u>	<u>\$0</u>	
		<u>\$219</u>	<u>\$0</u>	

(04) ADMINISTRATION

APA - American Planning Association	J. Crumm	\$375	\$0	
APA - Michigan Chapter	J. Crumm	135	0	
American Institute of Certified Planners	J. Crumm	240	0	
APA Michigan Conference	J. Crumm	0	975	TBD
ASCE	B. Santo	325	0	
NSPE	B. Santo	350	0	
NAFA (Fleet Management Association)	N. Stanuch	500	600	
Public Relations Society of America	E. Dimoff	340	1,150	
MPPOA	N. Stanuch	75	0	
Continuing Education	Administration Employees	0	800	
		<u>\$2,340</u>	<u>\$3,525</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 MEMBERSHIPS and CONFERENCES

	<u>Employee</u>	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
<i>(11) WASHINGTON TOWNSHIP SERVICE CENTER</i>				
APWA - Membership	J. Graber	\$250	\$0	
		<u>\$250</u>	<u>\$0</u>	
<i>(12) NEW HAVEN SERVICE CENTER</i>				
APWA - Membership	K. Paige	\$250	\$0	
		<u>\$250</u>	<u>\$0</u>	
<i>(13) CLINTON TOWNSHIP SERVICE CENTER</i>				
APWA - Membership	S. Baurhenn	\$250	\$0	
		<u>\$250</u>	<u>\$0</u>	
<i>(14) SHELBY TOWNSHIP SERVICE CENTER</i>				
APWA - Membership	D. DiCicco	\$250	\$0	
		<u>\$250</u>	<u>\$0</u>	
<i>(15) VEHICLE MAINTENANCE</i>				
APWA - Membership	G. Zukowski	\$250	\$0	
		<u>\$250</u>	<u>\$0</u>	
<i>(16) SUPERINTENDENT'S OFFICE</i>				
APWA - Membership	L. Ciavatta	\$250	\$0	
		<u>\$250</u>	<u>\$0</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 MEMBERSHIPS and CONFERENCES

	<u>Employee</u>	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
(18) RIGHT OF WAY				
Broker Continuing Education	ROW Personnel	\$0	\$80	
Broker License Renewal *	ROW Personnel	0	0	
IRWA - Membership	ROW Personnel	300	0	
IRWA - General Meetings	ROW Personnel	0	300	
IRWA - Fall Seminar	ROW Personnel	0	800	TBD
IRWA - Miscellaneous Classes	ROW Personnel	0	1,100	
Miscellaneous Classes	ROW Personnel	0	3,000	
		<u>\$300</u>	<u>\$5,280</u>	
*Broker License Renewal (3 year cycle) due 2024				
(21) TRAFFIC				
American Society of Civil Engineers	A. Merchant	\$275	\$0	
ITE - Institute of Transportation Engineers	Traffic Employees	1,250	3,900	TBD
Traffic Safety Summit	Traffic Employees	0	1,800	East Lansing
Intelligent Transportation Society of Michigan	Traffic Employees	0	2,500	TBD
Electrical License Renewal	Webb/Ferrell/Foate	250	0	
Traffic Webinars	Traffic Employees	0	500	
PE License Renewal	Abraham/Merchant/ Silver	240	0	
NEC Code Update Class	Webb/Ferrell/Foate	0	750	
Electrical Training Classes	Ferrell/Foate	0	1,000	
IMSA - International Municipal Signal Association	Traffic Employees	110	3,200	TBD
		<u>\$2,125</u>	<u>\$13,650</u>	
(22) ELECTRICAL				
IMSA - International Municipal Signal Association	Electrical Employees	\$330	\$3,000	
NEC Code Update Class	Electrical Employees	0	2,500	
Electrical License Renewal	Electrical Employees	500	0	
		<u>\$830</u>	<u>\$5,500</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 MEMBERSHIPS and CONFERENCES

	<u>Employee</u>	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
<i>(23) SIGN DEPARTMENT</i>				
IMSA - International Municipal Signal Association	Sign Employees	\$330	\$4,000	
		<u>\$330</u>	<u>\$4,000</u>	
 <i>(24) ENGINEERING</i>				
Contract Management Conference	K. Stefanski	\$0	\$300	
CRA Conferences	S. Wanagat	0	600	
CSWO/SESC Certification	Cooper	0	225	
Michigan Concrete Association - Level I	Papas, Prize, Florka, Bucholtz, Tomassi	0	6,800	Lansing
Michigan Concrete Association - Level II	Prevost, Pilgrim, Schrade	0	4,800	
Hot Mix Asphalt - Paving Operations	Holmbert, Papas, Tomassi	0	3,300	Big Rapids
Density Control Technology	Schrade, Malburg, Tomassi	0	2,850	Big Rapids
Aggregate Inspection - Level I	Schrade		1,400	
Michigan Bridge Conference	Wanagat, Newton	0	1,200	Ypsilanti
Michigan Society of Professional Surveyors	Pisarcik, Dubay	240	600	TBD
Professional Engineer License Renewal	Wanagat, Kniga	160	0	
American Society of Civil Engineers	J. Armbruster	300	0	
County Engineers Workshop	S. Wanagat	0	600	TBD
Continuing Education	Engineers	0	1,500	
		<u>\$700</u>	<u>\$24,175</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



