# 2023 Budget and Five-Year Improvement Program







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## Board of Road Commissioners



**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 county administrator for Kent County. Previously, he has served as deputy city administrator for the City of Kentwood, manager of operations for Grand Valley State University, manager of Howard City, and engineering programs coordinator for the City of Walker.



**David J. Morren** was appointed to the Board of the Kent County Road Commission in 2014 and has served as vice chair since 2021. Previously, Commissioner Morren served on the Kent County Board of Commissioners for 14 years, serving three years as chair 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.



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 a 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 University, 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.

## **Board of Road Commissioners**



Cynthia Porter Janes was appointed to the Board of the Kent County Road Commission in 2015 and served as vice chair from 2017 to 2019. Commissioner Janes is the architectural & engineering services director at Fishbeck 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.



Rob VerHeulen was appointed to the Board of the Kent County Road Commission in 2019 and served as vice chair in 2020. 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 35 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 organization's pavement management, performance management and geographic information systems (GIS). 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.



Re: FY 2023 Operating Budget

**Greetings Kent County Stakeholders:** 

On behalf of the Kent County Board of Road Commissioners, I would like to thank our partners – on the local, state, and federal levels - for their ongoing collaboration with KCRC to improve the transportation infrastructure within Kent County.

Furthermore, I want to recognize our staff and crews for their daily efforts in building, improving, and preserving the nearly 2,000 road miles that comprise KCRC's network. Each division's proactive team approach, focus on best practices, and attention to positive customer service aligns with our shared vision of having the premier county transportation network in Michigan. It is because of their efforts that KCRC remains at the forefront of construction, preservation, and innovation.

Strategic planning, asset management and continuous performance improvement remain at the core of our decision making. We invite you to visit kentcountyroads.net to review our strategic and long-range plans and learn more about our annual improvement targets and performance measures.

Aligned with our strategic plan is the construction of the new central complex, which is scheduled for completion this coming year. With a commitment to excellence defining the current Central Complex since 1923, the new facility at 1900 4 Mile Road will ensure the road commission has the infrastructure needed to continue this legacy for the next 100 years.

We take pride in the relationships cultivated with communities throughout Kent County and appreciate the strong support and open lines of communication shared among 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

anh E Land

Chair



**Working to Keep Kent County Moving** Since 1911

#### **WHO WE ARE**



21 TOWNSHIPS KCRC service area



**OVER** 



**OUR NETWORK** 



**NEARLY** 2,000 COUNTY ROAD MILES representing nearly 4,200 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



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.

46% Construction and Preservation ANNUAL

15% State Trunkline

4% Non-Motorized 6% Capital Dutlay

BUDGET

20%

Other Expenditures

1%

Routine Maintenance Administration







#### **MEMORANDUM**

To: Kent County Board of Road Commissioners

From: Steve Warren, Managing Director

Date: November 10, 2022

Subject: FY2023 Operating Budget

We are pleased to present the 2023 Budget and Five-Year Improvement Plan of the Kent County Road Commission (KCRC). This budget aligns with our mission to serve Kent County with a safe, reliable, and efficient road network in support of the region's multiuse transportation system. Sound financial management guides our efforts as we allocate resources in accordance with our strategic objectives, specifically to:

- Engage local, state, and federal officials in a collaborative effort to increase funding aligned with achieving KCRC's strategic objectives
- Strive for continuous improvement in all facets of KCRC operations and service delivery through proven practices and ongoing innovation
- Partner with state, municipal, and township officials to implement transportation system improvements
- Complete construction of the new Central Complex at 1900 4 Mile Road
- Maintain KCRC's leadership role on local, regional, and statewide transportation issues

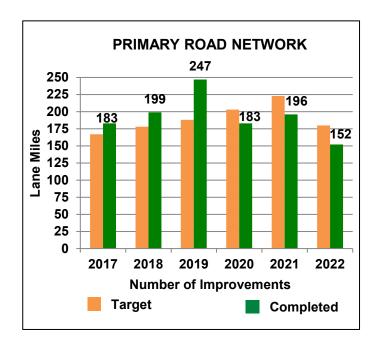
#### 2022 Review

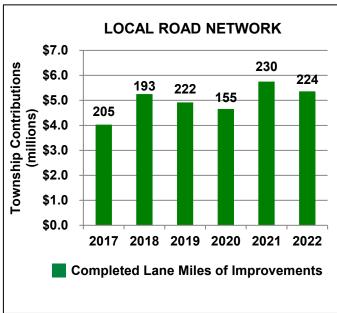
First, we want to applaud our township partners. On the local road network, KCRC's long-standing cost-share program enjoyed 100 percent participation from the 21 townships within Kent County. This resulted, once again, in increased levels of investment tailored to meet the available resources and specific needs of each community.

On the primary road network, we accomplished a total of 152 lane miles of improvements. With increased costs of materials, KCRC adjusted our "mix of fixes" approach to maximize long-term impact. Although this translated to a reduction in the number of preservation projects, it resulted in an increase in the number of reconstruction and resurfacing projects, helping us to surpass lane mile targets for both improvement categories.

