

2020 Budget and Five-Year Improvement Plan



Kent County
Road Commission





Board of Road Commissioners.....	1
Chairperson's Letter of Welcome.....	3
Managing Director's Comments.....	5
2019 Primary Road Improvements.....	8
2020 Adopted Budget.....	11
2020 Primary Road Improvements.....	16
Five-Year Improvement Program.....	19



Mark Rambo was appointed to the Board of the Kent County Road Commission in 2009 and has served as Chair since 2012. He holds a master's degree in public administration and is currently the Deputy City Administrator for the City of Kentwood. Previously, he has served as Manager of Operations for Grand Valley State University, the Manager of Howard City and the Engineering Programs Coordinator for the City of Walker.



Cynthia Porter Janes was appointed to the Board of the Kent County Road Commission in 2015 and has served as Vice Chair since January 2017. Commissioner Janes is the Architectural & Engineering Services Director at Fishbeck, Thompson, Carr & Huber (FTCH) and previously worked as an Education Practice Leader for AECOM. Commissioner Janes serves as a commissioner of the Kent County Board of Public Works and trustee of the Grand Rapids Public Museum. Previously, Commissioner Janes served six years on the GVMC board (five years on the Executive Committee); five years on the Cascade Township Planning Commission (including one year as chair); seven years as township trustee, elected to the Cascade Township Board; and nine years on the Board of Directors for the Cascade Community Foundation.



Dave Medema was appointed to the Board of the Kent County Road Commission in 2017. Commissioner Medema is owner of Medema Consulting Associates LLC, which was established in 1999, and has served as board member of the Michigan League for Public Policy. Commissioner Medema has also been a member of the City of Grand Rapids Community Relations Commission, Board of Zoning Appeals and Community Development Citizens Committee. Commissioner Medema is a graduate of Calvin College, has a Master of Social Work degree from Arizona State University and studied at New Brunswick Theological Seminary. He is a certified coach and trainer for the Right Use of Power Institute in Boulder, Colorado. An avid bicyclist, Commissioner Medema proudly completed a ride from San Francisco, California, to Grand Rapids in 2011.



David J. Morren was appointed to the Board of the Kent County Road Commission in 2014. Previously, Commissioner Morren served on Kent County Board of Commissioners for 14 years, serving three years as Chairman and sitting on various public boards during his tenure. Commissioner Morren is the owner of Insignia Homes and has served as elder and deacon of his church.



Robert VerHeulen was appointed to the Board of the Kent County Road Commission in 2019. Commissioner VerHeulen formerly served three terms in the Michigan House of Representatives, chairing the Michigan House Appropriations Subcommittee on Transportation from 2013 to 2014. He also served as mayor of Walker, Michigan from 2001 to 2012. Before taking public office, Commissioner VerHeulen worked as an attorney for Meijer Inc. and most recently as the Vice President and Deputy General Counsel to The Meijer Foundation. He also served on several boards for non-profit and philanthropic organizations throughout the community. Commissioner VerHeulen attended Grand Rapids Community College and graduated from the University of Michigan, receiving his juris doctorate from Wayne State University.

Managing Director



Steven A. Warren was named Managing Director of the Kent County Road Commission in 2013. During nearly 31 years of service to the commission, he has managed KCRC's long and short-range planning programs, environmental studies and major improvement projects. Mr. Warren also developed KCRC's Asset Management Program, which integrates the organizations' Pavement Management, Performance Management and Geographic Information Systems. Prior to joining KCRC, Mr. Warren served as Director of the Metropolitan Planning Organization (MPO) for the Grand Rapids Metropolitan Area and worked as Transportation Planner for the Northwest Regional Planning Commission in Traverse City, Michigan.



Kent County Road Commission

November 1, 2019

Re: FY 2020 Operating Budget

Greetings Kent County Stakeholders:

On behalf of the Kent County Board of Road Commissioners, I would like to thank our local, state, and federal partners for their sense of collaboration and commitment to improving the transportation infrastructure within Kent County.

I also want to recognize and thank the entire Road Commission staff for their daily efforts to reach our vision of having the premier county transportation network in Michigan. Their proactive team approach and positive customer service embodies the spirit of an effective organization. These efforts continue to keep Kent County at the forefront of construction, preservation, and innovation.

Please visit us online to review our Performance Management summary and keep current with our daily activities. Asset management and continuous performance improvement are at the core of our decision making. We take pride in the transparency of our annual data tracking, analyzing, and reporting in the form of an online dashboard and hope that it provides insight into the overall scope of our transportation activities.

The Board and staff of the Kent County Road Commission continue to appreciate the strong support and open lines of communication between our township leaders and local elected officials. We hope the enclosed information helps facilitate understanding of the role of the Kent County Road Commission.

Please feel free to contact any of us with questions or concerns at any time.

Sincerely,

Mark E. Rambo
Chairperson



WHO WE ARE



2ND LARGEST
road commission
in Michigan

21 TOWNSHIPS
KCRC service area

635,000+
RESIDENTS

OVER 230
EMPLOYEES

fleet of **260+**
VEHICLES,
including over 100
plow trucks deployed
from 4 complexes

OUR NETWORK



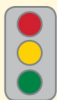
OVER 170
BRIDGES

100% rated in
good/fair condition

NEARLY 2,000
COUNTY ROAD MILES
representing nearly
4,200 lane miles

OVER 430 MILES
of state & interstate highway
miles for MDOT (representing
over 1,100 lane miles)

WHAT WE DO



Traffic and Safety

Continually analyzes
traffic to improve safety
and reduce congestion;
maintains 120+ traffic
signals and 30,000+
traffic signs

Construction and Preservation

Scheduled to improve over
1,200 lane miles by 2025

Routine Maintenance

Over 200,000 hours dedicated to
year-round activities that maintain
and protect the roadway

Winter Maintenance

Servicing 5,300 lane miles of road –
targeting one pass of the network
within 36 hours of a storm's completion

HOW WE DO IT



Responsive to the Community:

Delivering value-driven service to meet the needs of those
we serve.



Fiscally Responsible:

100% of funding comes
from fuel tax, registration fees, grants and project cost
sharing (no county general funds or property tax revenue).
Pension and OPEB fully funded in 2018.



