

2021 Budget and Five-Year Improvement Plan



Kent County Road Commission





Board of Road Commissioners.....	1
Chair’s Letter of Welcome.....	3
Managing Director’s Comments.....	5
2020 Primary Road Improvements.....	9
2021 Amended Budget.....	12
2021 Primary Road Improvements.....	17
Five-Year Improvement Program.....	20



Mark Rambo was appointed to the Board of the Kent County Road Commission in 2009 and has served as chair since 2012. Commissioner Rambo 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

February 11, 2021

Re: FY 2021 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.

This past year, we experienced many unique challenges as we amended operations to maintain high quality roads during a pandemic. This could not have occurred without a dedicated road commission team. I want to recognize and thank the entire KCRC staff for their daily efforts to reach our shared vision of having the premier county transportation network in Michigan. Their proactive team approach, positive customer service and ability to adapt to these challenges embodies the spirit of an effective organization.

Strategic planning, asset management and continuous performance improvement remain at the core of our decision making, and we greatly appreciate your input on how we can improve. We thank everyone who shared their thoughts through the online survey posted in December to help guide an update to our strategic plan. The full report of the survey's results is available on kentcountyroads.net.

We take pride in the positive relationships we have with all of the communities in Kent County and 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,

A handwritten signature in blue ink that reads "Mark E. Rambo".

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.



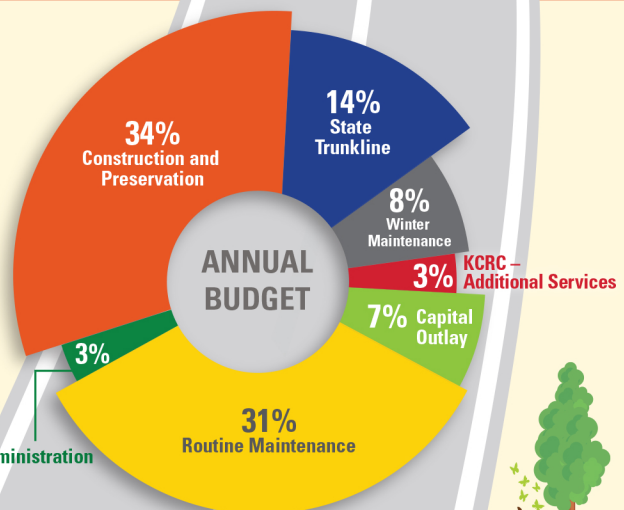
Strategic Planning:

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: February 11, 2021
Subject: 2021 Operating Budget

We are pleased to present the 2021 Budget and Five-Year Improvement Plan of the Kent County Road Commission (KCRC).

With this budget, we continue to make progress toward achieving the following strategic objectives:

- Improve and preserve the condition of the primary road network consistent with KCRC's Long Range Asset Management Plan
- Match increased township contributions to improve and preserve the local road network
- Address additional routine maintenance needs to help keep good roads in good condition
- Accelerate replacement of large trucks to maintain an efficient and effective fleet
- Commence design and construction management services to establish the Central Complex at the Walker View site

Strategic Plan and Survey

Upon completing the draft 2021 Kent County Road Commission Strategic Plan, we were eager to receive stakeholder feedback via an online survey, which was released in December 2020. The survey results helped to confirm that KCRC's priorities and objectives align with what network users feel is important. The results also indicate positive perception of KCRC and the roads and bridges under our jurisdiction, with 99 percent of respondents ranking the overall condition of the network as "good" or "fair." Links to both the draft Plan and the full report of the survey's results are available on our website, kentcountyroads.net.

2020 Review

I am pleased to report that, amid the challenges caused by the situation surrounding COVID-19, KCRC sustained high-levels of service and completed a majority of the improvement targets identified in KCRC's Long Range Plan.

Throughout the 2020 construction season, we concentrated on maximizing resources while maintaining safe work environments in accordance with local, state and federal guidelines.

