

2022 Budget and Five-Year Improvement Plan



**Kent County
Road Commission**





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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, 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 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.



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 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.



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.



Robert 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 34 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. 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

March 1, 2022

Re: FY 2022 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.

The Board further wants 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 challenges embody 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. Thank you to all of our stakeholders who participated in last year's survey that helped guide an update to our strategic plan; we greatly appreciate you sharing your thoughts.

Aligned with our strategic plan is the construction of the new central complex, which will near completion this coming fiscal year. This monumental step will ensure the Road Commission has the necessary infrastructure required to continue providing high-quality services for the next 100 years.

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,

Mark E. Rambo
Chairperson



Kent County Road Commission

Working to Keep
Kent County Moving

Since 1911

WHO WE ARE



2ND LARGEST
road commission
in Michigan

21 TOWNSHIPS
KCRC service area

660,000+
RESIDENTS

OVER
260
EMPLOYEES

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

OUR NETWORK



OVER 160
BRIDGES

100% rated in
good/fair condition

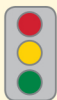
NEARLY
2,000
COUNTY
ROAD MILES
representing nearly
4,200 lane miles



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:

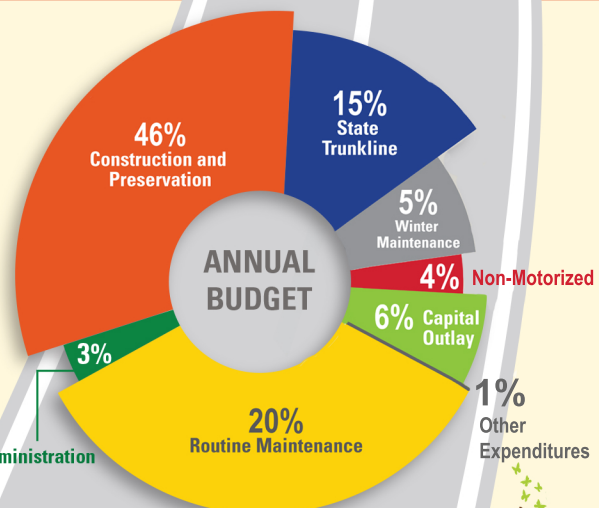
Organizational objectives
drive performance measures; Long Range Plan translates
organization's vision into action.



Collaboration and Coordination:

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

Administration





Kent County Road Commission

MEMORANDUM

To: Kent County Board of Road Commissioners

From: Steve Warren, Managing Director

Date: March 1, 2022

Subject: 2022 Operating Budget

We are pleased to present the 2022 Budget and Five-Year Improvement Plan of the Kent County Road Commission (KCRC).

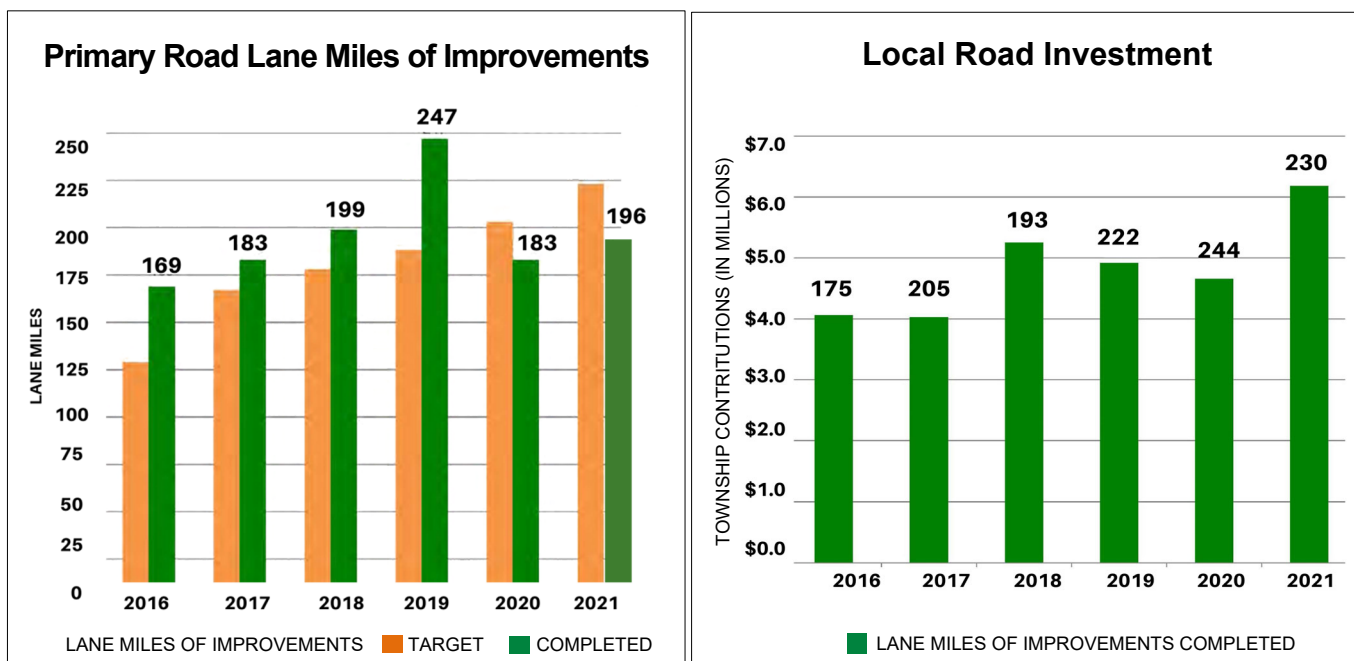
With this budget, we continue to make progress toward achieving the following strategic objectives:

- 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
- Replace large trucks to maintain an efficient and effective fleet
- Continue construction of the New Central Complex at the Walker View site

2021 Review

The tremendous teamwork and collaboration demonstrated across the organization allowed KCRC to sustain high levels of service amid the ongoing challenges that COVID-19 continued to present in 2021. Our focus on maximizing resources while maintaining safe work environments culminated in a total of 426 lane miles of improvements being completed across the primary and local road networks.

On the primary road network, we surpassed our targets for reconstruction and resurfacing, accomplishing more lane miles of longer-term fixes. 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.



2022: Looking Ahead

Much has been written and speculated about the recently enacted federal surface transportation program, better known as the “Infrastructure Investment and Jobs Act (IIJA).” The IIJA is a \$1.2 trillion bill that includes additional investment for highways, bridges, public transportation, water, energy, and broadband infrastructure. And while this, indeed, is a large sum, I do not foresee the anticipated increase designated for local road agencies to have the kind of transformational impact on KCRC’s network and levels of service that one may assume.

Most of the funding for roads and bridges in the IIJA is, in fact, the reauthorization of funding designated under the traditional federal transportation program. Of the \$2 billion per year allocated to Michigan through 2026, the actual annual increase equates to about \$330 million. Federal funds are allocated across the state by formula with MDOT receiving 75% of federal funds and the remaining 25% being distributed among county road agencies, cities, and villages.

Furthermore, of KCRC’s total road network of 1,975 miles, federal grant funding can only be used on a designated 655 miles of our Primary road network, leaving the remaining 1,320 network miles (including the Local road system) ineligible to benefit.

KCRC is waiting to see how much additional federal funding will trickle down from the State to our area, and we should know more in the coming months.

While the additional federal aid over the next five years is much appreciated, it does not provide a comprehensive revenue solution that is needed to achieve KCRC’s long-range goals. Instead, we must continue to work with our state legislators to advocate for a funding solution that allows us to achieve our strategic objectives aligned with preserving and maintaining our entire road network and the other services we perform.

New Central Complex

KCRC broke ground at the site of the New Central Complex, located at 1900 4 Mile NW, in March 2021, and work is steadily progressing. We are very proud of the project's assembled team led by Hobbs+Black Architects, overseeing the project's design, and Owen Ames Kimball, managing the two-phase construction.

Phase I work is substantially complete, including construction of the vehicle wash building, cold/warm storage building and salt barn.

Phase II work is advancing and focuses on the maintenance garage, administrative building, and fuel island. The garage's foundation is currently being installed with concrete pours occurring multiple times a week. The administration building basement excavation has also begun and underground utility work continues from south to north, as weather allows.

In June 2021, the Grand Rapids City Commission voted to exercise the option to purchase our current Central Complex property at 1500 Scribner Avenue. The agreement allows KCRC to remain at the Scribner site into 2023, which provides us ample time and flexibility to complete construction (Phase 1 and 2) at the New Central Complex and efficiently transfer operations from one site to the other.



Rendering: Hobbs+Black Architects

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. 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 – Cherry Valley Avenue to Thornapple River Drive (south)

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

84th Street – Division Avenue to Eastern Avenue

Widened existing 2-lane portion to 3 lanes. Work included earthwork, concrete curb and gutter, storm sewer, drainage, sanitary sewer (Gaines Township) HMA pavement, pavement markings and restoration.