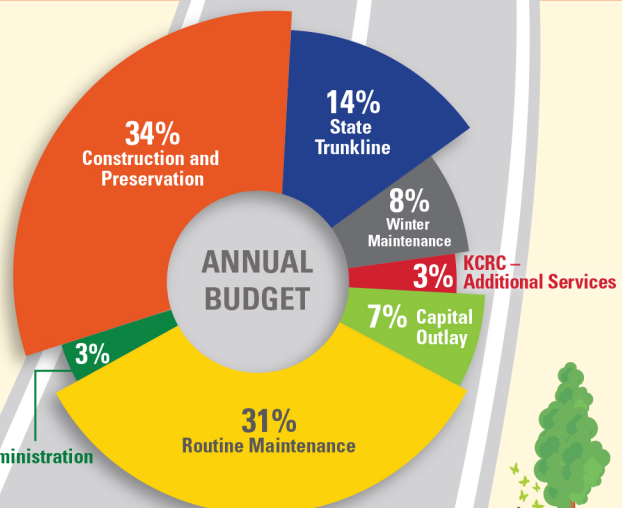
Strategic Planning:

Organizational objectives
drive performance measures; Long Range Plan translates
organization's vision into action.



Collaboration and Coordination:

Partnerships at the local, regional and state level
enhance efficiencies and improve services.





Kent County Road Commission

MEMORANDUM

To: Kent County Board of Road Commissioners

From: Steve Warren, Managing Director

Date: November 1, 2019

Subject: 2020 Operating Budget

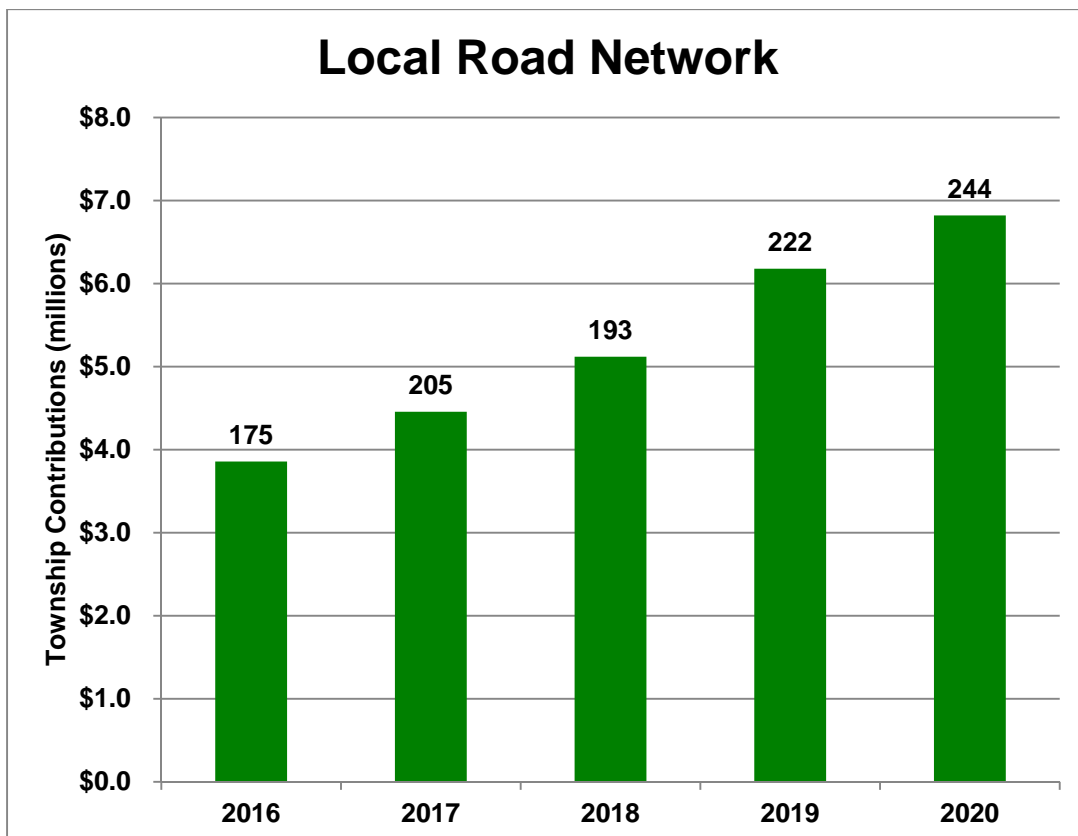
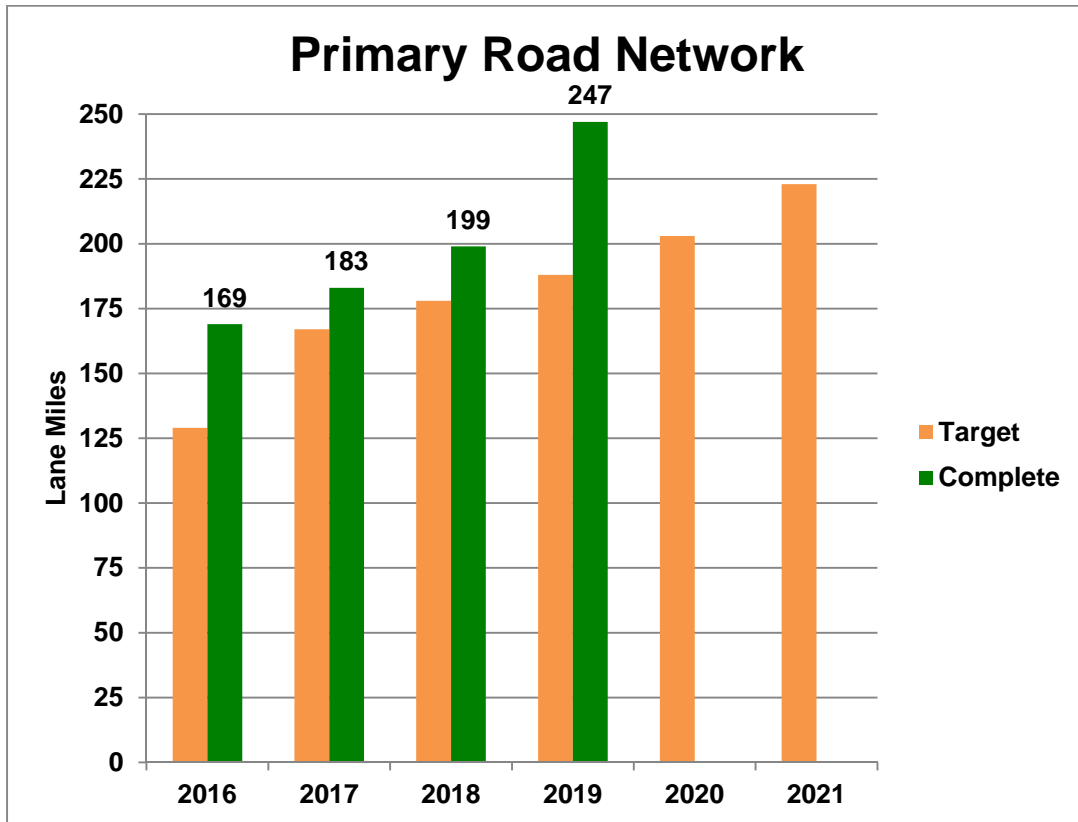
I am pleased to present the Kent County Road Commission fiscal year 2020 operating budget. As the county's road agency, we are continually *working to keep Kent County moving*, and the projects and activities articulated in this budget represent how we intend to achieve success in 2020. This document demonstrates how the dedicated men and women of KCRC will continue to improve county roads, maintain the state highway network, and provide quality services to the citizens of Kent County.