FISCAL YEAR 2021/2022 MEMBERSHIPS and CONFERENCES

	<u>Employee</u>	<u>Membership</u>	<u>Conference</u>	<u>Location</u>
(31) PURCHASING/STOCKROOM				
Michigan Public Purchasing Officers Association	Strizic/Giedroc	\$500	\$1,100	Various
National Institute of Governmental Purchasing Training	Purchasing Staff	0	650	
MPPOA	Purchasing Staff	0	450	Various
		<u>\$500</u>	<u>\$2,200</u>	
(32) PERMITS				
Michigan Concrete Association - Level 1	Vacant EA1	\$0	\$1,500	
Michigan Density Control Certification	Vacant EA1	0	1,500	
PUSH Meetings (Precision Training)	L. Smith/N. Staelgraeve	0	500	
Michigan Concrete Association	Bush, Harlow, Devos, Tersigni, Hofman	2,875	0	
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	
		<u>\$3,780</u>	<u>\$3,500</u>	
AGENCY				
Weighmaster		\$20,000	\$0	
Miss Dig Fee		10,000	0	
County Road Association of Michigan		54,000	0	
National Institute of Governmental Purchasing		500	0	
OPIS		600	0	
MI Deal		700	0	
Intelligent Transportation Society of Michigan		400	0	
		<u>\$86,200</u>	<u>\$0</u>	
TOTALS		<u>\$99,754</u>	<u>\$82,090</u>	



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(02) FINANCE & IT		
Audit Fee	\$30,000	
Checks, Forms, Folders, Envelopes, Binders, Labels etc.	5,000	
Actuarial Fee - OPEB	28,000	
Actuarial Fee - GASB 74/75	11,000	
Actuarial Fee - PA 202 Reporting	3,500	
General Liability Actuarial	14,000	
Contract Labor - Payroll Training	20,000	
Miscellaneous - Maintenance	5,000	
Maintenance - Cisco Hardware	5,000	
Maintenance - General PC & Peripherals	25,000	
Maintenance - Formax Folder / Sealer Machine	900	
Service - Bentley Software Support (Engineering)	50,000	
Service - AT&T Internet Service Provider (ISP)	4,500	
Service - AT&T ASE Fiber Network	31,000	
Service - Tungsten Content Manager Software Support	5,000	
Service - Fuel Master Fuel System Support	2,300	
Service - GIS Software Maintenance (ArcEditor - 6 licenses)	5,200	
Service - County Charge-Backs for IT Services	50,000	
(Continued)		



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(02) FINANCE & IT - (Concluded)		
Service - Office 365 GCC E3 - (194 licenses)	38,460	
Service - Windows 10 - (194 licenses)	7,116	
Service - Windows Server User CAL - (194 licenses)	2,842	
Service - Msft SQL Standard Core MCDRSQL1 - (1 license)	581	
Service - Msft SQL Standard Core Centracs - (4 licenses)	12,865	
Service - Msft Exchange Server Enterprise - (4 licenses)	2,622	
Service - CrowdStrike Anit-Virus (198 licenses)	2,000	
Service - Infrastructure Consumption	16,000	
		\$377,886
(03) HUMAN RESOURCES		
CDL Reimbursement	\$2,500	
Mileage Reimbursement	300	
Training	5,000	
Surveillance	5,000	
Arbitration Fees	10,000	
Independent Medical Exams	8,000	
Legal Fees	70,000	
Random Drug Testing	15,000	
Pre-employment Physicals	5,000	
COVID-19 Response Expenses	5,000	
		\$125,800



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(04) ADMINISTRATION		
Admin Building Cleaning (Janitorial, Carpet, Window, etc.)	\$4,000	
Lobbyist	20,000	
Accurate Alarm (Nightwatch)	18,000	
Radio User Fees - 800Mzh	20,000	
Audio Sentry Alarm	3,800	
117 Building Maintenance	40,000	
DPW Projects	200,000	
Asset Management Program (HNTB Consultant)	1,250,000	
Legal Matters/Settlements/Deductibles/Moving Road Claims	120,000	
Postage/Meter	20,000	
Phragmites Management	35,000	
Consulting Services (Master Plan, Asset Mgmt., Safety)	50,000	
Landscaping - Administration Building	2,000	
MDEQ UST Registrations	1,500	
MDEQ Testing/Reports for Clean up at SC3 & Other Locations	50,000	
MDEQ Annual & Quarterly Testing/Repairs for UST/Fuel Sys	25,000	
		\$1,859,300



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(15) VEHICLE MAINTENANCE		
All Data Online Repair Manuals - All Service Centers	\$3,000	
Noregon System JPRO - Annual All Service Centers	9,000	
Allison DOC Premium - Annual All Service Centers	7,500	
Sandblast and Paint Trucks & Equipment	15,000	
Contract out Major Repairs on Equipment	100,000	
Undercoat New Equipment	5,000	
Motorola Radio Maintenance	20,000	
Bosch Evolve Subscription	900	
		\$160,400