84th Street – Breton Avenue to Hanna Lake Avenue

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

100th Street – Kalamazoo Avenue to Hanna Lake Avenue

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

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

- **7 Mile Road** – Alpine Avenue to Pine Island Drive
- **13 Mile Road** – Sparta Village E. limit to Edgerton Avenue
- **Northland Drive** – from north of Ritchie Avenue to Lake Street
- **Whitneyville Avenue** – from north of I-96 overpass to Cascade Road

Crush and shape existing pavement and HMA replacement:

- **68th Street** – Division Avenue to Eastern Avenue
- **Alden Nash Avenue** – Fulton Street (M-21) to Foreman Street
- **Fruit Ridge Avenue** – 4 Mile Road to 6 Mile Road

RESURFACING

- **68th Street** – 200 feet east of Kalamazoo Avenue to Plaza Center Avenue
- **68th Street** – east of Patterson Avenue to Broadmoor Avenue (M-37)
- **Burton Street** – Spaulding Avenue to Kraft Avenue
- **Cascade Road** – Burton Street to 28th Street

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.

- **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**

BRIDGES AND CULVERTS

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

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

Spencer Bridge #8 – Rooksby Street over Black Creek

Culvert rehabilitation project repaired portion of the existing triple 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 removed the existing steel girder bridge and installed a precast concrete box culvert with per-cast concrete wingwalls.

Tyrone Bridge #18 – 20 Mile Road over the Rogue River

Bridge superstructure replacement project included removal of the existing concrete deck and steel beams and replaced with galvanized steel beams and reinforced concrete deck and new steel beam bridge 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.

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

2022 Amended Budget
Appropriation Act

	2020 Actual	2021 Amended Budget	2022 Amended Budget	Attachment
Revenue				
Michigan Transportation Funds (MTF)	\$ 51,644,513	\$ 56,082,993	\$ 57,645,654	
State General Fund				
Surplus Appropriation	-	-	-	
Additional Appropriation	-	-	-	
Federal and State Grants				
Motorized	5,078,756	9,007,422	9,485,573	A
Non-Motorized	1,730,978	1,165,000	440,000	
State Trunkline contract	12,332,570	13,000,000	11,000,000	
Local Government Contributions				
Road Projects	4,725,852	9,383,500	8,000,000	
Non-Motorized	1,064,280	935,000	200,000	
Services Provided	1,332,682	1,300,000	2,000,000	
Sale of Capital Assets and salvage	168,002	1,050,000	500,000	
Property Rental	165,535	150,000	150,000	
Interest	412,537	250,000	150,000	
Total Revenue	78,655,705	92,323,915	89,571,227	
Expenditures				
Primary Roads				
Reconstruction	12,609,467	16,860,000	15,640,000	
Resurfacing	953,119	800,000	780,000	
Preservation	4,415,675	4,000,000	3,000,000	
Safety	3,159,171	2,625,000	2,951,000	
Bridges and Culverts	1,690,868	1,503,000	2,338,000	
Total Primary Roads	22,828,300	25,788,000	24,709,000	A
Local Roads				
Reconstruction	8,603,703	13,000,000	13,290,000	
Resurfacing	1,009,443	1,850,000	1,710,000	
Preservation	2,738,835	3,643,000	4,000,000	
Safety	517,398	800,000	680,000	
Bridges and Culverts	1,525,422	400,000	500,000	
Total Local Roads	14,394,802	19,693,000	20,180,000	
Routine Maintenance				
State	8,849,553	9,500,000	7,000,000	
Primary	5,673,301	6,525,000	6,851,250	B
Local	11,064,278	11,175,000	11,733,750	B
Total Routine Maintenance	25,587,132	27,200,000	25,585,000	
Winter Maintenance				
State	3,451,336	3,500,000	4,000,000	
Primary	2,165,374	2,190,000	3,000,000	
Local	2,020,149	2,190,000	3,000,000	
Total Winter Maintenance	7,636,859	7,880,000	10,000,000	
Non-Motorized	3,015,427	2,100,000	640,000	
Equipment Operations	(519,345)	750,000	500,000	
Capital Outlay				
Buildings	758,135	8,985,000	5,699,500	C
Equipment	4,472,070	6,928,000	6,177,000	C
Depreciation	(4,030,186)	(4,300,000)	(4,400,000)	
Services Provided	1,062,682	1,000,000	1,000,000	
Administration	2,724,336	2,861,817	3,000,000	D
Contingency	-	-	-	
Total Expenditures	77,930,212	98,885,817	93,090,500	
Revenues Over (Under) Expenditures	725,493	(6,561,902)	(3,519,273)	
Fund Balance, Beginning of Year	28,026,645	28,752,138	28,748,368	
Projected Fund Balance, End of Year	<u>\$ 28,752,138</u>	<u>\$ 22,190,236</u>	<u>\$ 25,229,095</u>	