A review of the budget's Appropriation Act (pg. 11) and supporting schedules (pgs. 12 – 15) helps one appreciate the wide range of activities KCRC undertakes to provide safe and efficient travel along nearly 2000 miles of county roads and over 400 miles of state highways we maintain. Also represented are collaborative efforts with our local, county, and state government partners to expand non-motorized facilities throughout the area.

2019 Review

The *Kent County Road Commission Long Range Plan* serves as a blueprint for the effective investment of resources aligned with preserving and improving the quality and safety of our road network. I am pleased to share that, during the 2019 construction season, the plan's primary road improvement targets were not only met, but exceeded. In addition, on the local road network, KCRC continued to support its township partners. Together, we increased investment through KCRC's matching program.

The following graphs illustrate achievements on KCRC's primary and local road networks.



Working to keep Kent County moving

1500 Scribner Avenue NW, Grand Rapids, MI 49504 | (616) 242-6900 | kentcountyroads.net

Looking Ahead to 2020

Fiscal year 2020 represents the third year of the “phased-in” implementation of the 2015 Transportation Funding Package. KCRC will continue to commit 100% of this funding increase to improving road and bridge conditions by dedicating 75% to reconstruction, resurfacing and preservation and 25% to routine maintenance.

Unlike the last fiscal year, the 2020 budget does not include any “supplemental appropriation” revenue from the Michigan Legislature to accelerate needed improvement projects. As I write this memo, the Governor and Legislature have not reached agreement on either a long-term funding program or one-time annual budget appropriation to increase funding for roads.

With the funding that is available, KCRC will continue to employ an overall strategy that incorporates a “mix of fixes” approach to needed road improvements. Our improvement “toolbox” includes pavement preservation treatments, resurfacing, reconstruction and essential routine maintenance. Combined, these actions will help restore “poor” roads to good or fair condition and then preserve the assets for years to come.

Our Partners

The success of the Kent County Road Commission is dependent on maintaining positive relationships with township, county, city, and state officials. I want to thank these partners for their ongoing support and collaboration. Together, we have worked to improve the overall condition of KCRC's road network to the benefit of the people and businesses we serve.



RECONSTRUCTION

76th Street - Clyde Park Avenue to Gordon Industrial Drive

Widened the existing 4-lane portion to 5 lanes. Work included bridge rehabilitation and widening, railroad crossing widening, concrete curb and gutter, drainage, HMA pavement, pavement markings and restoration.

100th Street - East of Eastern Avenue to Kalamazoo Avenue

Reconstructed to 2-lane all season road standard. Work included tree removal, earthwork, valley gutter, ditches, culvert replacement, HMA Pavement, pavement markings and restoration.

Full depth pavement removal and Hot Mix Asphalt (HMA) replacement:

- **5 Mile Road** – Plainfield Avenue to East Beltline Avenue
- **Byron Center Avenue** – 92nd Street to 84th Street
- **Cascade Road** – Forest Hill Avenue to Spaulding Avenue
- **Kraft Avenue** – 36th Street to 28th Street
- **Lamoreaux Drive** – Alpine Avenue to West River Drive
- **Whitneyville Avenue** – 66th Street to 48th Street

Crush and shape existing pavement and HMA replacement:

- **13 Mile Road** – Peach Ridge Avenue to M-37
- **6 Mile Road** – Walker Avenue to Alpine Avenue
- **7 Mile Road** – Fruit Ridge Avenue to Alpine Avenue
- **76th Street** – Sierrafield Drive to Clyde Park Avenue
- **Lincoln Lake Avenue** – North city limits to McPherson Street

RESURFACING

Thornapple River Drive – Cascade Road to north of Fase Street

PRESERVATION

Freeport Avenue – 108th Street to 84th Street

SAFETY

Patterson Avenue and 44th Street

Widened to provide dual left-turn lanes on eastbound 44th Street to northbound Patterson Avenue. The work included asphalt and concrete pavement removal, concrete curb and gutter, concrete pavement, pavement markings, restoration and traffic signal modifications.

SAFETY

Crahen Avenue and Leonard Street

Realigned Crahen Avenue northwesterly into Leonard Street. Leonard Street east is now the stop street. Work included earthwork, utility relocation, drainage, HMA pavement, pavement markings and restoration.

Traffic Signal Projects

These projects include the upgrade of the existing traffic signal, or installation of a new signal, with box configuration, LED signal heads, backplates and detection.

- **68th Street and Hanna Lake Avenue**
- **Cascade Road and 36th Street**
- **Jupiter Avenue and Rogue River Drive**
- **Pettis Avenue and Vergennes Street**
- **Robinson Road and Lakeside Drive**
- **Wolverine Boulevard and Kroes Street**
- **West River Drive and North Division Avenue (new signal)**

BRIDGES AND CULVERTS

Algoma Bridge #52 – 10 Mile Road over the Rouge River

Preventative maintenance project included expansion joint replacement, substructure repair, concrete box beam repair and spot box beam replacement.

Byron Bridge #25 – 76th Street over Buck Creek

Part of the 76th Street project, this bridge replacement utilized a precast 3-sided concrete structure.

Caledonia Bridge #30 – 100th Street over the Thornapple River

Preventative maintenance project included deck joint replacement; extensive concrete substructure repair and streambed scour protection.

Cascade Bridge #27 – Thornapple River Drive over unnamed tributary

Culvert rehabilitation project repaired a portion of the existing twin corrugated metal pipe arches with a reinforced concrete bottom and sidewalls.

NON-MOTORIZED

Caledonia Trail Phase 1B

Constructed a 10-foot wide asphalt non-motorized trail extending from the existing Paul Henry Thornapple Trail within Caledonia Lakeside Park northeast to 92nd Street and Cherry Valley Avenue and north to 84th Street. Local match provided by Caledonia Township.