Working to keep Kent County moving

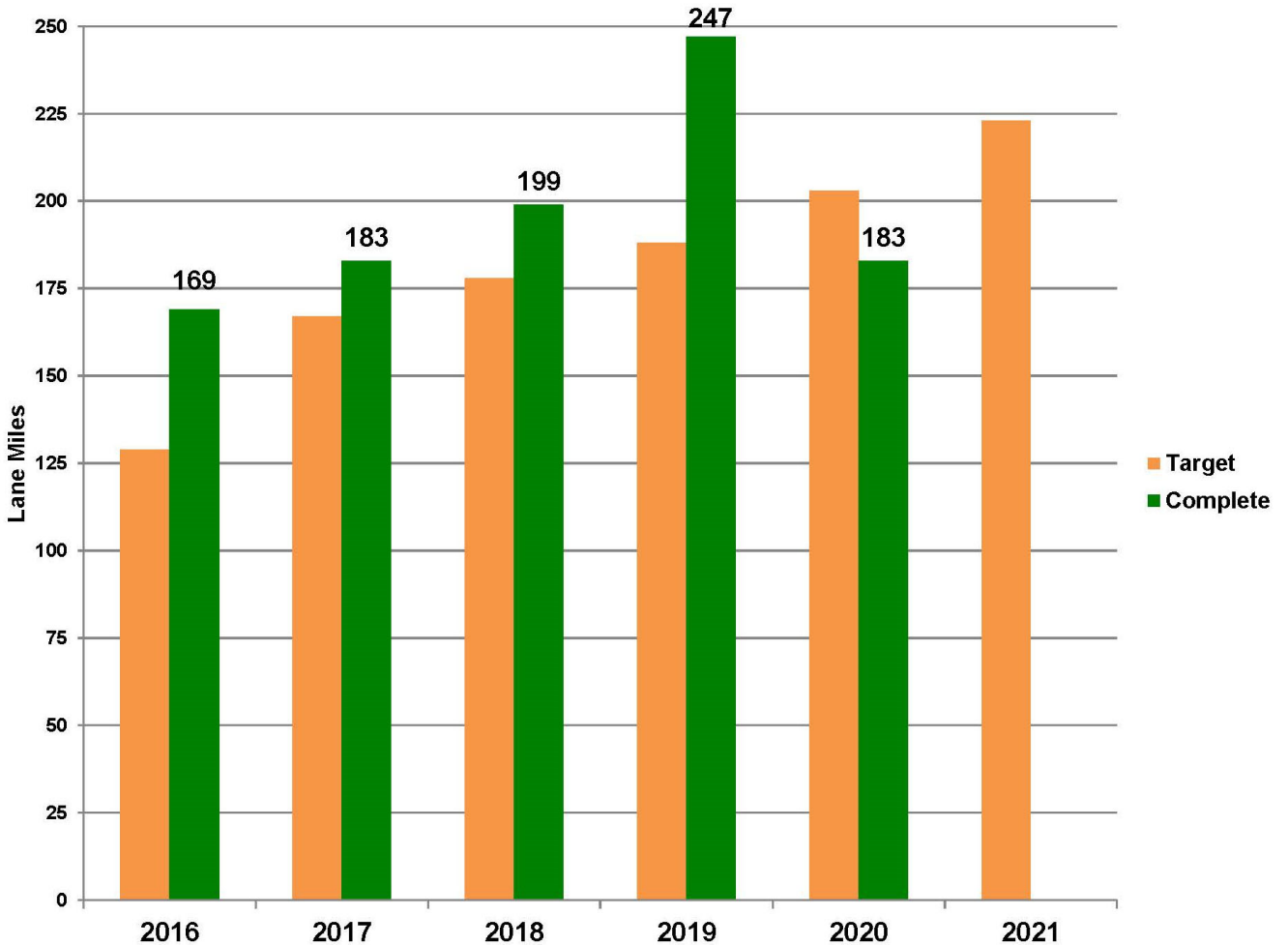
1500 Scribner Avenue NW, Grand Rapids, MI 49504 | (616) 242-6900 | kentcountyroads.net

Aligned with this focus, we substituted select preservation work that required employees to work in close contact with an increased number of reconstruction and resurfacing projects. Therefore, while our total lane miles of improvements were less than originally targeted, we completed an increased number of reconstruction and heavy overlay projects and maintained the trajectory to improve the overall condition of the primary road network.

Primary Road Lane Mile Improvements: 2020 Construction Season

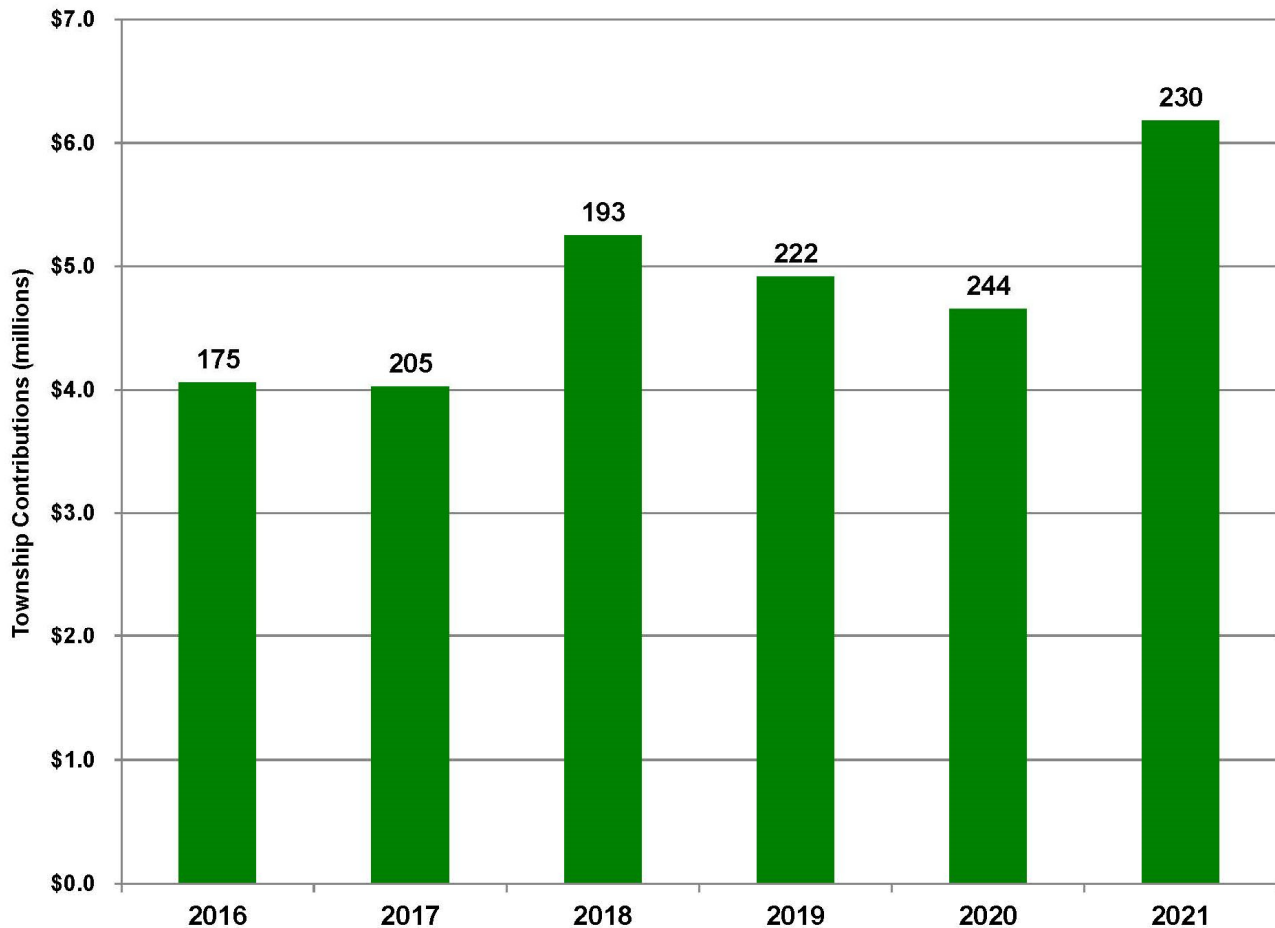
Improvement Type	Targeted	Completed
Reconstruction	22	48
Resurfacing	6	15
Preservation	175	120