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(16) SUPERINTENDENTS OFFICE		
Emergency Road Repairs	\$130,000	
DEQ Compliance Fees at MCDOR Facilities	50,000	
MIOSHA Inspection & Certification at MCDOR Facilities	50,000	
Deicing Chemicals for Winter Maintenance	50,000	
Landfill Fees	80,000	
Software Maintenance Upgrades & Equipment for GPS Systems	125,000	
Safety and Training	25,000	
Snow/Patching/Mowing Contracts-Municipalities & Contractors		
Contracts Mowing - Primary	170,000	
Contracts Snow - Primary	34,500	
Contracts Sweeping - Primary	14,000	
DPW Patching - Primary	20,000	
DPW Patching - Local	25,000	
DPW Snow - Local	25,000	
Contractors Snow - Local	125,000	
Tree Removal Contract	120,000	
Contract Labor	1,000	
Utility Damage during Mowing Operations	15,000	
Phragmites Management	5,000	
Emergency Repairs at Service Centers	120,000	
MCDOR Drainage Easement, Seawall Repair	45,000	
		\$1,229,500



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(18) RIGHT OF WAY		
Land Access Subscription	\$1,700	
Contract Labor	75,000	
Condemnation Awards	400,000	
		\$476,700
(21) TRAFFIC		
Communication Pole Equipment Maintenance	\$30,000	
Controller Software Upgrades and Maintenance	60,000	
Stockroom Material and Loaners for ITS Maintenance	60,000	
Connected Vehicle - Vehicle Units, Software, RSUs, OBU's	150,000	
Office Chairs	600	
Updates to the Precision Traffic Estimating Module	3,500	
Two Cubicles (Electronics Tech, Carpet, Dividers & Desks)	8,000	
		\$312,100



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(22) ELECTRICAL		
Replace/Upgrades to Storm Water Pump Stations (6 locations)	\$600,000	
Emergency Repairs to Storm Water Pump Stations	30,000	
Anchor Rod Pulling Eye	300	
Single Sheave Pulleys	800	
Pallet Style Storage/Shelving Units (4'x8'x12')	3,000	
Calibration of Testing Equipment	5,000	
		\$639,100
(23) SIGN DEPARTMENT		
Breakroom Chairs	\$1,200	
Office Chairs	\$600	
Phoenix 350 Temporary Sign Stands (4)	600	
Video Projector	300	
Jet 100CFM Air Filtration System	500	
Mimaki Sign Printer - Annual Maintenance	3,500	
		\$6,700



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



SPECIAL REQUESTS - FISCAL YEAR 2021/2022

Service or Item Requested	Amount Requested	Total
(24) ENGINEERING		
Subscriptions & Publications	\$1,000	
Cell Phone GPS (Survey Equipment)	1,000	
Miscellaneous Lab/Testing Equipment Service/Calibration	5,000	
GPS Firmware Maintenance	7,500	
NRC Nuclear License for Troxler Gauges	12,000	
Dosimeter Badge Service Contract	4,000	
Hazmat Training & Certifications	1,000	
Miscellaneous Environmental Services	20,000	
Miscellaneous Geotechnical Services	20,000	
Construction Stakes	5,000	
Miscellaneous Bridge and Road Design Contracts	50,000	
Miscellaneous CAD Consulting Services	10,000	
GIS Certification Services	5,000	
KIP Maintenance Contract	6,000	
Miscellaneous Lab Equipment	15,000	
Miscellaneous Field Equipment	6,000	
Monument Boxes	2,000	
Safety and Training	10,000	
		\$180,500



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



ROAD MAINTENANCE COSTS FISCAL YEAR 2021/2022

SUMMARY

TOTAL FIELD BUDGET for:

	<u>Primary Road</u>	<u>Local Road</u>	<u>State Trunkline</u>	<u>Totals</u>
MAINTENANCE	\$7,643,000	\$7,490,000	\$3,036,939	\$18,169,939
TRAFFIC	2,388,000	668,000	971,500	4,027,500
SUPERVISION	<u>625,000</u>	<u>325,000</u>	<u>275,000</u>	<u>1,225,000</u>
TOTAL COUNTY	\$10,656,000	\$8,483,000	\$4,283,439	\$23,422,439
Total Fringe Benefits	<u>3,300,000</u>	<u>2,500,000</u>	<u>1,400,000</u>	<u>7,200,000</u>
SUBTOTAL	\$13,956,000	\$10,983,000	\$5,683,439	\$30,622,439
Total Overhead	<u>2,512,080</u>	<u>1,976,940</u>	<u>1,246,000</u>	<u>5,735,020</u>
GRAND TOTAL	<u><u>\$16,468,080</u></u>	<u><u>\$12,959,940</u></u>	<u><u>\$6,929,439</u></u>	<u><u>\$36,357,459</u></u>