Fred Meijer Pioneer Trail Phase 2

Constructed a 10 foot wide asphalt non-motorized trail extending from Alpine Avenue and 3 Mile Road easterly along 3 Mile Road to end. Then northeast along I-296 ramp to Hillside Drive and southerly to Lankamp Street and West River Drive. Local match provided by the County of Kent.

Paul Henry Thornapple Trail (Dutton Spur)

Constructed a 10-foot wide asphalt non-motorized trail extending from the existing Paul Henry Trail north of 76th Street and northwest along the abandoned railroad bed, connecting west to Dutton Park and North to 68th Street. Local match provided by Gaines Township.

Fred Meijer Flat River Valley and Grand River Valley Rail Trail (On-Going)

Improvements to existing abandoned rail grades between City of Lowell and City of Greenville and the City of Lowell and City of Saranac to provide a 10-foot wide unpaved non-motorized trail. Work includes bridge and culvert work, crushed asphalt and grading. Local match is being provided by City of Greenville and the County of Ionia.



	2018 Actual	2019 Amended Budget	2020 Budget	Attachment
Revenue				
Michigan Transportation Funds (MTF)	\$ 45,141,282	\$ 47,095,879	\$ 53,865,467	
State General Fund				
Surplus Appropriation	3,348,139	5,764,383	-	
Additional Appropriation	-	1,000,000	-	
Federal and State Grants				
Motorized	5,024,208	7,263,584	6,591,097	A
Non-Motorized	1,157,935	4,098,000	336,000	A
State Trunkline contract	9,524,664	11,500,000	10,500,000	
Local Government Contributions	5,606,535	10,944,500	7,010,175	
Services Provided	1,734,369	2,300,000	1,800,000	
Sale of Capital Assets and salvage	447,555	350,000	300,000	
Property Rental	177,220	165,000	175,000	
Interest	284,035	500,000	650,000	
Total Revenue	72,445,942	90,981,346	81,227,739	
Expenditures				
Primary Roads				
Reconstruction	9,013,583	16,305,000	11,220,000	
Resurfacing	1,230,193	780,000	1,000,000	
Preservation	4,454,448	3,800,000	4,155,000	
Safety	4,195,626	4,095,000	3,280,000	
Bridges and Culverts	553,206	2,375,000	1,000,000	
Total Primary Roads	19,447,056	27,355,000	20,655,000	A
Local Roads				
Reconstruction	7,319,146	10,160,000	11,038,350	
Resurfacing	1,566,728	1,146,000	1,409,000	
Preservation	3,585,657	3,595,000	3,820,000	
Safety	438,898	1,026,500	596,000	
Bridges and Culverts	825,101	265,000	500,000	
Total Local Roads	13,735,530	16,192,500	17,363,350	
Routine Maintenance				
State	5,652,463	7,195,000	6,500,000	
Primary	5,493,969	7,500,000	8,325,000	B
Local	8,486,886	9,000,000	9,825,000	B
Total Routine Maintenance	19,633,318	23,695,000	24,650,000	
Winter Maintenance				
State	3,863,849	4,305,000	4,000,000	
Primary	2,496,880	2,800,000	3,140,000	
Local	2,397,408	2,745,000	3,140,000	
Total Winter Maintenance	8,758,137	9,850,000	10,280,000	
Non-Motorized	1,676,108	6,987,000	525,000	A
Equipment Operations	1,225,159	1,499,650	909,500	
Capital Outlay				
Buildings	471,212	782,000	980,000	C
Equipment	4,273,707	5,354,000	3,539,500	C
Depreciation	(3,873,669)	(3,900,000)	(4,100,000)	
Services Provided	1,132,102	2,000,000	1,500,000	
Administration	2,346,801	2,500,000	2,750,000	D
Contingency	-	5,125,000	5,000,000	
Total Expenditures	68,825,461	97,440,150	84,052,350	
Revenues Over (Under) Expenditures	3,620,481	(6,458,804)	(2,824,611)	
Fund Balance, Beginning of Year	19,135,974	22,756,455	16,297,651	
Projected Fund Balance, End of Year	\$ 22,756,455	\$ 16,297,651	\$ 13,473,040	

**2020 Adopted Budget
Primary Road Projects
Attachment A**

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total
						KCRC	Federal/State	Local	
Reconstruction									
	Expansion/All-Season								
	84th St.	Division Ave. to Eastern Ave.	1.0	3.0	Reconstruct to 3 lanes	\$ 384,739	\$ 1,040,261		\$ 1,425,000
	84th St.	Kalamazoo Ave. to Breton Ave.	1.0	2.0	All-Season	420,000	1,120,000		1,540,000
	68th St.	Burlingame Ave. to Clyde Park Ave.	1.0	3.0	Widen to 3 lanes	313,500	566,500		880,000
	Segwun Ave.	Alden Nash Ave. to Grand River Dr.	0.5	1.5	Reconstruct/Widen to 3 lanes	261,986	713,014		975,000
	100th St.	E. and W. of US-131	0.2	0.6	Reconstruct Approach to 3 lanes	518,678	301,322		820,000
	Preliminary Engineering					300,000	-		300,000
	Full Depth Pavement								
	68th St.	Byron Center Ave. to Burlingame Ave.	1.0	5.0	Resurface	298,500	646,500		945,000
	Fruit Ridge Ave.	6 Mile Rd. to 10 Mile Rd.	4.0	8.0	Resurface	593,000	877,000		1,470,000
	Knapp St.	E. City Limit to East Beltline Ave.	1.0	5.0	Resurface	198,500	426,500		625,000
	Leffingwell Ave.	City limits to Knapp St.	0.5	1.5	Resurface	265,000			265,000
	Grand River Dr.	Snow to Segwun	4.5	9.0	Resurface	275,000	900,000		1,175,000
	Various Locations		2.5	5.0	Resurface	800,000			800,000
Total Reconstruction			17.2	43.6		4,628,903	6,591,097	-	11,220,000
Resurfacing									
	Overlays	Various Locations	5.0	11.0	Resurface	1,000,000			1,000,000
Total Resurfacing			5.0	11.0		1,000,000	-	-	1,000,000
Preservation									
	Surface Treatments	Various Locations	75.0	165.0	Sealcoat and Micro Surface	3,705,000			3,705,000
	Thin Overlays		4.6	10.0		450,000			450,000
Total Preservation			79.6	175.0		4,155,000	-	-	4,155,000
Safety									
	Various Locations				Capacity / Safety Improvement	500,000			500,000
	Northland Dr. and 13 Mile Rd.				Signal Upgrade	150,000			150,000
	Thornapple River Dr. and Laraway Lake Dr.				Signal Upgrade	150,000			150,000
	Cascade Rd. and Laraway Lake Dr.				Signal Upgrade	150,000			150,000
	West River Dr. and West River Center				Signal Upgrade	150,000			150,000
	West River Dr. and Lamoreaux Dr.				Signal Upgrade	150,000			150,000
	76th St. RR Crossing Gates @ Grand Elk RR				Crossing Gates	400,000			400,000
Total Safety						1,650,000	-	-	1,650,000
Bridges and Culverts									
	Preventive Maintenance	Various Locations				1,000,000			1,000,000
Total Bridges and Culverts						1,000,000	-	-	1,000,000
Total Primary Road Projects			101.8	229.6		\$ 12,433,903	\$ 6,591,097	\$ -	\$ 19,025,000
Non-Motorized									
	4 Mile sidewalk						105,000	70,000	175,000
	Nelson Twp Trail						231,000	119,000	350,000
Total Non-Motorized						\$ 336,000	\$ 189,000	\$ 525,000	