2022 Amended Budget
Attachment A
Primary Road Projects

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total
						KCRC	Federal/State	Local	
Reconstruction									
	Expansion/All-Season								
	100th St.	Hanna Lake Ave. to East Paris Ave.	1.0	2.0	All-Season	\$ 572,000	\$ 913,000		\$ 1,485,000
	68th St.	Plaster Creek to Hanna Lake Ave.	0.6	3.0	Widening 4 to 5 lanes	450,000	1,200,000		1,650,000
	Cascade Rd.	36th St. to Whitneyville Ave.	0.8	2.4	Widening 2 to 3 lanes	430,000	1,120,000		1,550,000
	Full Depth Pavement								
	68th St.	Eastern Ave. to Kalamazoo Ave.	1.0	4.0	Resurface	254,000	731,000		985,000
	4 Mile Rd.	Coit Ave. to Plainfield Ave.	1.0	3.0	Resurface	195,000	450,000		645,000
	6 Mile Rd.	Alpine Ave. to Pine Island Dr.	1.8	3.6	Resurface	325,657	749,343		1,075,000
	Wolverine Blvd.	10 Mile Rd. to 11 Mile Rd.	1.0	4.0	Resurface	495,790	899,210		1,395,000
	Northland Dr.	11 Mile Rd. to 12 Mile Rd.	1.0	5.0	Resurface	335,000	630,000		965,000
	Northland Dr.	18 Mile Rd. to Ritchie Ave.	1.0	2.0	Resurface	360,000	930,000		1,290,000
	Crush & Shape	Various Locations	6.1	13.4	Resurface	1,500,000			1,500,000
	Mill & Fill	Various Locations	6.1	13.4	Resurface	1,500,000			1,500,000
	Carryover projects					575,830	1,024,170		1,600,000
Total Reconstruction			21.4	55.7		6,993,277	8,646,723	-	15,640,000
Resurfacing									
	Overlays	Various Locations	5.3	11.6	Resurface	780,000			780,000
Total Resurfacing			5.3	11.6		780,000	-	-	780,000
Preservation									
	Surface Treatments	Various Locations	39.0	85.8	Sealcoat and Micro Surface	2,500,000			2,500,000
	Thin Overlays		7.0	15.4		500,000			500,000
Total Preservation			46.0	101.2		3,000,000	-	-	3,000,000
Safety									
	100th St. at Division Ave.				New Traffic Signal	230,000			230,000
	68th St. at Plaza Center Dr.				Signal Upgrade	140,000			140,000
	Patterson Ave. at Burton St.				Signal Upgrade	140,000			140,000
	Carryover projects				Signal Upgrade	151,000			151,000
	Various Locations				Capacity / Safety Improvement	340,000			340,000
Total Safety						1,001,000	-	-	1,001,000
Bridges and Culverts									
	Ada Bridge #5	Knapp St. over the Grand River			Preservation	81,000	399,000		480,000
	Tyrone Bridge #21	18 Mile Rd. over the Rogue River			Rehabilitation	83,150	439,850		523,000
	Spencer Bridge #22	Lincoln Lake Ave. - 300 ft. north of 18 Mile Rd			Rehabilitation	200,000			200,000
	Carryover projects					435,000			435,000
	Preventive Maintenance	Various Locations				700,000			700,000
Total Bridges and Culverts						1,499,150	838,850	-	2,338,000
Total Primary Road Projects			72.6	168.5		\$ 13,273,427	\$ 9,485,573	\$ -	\$ 22,759,000

Note: Projects are subject to change.