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



ROAD MAINTENANCE COSTS - FISCAL YEAR 2021/2022

Activity Code & Description	Primary Road	Local Road	State Trunkline	Totals
M100 Blow-up Repair	0	0	0	0
M101 Joint & Crack Filling	160,000	140,000	5,000	305,000
M102 Replace Concrete Pavement	100,000	400,000	5,280	505,280
M103 Patrol Patching	1,600,000	650,000	0	2,250,000
M104 Hot Patching	225,000	120,000	22,000	367,000
M105 Sawing Pavement	20,000	25,000	1,000	46,000
M107 Grade Gravel Surface	70,000	900,000	0	970,000
M108 Patch Gravel Surface	90,000	1,400,000	0	1,490,000
M109 Surface Maintenance	20,000	80,000	22,000	122,000
M110 State Trunkline/Freeway Patching	0	0	842,000	842,000
<i>109 SURFACE MAINTENANCE</i>	<i>\$2,285,000</i>	<i>\$3,715,000</i>	<i>\$897,280</i>	<i>\$6,897,280</i>
M120 Dust Layer Surface	25,000	480,000	0	505,000
<i>CHLORIDE APPLICATION</i>	<i>\$25,000</i>	<i>\$480,000</i>	<i>\$0</i>	<i>\$505,000</i>
M130 Blading Shoulders	310,000	25,000	10,000	345,000
M131 Berm Removal	40,000	50,000	50,000	140,000
M132 Patch Gravel Shoulder	180,000	25,000	10,000	215,000
<i>119 SHOULDER MAINTENANCE</i>	<i>\$530,000</i>	<i>\$100,000</i>	<i>\$70,000</i>	<i>\$700,000</i>
M140 Tree Removal	40,000	50,000	11,000	101,000
M141 Tree/Brush Trimming	70,000	120,000	11,000	201,000
M142 Stump Removal	5,000	5,000	0	10,000
M143 Log Removal	2,000	20,000	0	22,000
M144 Tree Removal Contracts	40,000	80,000	0	120,000
<i>121 TREES & SHRUBS</i>	<i>\$157,000</i>	<i>\$275,000</i>	<i>\$22,000</i>	<i>\$454,000</i>
M150 Clean Catch Basins	50,000	35,000	3,000	88,000
M151 Repair Catch Basins	100,000	200,000	10,000	310,000
M152 Build Catch Basins	0	0	0	0
M153 Ditch Cleanout	120,000	350,000	12,000	482,000
M154 Powerflushing Culverts	50,000	150,000	10,000	210,000
M155 Culvert/Underdrain Maintenance	120,000	400,000	10,000	530,000
M156 Erosion Control	75,000	50,000	20,000	145,000
M157 Drainage Contracts	0	0	0	0
<i>122 DRAINAGE STRUCTURES</i>	<i>\$515,000</i>	<i>\$1,185,000</i>	<i>\$65,000</i>	<i>\$1,765,000</i>



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



ROAD MAINTENANCE COSTS - FISCAL YEAR 2021/2022

Activity Code & Description	Primary Road	Local Road	State Trunkline	Totals
M160 Full Width Litter Pickup	0	0	90,000	90,000
M161 Patrol Litter Pickup	25,000	10,000	20,000	55,000
M162 Litter Hauling Contract	7,000	7,000	15,000	29,000
<i>124 ROADSIDE CLEANUP</i>	\$32,000	\$17,000	\$125,000	\$174,000
M170 Swath Mowing	350,000	210,000	34,000	594,000
M171 Mowing Contracts	180,000	0	0	180,000
M172 Weedspray Contracts	0	0	0	0
<i>126 GRASS AND WEED CONTROL</i>	\$530,000	\$210,000	\$34,000	\$774,000
M180 Approach Sweeping	3,000	3,000	1,000	7,000
M181 Curb Sweeping	420,000	100,000	1,000	521,000
M182 Freeway Sweeping	0	0	20,000	20,000
M183 Sweeping Contracts	15,000	0	0	15,000
M184 Sweeping Disposal	80,000	10,000	3,000	93,000
<i>132 SWEEPING AND FLUSHING</i>	\$518,000	\$113,000	\$25,000	\$656,000
M190 R.O.W. Fence Repair	0	0	15,000	15,000
<i>137 R.O.W. FENCE REPAIR</i>	\$0	\$0	\$15,000	\$15,000
M200 Other Routine Maintenance	80,000	80,000	45,000	205,000
<i>139 OTHER ROUTINE MAINTENANCE</i>	\$80,000	\$80,000	\$45,000	\$205,000
M210 Maintain Snow Route RT	800,000	100,000	402,000	1,302,000
M211 Maintain Snow Route OT	1,900,000	200,000	1,000,000	3,100,000
M212 Scrape/Salt Non-Route Road RT	20,000	700,000	0	720,000
M213 Scrape/Salt Non-Route Road OT	5,000	250,000	0	255,000
M214 Erect/Remove Snow Fence	100,000	3,000	8,322	111,322
M215 Winter Maintenance Contract	40,000	0	0	40,000
M216 Anti-Ice System	0	0	0	0
M220 Night Patrol	40,000	0	92,019	132,019
M230 Other Winter Maintenance	6,000	2,000	161,318	169,318
<i>141 SNOW AND ICE REMOVAL</i>	\$2,911,000	\$1,255,000	\$1,663,659	\$5,829,659



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



ROAD MAINTENANCE COSTS - FISCAL YEAR 2021/2022

Activity Code & Description	Primary Road	Local Road	State Trunkline	Totals
M240 Bridge Repair	10,000	10,000	0	20,000
151 STRUCTURE MAINTENANCE	\$10,000	\$10,000	\$0	\$20,000
M250 Structure Painting	0	0	0	0
152 STRUCTURE PAINTING	\$0	\$0	\$0	\$0
M280 Emergency Road Maintenance	50,000	50,000	75,000	175,000
190 EMERGENCY ROAD MAINTENANCE	\$50,000	\$50,000	\$75,000	\$175,000
TOTAL FIELD BUDGET for MAINTENANCE	\$7,643,000	\$7,490,000	\$3,036,939	\$18,169,939
M500 Replace Steel Beam Guardrail RT	345,000	165,000	85,000	595,000
M501 Replace Steel Beam Guardrail OT	12,000	12,000	5,000	29,000
M502 Replace Cable Barrier RT	0	0	5,000	5,000
M503 Replace Cable Barrier OT	0	0	2,500	2,500
130 GUARDRAIL AND POST	\$357,000	\$177,000	\$97,500	\$631,500
M542 Pumphouse Energy	6,000	0	0	6,000
153 PUMPHOUSE ENERGY	\$6,000	\$0	\$0	\$6,000
M510 Sign Maintenance RT	230,000	215,000	155,000	600,000
M511 Sign Maintenance OT	40,000	30,000	45,000	115,000
M512 Sign Shop Work RT	0	0	0	0
M513 Sign Shop Work OT	0	0	0	0
M514 Overhead Signs - Electrical	1,000	0	0	1,000
M515 Overhead Signs - Non Electrical	0	0	0	0
M516 Other Traffic Maintenance	220,000	0	60,000	280,000
160 TRAFFIC SIGNS	\$491,000	\$245,000	\$260,000	\$996,000