Note: Projects are subject to change.

**2020 Adopted Budget
Routine Maintenance
Attachment B**

Primary			
	2018	2019	2020
	Actual	Amended Budget	Budget
Adopt-a-Road Expenses	15,755	28,409	29,829
Bridge Preventative Maint.	1,071	113,636	119,318
Brush back mowing	-	227,273	238,637
Crack sealing	168,711	340,909	357,954
Drainage And Backslopes	1,092,321	1,136,364	1,243,182
Grass And Weed Control	302,786	397,727	617,613
Guard Rail & Posts	27,913	56,818	259,659
Partial Depth Mill and Fill	-	113,636	119,318
Restoration	38,729	34,091	35,796
Roadside Cleanup	73,261	85,227	89,488
Shoulder Maintenance	320,772	454,545	477,272
Spot Mill and Fill	1,186	340,909	357,954
Supervision	526,102	568,182	596,591
Surface Maintenance	1,781,435	2,272,727	2,386,363
Sweeping And Flushing	204,412	170,455	178,978
Trees And Shrubs	920,431	1,136,364	1,193,182
Weight Limit Signing	19,085	22,728	23,864
Total Primary	\$ 5,493,969	\$ 7,500,000	\$ 8,325,000

Local			
	2018	2019	2020
Description	Actual	Budget	Budget
Adopt-a-Road Expenses	8,353	10,778	11,317
Bridge Preventative Maint.	-	53,892	56,587
Brush back mowing	-	107,784	113,173
Crack sealing	95,291	107,784	113,173
Drainage And Backslopes	2,041,580	1,886,228	2,130,539
Dust Control	406,160	485,030	509,282
Grass And Weed Control	322,566	323,353	339,521
Guard Rail & Posts	19,077	53,892	56,587
Restoration	82,835	80,838	84,880
Roadside Cleanup	49,093	53,892	56,587
Shoulder Maintenance	200,268	269,461	282,934
Supervision	648,030	646,707	679,042
Surface Maintenance	3,029,585	3,233,533	3,395,210
Sweeping And Flushing	68,875	43,114	120,270
Trees And Shrubs	1,492,862	1,616,766	1,847,604
Weight Limit Signing	22,312	26,948	28,295
Total Local	\$ 8,486,886	\$ 9,000,000	\$ 9,825,000

**2020 Adopted Budget
Capital Outlay
Attachment C**

	Unit Cost	2020 Budget
Buildings		
Pave drive & storage area at North		\$ 250,000
Replace underground fuel storage tanks at North		250,000
Relocate blade pit at South		250,000
Add road material storage bunkers at North		100,000
Pave drive & storage area at Central		100,000
Replace boiler at North		30,000
Total Buildings		\$ 980,000
Plow Trucks		
Five Axle Truck		
1 Chassis	140,000	140,000
1 Live bottom v-box	70,000	70,000
1 Underbody scraper	8,000	8,000
Labor to complete truck		32,000
Single Axle Truck		
8 Chassis	110,000	880,000
8 Underbody scraper	8,000	64,000
8 Wing	7,000	56,000
Labor to complete trucks		480,000
Total Large Trucks		1,730,000
Heavy Equipment		
Replacements		
1 Loader	170,000	170,000
2 Tractor	85,000	170,000
2 Side mower	25,000	50,000
2 Rear mower	10,000	20,000
1 Excavator	170,000	170,000
1 Mini excavator	70,000	70,000
2 Skid steer	80,000	160,000
2 Clam bucket	5,000	10,000
2 Trailer - 16,000 lb	18,000	36,000
1 Trailer - 50,000 lb	40,000	40,000
1 Durapatcher	75,000	75,000
1 Tar kettle	15,000	15,000
1 Enclosed trailer	10,000	10,000
Additions		
1 Hotpatcher	24,000	24,000
1 Chipper	60,000	60,000
1 Trailer-mounted compressor	20,000	20,000
Total Heavy Equipment		1,100,000
Small Equipment		
Winter Equipment		
1 Front plow - left	9,000	9,000
1 Front plow - right	9,000	9,000
1 Front v-plow	9,000	9,000
Power Tools		10,000
Shop Tools		10,000
Total Winter Equipment		47,000
Work Trucks		
1 1 ton 4x2 SRW crew cab	35,000	35,000
2 1 ton 4x2 DRW crew cab	65,000	130,000
1 1 ton 4x4 SRW extended cab with plow	41,000	41,000
2 1 ton 4x4 SRW extended cab with plow and utility box	48,000	96,000
1 1 ton 4x4 SRW crew cab with plow and lift gate	50,000	50,000
3 1/2 ton 4x4 extended cab	36,000	108,000
1 1/2 ton 4x4 extended cab	30,000	30,000
Total Work Trucks		490,000
Passenger vehicles		
4 Cars/SUV	30,000	120,000
Engineering		
2 Nuclear density gauges	10,000	20,000
1 Robotic total station	22,500	22,500
1 Drone with FPV goggles	10,000	10,000
Total Engineering		52,500
Total Equipment		\$ 3,539,500

**2020 Adopted Budget
Administration
Attachment D**

	2018 Actual	2019 Amended Budget	2020 Budget
Advertising	\$ 53,159	\$ 40,000	\$ 50,000
Depreciation	63,530	59,000	65,000
Equipment Rental	38,152	36,000	46,000
Information Technology	154,309	100,000	150,000
Insurance	58,755	80,000	80,000
Personnel Costs	1,524,784	1,766,000	1,900,000
Professional Services	187,130	158,000	205,000
Repairs and Maintenance	92,027	95,000	75,000
Supplies	105,009	100,000	110,000
Training and Travel	19,592	17,000	20,000
Utilities	135,031	139,000	149,000
Handling Charges on Materials Sold	(78,553)	(85,000)	(95,000)
Purchase Discounts	(6,125)	(5,000)	(5,000)
Total Administration	\$ 2,346,801	\$ 2,500,000	\$ 2,750,000



RECONSTRUCTION

84th Street – Division Avenue to Eastern Avenue

Widen existing 2-lane portion to 3 lanes. Work includes tree removal, earthwork, concrete curb and gutter, drainage, sanitary sewer (Gaines Township) HMA pavement, pavement markings and restoration.