#### 2022 PRIMARY ROAD LANE MILE IMPROVEMENTS

Improvement Type	Target	Completed
Reconstruction	25	39
Resurfacing	6	15
Preservation	149	98





In 2022, KCRC once again participated in multi-agency, multi-township projects to enhance efficiency across jurisdictional boundaries. Exemplifying this was KCRC's partnership with Montcalm County Road Commission, along with Spencer and Maple Valley townships, to resurface 22 Mile Road, a main roadway corridor bordering the two communities. Having the two agencies collaborate on the resurfacing made the project more cost effective. The success of that project will serve as a prototype for the joint resurfacing of 108th Street that KCRC and Allegan County plan to complete in 2023.

KCRC is also implementing its asset management plan for bridges and large culverts. With a focus on preventive maintenance, KCRC continues to work to extend the life of its bridges. KCRC is one of the few road commissions in the state having no bridge categorized as structurally deficient. Aligned with this strategy is KCRC's rehabilitation program for larger steel culverts that includes installing a concrete lining within critical portions of the culvert. This innovative approach to extending the culvert's life for a fraction of its potential replacement cost earned KCRC an IMPRESS award from the County Road Association (CRA) and has been studied by agencies across the state.

#### 2023: Looking Ahead

In accordance with KCRC's strategic objectives, we will continue a "mix of fixes" approach to pavement management. The positive cooperation and collaboration among our township, county and state partners will help us counter the challenges of reduced revenues and escalating costs to optimize available resources. The 2023 budget reflects another sizeable investment in local roads, and we anticipate making \$6.5 million available to match our townships' effort (for a combined \$13 million investment).

#### **First Major Roundabout**

The strategy that we employ for road improvement selection, which includes "the right fix, at the right time, at the right location," also applies to safety project selection. With growing evidence supporting the benefits of roundabouts, KCRC applied for, and was awarded, a Federal Highway Safety Improvement Program (HSIP) grant. These funds will support the 2023 construction of our network's first major roundabout at 84th Street and Kalamazoo Avenue.

#### Central Complex: Past, Present and Future

Since the construction of our first headquarters in 1923, KCRC has continued to adjust the location, size, and number of its facilities to accommodate the region's growing population and increased demand. The past 100 years has seen satellite garages built to avoid dead haul driving to and from KCRC's headquarters and then consolidated into four strategically placed complexes out of which fleets could more effectively deploy services to all corners of the county.

Now, KCRC must adjust once more. With more miles to maintain, equipment to house, and trucks to assemble, we need a larger site for central operations. The 29-acre location at 1900 4 Mile Road (pictured below) provides a larger, more modern complex that maximizes energy efficiency, incorporates new technologies and expands facilities for field operations, equipment repair and under-roof storage. The completion of KCRC's new Central Complex is scheduled for completion in June 2023, and we look forward to a smooth transfer of central operations.



#### **Our Partners**

As evidenced throughout this document, 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. Through our partnerships, we continue to increase investment in KCRC's road and bridge network, which directly benefits the communities and businesses we serve.

## 2022 Primary Road Improvements

#### RECONSTRUCTION

#### 100th Street - Hanna Lake Avenue to East Paris Avenue

Reconstructed to 2-lane all-season standard. Work included tree removal, earthwork, ditches, culvert replacement, HMA (hot mix asphalt) pavement, pavement markings and restoration.

#### 68th Street – Glen Hollow Drive to Hanna Lake Avenue

Widened existing 4-lane portion to 5 lanes. Work included tree removal, earthwork, concrete curb and gutter, storm sewer, drainage, concrete sidewalk Gaines Township sanitary sewer extension, HMA pavement, pavement markings and restoration.

#### Full depth pavement removal and HMA replacement:

- 4 Mile Road Coit Avenue to Plainfield Avenue (1.0 Mile)
- 6 Mile Road Alpine Avenue to Pine Island Drive (2.0 Miles)
- **68th Street –** Eastern Avenue to Kalamazoo Avenue (1.0 Mile)
- **Northland Drive –** 18 Mile Road to Ritchie Avenue (2.3 Miles)
- Northland Drive 11 Mile Road to 12 Mile Road (1.0 Mile)
- Wolverine Boulevard 10 Mile Road to 11 Mile Road (1.0 Mile)

#### **Crush and shape existing pavement and HMA replacement:**

- 19 Mile Road Bass Lake Avenue to E. County Line (0.5 Mile)
- **Belmont Avenue –** Post Drive to Pine Hill Drive (1.0 Mile)
- Fruit Ridge Avenue 16 Mile Road to 18 Mile Road (2.0 Miles)
- Lincoln Lake Avenue 18 Mile Road to Bradshaw (0.5 Mile)
- Morse Lake Avenue 60th Street to 52nd Street (1.0 Mile)

#### **RESURFACING**

- **60th Street –** Kalamazoo Avenue to Wing Avenue (2.0 Miles)
- Burton Street Kraft Avenue to west of Cascade Road (1.0 Mile)
- **Division Avenue –** West River Drive to 6 Mile Road (1.0 Mile)

#### <u>SAFETY</u>

#### 68th Street and Plaza Center Drive

Modified and upgraded the existing traffic signal, with box span configuration, LED signal heads, backplates and updated detection.

#### 100<sup>th</sup> Street and Division Avenue

Installing new traffic signal, with box span configuration, LED signal heads, backplates and detection.