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



ROAD MAINTENANCE COSTS - FISCAL YEAR 2021/2022

Activity Code & Description	Primary Road	Local Road	State Trunkline	Totals
M520 Relamp Electrical Device 3 Man	80,000	0	90,000	170,000
M521 Relamp Electrical Device 2 Man	30,000	0	30,000	60,000
M522 Signal Trouble Call RT	60,000	0	45,000	105,000
M523 Signal Trouble Call OT	100,000	0	90,000	190,000
M524 Controller Maintenance	80,000	0	75,000	155,000
M527 Signal Operations Adjustment	5,000	0	20,000	25,000
M528 Remove/Replace Signals	20,000	0	5,000	25,000
M529 Emergency Signal Remove/Repair RT	10,000	0	75,000	85,000
M530 Emergency Signal Remove/Repair OT	85,000	0	160,000	245,000
M531 Install Signals	10,000	0	10,000	20,000
M533 Signal Modernization	2,000	0	0	2,000
M540 Signal Energy	305,000	30,000	1,000	336,000
<i>161 TRAFFIC SIGNALS</i>	<i>\$787,000</i>	<i>\$30,000</i>	<i>\$601,000</i>	<i>\$1,418,000</i>
M550 Traffic Counter Maintenance	80,000	40,000	0	120,000
<i>239 TRAFFIC COUNTER MAINTENANCE</i>	<i>\$80,000</i>	<i>\$40,000</i>	<i>\$0</i>	<i>\$120,000</i>
M560 Paint Guidelines RT	425,000	110,000	0	535,000
M561 Paint Guidelines OT	13,000	3,000	0	16,000
M562 Pavement Messages RT	213,000	57,000	0	270,000
M563 Pavement Messages OT	13,000	4,000	0	17,000
<i>162 PAVEMENT MARKINGS</i>	<i>\$664,000</i>	<i>\$174,000</i>	<i>\$0</i>	<i>\$838,000</i>
M570 Delineator Maintenance RT	3,000	2,000	7,000	12,000
M571 Delineator Maintenance OT	0	0	0	0
<i>164 DELINEATOR MAINTENANCE</i>	<i>\$3,000</i>	<i>\$2,000</i>	<i>\$7,000</i>	<i>\$12,000</i>
M580 Attenuator Maintenance RT	0	0	5,000	5,000
M581 Attenuator Maintenance OT	0	0	1,000	1,000
<i>165 ATTENUATOR MAINTENANCE</i>	<i>\$0</i>	<i>\$0</i>	<i>\$6,000</i>	<i>\$6,000</i>
TOTAL FIELD BUDGET for TRAFFIC	\$2,388,000	\$668,000	\$971,500	\$4,027,500



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>	
<u>W. O. Callens Road at Salt River</u>							
<i>Bridge CPM</i>							
HM	10,800		16,200	108,000		135,000	B
					LOCAL BRIDGE	86,400	
					MCDR	48,600	
<u>W. O. Capac between Irwin and Gould</u>							
<i>Resurfacing</i>							
HM	30,713		46,069	307,127		383,909	
					STL	306,000	
					ARMADA TWP	38,954	
					MCDR	38,955	
<u>W. O. Garfield Road - 17 Mile Road to Canal - (carry-over)</u>							
<i>Rehabilitation</i>							
HM			585,000	3,900,000		4,485,000	
					STBG URBAN	3,120,000	
					CLINTON TWP	682,500	
					MCDR	682,500	
<u>W. O. Harper Avenue at Clinton River Spillway</u>							
<i>Bridge Rehabilitation</i>							
HM			202,500	1,350,000		1,552,500	B
					MCS	1,080,000	
					MCDR	472,500	

Key Code: NC = New Construction; HM = Heavy Maintenance



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. Hayes Road - 10 Mile Road to 11 Mile Road - (carry-over)</u>						
<i>Rehabilitation</i>						
HM			360,000	2,400,000		2,760,000
					ACC	2,391,537
					WARREN	92,116
					ROSEVILLE	92,116
					MCDR	184,231
<hr/>						
<u>W. O. Hayes Road - 18 Mile Road to M-59</u>						
<i>Rehabilitation</i>						
HM	417,330		625,995	4,173,303		5,216,628
					STU/EDC	2,222,597
					CLINTON TWP	748,508
					STERLING HEIGHTS	748,508
					MCDR	1,497,015
<hr/>						
<u>W. O. Kelly Road - 14 Mile Road to 15 Mile Road</u>						
<i>Reconstruction</i>						
HM	425,000	85,000	637,500	4,250,000		5,397,500
					SENATOR LEVIN	3,500,000
					CLINTON TWP	474,375
					FRASER	474,375
					MCDR	948,750