84th Street – Kalamazoo Avenue to Breton Avenue

Reconstruct to 2-lane all-season road standard. Work includes tree removal, earthwork, ditches, culvert replacement, HMA pavement, pavement markings and restoration. Through traffic will be detoured.

68th Street – Burlingame Avenue to Clyde Park Avenue

Widen existing 2-lane portions to 3 lanes. Work includes earthwork, concrete curb and gutter, drainage, HMA pavement, pavement markings and restoration.

Segwun Avenue – Alden Nash Avenue to Grand River Drive

Widen existing 2-lane road to 3 lanes. Work includes earthwork, concrete curb and gutter, drainage, HMA pavement, pavement markings and restoration.

100th Street – East and West of US-131

Reconstruct and widen approaches in conjunction with replacement of the bridge over US-131. Work includes earthwork, drainage, HMA pavement, pavement markings and restoration.

6 Mile Road - Fruit Ridge Avenue to Walker Avenue

Crush and shape the existing asphalt surface and place 2 courses of hot mix asphalt (HMA). Through traffic will be detoured.

68th Street – Byron Center Avenue to Burlingame Avenue

Cold mill existing 5-lane asphalt surface and place 2 courses of HMA. Two-way traffic will be maintained.

Fruit Ridge Avenue – 6 Mile Road to 10 Mile Road

Crush and shape the existing asphalt surface and place 2 courses of HMA. Through traffic will be detoured.

Knapp Street - East City Limit to East Beltline Avenue

Cold mill existing 2-lane to 6-lane asphalt surface and place 2 courses of HMA. Through traffic will be detoured west of Leffingwell Avenue and maintained east.

Leffingwell Avenue - City Limits to Knapp Street

Cold mill existing 3-lane asphalt surface and resurface with 2 courses of HMA. Two-way traffic will be maintained.

Grand River Drive – Snow Avenue to Segwun Avenue

Cold mill existing asphalt surface and place 2 courses of HMA. Two-way traffic will be detoured.

SAFETY

Hanna Lake Avenue south of 60th Street

Extend left turn lane south in coordination with new traffic signal. Work will be completed using shoulder closures and short duration closure.

Kraft Avenue and 68th Street

Remove existing building, outbuildings and stockade fence. Traffic will be maintained.

Traffic Signal Projects

These projects include the upgrade of the existing traffic signal, or installation of a new signal, with box configuration, LED signal heads, backplates and detection.

- **Cascade Road and Laraway Lake Drive**
- **Northland Drive and 13 Mile Road**
- **Thornapple River Drive and Laraway Lake Drive**
- **West River Drive and West River Center**
- **West River Drive and Lamoreaux Drive**
- **84th Street and Byron Commerce Drive (new signal)**

BRIDGES AND CULVERTS (PRIMARY & LOCAL)

Alpine Bridge #27 – Vinton Avenue over Mill Creek

Culvert rehabilitation project to repair a portion of the existing twin corrugated metal pipe arches. Traffic will be detoured.

Lowell Bridge #16 – Jackson Street over the Grand River

Preventative maintenance project including deck expansion joint replacement, and concrete substructure repair. Traffic will be detoured.

Sparta Bridge #20 – Peach Ridge Avenue 0.6 Mile North of 13 Mile Road

Culvert replacement project to remove the existing corrugated metal pipe arches and install a precast concrete box culvert. Traffic will be detoured.

Spencer Bridge #16 – Hatch Avenue over Black Creek

Culvert rehabilitation project to repair a portion of the existing triple corrugated metal pipe arches. Traffic is currently detoured.

NON-MOTORIZED

Fred Meijer River Valley Rail Trails (continuation)

Improvements to existing abandoned rail grades between City of Lowell and City of Greenville; and the City of Lowell and City of Saranac to provide a 10-foot wide unpaved non-motorized trail. Work includes bridge and culvert work, crushed asphalt and grading. Local match provided by City of Greenville and the County of Ionia.

Fred Meijer Pioneer Trail Phase 5

Construction of a 10 foot wide asphalt non-motorized trail extending along the east side of West River Drive between Lankamp Street and North Park Street. Local match provided by the County of Kent.

Nelson Township Trail

Construction of a 10 foot wide asphalt non-motorized trail extending from Cedar Springs High School south and east to the Ritchie Avenue Sports Complex. Local match provided by Nelson Township.

4 Mile Road Sidewalk

Construction of a 5 to 6 foot wide concrete sidewalk along the north side of 4 Mile Road extending from Yorkview Drive to West River Drive. Local match provided by Alpine Township.

100th Street Trail

Construction of a 10 foot wide asphalt non-motorized trail along the south side of 100th Street from west of US-131 easterly to Division Avenue. Local match provided by Byron Township.