#### **Burton Street and Patterson Avenue**

Modified and upgraded existing traffic signal, with box span configuration, LED signal heads, backplates and updated detection.

#### **BRIDGE AND CULVERTS**

#### Ada Bridge #5 – Knapp Street over the Grand River

Bridge preservation project included latex concrete deck patching and epoxy sealing, reinforced concrete approaches, partial clean and paint steel girders.

#### Gaines Bridge #12 – 76th Street over Schooley Drain

Culvert replacement project removed the existing wooden box culvert and installed 18 ft wide x 6 ft high precast concrete box culvert.

#### Gaines Bridge #27 – 84th Street over Schooley Drain

Culvert replacement project removed the existing concrete culvert and installed 18 ft wide x 6 ft high precast concrete box culvert.

#### Nelson Bridge #14 – 22 Mile Road over Black Creek

Culvert rehabilitation project repaired the deteriorated portion of the existing twin corrugated metal pipe arches with reinforced concrete around the galvanized metal culverts.

#### Sparta Bridge #50 – Division Avenue over the Rogue River

Concrete Pier repair and additional pile support added to north pier.

#### Spencer Bridge #22 – Lincoln Lake Avenue over Clear Creek

Culvert rehabilitation project repaired the deteriorated portion of the existing triple corrugated metal pipe arches with reinforced concrete placed on the bottom internal portion of the galvanized metal culverts.

			-		
	2021 Actual	Am	2022 ended Budget	 2023 Budget	Attachment
Revenue  Michigan Transportation Funds (MTF)	\$ 55,333,530	\$	59,074,765	\$ 61,199,208	
Federal and State Grants  Motorized	7,202,962		8,752,572	7,117,275	Α
Non-Motorized State Trunkline contract	922,247 12,417,503		440,000 15,000,000	13,000,000	
Local Government Contributions Road Projects	5,725,067		8,000,000	6,500,000	
Non-Motorized	396,303		200,000	260,000	
Services Provided Sale of Capital Assets and salvage	2,105,365 1,234,254		2,000,000 700,000	2,000,000 850,000	
Property Rental	178,307		80,000	45,000	
Refunds	793,147		85,000	-	
Donations	49,800		450,000	450,000	
Interest Bond Proceeds	159,272 -		150,000 21,998,218	150,000 -	
Total Revenue	86,517,756		116,480,556	91,121,483	
Expenditures					
Primary Roads	15,197,374		17 250 111	14 547 164	
Reconstruction Resurfacing	796,301		17,359,111 655,000	14,547,164 690,973	
Preservation	5,180,059		3,000,000	4,250,000	
Safety	2,448,029		2,951,000	4,662,027	
Bridges and Culverts Total Primary Roads	 1,307,115 24,928,878		1,655,000 25,620,111	 2,635,000 26,785,164	Α
Local Roads					
Reconstruction	8,225,476		8,200,000	10,000,000	
Resurfacing	1,242,875		4,250,000	2,000,000	
Preservation Safety	4,300,245 811,639		6,550,000 680,000	4,000,000 700,000	
Bridges and Culverts	258,152		500,000	500,000	
Total Local Roads	14,838,387		20,180,000	17,200,000	
Routine Maintenance	0.070.050		44 000 000	0.000.000	
State Primary	8,873,259 6,105,488		11,000,000 6,851,250	9,000,000 7,536,375	В
Local	10,275,748		11,733,750	 12,907,125	В
Total Routine Maintenance	25,254,494		29,585,000	29,443,500	
Winter Maintenance State	3,423,031		4,000,000	4.000.000	
Primary	2,125,029		2,300,000	3,000,000	
Local	 2,111,770		2,100,000	3,000,000	
Total Winter Maintenance	7,659,829		8,400,000	10,000,000	
Non-Motorized Equipment Operations	1,350,092 (1,835,510)		640,000 1,845,000	750,000	
Capital Outlay	(1,000,010)		1,040,000	730,000	
Buildings	8,584,400		35,153,261	967,000	С
Equipment Depreciation	5,316,193 (4,190,999)		6,137,000 (4,400,000)	6,147,500 (5,500,000)	С
Services Provided	1,180,252		1,200,000	1,200,000	
Administration Debt Service	2,907,116		3,200,000 2,564,456	3,250,000 2,317,900	D
Total Expenditures	85,993,132		130,124,828	92,561,064	
Revenues Over (Under) Expenditures	 524,624		(13,644,272)	(1,439,581)	
Fund Balance, Beginning of Year	28,752,131		29,276,755	 15,632,483	
Projected Fund Balance, End of Year	\$ 29,276,755	\$	15,632,483	\$ 14,192,902	
	 ·				