Primary Road Lane Mile Improvements: 2016 - 2021



On the local road network, we maintained KCRC’s long-standing cost-share program with our township partners. This resulted, once again, in increased levels of investment tailored to meet the available resources and specific needs of each township.

Local Road Network: Township Contributions



Looking Ahead to 2021

Looking ahead to 2021, we are pleased that the state budget maintains the level of investment envisioned in the 2015 transportation package. This will allow KCRC to maintain our robust road improvement program, keeping us on track to achieve 2021 improvement targets identified in the LRP.

KCRC will continue to employ an overall improvement strategy that incorporates a “mix of fixes” approach, including 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 these assets for years to come.

Walker View

KCRC is steadily progressing towards a 2021 groundbreaking at Walker View, the site of the future Central Complex. Our management team has been meeting regularly with the team from Hobbs+Black Architects to finalize site design, and the City of Walker's Planning Commission recently approved phase one construction on the property. Serving as the project's construction manager, Owen Ames Kimball will oversee the site build, which initially will include mass site grading and the construction of material and equipment storage facilities.

Due to the pandemic, the option agreement with the City of Grand Rapids to purchase KCRC's Scribner property has been extended, providing an additional six-month period for the City to perform a due-diligence review. Scheduling of Walker View's phase two construction will be determined once the City has made a decision regarding the Scribner property.

Our Partners

The success we have as an organization is dependent in large part on maintaining positive relationships with township, county, city, and state officials. I want to thank these partners for their ongoing support. It is through our continued collaboration that, together, we navigated the challenges of 2020. Through our partnerships, we continue to increase investment in KCRC's road and bridge network, which directly benefits the communities and businesses we serve.



RECONSTRUCTION

68th Street – Burlingame Avenue to Clyde Park Avenue

Widened the existing 2-lane portion to 3 lanes. Work included trench widening, storm sewer modifications, HMA pavement, pavement markings and restoration.

84th Street - Kalamazoo Avenue to Breton Avenue

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

100th Street – East and West of US-131

Reconstructed and widened east and west of US-131 in conjunction with replacement and widening the bridge over US-131. Work included earthwork, drainage, HMA pavement, pavement markings and restoration.

Segwun Avenue – Alden Nash Avenue to Grand River Drive

Widened existing 2-lane road to 3 lanes. Work included tree removal, earthwork, concrete curb and gutter, storm sewer, ditches, HMA pavement, pavement markings and restoration.

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

- **68th Street** – Byron Center Avenue to Burlingame Avenue
- **Grand River Drive** – Snow Avenue to Segwun Avenue
- **Knapp Street** – East City Limits to East Beltline Avenue
- **Pratt Lake Avenue** – Full width at various locations between 84th Street and 52nd Street (prior to chip seal)

Crush and shape existing pavement and HMA replacement:

- **6 Mile Road** – Fruit Ridge Avenue to Walker Avenue
- **12 Mile Road** – Ramsdell Drive to Nugent Avenue
- **19 Mile Road** – Lincoln Pines to Bass Lake Avenue
- **20 Mile Road** – Trenton Avenue to Algoma Avenue
- **52nd Street** – Morse Lake Avenue to Timpson Avenue
- **Fruit Ridge Avenue** – 6 Mile Road to 10 Mile Road
- **Honey Creek Avenue** – Pettis Avenue to Conservation Street
- **Lincoln Lake Avenue** – Bradshaw Street to 19 Mile Road
- **Parnell Avenue** – Bailey Drive to 2 Mile Road

SINGLE COURSE MILL AND HMA OVERLAY

- **68th Street** – Hanna Lake Avenue to Patterson Avenue (skip)
- **Hanna Lake Avenue** – 68th Street to 60th Street

SAFETY

68th Street and Kraft Avenue

Purchased property on the Northeast quadrant of the intersection and removed the building near the intersection to improve sight distance.

Hanna Lake Avenue at 60th Street

Widened the east side of Hanna Lake Avenue to provide a separate right turn lane and left turn lane at the new traffic signal.

Lincoln Lake Avenue at Belding Road (M-44)

Widened north of Belding Road to provide a separate left turn lane and right turn lane; and modified pavement markings south of Belding Road to delineate a left turn lane for the future traffic signal (MDOT).