Category	Road	Limits	Miles	Lane	Improvement	Source of Funds			Project Total	Program
				Miles		KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
	84th St.	Division Ave. to Eastern Ave.	1.0	3.0	Reconstruct to 3 lanes	\$ 384,739	\$ 1,040,261		\$ 1,425,000	EDF-C
	84th St.	Kalamazoo Ave. to Breton Ave.	1.0	2.0	All-Season	420,000	1,120,000		1,540,000	STP-U
	68th St.	Burlingame Ave. to Clyde Park Ave.	1.0	3.0	Widen to 3 lanes	313,500	566,500		880,000	STP-Flex
	Segwun Ave.	Alden Nash Ave. to Grand River Dr.	0.5	1.5	Reconstruct/Widen to 3 lanes	261,986	713,014		975,000	STP-Flex
	100th St.	E. and W. of US-131	0.2	0.6	Reconstruct Approach to 3 lanes	518,678	301,322		820,000	STP-U
	Preliminary Engineering					300,000	-		300,000	
Full Depth Pavement										
	68th St.	Byron Center Ave. to Burlingame Ave.	1.0	5.0	Resurface	298,500	646,500		945,000	EDF-C
	Fruit Ridge Ave.	6 Mile Rd. to 10 Mile Rd.	4.0	8.0	Resurface	593,000	877,000		1,470,000	STP-R
	Knapp St.	E. City Limit to East Beltline Ave.	1.0	5.0	Resurface	198,500	426,500		625,000	STP-U
	Leffingwell Ave.	City limits to Knapp St.	0.5	1.5	Resurface	265,000			265,000	
	Grand River Dr.	Snow Ave. to Segwun Ave.	4.6	9.2	Resurface	275,000	900,000		1,175,000	STP-R
	Various Locations		2.5	5.0	Resurface	800,000			800,000	
Total Reconstruction			17.3	43.8		4,628,903	6,591,097	-	11,220,000	
Resurfacing										
	Overlays	Various Locations	5.0	11.0	Resurface	1,000,000			1,000,000	
Total Resurfacing			5.0	11.0		1,000,000	-	-	1,000,000	
Preservation										
	Surface Treatments	Various Locations	82.0	180.4	Sealcoat and Micro Surface	3,705,000			3,705,000	
	Thin Overlays		15.0	33.0		450,000			450,000	
Total Preservation			97.0	213.4		4,155,000	-	-	4,155,000	
Safety										
	Various Locations				Capacity / Safety Improvement	500,000			500,000	
	Northland Dr. and 13 Mile Rd.				Signal Upgrade	150,000			150,000	
	Thornapple River Dr. and Laraway Lake Dr.				Signal Upgrade	150,000			150,000	
	Cascade Rd. and Laraway Lake Dr.				Signal Upgrade	150,000			150,000	
	West River Dr. and West River Center				Signal Upgrade	150,000			150,000	
	West River Dr. and Lamoreaux Dr.				Signal Upgrade	150,000			150,000	
	76th St. RR Crossing Gates @ Grand Elk RR				Crossing Gates	400,000			400,000	
Total Safety						1,650,000	-	-	1,650,000	
Bridges and Culverts										
	Preventive Maintenance	Various Locations				1,000,000			1,000,000	
Total Bridges and Culverts						1,000,000	-	-	1,000,000	
Total Primary Road Projects			119.3	268.2		\$ 12,433,903	\$ 6,591,097	\$ -	\$ 19,025,000	
Non-Motorized										
	4 Mile sidewalk						105,000	70,000	175,000	
	Nelson Twp Trail						231,000	119,000	350,000	
Total Non-Motorized							\$ 336,000	\$ 189,000	\$ 525,000	

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds		Project Total	Program
						KCRC	Federal/State		
Reconstruction									
Expansion/All-Season									
100th St.	Kalamazoo Ave. to 1 Mile East		1.0	2.0	All-Season	\$ 405,000	\$ 895,000	\$ 1,300,000	STP-R
68th St.	Cherry Valley Ave. to Thornapple River Dr.		1.0	2.0	All-Season	1,250,000		1,250,000	
84th St.	Breton Ave. to Hanna Lake Ave.		1.0	2.0	All-Season	318,550	981,450	1,300,000	STP-U
Full Depth Pavement									
13 Mile Rd.	Grange Ave. to Edgerton Ave.		2.3	4.6	Resurface	230,000	770,000	1,000,000	EDCF
68th St.	Hanna Lake Ave. to Kraft Ave.		3.0	15.0	Resurface	350,668	849,332	1,200,000	STP-U
7 Mile Rd.	Alpine Ave. to Pine Island Dr.		1.8	3.6	Resurface	238,000	462,000	700,000	EDCF
Fruit Ridge Ave.	4 Mile Rd. to 6 Mile Rd.		2.0	4.0	Resurface	800,000		800,000	
S. Division Ave.	76th St. to 68th St.		1.0	5.0	Resurface	283,000	717,000	1,000,000	NH
Whitneyville Ave.	I-96 to Cascade Rd.		1.0	2.0	Resurface	161,260	188,740	350,000	STP-U
Wolverine Blvd.	10 Mile Rd. to 11 Mile Rd.		1.0	4.0	Resurface	1,200,000		1,200,000	
Crush & Shape	Various Locations		8.1	17.8	Resurface	2,000,000	1,000,000	3,000,000	STP-U
Mill & Fill	Various Locations		8.1	17.8	Resurface	2,000,000	1,000,000	3,000,000	STP-U
Total Reconstruction			31.3	79.8		9,236,478	6,863,522	16,100,000	
Resurfacing									
Overlays	Various Locations		6.5	14.3	Resurface	1,300,000		1,300,000	
Total Resurfacing			6.5	14.3		1,300,000	-	1,300,000	
Preservation									
Surface Treatments	Various Locations		86.0	189.2	Sealcoat and Micro Surface	4,300,000		4,300,000	
Thin Overlays			15.0	33.0		1,500,000		1,500,000	
Total Preservation			101.0	222.2		5,800,000	-	5,800,000	
Safety									
Various Locations					Capacity / Safety Improvement	1,000,000		1,000,000	
Total Safety						1,000,000	-	1,000,000	
Bridges and Culverts									
Tyrone Bridge #15	20 Mile Rd. over Walter Creek				Replacement	21,800	414,200	436,000	LBP
Tyrone Bridge #18	20 Mile Rd. over the Rogue River				Rehabilitation	14,100	267,900	282,000	LBP
Preventive Maintenance	Various Locations					475,000		475,000	
Total Bridges and Culverts						510,900	682,100	1,193,000	
Total Primary Road Projects			138.8	316.3		\$ 17,847,378	\$ 7,545,622	\$ 25,393,000	