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. Metropolitan Parkway - Andrew Drive to Dodge Park Road - (carry-over)</u>						
Rehabilitation						
HM			482,662	3,217,746		3,700,408
					ACC STU	1,967,650
					STERLING HEIGHTS	866,379
					MCDR	866,379
<u>W. O. Metropolitan Parkway - Ryan to Dequindre</u>						
Rehabilitation						
HM	400,000		600,000	4,000,000		5,000,000
					STERLING HEIGHTS	2,500,000
					MCDR	2,500,000
<u>W. O. Mound Road - M-59 to 15 1/2 Mile Road (NC 6% - HM 94%)</u>						
Reconstruction						
NC	410,784		410,784	5,134,800		5,956,368
HM	6,435,616		6,435,616	80,445,200		93,316,432
Total	6,846,400		6,846,400	85,580,000		99,272,800
					INFRA GRANT	51,348,000
					STERLING HEIGHTS	16,054,808
					WARREN	7,907,592
					MCDR	23,962,400

Key Code: NC = New Construction; HM = Heavy Maintenance



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. New Haven Road at East Branch Coon Creek - (carry-over)</u>						
<i>Bridge Replacement</i>						
HM	42,450		254,700	1,698,000		1,995,150 B
					LOCAL BRIDGE	1,358,400
					MCDR	636,750
<u>W. O. Quinn Road - M-3 to Harper Avenue</u>						
<i>Rehabilitation</i>						
HM	140,205		210,307	1,402,047		1,752,559
					CLINTON TWP	876,279
					MCDR	876,280
<u>W. O. Romeo Plank - North of 21 Mile Road to 23 Mile Road (NC 60% - HM 40%) - (carry-over)</u>						
<i>Reconstruct and Widen</i>						
NC	720,000	2,220,000				2,940,000
HM	480,000	1,480,000				1,960,000
Total	1,200,000	3,700,000				4,900,000
					MACOMB TWP	2,450,000
					MCDR	2,450,000
<u>W. O. South River Road at Canal</u>						
<i>Bridge Replacement</i>						
HM	180,800	60,000				240,800 B
					MCDR	240,800

Key Code: NC = New Construction; HM = Heavy Maintenance



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. Wolcott Road at Tupper Brook Drain - (carry-over)</u>						
<i>Culvert Replacement</i>						
HM	45,000		67,500	450,000		562,500
					MCDR	562,500
<u>W. O. 14 Mile Road - Hayes to Hoover</u>						
<i>Rehabilitation</i>						
HM	620,000		930,000	6,200,000		7,750,000
					WARREN	1,937,500
					STERLING HEIGHTS	1,937,500
					MCDR	3,875,000
<u>W. O. 14 Mile Road - Kelly Road to City Limits</u>						
<i>Rehabilitation</i>						
HM	525,000	105,000	787,500	5,250,000		6,667,500
					SENATOR LEVIN	3,100,000
					ROSEVILLE	1,266,875
					CLINTON TWP	1,266,875
					MCDR	1,033,750
<u>W. O. 21 Mile Road at Middle Branch Clinton River</u>						
<i>Bridge CPM</i>						
HM	3,600		5,400	36,000		45,000 B
					LOCAL BRIDGE	28,800
					MCDR	16,200

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 23 Mile Road - North Avenue to Card Road (NC 60% - HM 40%) - (carry-over)</u>						
<i>Reconstruct and Widen</i>						
NC			312,129	2,080,860		2,392,989
HM			208,086	1,387,240		1,595,326
Total			520,215	3,468,100		3,988,315
					MACOMB TWP	1,994,158
					MCDR	1,994,158
<u>W. O. 23 Mile Road - Card Road to Heydenreich (NC 60% - HM 40%) - (carry-over)</u>						
<i>Reconstruct and Widen</i>						
NC			787,500	5,250,000		6,037,500
HM			525,000	3,500,000		4,025,000
Total			1,312,500	8,750,000		10,062,500
					MACOMB TWP	5,031,250
					MCDR	5,031,250
<u>W. O. 23 Mile Road - Heydenreich to Romeo Plank (NC 60% - HM 40%)</u>						
<i>Reconstruct and Widen</i>						
NC	450,000		675,000	4,500,000		5,625,000
HM	300,000		450,000	3,000,000		3,750,000
Total	750,000		1,125,000	7,500,000		9,375,000
					EDC/STU/NH	5,312,460
					MACOMB TWP	2,031,270
					MCDR	2,031,270

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2021 Pavement Preservation Program - Primary - (carry-over)</u>						
County Wide						
HM			75,000	750,000		825,000
					MCDR	825,000
<u>W. O. 2022 ACT 51 Resurfacing, Restoration, and Rehabilitation</u>						
County Wide						
HM	180,000		450,000	3,000,000		3,630,000
					CITIES & TWPS	1,815,000
					MCDR	1,815,000
<u>W. O. 2022 Bridge Inspection - Primary</u>						
County Wide						
HM				75,000		75,000 B
					MCDR	75,000
<u>W. O. 2022 Bridge Maintenance - Primary</u>						
County Wide						
HM	75,000		112,500	750,000		937,500 B
					MCDR	937,500
<u>W. O. 2022 MDOT Final Accountings</u>						
County Wide						
HM				100,000		100,000
					MCDR	100,000