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**
- **Thornapple River Drive and Laraway Lake Drive**
- **Northland Drive and 13 Mile Road**
- **West River Drive and West River Center**
- **West River Drive and Lamoreaux Drive**
- **60th Street and Hanna Lake Avenue (new signal)**
- **84th Street and Byron Commerce Drive (new signal)**

BRIDGES AND CULVERTS

Alpine Bridge #24 – Vinton Avenue over Mill Creek

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

Bowne Bridge #5 – Wingeir Avenue over Pratt Lake Drain

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

Byron Bridge #66 – 108th Street over Dorr and Byron Drain

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

Lowell Bridge #16 – Division Street over the Grand River

Preventative maintenance project included deck joint replacement, concrete substructure and superstructure repair and protective concrete sealant.

Sparta Bridge #20 – Peach Ridge Avenue over unnamed tributary

Bridge replacement utilizing a precast concrete box culvert structure.

Sparta Bridge #38 – Alpine Avenue over the Rogue River

Bridge rehabilitation project included joint replacement, spot box beam replacement, deck waterproofing and new HMA wearing surface.

Spencer Bridge #10 – Hatch Avenue over Black Creek

Culvert rehabilitation project repaired a portion of the existing triple corrugated metal pipe arches with a reinforced concrete placed on external portion of galvanized metal culverts. Completed by KCRC's bridge crew.

Spencer Bridge #38 – Larsen Avenue over Cooper Creek

Bridge replacement utilizing a precast concrete box beam superstructure on Geo Reinforced Soil Abutments, permanent steel sheeting and precast block abutment facing.

NON-MOTORIZED

100th Street Trail

Constructed a 10-foot-wide asphalt non-motorized trail extending from the Southbound US-131 Ramps easterly to Division Avenue along the south side of 100th Street. Contiguous with the 100th Street Bridge over US-131. Local match provided by Byron Township.

Fred Meijer Pioneer Trail Phase 5

Constructed a 10-foot-wide asphalt non-motorized trail extending along the east side of West River Drive from Lankamp Street northerly to North Park Street, completing the long awaited Musketawa/White Pine Trail connection. Local match provided by the County of Kent.

Fred Meijer Flat River Valley and Grand River Valley Rail Trail

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 primarily unpaved non-motorized trail. Work includes bridge and culvert work, crushed asphalt surface and grading. Local match provided by City of Greenville and the County of Ionia.

2021 Amended Budget

Appropriation Act

	<u>2019 Actual</u>	<u>2020 Amended Budget</u>	<u>2021 Amended Budget</u>	<u>Attachment</u>
Revenue				
Michigan Transportation Funds (MTF)	\$ 48,686,235	\$ 51,000,000	\$ 56,936,176	
State General Fund				
Surplus Appropriation	5,721,832	-	-	
Additional Appropriation	1,000,000	-	-	
Federal and State Grants				
Motorized	6,457,355	7,694,817	9,007,422	A
Non-Motorized	1,441,980	3,433,500	1,165,000	
State Trunkline contract	11,467,694	12,300,000	10,500,000	
Local Government Contributions	5,345,921			
Road Projects	-	7,901,175	8,183,500	
Non-Motorized	-	1,671,500	935,000	
Services Provided	3,242,712	1,800,000	1,300,000	
Sale of Capital Assets and salvage	352,663	300,000	350,000	
Property Rental	171,147	175,000	150,000	
Interest	610,599	650,000	450,000	
Total Revenue	<u>84,498,139</u>	<u>86,925,992</u>	<u>88,977,098</u>	
Expenditures				
Primary Roads				
Reconstruction	15,544,983	14,791,150	15,960,000	
Resurfacing	706,186	1,000,000	1,000,000	
Preservation	5,682,099	4,155,000	4,500,000	
Safety	4,087,905	3,670,000	2,925,000	
Bridges and Culverts	1,712,697	1,710,000	1,503,000	
Total Primary Roads	<u>27,733,869</u>	<u>25,326,150</u>	<u>25,888,000</u>	A
Local Roads				
Reconstruction	7,549,103	13,198,350	12,825,000	
Resurfacing	749,520	1,409,000	1,000,000	
Preservation	4,243,514	3,820,000	2,668,000	
Safety	877,600	596,000	600,000	
Bridges and Culverts	253,904	1,400,000	600,000	
Total Local Roads	<u>13,673,641</u>	<u>20,423,350</u>	<u>17,693,000</u>	
Routine Maintenance				
State	6,985,805	8,300,000	6,500,000	
Primary	5,751,840	6,325,000	6,325,000	B
Local	8,642,957	7,825,000	10,575,000	B
Total Routine Maintenance	<u>21,380,601</u>	<u>22,450,000</u>	<u>23,400,000</u>	
Winter Maintenance				
State	4,344,131	4,000,000	4,000,000	
Primary	2,767,287	2,140,000	3,140,000	
Local	2,713,497	2,140,000	3,140,000	
Total Winter Maintenance	<u>9,824,915</u>	<u>8,280,000</u>	<u>10,280,000</u>	
Non-Motorized	2,370,248	5,105,000	2,100,000	
Equipment Operations	834,861	909,500	750,000	
Capital Outlay				
Buildings	598,767	1,328,000	2,255,000	C
Equipment	3,232,767	6,644,603	7,173,000	C
Depreciation	(4,115,295)	(4,100,000)	(4,300,000)	
Services Provided	1,275,560	1,500,000	1,000,000	
Administration	2,418,014	2,750,000	2,900,000	D
Contingency	-	5,000,000	5,000,000	
Total Expenditures	<u>79,227,949</u>	<u>95,616,603</u>	<u>94,139,000</u>	
Revenues Over (Under) Expenditures	5,270,190	(8,690,611)	(5,161,902)	
Fund Balance, Beginning of Year	<u>22,756,455</u>	<u>28,026,645</u>	<u>28,752,138</u>	
Projected Fund Balance, End of Year	<u>\$ 28,026,645</u>	<u>\$ 19,336,034</u>	<u>\$ 23,590,236</u>	