- Committed 14,192,902 Unassigned

#### 2023 Adopted Budget Attachment A - Primary Road Projects

				Lane	,	S			
Category	Road	Limits	Miles	Miles	Improvement	KCRC	Federal/State	Local	Project Total
Reconstruc	rtion								
	nsion/All-Season								
	100th St.	East Paris Ave. to Patterson Ave.	1.0	2.0	All-Season	\$ 744,000	\$ 991,000		\$ 1,735,000
	84th St.	Hanna Lake Ave. to East Paris Ave.	1.0	2.0	All-Season	534,494	1,305,506		1,840,000
	Cascade Rd.	36th St. to Whitneyville Ave.	1.0	3.0	Widening 2 to 3 lanes	479,395	1,455,605	260,000	2,195,000
	10 Mile Rd.	Pine Island to Algoma	2.0	4.0	All-Season	3,300,000			3,300,000
Full [	Depth Pavement								
	Buttrick Ave.	Thornapple River Dr. to Grand River Dr.	0.5	1.0	Resurface	115,000	245,550		360,550
	Northland Dr.	12 Mile Rd. to 14 Mile Rd.	2.2	11.0	Resurface	910,000	1,656,614		2,566,614
	Crush & Shape	Various Locations	6.0	12.0	Resurface	1,775,000			1,775,000
	Mill & Fill	Various Locations	6.0	12.0	Resurface	775,000			775,000
Total Recor	nstruction		19.7	47.0	_	8,632,889	5,654,275	260,000	14,547,164
Resurfacin	g								
	Overlays	Various Locations	6.4	14.1	Resurface	690,973			690,973
Preservation	on								
	Surface Treatments	Various Locations	44.0	96.8	Sealcoat and Micro Surface	3,000,000			3,000,000
	Thin Overlays	_	10.5	23.1	_	1,250,000			1,250,000
Total Prese	rvation		54.5	119.9	_	4,250,000	-	-	4,250,000
Safety									
_	84th St. & Kalamazoo Ave.	Intersection			Roundabout	738,054	933,000		1,671,054
	Various Locations				Capacity / Safety Improvement	990,973			990,973
Total Safety	1					1,729,027	933,000	-	2,662,027
Bridges an	d Culverts								
_	Tyrone Bridge #21	18 Mile Rd. over the Rogue River			Rehabilitation	480,000	530,000		1,010,000
	Preventive Maintenance	Various Locations				1,625,000			1,625,000
Total Bridge	es					2,105,000	530,000	-	2,635,000
Total Prima	ary Projects	_	80.6	181.0	_	\$ 17,407,889	\$ 7,117,275	\$ 260,000	\$ 24,785,164

#### 2023 Adopted Budget Attachment B - Routine Maintenance

**Primary** 

		FIIIII	aiy		
Description	20:		2023		
Description	Act		Am	ended Budget	 Budget
Adopt-a-Road Expenses		16,181		10,000	11,000
Crack sealing		204,567		150,000	165,000
Drainage And Backslopes	1	,350,595		1,530,000	1,683,000
Grass And Weed Control		399,748		450,000	495,000
Guard Rail & Posts		69,379		80,000	88,000
Other routine maintenance		6,497		5,000	5,500
Restoration		43,409		50,000	55,000
Roadside Cleanup		125,419		86,250	94,875
Shoulder Maintenance		421,815		515,000	566,500
Supervision		587,593		625,000	687,500
Surface Maintenance	1	,208,987		1,760,000	1,936,000
Sweeping And Flushing		160,755		125,000	137,500
Trees And Shrubs	1	,690,826		1,450,000	1,595,000
Weight Limit Signing		16,502		15,000	 16,500
Total Primary	\$ 6	,302,272	\$	6,851,250	\$ 7,536,375

Local

	LUC	<u> </u>		
	2021	2022	2023	
Description	Actual	Am	nended Budget	 Budget
Adopt-a-Road Expenses	10,074		8,750	9,625
Crack sealing	92,608		100,000	110,000
Drainage And Backslopes	2,687,664		2,880,000	3,168,000
Dust Control	418,736		425,000	467,500
Grass And Weed Control	363,454		450,000	495,000
Guard Rail & Posts	25,709		40,000	44,000
Other routine maintenance	52,658		20,000	22,000
Restoration	242,240		275,000	302,500
Roadside Cleanup	30,956		35,000	38,500
Shoulder Maintenance	347,212		375,000	412,500
Supervision	786,996		900,000	990,000
Surface Maintenance	3,375,761		3,700,000	4,070,000
Sweeping And Flushing	10,678		10,000	11,000
Trees And Shrubs	2,163,520		2,500,000	2,750,000
Weight Limit Signing	 13,409		15,000	 16,500
Total Local	\$ 10,621,673	\$	11,733,750	\$ 12,907,125