Key Code: NC = New Construction; HM = Heavy Maintenance



Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2022 Pavement Preservation Program - Primary</u>						
County Wide						
HM	180,000		300,000	3,000,000		3,480,000
					MCDR	<u>3,480,000</u>
<u>W. O. 2022 Survey & Design</u>						
County Wide						
HM	300,000					300,000
					MCDR	<u>300,000</u>
<u>W. O. 2022 Signal Modernizations</u>						
County Wide						
HM	100,000		160,000	1,000,000		1,260,000
					MCDR	<u>1,260,000</u>
<u>W. O. 2022 New Signals</u>						
County Wide						
HM	50,000		80,000	500,000		630,000
					MCDR	<u>630,000</u>
<u>W. O. 2022 LED Retrofit</u>						
County Wide						
HM	70,000		30,000		350,000	450,000
					MCDR	<u>450,000</u>

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2016 Congestion Mitigation & Air Quality - (carry-over)</u>						
<i>Communication Load Distribution</i>						
HM			10,000	360,000		370,000
					MCDR	370,000
<u>W. O. 2017 Congestion Mitigation & Air Quality - (carry-over)</u>						
<i>Communication Load Distribution</i>						
HM			20,000	500,000		520,000
					MCDR	520,000
<u>W. O. 2019 Congestion Mitigation & Air Quality - (carry-over)</u>						
<i>Connected Vehicle RSU's and Travel Time Analytics</i>						
HM			150,000	1,300,000		1,450,000
					CMAQ	1,220,000
					MCDR	230,000
<u>W. O. 2020 Congestion Mitigation & Air Quality - (carry-over)</u>						
<i>Connected Vehicle RSU's and Travel Time Analytics</i>						
HM			190,000	2,360,000		2,550,000
					CMAQ	1,970,000
					MCDR	580,000
<u>W. O. 2021 Congestion Mitigation & Air Quality - (carry-over)</u>						
<i>Fiber Optic Cable, Phase 3</i>						
HM			215,000	2,670,000		2,885,000
					CMAQ	2,427,000
					MCDR	458,000

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2022 Congestion Mitigation & Air Quality</u>						
<i>Fiber Optic Cable, Phase 4</i>						
HM	150,000			100,000		250,000
					MCDR	250,000
<u>W. O. 2023 Congestion Mitigation & Air Quality</u>						
<i>Fiber Optic Cable, Phase 5</i>						
HM	50,000			100,000		150,000
					MCDR	150,000
<u>W. O. 2019 Safety - (carry-over)</u>						
<i>Box Spans with Backplates at 8 Locations</i>						
HM			10,000	60,000		70,000
					HSIP	10,000
					MCDR	60,000
<u>W. O. 2019 Safety - (carry-over)</u>						
<i>Backplates at 84 Locations</i>						
HM			10,000	60,000		70,000
					HSIP	10,000
					MCDR	60,000

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2020 Safety - (carry-over)</u>					
Backplates in Sterling Heights					
HM		20,000	78,000		98,000
				HSIP	54,000
				STERLING HTS	12,000
				MCDR	32,000
<u>W. O. 2020 Safety - (carry-over)</u>					
Box Spans with Backplates in Sterling Heights					
HM		120,000	739,000		859,000
				HSIP	179,000
				STERLING HTS	280,000
				MCDR	400,000
<u>W. O. 2020 Safety - (carry-over)</u>					
Backplates in Warren					
HM		30,000	151,000		181,000
				HSIP	111,000
				WARREN	20,000
				MCDR	50,000
<u>W. O. 2020 Safety - (carry-over)</u>					
Box Spans with Backplates in Warren					
HM		30,000	163,000		193,000
				HSIP	139,000
				WARREN	12,000
				MCDR	42,000

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2020 Safety - (carry-over)</u>						
<i>Sign Upgrades North Avenue</i>						
HM			10,000	20,000		30,000
					HSIP	10,000
					MCDR	20,000
<hr/>						
<u>W. O. 2021 Safety - (carry-over)</u>						
<i>Signal Upgrades, 8 Southern Locations</i>						
HM			106,000	662,000		768,000
					HSIP	565,000
					MCDR	203,000
<hr/>						
<u>W. O. 2021 Safety - (carry-over)</u>						
<i>Signal Upgrades, 6 Northern Locations</i>						
HM			97,000	603,000		700,000
					HSIP	516,000
					MCDR	184,000
<hr/>						
<u>W. O. 2021 Safety - (carry-over)</u>						
<i>Signal Upgrades, 10 Mile - Eastpointe Project</i>						
HM			50,000	965,000		1,015,000
					HSIP	600,000
					EASTPOINTE	110,000
					ROSEVILLE	55,000
					MCDR	250,000
<hr/>						

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - PRIMARY ROADS and BRIDGES

	<u>Design</u>	<u>R.O.W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2023 Safety Projects</u>						
<i>Design - Locations TBD</i>						
HM	80,000			20,000		100,000
					MCDR	100,000
<u>W. O. 2022 Traffic Operations Center</u>						
<i>TOC Operations, Maintenance and Equipment</i>						
HM				3,470,000		3,470,000
					CMAQ	2,776,000
					MCDR	694,000