2021 Amended Budget

**Primary Road Projects
Attachment A**

Category	Road	Limits	Miles	Lanes	Lane Miles	Improvement	Source of Funds			Project Total
							KCRC	Federal/State	Local	
Reconstruction										
Expansion/All-Season										
	100th St.	Kalamazoo Ave. to Hanna Lake Ave.	2.0	2.0	4.0	All-Season	\$ 1,100,000	\$ 1,830,000		\$ 2,930,000
	84th St.	Breton Ave. to Hanna Lake Ave.	1.0	2.0	2.0	All-Season	448,550	981,450		1,430,000
	68th St.	Cherry Valley Ave. to Thornapple River Dr.	1.0	2.0	2.0	All-Season	1,350,000			1,350,000
	84th St.	Division Ave. to Eastern Ave.	1.0	3.0	3.0	3 Lane Expansion	296,200	1,116,800	687,000	2,100,000
Full Depth Pavement										
	7 Mile Rd.	Alpine Ave. to Pine Island Dr.	1.8	2.0	3.6	Resurface	273,000	462,000		735,000
	13 Mile Rd.	Grange Ave. to Edgerton Ave.	2.3	2.0	4.6	Resurface	280,000	770,000		1,050,000
	13 Mile Rd.	Sparta Village to Grange	3.5	2.0	7.0	Resurface	515,668	849,332		1,365,000
	68th St.	Division Ave. to Eastern Ave.	1.0	4.0	4.0	Resurface	233,000	717,000		950,000
	Fruit Ridge Ave.	4 Mile Rd. to 6 Mile Rd.	2.0	2.0	4.0	Resurface	190,000	640,000		830,000
	Whitneyville Ave.	I-96 to Cascade Rd.	1.0	2.0	2.0	Resurface	181,260	188,740		370,000
	Crush & Shape	Various Locations	3.2	2.2	7.0	Resurface	675,000			675,000
	Mill & Fill	Various Locations	2.0	2.2	4.4	Resurface	575,000			575,000
Total Reconstruction			21.8		47.6		6,117,678	7,555,322	687,000	14,360,000
Resurfacing										
	Cascade Rd.	Burton St. to 28th St.	0.5	2.2	1.1	Resurface	600,000			600,000
	Overlays	Various Locations	6.5	2.2	14.3	Resurface	400,000			400,000
Total Resurfacing			6.5		14.3		1,000,000	-	-	1,000,000
Preservation										
	Surface Treatments	Various Locations	80.0	2.2	176.0	Sealcoat and Micro Surface	4,000,000			4,000,000
	Thin Overlays		5.0	2.2	11.0		500,000			500,000
Total Preservation			85.0		187.0		4,500,000	-	-	4,500,000
Safety										
	Division Ave. at 76th St.					Signal Upgrade	150,000			150,000
	East Paris Ave. at 68th St.					Signal Upgrade	150,000			150,000
	East Paris Ave. at Cook Valley Blvd.					Signal Upgrade	150,000			150,000
	Various Locations					Capacity / Safety Improvement	625,000			625,000
Total Safety							1,075,000	-	-	1,075,000
Bridges and Culverts										
	Sparta Bridge #28	Division St. over Rogue River				Rehabilitation	275,000			275,000
	Tyrone Bridge #15	20 Mile Rd. over Walter Creek				Replacement	71,800	414,200		486,000
	Tyrone Bridge #18	20 Mile Rd. over the Rogue River				Rehabilitation	54,100	267,900		322,000
	Preventive Maintenance	Various Locations					270,000			270,000
Total Bridges and Culverts							670,900	682,100	-	1,353,000
Total Primary Projects			113.3		248.9		\$ 13,363,578	\$ 8,237,422	\$ 687,000	\$ 22,288,000

Note: Projects are subject to change.

2021 Amended Budget

Routine Maintenance

Attachment B

Primary

Description	2019 Actual	2020 Amended Budget	2021 Amended Budget
Adopt-a-Road Expenses	12,522	29,829	29,829
Bridge Preventative Maint.	-	119,318	119,318
Brush back mowing	-	238,637	238,637
Crack sealing	83,270	57,954	57,954
Drainage And Backslopes	1,215,127	893,182	893,182
Grass And Weed Control	476,214	452,613	452,613
Guard Rail & Posts	44,632	179,659	179,659
Partial Depth Mill and Fill	-	119,318	119,318
Restoration	107,617	35,796	35,796
Roadside Cleanup	77,743	89,488	89,488
Shoulder Maintenance	242,039	377,272	377,272
Spot Mill and Fill	-	157,954	157,954
Supervision	517,120	596,591	596,591
Surface Maintenance	1,939,122	1,881,363	1,881,363
Sweeping And Flushing	133,191	178,978	178,978
Trees And Shrubs	892,272	893,182	893,182
Weight Limit Signing	10,971	23,866	23,866
Total Primary	\$ 5,751,840	\$ 6,325,000	\$ 6,325,000