2022 Amended Budget
Attachment B
Routine Maintenance

Primary			
Description	2020 Actual	2021 Amended Budget	2022 Amended Budget
Adopt-a-Road Expenses	9,940	10,000	10,500
Crack sealing	37,154	35,000	36,750
Drainage And Backslopes	1,272,712	1,530,000	1,606,500
Grass And Weed Control	464,371	450,000	472,500
Guard Rail & Posts	82,765	80,000	84,000
Other routine maintenance	4,081	5,000	5,250
Restoration	48,573	50,000	52,500
Roadside Cleanup	76,164	75,000	78,750
Shoulder Maintenance	318,486	515,000	540,750
Spot Mill and Fill	-	-	-
Supervision	630,010	625,000	656,250
Surface Maintenance	1,603,027	1,860,000	1,953,000
Sweeping And Flushing	125,505	125,000	131,250
Trees And Shrubs	983,761	1,150,000	1,207,500
Weight Limit Signing	16,752	15,000	15,750
Total Primary	\$ 5,673,301	\$ 6,525,000	\$ 6,851,250

Local			
Description	2020 Actual	2021 Amended Budget	2022 Amended Budget
Adopt-a-Road Expenses	5,623	5,000	5,250
Crack sealing	61,305	60,000	63,000
Drainage And Backslopes	2,436,474	2,700,000	2,835,000
Dust Control	428,710	425,000	446,250
Grass And Weed Control	453,846	450,000	472,500
Guard Rail & Posts	43,850	40,000	42,000
Other routine maintenance	18,743	20,000	21,000
Restoration	177,812	175,000	183,750
Roadside Cleanup	37,607	35,000	36,750
Shoulder Maintenance	276,374	275,000	288,750
Supervision	822,849	800,000	840,000
Surface Maintenance	4,063,691	3,715,000	3,900,750
Sweeping And Flushing	9,544	10,000	10,500
Trees And Shrubs	2,213,113	2,450,000	2,572,500
Weight Limit Signing	14,738	15,000	15,750
Total Local	\$ 11,064,278	\$ 11,175,000	\$ 11,733,750

2022 Amended Budget
Attachment C
Capital Outlay

		2022
	Unit Cost	Amended Budget
Buildings		
Add road material bunkers at North (west bunkers)		\$ 225,000
Replace overhead doors at North		35,000
Upgrade lighting at North		30,000
Replace EPS fire monitoring system at South		7,500
Remove mechanic bay wall at Southwest		25,000
Replace parking lot LED lights at Southwest		30,000
Floor scrubber at Southwest		25,000
New Central Complex at Walkerview		5,000,000
Carryover buildings		322,000
Total Buildings		\$ 5,699,500
Plow Trucks		
Five Axle Truck		
1 Live bottom box	75,000	75,000
1 Underbody scraper	10,500	10,500
1 Hydraulics	10,000	10,000
1 Labor	40,000	40,000
Single Axle Trucks (2023)		
10 Dump box	27,000	270,000
10 Underbody scraper	10,500	105,000
10 Wing	7,000	70,000
10 Hydraulics	10,000	100,000
10 Labor to complete trucks	60,000	600,000
1 Hook loader attachment at South	60,000	60,000
Labor to complete Single Axle Trucks (2022)	30,000	300,000
Total Plow Trucks		1,640,500
Heavy Equipment		
Replacements		
1 High Ranger	200,000	200,000
1 Loader	400,000	400,000
1 Fork attachment	8,000	8,000
1 Box plow attachment	15,000	15,000
1 Motorgrader	400,000	400,000
1 Roller attachment	45,000	45,000
1 Tractors	100,000	100,000
1 Side mower attachment	25,000	25,000
1 Rear mower attachment	10,000	10,000
1 Boom arm mower attachment	15,000	15,000
1 Rock hound	10,000	10,000
1 Skytrack / Tella-handler	80,000	80,000
1 Mini excavators	70,000	70,000
1 Track loader	106,000	106,000
1 Forestry head	37,000	37,000
1 Mill attachment	40,000	40,000
1 Pickup broom	6,000	6,000
1 Utility trailer	10,000	10,000
1 Tar distributor	200,000	200,000
1 Roller	60,000	60,000
1 Chipper	90,000	90,000
1 Push-off broom	75,000	75,000
		2,002,000
Small Equipment		
Power Tools		20,000
Shop Tools		20,000
Total Small Equipment		40,000
Work Trucks		
2 1 ton truck DRW, regular cab, dump	65,000	130,000
1 1 ton truck DRW, crew cab, flat bed	70,000	70,000
1 1 ton truck DRW, crew cab, dump, liftgate	75,000	75,000
1 1 ton truck SRW, ext. cab, 4x4, 6.5 box, plow	47,500	47,500
1 1/2 ton truck, ext. cab, 4x4 (road patrol)	40,000	40,000
2 1/2 ton truck, ext. cab, 4x2	30,000	60,000
2 1/2 ton truck, 4x4	40,000	80,000
2 Cars	26,000	52,000
		554,500
Carryover equipment		1,940,000
Total Equipment		\$ 6,177,000