#### 2023 Adopted Budget Attachment C - Capital Outlay

Buildings	Unit Cost	2023 Budget
Remove underground storage tanks at Central	<u> </u>	\$ 50,000
Replace overhead doors at North Upgrade electrical panels at North		35,000 20,000
Upgrade lighting at North		30,000
Replace AC units at South Parking lot pavement replacement at Southwest		120,000 50,000
Wash and paint garage at Southwest		70,000
Clean, caulk and seal exterior at Southwest		80,000
New warehouse and blade pit at Southwest Replace windows at Southwest		500,000 12,000
Total Buildings		\$ 967,000
Plow Trucks		
Five Axle Truck 1 Chassis, hydraulics	220,000	220,000
1 Live bottom box	75,000	75,000
1 Underbody scraper 1 Labor	12,500 40,000	12,500 40,000
i Laboi	40,000	40,000
Single Axle Trucks (2024)	102.000	1 920 000
10 Chassis, hydraulics 10 Dump box	182,000 30,000	1,820,000 300,000
10 Underbody scraper	12,500	125,000
10 Wing 10 Labor to complete trucks	10,000 60,000	100,000 600,000
		·
Box with conveyor     Under tailgate spreader	55,000 7,000	55,000 21,000
Total Plow Trucks	,,,,,,	3,368,500
Heavy Equipment		
Replacements		
1 Sign shop bucket truck 1 Loader	204,000 400,000	204,000 400,000
Motor grader - roller attachment	50,000	50,000
2 Tractors	96,000	192,000
Side mower attachment     Rear mower attachment	15,000 15,000	30,000 30,000
2 Boom arm mower attachment	60,000	120,000
1 Skytrack / Tella-handler 1 Mini excavator - tilt bucket	100,000 7,000	100,000 7,000
1 Track loader	90,000	90,000
2 Pickup broom	6,000	12,000 15,000
1 Brush hog 1 Utility trailer	15,000 30,000	30,000
1 20,000 lb trailer	35,000	35,000
1 Hot Patcher 1 Chipper	65,000 125,000	65,000 125,000
1 Push-off broom	75,000	75,000
Total Heavy Equipment		1,580,000
Small Equipment		
Power Tools Shop Tools		25,000 30,000
Survey Equipment		18,000
Total Small Equipment		73,000
Work Trucks		
2 1 ton truck SRW, crew cab	44,500	89,000
3 1 ton truck DRW, reg. cab, dump 1 1 ton truck SRW, crew cab, 4x4, 6.5 box, plow	73,000 40,000	219,000 40,000
1 1 ton truck DRW, reg. cab, 4x4, dump	60,000	60,000
1 3/4 ton truck, ext. cab, 4x4 1 1/2 ton truck, ext. cab, 4x4 (road patrol)	50,000 45,000	50,000 45,000
1 1/2 ton truck, ext. cab, 4x4 (survey)	45,000	45,000
2 Vans 7 1/2 ton truck, ext. cab, 4x2	53,500 36,500	107,000 255,500
3 1/2 ton truck, 4x4	50,500	255,500 151,500
2 Cars	32,000	64,000
		1,126,000
Total Equipment		\$ 6,147,500

	2021		2022	2023
	Actual	Ame	ended Budget	Budget
Advertising	\$ 8,852	\$	20,000	\$ 20,000
Depreciation	55,297		60,000	55,000
Equipment Rental	48,158		40,000	50,000
Information Technology	153,697		100,000	250,000
Insurance	308,186		415,000	100,000
Personnel Costs	2,013,230		2,000,000	2,200,000
Professional Services	138,155		200,000	215,000
Repairs and Maintenance	113,985		120,000	100,000
Supplies	195,565		200,000	175,000
Training and Travel	4,958		20,000	50,000
Utilities	120,718		125,000	140,000
Handling Charges on Materials Sold	(76,213)		(95,000)	(100,000)
Purchase Discounts	(5,392)		(5,000)	 (5,000)
Total Administration	\$ 3,079,196	\$	3,200,000	\$ 3,250,000

## **2023 Primary Road Improvements**

#### **RECONSTRUCTION**

#### 100th Street - East Paris Avenue to Patterson Avenue

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

#### 84th Street - Hanna Lake Avenue to East Paris Avenue

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

#### Cascade Road – 36<sup>th</sup> Street to Whitneyville Avenue

Widen existing 2-lane roadway to 3 lanes. Work includes earthwork, concrete pavement removal, concrete curb and gutter, storm sewer, drainage, HMA pavement, pavement markings and restoration. Through traffic will be detoured.

#### 10 Mile Road - Pine Island Drive to Algoma Avenue

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

#### **Buttrick Avenue – Grand River Drive to Thornapple River Drive**

Full Depth Cold mill existing 2-lane asphalt surface and place 2 courses of HMA. Through traffic will be detoured.

#### Northland Drive - 12 Mile Road to 14 Mile Road

Full Depth Cold mill existing 5-lane asphalt surface and three courses of HMA. Milling and paving work will be phased to always maintain 2-way traffic.

#### Full depth pavement removal and HMA replacement:

(Through traffic will be detoured)

- Division Avenue 6 Mile Road to 7 Mile Road
- Robinson Road Cascade Road to Fulton Street

#### **Crush and shape existing pavement and HMA replacement:**

(Through traffic will be detoured)

- 84th Street Wingier Avenue to Freeport Avenue
- Honey Creek Avenue 3 Mile Road to 5 Mile Road
- Parnell Avenue/Settlewood Drive M-21 (Fulton Street) to Foremen Street

#### **SAFETY**

#### 84th Street and Kalamazoo Avenue Roundabout

Construct single lane Roundabout with concrete curb and gutter, 8-foot concrete sidewalk, asphalt paving, drainage, street lighting and restoration. Work will be phased and through traffic will be detoured.

#### 4 Mile Road - west of Bird Avenue to East Beltline Avenue

Widening and resurfacing to provide turn lane, commercial driveway upgrades and non-motorized trail.

#### **Division Street and Main Street**

Widening and realignment of existing intersection to provide turn lanes and larger turning radii for future traffic signal upgrade project. 2-way traffic will be maintained.