Local

Description	2019 Actual	2020 Amended Budget	2021 Amended Budget
Adopt-a-Road Expenses	7,023	11,317	15,294
Bridge Preventative Maint.	-	6,587	8,902
Brush back mowing	-	13,173	17,802
Crack sealing	49,101	63,173	85,374
Drainage And Backslopes	2,094,471	1,355,539	1,831,927
Dust Control	387,249	509,282	688,263
Grass And Weed Control	373,961	239,521	323,698
Guard Rail & Posts	11,320	36,587	49,445
Restoration	167,441	84,880	114,710
Roadside Cleanup	31,478	56,587	76,474
Shoulder Maintenance	151,941	182,934	247,224
Supervision	638,222	679,042	917,683
Surface Maintenance	3,036,321	2,790,210	3,770,795
Sweeping And Flushing	100,171	120,270	162,537
Trees And Shrubs	1,582,452	1,647,604	2,226,634
Weight Limit Signing	11,806	28,294	38,238
Total Local	\$ 8,642,957	\$ 7,825,000	\$ 10,575,000

2021 Amended Budget

Capital Outlay Attachment C

	<u>Unit Cost</u>	<u>2021 Budget</u>
Buildings		
Add road material storage bunkers at North		\$ 185,000
Replace 3 overhead doors at North		50,000
Upgrade electrical panels at North		50,000
Replace air handlers at South		200,000
Repair salt dome at South		110,000
Upgrade Co/No2 system at Southwest		100,000
Install metal siding on salt barn at Southwest		50,000
Scissor lift		12,000
Hi-lo		13,000
Fuel tank replacement at North		135,000
New Central Complex at Walker View		<u>1,000,000</u>
Land and Land Improvements		
Pave drive & storage area at North part 1		200,000
Pave drive & storage area at North part 2		<u>150,000</u>
Total Buildings		<u>\$ 2,255,000</u>
Plow Trucks		
Single Axle Truck		
10 Chassis	110,000	1,100,000
10 Underbody scraper	8,000	80,000
10 Wing	7,000	70,000
10 Labor to complete trucks	60,000	<u>600,000</u>
Carryover		
1 Five Axle Truck (2022)	250,000	250,000
8 Single Axle Trucks (2022)	185,000	1,480,000
8 Labor to complete single axle trucks (2021)	17,500	140,000
1 Five Axle Truck (2021)	30,000	<u>30,000</u>
Total Plow Trucks		3,750,000
Heavy Equipment		
Replacements		
2 Motor grader	305,000	610,000
4 Tractors	90,000	360,000
3 Side mower	25,000	75,000
3 Rear mower	10,000	30,000
1 Skid steer	80,000	80,000
1 Clam bucket	5,000	5,000
1 Mill	20,000	20,000
1 Utility trailer	12,000	12,000
3 Trailer - 16,000 lb	20,000	60,000
2 Trailer - 20,000 lb	25,000	50,000
1 Hot patcher	24,000	24,000
1 Durapatcher	75,000	75,000
1 Tar distributor	190,000	190,000
1 Trailer-mounted compressor	20,000	<u>20,000</u>
Additions		
1 Semi tractor	140,000	140,000
2 Rollers	35,000	70,000
1 Side mower	25,000	25,000
1 Rear mower	10,000	10,000
1 Boom arm mower	50,000	50,000
2 Pickup broom	5,000	10,000
1 Chipper	60,000	<u>60,000</u>
Carryover		
1 Loader	275,000	275,000
1 Brine trailer #2	120,000	120,000
1 Aerial lift for Sign Shop	145,000	<u>145,000</u>
Total Heavy Equipment		2,516,000
Small Equipment		
Power Tools		20,000
Shop Tools		<u>20,000</u>
Total Small Equipment		40,000
Work Trucks		
1 1 ton 4x2 SRW crew cab with utility box	35,000	35,000
2 1 ton 4x2 DRW crew cab with dump	60,000	120,000
2 1 ton 4x2 DRW crew can with flat bed	50,000	100,000
1 1 ton 4x4 SRW extended cab with plow and utility box	48,000	48,000
3 3/4 ton 4x4 extended cab with plow	41,000	123,000
1 3/4 ton 4x2 extended cab (sign shop)	30,000	30,000
1 1/2 ton 4x4 extended cab (road patrol)	36,000	36,000
2 1/2 ton 4x2 extended cab	30,000	60,000
9 1/2 ton pickup	35,000	<u>315,000</u>
Total Work Trucks		867,000
Total Equipment		<u>\$ 7,173,000</u>

2021 Amended Budget**Administration
Attachment D**

	2019	2020	2021
	Actual	Amended Budget	Amended Budget
Advertising	\$ 24,939	\$ 50,000	\$ 50,000
Depreciation	54,579	65,000	55,000
Equipment Rental	35,988	46,000	40,000
Information Technology	125,251	150,000	150,000
Insurance	24,859	80,000	80,000
Personnel Costs	1,629,385	1,900,000	2,000,000
Professional Services	216,229	205,000	215,000
Repairs and Maintenance	112,560	75,000	100,000
Supplies	130,596	110,000	150,000
Training and Travel	28,659	20,000	15,000
Utilities	134,069	149,000	150,000
Handling Charges on Materials Sold	(93,912)	(95,000)	(100,000)
Purchase Discounts	(5,188)	(5,000)	(5,000)
Total Administration	\$ 2,418,014	\$ 2,750,000	\$ 2,900,000



RECONSTRUCTION

68th Street – Cherry Valley Avenue to Thornapple River Drive (south)

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.