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds		Project Total	Program
						KCRC	Federal/State		
Reconstruction									
Expansion/All-Season									
100th St.		1 Mile East of Kalamazoo Ave. to Hanna Lake Ave.	1.0	2.0	All-Season	\$ 437,000	\$ 913,000	\$ 1,350,000	STP-R(STL)
68th St.		Plaster Creek to Hanna Lake Ave.	0.6	3.0	Widening 4 to 5 lanes	300,000	1,200,000	1,500,000	EDC
68th St.		Thornapple River Dr. to Whitneyville Ave.	1.0	2.0	All-Season	1,400,000		1,400,000	
84th St.		Hanna Lake Ave. to East Paris Ave.	1.0	2.0	All-Season	425,854	974,146	1,400,000	STP-U
Cascade Rd.		36th St. to Whitneyville Ave.	0.8	2.4	Widening 2 to 3 lanes	280,000	1,120,000	1,400,000	EDC
Full Depth Resurface									
13 Mile Rd.		Sparta Village to Grange	3.5	7.0	Resurface	400,790	899,210	1,300,000	STP-U
4 Mile Rd.		Coit Ave. to Plainfield Ave.	1.0	3.0	Resurface	150,000	450,000	600,000	EDC
6 Mile Rd.		Alpine Ave. to Pine Island Dr.	1.8	3.6	Resurface	250,657	749,343	1,000,000	STP-U
Kalamazoo Ave.		68th St. to 60th St.	1.0	5.0	Resurface	369,000	731,000	1,100,000	NH
Crush & Shape		Various Locations	8.1	17.8	Resurface	2,000,000	1,000,000	3,000,000	STP-U
Mill & Fill		Various Locations	8.1	17.8	Resurface	2,000,000	1,000,000	3,000,000	STP-U
Total Reconstruction			27.9	65.6		8,013,301	9,036,699	17,050,000	
Resurfacing									
Overlays		Various Locations	7.0	15.4	Resurface	1,400,000		1,400,000	
Total Resurfacing			7.0	15.4		1,400,000	-	1,400,000	
Preservation									
Surface Treatments		Various Locations	86.0	189.2	Sealcoat and Micro Surface	4,300,000		4,300,000	
Thin Overlays			15.0	33.0		1,500,000		1,500,000	
Total Preservation			101.0	222.2		5,800,000	-	5,800,000	
Safety									
Various Locations					Capacity / Safety Improvement	1,100,000		1,100,000	
Total Safety						1,100,000	-	1,100,000	
Bridges and Culverts									
Preventive Maintenance		Various Locations				1,100,000		1,100,000	
Total Bridges and Culverts						1,100,000	-	1,100,000	
Total Primary Road Projects			135.9	303.2		\$ 17,413,301	\$ 9,036,699	\$ 26,450,000	

Category	Road	Limits	Miles	Lane	Improvement	Source of Funds		Project Total	Program
				Miles		KCRC	Federal/State		
Reconstruction									
Expansion/All-Season									
	10 Mile Rd.	Pine Island to Algoma	2.0	4.0	All-Season	\$ 3,000,000		\$ 3,000,000	
	100th St.	Hanna Lake Ave. to East Paris Ave.	1.0	2.0	All-Season	419,000	931,000	1,350,000	STP-R(STL)
	68th St.	Kraft Ave. to Cherry Valley Dr.	1.0	2.0	All-Season	1,500,000		1,500,000	
	84th St.	East Paris Ave. to Patterson Ave.	1.0	2.0	All-Season	387,992	1,062,008	1,450,000	STP-U
Full Depth Pavement									
	Buttrick Ave.	Thornapple River Dr. to Grand River Dr.	0.5	1.0	Resurface	63,998	236,002	300,000	STP-U
	Northland Dr.	12 Mile Rd. to 13 Mile Rd.	1.0	5.0	Resurface	280,000	720,000	1,000,000	EDC
	Northland Dr.	13 Mile Rd. to 14 Mile Rd.	1.2	6.0	Resurface	240,000	936,614	1,176,614	EDC
	Crush & Shape	Various Locations	9.0	19.8	Resurface	2,750,000	1,000,000	3,750,000	STP-U
	Mill & Fill	Various Locations	10.0	22.0	Resurface	3,000,000	1,000,000	4,000,000	STP-U
Total Reconstruction			26.7	63.8		11,640,990	5,885,624	17,526,614	
Resurfacing									
	Overlays	Various Locations	8.0	17.6	Resurface	1,600,000		1,600,000	
Total Resurfacing			8.0	17.6		1,600,000	-	1,600,000	
Preservation									
	Surface Treatments	Various Locations	84.0	184.8	Sealcoat and Micro Surface	4,200,000		4,200,000	
	Thin Overlays		15.0	33.0		1,500,000		1,500,000	
Total Preservation			99.0	217.8		5,700,000	-	5,700,000	
Safety									
	Various Locations				Capacity / Safety Improvement	1,250,000		1,250,000	
Total Safety						1,250,000	-	1,250,000	
Bridges and Culverts									
	Preventive Maintenance	Various Locations				1,250,000		1,250,000	
Total Bridges and Culverts						1,250,000	-	1,250,000	
Total Primary Road Projects			133.7	299.2		\$ 21,440,990	\$ 5,885,624	\$ 27,326,614	

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total	Program
						KCRC	Federal/State	Local		
Reconstruction										
	Expansion/All-Season									
	100th St.	East Paris Ave. to Patterson Ave.	1.0	2.0	All-Season	\$ 440,000	\$ 935,000		\$ 1,375,000	STP-R
	84th St.	Patterson Ave. to Broadmoor (M-37)	1.8	5.4	All-Season	1,688,000	1,188,000		2,876,000	STP-U
	Lincoln Lake Rd.	Belding Rd. to Heffron	2.0	8.0	All-Season	3,000,000			3,000,000	
	Wilson Ave.	76th to M-6	1.3	2.6	All-Season	1,925,000			1,925,000	
	Full Depth Pavement									
	Crush & Shape	Various Locations	15.0	33.0	Resurface	3,750,000	1,000,000		4,750,000	STP-U
	Mill & Fill	Various Locations	15.0	33.0	Resurface	3,750,000	1,000,000		4,750,000	STP-U
Total Reconstruction			36.1	84.0		14,553,000	4,123,000	-	18,676,000	
Resurfacing										
	Overlays	Various Locations	10.0	22.0	Resurface	2,000,000			2,000,000	
Total Resurfacing			10.0	22.0		2,000,000	-	-	2,000,000	
Preservation										
	Surface Treatments	Various Locations	82.0	180.4	Sealcoat and Micro Surface	4,100,000			4,100,000	
	Thin Overlays		15.0	33.0		1,500,000			1,500,000	
Total Preservation			97.0	213.4		5,600,000	-	-	5,600,000	
Safety										
	Various Locations				Capacity / Safety Improvement	1,000,000			1,000,000	
Total Safety						1,000,000	-	-	1,000,000	
Bridges and Culverts										
	Preventive Maintenance	Various Locations				1,000,000			1,000,000	
Total Bridges and Culverts						1,000,000	-	-	1,000,000	
Total Primary Road Projects			143.1	319.4		\$ 24,153,000	\$ 4,123,000	\$ -	\$ 28,276,000	