#### Courtland Drive at Wolverine Boulevard

Widening to provide a right-turn lane for west bound Courtland to northbound/southbound Wolverine traffic. 2-way traffic will be maintained.

#### **BRIDGE AND CULVERTS**

#### Tyrone Bridge #21 - 18 Mile Rd over the Rogue River

Bridge superstructure replacement project to remove the existing concrete deck and steel beams, construct new abutments and replace with galvanized steel beams and reinforced concrete deck and railing, approach work, guardrail and restoration. Traffic will be detoured.

#### Oakfield Bridge #9 - McClain Avenue over Chain of Lakes

Culvert replacement project removing existing Twin Galvanized steel pipe arch install in-kind twin galvanized steel pipe arches with protective coating. Traffic will be detoured

## Five-Year Improvement Program 2023 Primary Road Projects

				Lane		5	Source of Funds			
Category	Road	Limits	Miles	Miles	Improvement	KCRC	Federal/State	Local	Project Total	Program
Reconstruc	tion									
	nsion/All-Season									
(A)	100th St.	East Paris Ave. to Patterson Ave.	1.0	2.0	All-Season	\$ 444,000	\$ 1,291,000		\$ 1,735,000	STP-R
(B)	84th St.	Hanna Lake Ave. to East Paris Ave.	1.0	2.0	All-Season	534,494	1,305,506		1,840,000	STP-U
. ,	Cascade Rd.	36th St. to Whitneyville Ave.	1.0	3.0	Widening 2 to 3 lanes	479,395	1,455,605	260,000	2,195,000	EDC
	10 Mile Rd.	Pine Island to Algoma	2.0	4.0	All-Season	3,300,000		1,500,000	4,800,000	
(C)	Clyde Park Ave.	108th St. to 100th St.	1.0	2.0	All-Season		800,000	900,000	1,700,000	Cat-A
Full [	Depth Pavement									
	Buttrick Ave.	Thornapple River Dr. to Grand River Dr.	0.5	1.0	Resurface	115,000	245,550		360,550	STP-U
(D)	Northland Dr.	12 Mile Rd. to 14 Mile Rd.	2.2	11.0	Resurface	560,000	2,006,614		2,566,614	EDC
	Crush & Shape	Various Locations	5.0		Resurface	1,775,000			1,775,000	
	Mill & Fill	Various Locations	2.5		Resurface	775,000			775,000	_
Total Recon	struction		16.2	40.0		7,982,889	7,104,275	2,660,000	17,747,164	
Resurfacing	9									
	Overlays	Various Locations	4.0		Resurface	690,973			690,973	
Total Resurf	acing		4.0	8.8		690,973	-	-	690,973	
Preservatio	n									
	Surface Treatments	Various Locations	44.0		Sealcoat and Micro Surface	3,000,000			3,000,000	
	Thin Overlays		10.5	23.1		1,250,000			1,250,000	_
Total Preser	vation		54.5	119.9		4,250,000	-	-	4,250,000	
Safety										
	84th St. & Kalamazoo Ave.	Intersection (Roundabout)			Roundabout	738,054	933,000		1,671,054	
	Various Locations				Capacity / Safety Improvement	990,973			990,973	
Total Safety						1,729,027	933,000	-	2,662,027	
Bridges and										
	Gaines Bridge #27	84th St over Schooley Drain				250,000			250,000	
	Tyrone Bridge #21	18 Mile Rd. over the Rogue River			Rehabilitation	317,600	782,400		1,100,000	
	Preventive Maintenance	Various Locations				1,285,000			1,285,000	
Total Bridge	s and Culverts					1,852,600	782,400	-	2,635,000	
Total Prima	ry Road Projects		74.7	168.7	=	\$ 16,505,489	\$ 8,819,675	\$ 2,660,000	\$ 27,985,164	=