84th Street – Division Avenue to Eastern Avenue

Widen existing 2-lane portion to 3 lanes. Work includes earthwork, concrete curb and gutter, storm sewer, drainage, sanitary sewer (Gaines Township) HMA pavement, pavement markings and restoration. Through traffic will be detoured.

84th Street – Breton Avenue to Hanna Lake Avenue

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

100th Street – Kalamazoo Avenue to Hanna Lake 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.

7 Mile Road - Alpine Avenue to Pine Island Drive

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

13 Mile Road – Sparta east Village limit to Edgerton Avenue

Crush and shape the existing asphalt surface and place 2 courses of hot mix asphalt (HMA). Project will be completed in 2 phases; west of Pine Island Drive is phase 1 and east of Pine Island Drive is phase 2. Through traffic will be detoured.

68th Street – Division Avenue to Eastern Avenue

Cold mill existing 4-lane asphalt surface and place 2 courses of HMA. Upgrade sidewalk ramps to meet current ADA requirements. Two-way traffic will be maintained.

Fruit Ridge Avenue – 4 Mile Road to 6 Mile Road

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

Whitneyville Avenue – From north of I-96 overpass to Cascade Road

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

RESURFACING

Cascade Road – Burton Street to 28th Street

Cold mill existing 5-lane asphalt surface partial depth and place single course HMA. Milling and paving work will be phased to maintain 2-way traffic at all times.

SAFETY

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.

- **Division Avenue at 76th Street**
- **East Paris Avenue at 68th Street**
- **East Paris Avenue at Cook Valley Boulevard**

BRIDGES AND CULVERTS (PRIMARY & LOCAL)

Sparta Bridge #28 – 13 Mile Road over the Rogue River

Bridge rehabilitation project includes spot concrete box beam replacement deck waterproofing, concrete abutment repair and new HMA surface.

Spencer Bridge #8 – Rooksby Street over Black Creek

Culvert rehabilitation project to repair deteriorated portion of the existing triple corrugated metal pipe arches with reinforced concrete placed on the external portion of the galvanized metal culverts.

Tyrone Bridge #15 – 20 Mile Road over Walter Creek

Bridge replacement project to remove the existing steel girder bridge and install a precast concrete box culvert.

Tyrone Bridge #20 – 20 Mile Road over the Rogue River

Bridge superstructure replacement project to remove the existing concrete deck and steel beams and replace with galvanized steel beams and reinforced concrete deck and railing.

NON-MOTORIZED

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. **(Fall Letting)**

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.

Burton Street Non-Motorized Trail over I-96

Extend existing Non-motorized trail from Highridge Lane west to Patterson Avenue, including Pedestrian Bridge over I-96.

LOCAL ROAD CONSTRUCTION

5 Mile Road – East of Dursum Avenue to Honey Creek Avenue (Cannon)

Construct existing gravel roadway to KCRC Local road standard including 2 courses of HMA surface.

13 Mile Road – Heintzelman Avenue to Podunk Avenue (Oakfield)

Construct existing gravel roadway to KCRC Local road standard including 2 courses of HMA surface.

16 Mile Road – Pennington Avenue to Algoma Avenue (Solon)

Construct existing gravel roadway to KCRC Local road standard including 2 courses of HMA surface.

16 Mile Road – Ritchie Avenue to Shaner Avenue (Courtland & Nelson)

Construct existing gravel roadway to KCRC Local road standard including 2 courses of HMA surface.

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total	Program
						KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
	100th St.	Hanna Lake Ave. to East Paris 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	
	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
	Clyde Park Ave.**	108th St. to 100th St.	1.0	2.0	All-Season		1,040,000	260,000	1,300,000	Cat-A
Full Depth Resurface										
	68th St.	Eastern Ave. to Kalamazoo Ave.	1.0	4.0	Resurface	184,000	731,000		915,000	NH
	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
	Wolverine Blvd.	11 Mile Rd. to 12 Mile Rd.	1.0	4.0	Resurface	400,790	899,210		1,300,000	STP-U
	Crush & Shape	Various Locations	8.1	17.8	Resurface	2,000,000	-		2,000,000	
	Mill & Fill	Various Locations	8.1	17.8	Resurface	2,000,000	-		2,000,000	
Total Reconstruction			25.4	61.6		7,402,447	7,102,553	260,000	14,765,000	
Resurfacing										
	Overlays	Various Locations	7.0	15.4	Resurface	1,000,000			1,000,000	
Total Resurfacing			7.0	15.4		1,000,000	-	-	1,000,000	
Preservation										
	Surface Treatments	Various Locations	86.0	189.2	Sealcoat and Micro Surface	4,000,000			4,000,000	
	Thin Overlays		15.0	33.0		1,000,000			1,000,000	
Total Preservation			101.0	222.2		5,000,000	-	-	5,000,000	
Safety										
	Various Locations				Capacity / Safety Improvement	1,100,000			1,100,000	
Total Safety						1,100,000	-	-	1,100,000	
Bridges and Culverts										
	Ada Bridge #5	Knapp St. over the Grand River			Preservation	21,000	399,000		420,000	
	Tyrone Bridge #21	18 Mile Rd. over the Rogue River			Rehabilitation	23,150	439,850		463,000	
	Preventive Maintenance	Various Locations				1,100,000			1,100,000	
Total Bridges						1,144,150	838,850	-	1,983,000	
Total Primary Projects			133.4	299.2		\$ 15,646,597	\$ 7,941,403	\$ 260,000	\$ 23,848,000	