TOTALS . . . PRIMARY ROADS and BRIDGES

<u>\$12,872,298</u>	<u>\$3,950,000</u>	<u>\$17,890,948</u>	<u>\$167,596,323</u>	<u>\$350,000</u>	<u>\$202,659,569</u>
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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - LOCAL ROADS and BRIDGES

	<u>Design</u>	<u>R-O-W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. Card Road at M-59</u>						
<i>Dual Right Turn Lanes</i>						
HM	15,000		22,500	150,000		187,500
					MCDR	187,500
<u>W. O. Coon Creek Road at Coon Creek</u>						
<i>Bridge Replacement</i>						
HM	101,800		152,700	1,018,000		1,272,500 B
					LOCAL BRIDGE	814,400
					MCDR	458,100
<u>W. O. Garfield Road Extension - 22 Mile Road to 23 Mile Road - (carry-over)</u>						
<i>New Construction - New Location</i>						
NC			585,000	3,900,000		4,485,000
					MACOMB TWP	2,242,500
					MCDR	2,242,500
<u>W. O. Heydenreich at Middle Branch Clinton River</u>						
<i>Bridge CPM</i>						
HM	10,600		15,900	106,000		132,500 B
					LOCAL BRIDGE	84,800
					MCDR	47,700

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - LOCAL ROADS and BRIDGES

	<u>Design</u>	<u>R-O-W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. Hike/Bike throughout Macomb County</u>						
<i>Non-Motorized</i>						
HM	240,000		360,000	2,400,000		3,000,000
					TOWNSHIPS	1,500,000
					MCDR	1,500,000
<hr/>						
<u>W. O. North River at Catfish Channel</u>						
<i>Bridge Replacement</i>						
HM	303,600	120,000				423,600 B
					MCDR	423,600
<hr/>						
<u>W. O. Powell Road - 32 Mile Road to 33 Mile Road</u>						
<i>Rehabilitation</i>						
HM	150,193		225,289	1,501,929		1,877,411
					STU	1,015,686
					ROMEO/BRUCE/ARMADA	430,863
					MCDR	430,862
<hr/>						
<u>W. O. West Road - Van Dyke to Mound</u>						
<i>Resurfacing</i>						
HM	96,223		144,334	962,229		1,202,786
					WASHINGTON TWP	721,672
					MCDR	481,114
<hr/>						

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - LOCAL ROADS and BRIDGES

	<u>Design</u>	<u>R-O-W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 22 Mile Road at Salt Slang Gloede Drain - (carry-over)</u>						
Bridge Replacement						
HM			76,552	510,349		586,901 B
					LOCAL BRIDGE	484,831
					MCDR	102,070
<u>W. O. 29 Mile Road at Salt River</u>						
Bridge CPM						
HM	15,300		22,950	153,000		191,250 B
					LOCAL BRIDGE	122,400
					MCDR	68,850
<u>W. O. 30 Mile Road - Bur Oak Drive to Kildare Drive</u>						
Reconstruction						
HM	225,129		337,694	2,251,294		2,814,117
					WASHINGTON TWP	1,688,471
					MCDR	1,125,646
<u>W. O. 30 Mile Road - Mound Road to Bur Oak Drive</u>						
Reconstruction						
HM	126,315		189,472	1,263,148		1,578,935
					WASHINGTON TWP	1,578,935

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - LOCAL ROADS and BRIDGES

	<u>Design</u>	<u>R-O-W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2021 Pavement Preservation Program - Local - (carry-over)</u>						
County Wide						
HM			75,000	750,000		825,000
					MCDR	<u>825,000</u>
<u>W. O. 2021 Subdivision Reconstruction - (carry-over)</u>						
County Wide						
HM			123,600	824,000		947,600
					TOWNSHIPS	<u>473,800</u>
					MCDR	<u>473,800</u>
<u>W. O. 2022 Bridge Inspection - Local</u>						
County Wide						
HM				75,000		75,000 B
					MCDR	<u>75,000</u>
<u>W. O. 2022 Large Culvert Replacement</u>						
County Wide						
HM	60,000		90,000	600,000		750,000
					MCDR	<u>750,000</u>

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Macomb County Department of Roads

October 1, 2021 thru September 30, 2022



CONSTRUCTION - LOCAL ROADS and BRIDGES

	<u>Design</u>	<u>R-O-W</u>	<u>Construction Engineering</u>	<u>Contract</u>	<u>Sign & Signal</u>	<u>Totals & Financing</u>
<u>W. O. 2022 Limestone Program - Local</u>						
County Wide						
HM				2,200,000		2,200,000
					TOWNSHIPS	220,000
					MCDR	1,980,000
<hr/>						
<u>W. O. 2022 Pavement Preservation Program - Local</u>						
County Wide						
HM	180,000		300,000	3,000,000		3,480,000
					MCDR	3,480,000
<hr/>						
<u>W. O. 2022 Subdivision Reconstruction</u>						
County Wide						
HM	224,000		480,000	3,296,000		4,000,000
					TOWNSHIPS	2,000,000
					MCDR	2,000,000
<hr/>						
TOTALS . . . LOCAL ROADS and BRIDGES						
	<u>\$1,748,160</u>	<u>\$120,000</u>	<u>\$3,200,991</u>	<u>\$24,960,949</u>	<u>\$0</u>	<u>\$30,030,100</u>

Key Code: NC = New Construction; HM = Heavy Maintenance