<sup>(</sup>A) = \$300,000 Purchased from Cass CRC

<sup>(</sup>B) = Obligated in 2022 to be built 2023

<sup>(</sup>C) = Pending Grant Funding

<sup>(</sup>D) = \$350,000 Purchased from Cass CRC

#### **Five Year Improvement Program** 2024 Primary Road Projects

		Limits		Lane			Source of Funds			
Category	Road		Miles	Miles	Improvement	KCRC	Federal/State	Local	Project Total	Program
Reconstru	ection									
	pansion/All-Season									
	68th St.	Thornapple River Dr. S to Whitneyville Ave.	1.0	2.0	All-Season	\$ 1,600,000			\$ 1.600.000	
	100th St.	Patterson Ave. to Kraft Ave.	1.0		All-Season	589,000	1,011,000		1,600,000	
(Δ)	84th St.	East Paris Ave. to Patterson Ave.	1.0		All-Season	574,705	1,025,295		1,600,000	
(* 4)	84th St.	Kraft Ave to Cherry Valley Ave	1.0		All-Season	424,705	1,025,295		1,450,000	011 0
Full	Depth Pavement									
	60th St	Broadmoor Ave to Thornapple River Dr	2.5	5.0		200,000	800,000		1,000,000	STP-U
(B)	West River Dr	Lamoreaux Dr to Pine Island Dr	0.95	4.8		261,000	739,000		1,000,000	STP-U
` ,	Leffingwell Ave	City Limits to Knapp St	0.5	1.5		73,225	176,775		250,000	STP-U
	60th St	Eastern Ave to Kalamazoo Ave	1.0	4.0		220,000	880,000		1,100,000	EDC
	Crush & Shape	Various Locations	7.0	15.4	Resurface	2,250,000	, -		2,250,000	
	Mill & Fill	Various Locations	6.0	13.2	Resurface	2,000,000	200,000		2,200,000	STP-U
Total Reco	onstruction		22.0	50.9	-	8,192,635	5,857,365	-	14,050,000	
Resurfacii	ng									
	Overlays	Various Locations	8.5	18.7	Resurface	1,500,000			1,500,000	
Total Resu	ırfacing		8.5	18.7	-	1,500,000	-	-	1,500,000	<del>-</del> '
Preservati	ion									
	Surface Treatments	Various Locations	55.0	121.0	Sealcoat and Micro Surface	4,000,000			4,000,000	
	Thin Overlays		12.0	26.4		1,500,000			1,500,000	
Total Prese	ervation		67.0	147.4	_	5,500,000	-	-	5,500,000	
Safety										
	76th St	at Broadmoor Ave	0.2		Turn Lanes	65,049	260,193		325,242	
	Cherry Valley Ave	at Broadmoor Ave	0.2		Turn Lanes	65,049	260,193		325,242	
	Various Locations				Capacity / Safety Improvement	1,250,000			1,250,000	
Total Safet	ty					1,380,098	520,386	-	1,900,484	
Bridges aı	nd Culverts									
	Ver #21	Fallasburg Covered Bridge			Preservation	20,000	180,000		200,000	
	GR #16	Crahen Ave over GR Eastern RR			Rehabilitation	53,000	1,007,000		1,060,000	
	Preventive Maintenance	Various Locations			<u>-</u>	2,000,000			2,000,000	_
Γotal Bridg	es and Culverts					2,073,000	1,187,000	-	3,260,000	
Non-Moto		100.16					4	4 00 4 = :=	0.000.000	T4.D
	Crahen Valley Trail	Leonard St to Knapp Ct			HMA Trail		1,474,985	1,601,547	3,076,532	_IAP
Γotal Prim	ary Road Projects		97.5	217.0		\$ 18,645,733	\$ 9,039,736	\$ 1,601,547	\$ 29,287,016	

<sup>(</sup>A) = Obligated in 2023 Built in 2024 (B) = \$366,000 Fed \$ to be received 2024 and \$373,000 in 2025

## Five-Year Improvement Program 2025 Primary Road Projects

				Lane			So	urce of Funds			
Category	Road	Limits	Miles	Miles	Improvement		KCRC	Federal/State	Local	Project Total	Program
Reconstruc											
Expa	nsion/All-Season 68th St.	Kraft Ave. to Cherry Valley Dr.	1.0	2.0	All-Season	\$	439,350	\$ 1,060,650		\$ 1,500,000	STD II
	84th St.	Patterson Ave. to Kraft Ave	1.0 1.0		All-Season	Ф	1,125,000	375,000		1,500,000	
	Lincoln Lake Ave.	Belding Rd. to Strotheide St.	0.8		All-Season		369,000	1,031,000			STP-R(AC)
(A)	Lincoln Lake Ave.	Strotheide St. to Heffron St.	1.0		All-Season		500,000	1,200,000		1,700,000	
(A)	LINCOIN LAKE AVE.	Strotheide St. to Heilion St.	1.0	2.0	All-Season		300,000	1,200,000		1,700,000	311 -IX
Full 0	Depth Pavement										
	Patterson Ave.	M-37 to Burton St	4.1	20.4	Spot Resurface - Concrete		184,520	738,000		922,520	NHPP
	Forest Hill Ave.	Hall St to Cascade Rd	0.4		Resurface		120,000	480,000		600.000	
	Northland Dr.	M-57 to Indian Lakes Rd.	1.3	3.9	Resurface		220,000	880,000		1,100,000	EDC
	Crush & Shape	Various Locations	10.0	22.0	Resurface		2,000,000	,		2,000,000	
	Mill & Fill	Various Locations	10.0	22.0	Resurface		2,000,000			2,000,000	STP-U
Total Recon	struction		29.5	77.9	-		6,957,870	5,764,650	-	12,722,520	•
Resurfacing	g										
	Overlays	Various Locations	8.5	18.7	Resurface		1,500,000			1,500,000	
Total Resurf	facing		8.5	18.7	-		1,500,000	-	-	1,500,000	
Preservatio											
	Surface Treatments	Various Locations	52.0		Sealcoat and Micro Surface		4,000,000			4,000,000	
	Thin Overlays		11.0	24.2	_		1,500,000			1,500,000	
Total Preser	vation		63.0	138.6			5,500,000	-	-	5,500,000	
Safety	Mariana I aratiana				0		4.050.000			4.050.000	
Tatal Cafati	Various Locations				Capacity / Safety Improvement		1,250,000			1,250,000	
Total Safety							1,250,000	-	-	1,250,000	
Bridges and	d Culverts Preventive Maintenance	Various Locations					2,000,000			2,000,000	
Total Bridge	s and Culverts	various Locations					2,000,000	-	-	2,000,000	•
Non-Motori	zed										
	4-Mile Rd	Hachmuth to Yorkland			Sidewalk			119,000	51,000	170,000	TAP
	Argo Ave	Hall St to Cascade Rd			Sidewalk			125,790	,	179,700	
	68th St	Kraft Ave to .4 miles east			Trail			140,000		200,000	
Total Non-M							-	384,790	164,910	549,700	•
Total Prima	ry Road Projects		101.0	235.2	=	\$	17,207,870	\$ 6,149,440	\$ 164,910	\$ 23,522,220	