**Local road that would be requested to be primary after improvements

Category	Road	Limits	Lane		Improvement	Source of Funds			Project Total	Program
			Miles	Miles		KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
	100th St.	East Paris Ave. to Patterson Ave.	1.0	2.0	All-Season	\$ 419,000	\$ 931,000		\$ 1,350,000	STP-R(STL)
	84th St.	Hanna Lake Ave. to East Paris Ave.	1.0	2.0	All-Season	425,854	974,146		1,400,000	STP-U
	10 Mile Rd.	Pine Island to Algoma	2.0	4.0	All-Season	3,000,000			3,000,000	
	68th St.	Kraft Ave. to Cherry Valley Dr.	1.0	2.0	All-Season	1,500,000			1,500,000	
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	380,000	720,000		1,100,000	EDC
	Northland Dr.	13 Mile Rd. to 14 Mile Rd.	1.2	6.0	Resurface	2,400,000	936,614		1,176,614	EDC
	Crush & Shape	Various Locations	9.0	19.8	Resurface	2,000,000			2,000,000	
	Mill & Fill	Various Locations	10.0	22.0	Resurface	1,000,000			1,000,000	
Total Reconstruction			26.7	63.8		9,028,852	3,797,762	-	12,826,614	
Resurfacing										
	Overlays	Various Locations	8.0	17.6	Resurface	1,000,000			1,000,000	
Total Resurfacing			8.0	17.6		1,000,000		-	1,000,000	
Preservation										
	Surface Treatments	Various Locations	84.0	184.8	Sealcoat and Micro Surface	4,000,000			4,000,000	
	Thin Overlays		15.0	33.0		1,250,000			1,250,000	
Total Preservation			99.0	217.8		5,250,000		-	5,250,000	
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						1,250,000		-	1,250,000	
Total Primary Projects			133.7	299.2		\$ 17,778,852	\$ 3,797,762	\$ -	\$ 21,576,614	

Category	Road	Limits	Lane		Improvement	Source of Funds			Project Total	Program
			Miles	Miles		KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
	100th St.	Patterson Ave. to Kraft Ave.	1.0	2.0	All-Season	\$ 440,000	\$ 935,000		\$ 1,375,000	STP-U
	84th St.	East Paris Ave. to Patterson Ave.	1.0	2.0	All-Season	387,992	1,062,008		1,450,000	STP-U
	Wilson Ave.	76th to M-6	1.3	2.6	All-Season	1,925,000			1,925,000	
	Lincoln Lake Ave.	Belding Rd. to Strotheide St.	0.8	1.6	All-Season	224,000	896,000		1,120,000	STP-R
Full Depth Pavement										
	Crush & Shape	Various Locations	15.0	33.0	Resurface	2,500,000	1,000,000		3,500,000	STP-U
	Mill & Fill	Various Locations	15.0	33.0	Resurface	2,000,000	1,000,000		3,000,000	STP-U
Total Reconstruction			34.1	74.2		7,476,992	4,893,008	-	12,370,000	
Resurfacing										
	Overlays	Various Locations	10.0	22.0	Resurface	1,500,000			1,500,000	
Total Resurfacing			10.0	22.0		1,500,000		-	1,500,000	
Preservation										
	Surface Treatments	Various Locations	82.0	180.4	Sealcoat and Micro Surface	4,000,000			4,000,000	
	Thin Overlays		15.0	33.0		1,500,000			1,500,000	
Total Preservation			97.0	213.4		5,500,000		-	5,500,000	
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						1,250,000		-	1,250,000	
Total Primary Projects			141.1	309.6		\$ 16,976,992	\$ 4,893,008	\$ -	\$ 21,870,000	

Note: Projects are subject to change.

Category	Road	Limits	Lane		Improvement	Source of Funds			Project Total	Program
			Miles	Miles		KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
	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 Ave.	Strotheide St. to Heffron St.	1.0	2.0	All-Season	280,000	1,120,000		1,400,000	STP-R
	Myers Lake Ave.	12 Mile Rd. to 13 Mile Rd.	1.0	2.0	All-Season	500,000	1,000,000		1,500,000	
Full Depth Pavement										
	Division Ave.	76th St. to 68th St.	1.0	4.0	Resurface	183,000	717,000		900,000	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	15.0	33.0	Resurface	3,000,000	1,000,000		4,000,000	STP-U
	Mill & Fill	Various Locations	15.0	33.0	Resurface	3,000,000	1,000,000		4,000,000	STP-U
Total Reconstruction			35.8	84.4		9,020,000	6,756,000	-	15,776,000	
Resurfacing										
	Overlays	Various Locations	10.0	22.0	Resurface	1,500,000			1,500,000	
Total Resurfacing			10.0	22.0		1,500,000	-	-	1,500,000	
Preservation										
	Surface Treatments	Various Locations	82.0	180.4	Sealcoat and Micro Surface	4,000,000			4,000,000	
	Thin Overlays		15.0	33.0		1,500,000			1,500,000	
Total Preservation			97.0	213.4		5,500,000	-	-	5,500,000	
Safety										
	Various Locations				Capacity / Safety Improvement	1,250,000			1,250,000	
Total Safety						1,250,000	-	-	1,250,000	
Bridges and Culverts										
	Preventive Maintenanc	Various Locations				1,250,000			1,250,000	
Total Bridges						1,250,000	-	-	1,250,000	
Total Primary Projects			142.8	319.8		\$ 18,520,000	\$ 6,756,000	\$ -	\$ 25,276,000	