(A) = Advance Construct receive \$ in 2026

## Five-Year Improvement Program 2026 Primary Road Projects

				Lane			Sou	ırce				
Category	Road	Limits	Miles	Miles	Improvement		KCRC	Fed	deral/State	Local	Project Total	Program
Reconstruct	tion											
	sion/All-Season											
Ехрап	84th St.	Kraft Ave to Cherry Valley Ave	1.0	3.0	All-Season	\$	424,705	\$	1,025,295		\$ 1,450,000	STP-U
(A)	Lincoln Lake Ave	Heffron St to Hart	0.8		All-Season	•	1,350,000	*	.,,		1,350,000	
( )	Myers Lake Ave.	12 Mile Rd. to 14 Mile Rd.	2.0	4.0	All-Season		652,219		2,768,000			STP-U(Flex)
Full De	epth Pavement											
	Division Ave	76th St to 68th St	1.0	5.0	Resurface		200,000		800,000		1,000,000	NHPP
	Forest Hill Ave.	Ada Dr. to Fulton St.(M-21)	1.1	3.3	Resurface		180,000		720,000		900,000	EDC
	10 Mile Rd.	E. of Belmont Bypass to Childsdale Ave.	1.5	6.0	Resurface		240,000		960,000		1,200,000	EDC
	Crush & Shape	Various Locations	10.0	22.0	Resurface		2,000,000				2,000,000	STP-U
	Mill & Fill	Various Locations	10.0		Resurface		2,000,000				2,000,000	STP-U
Total Recons	struction		27.4	66.9	_		7,046,924		6,273,295	-	13,320,219	_
Resurfacing	l											
	Overlays	Various Locations	8.5	18.7	Resurface		1,500,000				1,500,000	
Total Resurfa	acing		8.5	18.7	<del>-</del>		1,500,000		-	-	1,500,000	=
Preservation												
	Surface Treatments	Various Locations	49.0		Sealcoat and Micro Surface		4,000,000				4,000,000	
	Thin Overlays		4.5	9.9	_		500,000				500,000	_
Total Preserv	/ation		53.5	117.7			4,500,000		-	-	4,500,000	
Safety					0 " (0 ( ) )						0.000.000	
T	Various Locations				Capacity / Safety Improvement	_	2,000,000				2,000,000	_
Total Safety							2,000,000		-	-	2,000,000	
Bridges and		Mariana Lagations					2 000 000				2 000 000	
Total Bridges	Preventive Maintenance and Culverts	various Locations				_	2,000,000 2,000,000				2,000,000 2,000,000	_
Total Bridges	and Guiverts						2,000,000		-	-	2,000,000	
Total Primar	y Road Projects		89.4	203.3	=	\$ 1	7,046,924	\$	6,273,295	\$ -	\$ 23,320,219	=

(A) = Advance Construct receive \$ in 2026

## Five-Year Improvement Program 2027 Primary Road Projects

				Lane		Source of Funds				
Category	Road	Limits	Miles	Miles	Improvement	KCRC	Federal/State	Local	Project Total	Program
Reconstruction	on on/All-Season									
84th St.		Cherry Valley Ave to Thornapple River	1.0	2.0	All-Season	520,000	1,280,000		1,800,000	STP-U
Linc	coln Lake Ave	Hart St to Beardslee St	1.3	2.6	All-Season	1,100,000	1,100,000		2,200,000	
Full Dept	th Pavement									
Crus	sh & Shape	Various Locations	10.0	22.0	Resurface	2,000,000	2,000,000		4,000,000	STP-U
	& Fill	Various Locations	10.0	22.0		2,000,000	2,000,000		4,000,000	
Total Reconstruction			22.3	48.6	_	5,620,000	6,380,000	-	40.000.000	
Resurfacing										
Ove	erlays	Various Locations	10.0		Resurface	1,500,000			1,500,000	
Total Resurfac	cing		10.0	22.0	_	1,500,000	-	-	1,500,000	
Preservation										
	face Treatments	Various Locations	46.0		Sealcoat and Micro Surface	4,000,000			4,000,000	
	n Overlays		10.0	22.0	_	1,500,000			1,500,000	
Total Preserva	ation		56.0	123.2		5,500,000	-	-	5,500,000	
Safety										
	ious Locations				Capacity / Safety Improvement	1,250,000			1,250,000	_
Total Safety						1,250,000	-	-	1,250,000	
Bridges and (	Culverts									
	ventive Maintenance	Various Locations				2,000,000			2,000,000	_
Total Bridges	and Culverts					2,000,000	-	-	2,000,000	
Total Primary	Road Projects		88.3	193.8		\$ 15,870,000	\$ 6,380,000	\$ -	\$ 22,250,000	