2022 Amended Budget
Attachment D
Administration

	2020 Actual	2021 Amended Budget	2022 Amended Budget
Advertising	\$ 16,449	\$ 20,000	\$ 20,000
Depreciation	52,723	60,000	55,000
Equipment Rental	37,613	40,000	50,000
Information Technology	160,916	161,817	250,000
Insurance	111,793	115,000	100,000
Personnel Costs	1,808,629	1,900,000	2,000,000
Professional Services	176,781	200,000	215,000
Repairs and Maintenance	117,442	120,000	100,000
Supplies	197,643	200,000	175,000
Training and Travel	17,553	20,000	15,000
Utilities	118,268	125,000	125,000
Handling Charges on Materials Sold	(83,766)	(95,000)	(100,000)
Purchase Discounts	(7,710)	(5,000)	(5,000)
Total Administration	\$ 2,724,336	\$ 2,861,817	\$ 3,000,000



RECONSTRUCTION

100th 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.

68th Street – Glen Hollow Drive to Hanna Lake Avenue

Widen existing 4-lane portion to 5 lanes. Work includes earthwork, concrete curb and gutter, storm sewer, drainage, concrete sidewalk (Gaines Township) HMA pavement, pavement markings and restoration. 2 Way Traffic will be maintained.

Cascade Road – 36th Street to Whitneyville Avenue

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

68th Street – Eastern Avenue to Kalamazoo 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.

4 Mile Road – Coit Avenue to Plainfield Avenue

Full Depth Cold mill existing 3-lane asphalt surface and place 2 courses of new HMA. Two-way traffic will be maintained.

6 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.

Wolverine Boulevard – 10 Mile Road to 11 Mile Road

Cold mill existing HMA over existing rubberized concrete pavement. Place 2 courses of new HMA in 4-lane boulevard section. Two-way traffic will be maintained.

Northland Drive – from 11 Mile Road to 12 Mile Road

Full Depth Cold mill existing 5-lane asphalt surface and place two courses of HMA. Milling and paving work will be phased to always maintain 2-way traffic. (Will be bid with Wolverine Boulevard project.)

Northland Drive – from 18 Mile Road to Ritchie Avenue

Install underdrains, Place 4-inch-deep aggregate over existing asphalt pavement (over concrete pavement) pulverize aggregate, grade and place 2 courses of HMA. Through traffic will be detoured.

Other Reconstruction Projects:

- **Belmont Avenue** – Post Drive to Pine Hill Drive
- **Burton Street** – Candlewick Court to Cascade Point Private
- **Division Avenue** – West River Drive to 6 Mile Road
- **Fruit Ridge Avenue** – 16 Mile Road to 18 Mile Road
- **Lincoln Lake Avenue** – 18 Mile Road to Bradshaw; Bass Lake to county line
- **Morse Lake Avenue** – 60th Street to 68th Street

RESURFACING

Northland Drive – Lake Street north to county line

Cold Mill HMA and place new HMA

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.

- **68th Street and Plaza Center Drive**
- **100th Street and Division Avenue**
- **Burton Street and Patterson Avenue**

BRIDGES AND CULVERTS

Ada Bridge #5 – Knapp Street over the Grand River

Bridge preservation project includes reinforced concrete deck patching and epoxy sealing. Partial clean and paint Steel Girders. 2-way traffic to be maintained using portable traffic signals.

Spencer Bridge #22 – Lincoln Lake Avenue over Clear Creek

Culvert rehabilitation project to repair deteriorated portion of the existing triple corrugated metal pipe arches with reinforced concrete placed on the bottom internal portion of the galvanized metal culverts. Traffic will be detoured.

Tyrone Bridge #21 – 18 Mile Rd 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. Traffic will be detoured.

Category	Road	Limits	Miles	Lane	Improvement	Source of Funds			Project Total	Program
				Miles		KCRC	Federal/State	Local		
Reconstruction										
(A)	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
	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.	10 Mile Rd. to 11 Mile Rd.	1.0	4.0	Resurface	400,790	899,210		1,300,000	STP-U
	Northland Dr.	11 Mile Rd. to 12 Mile Rd.	1.0	5.0	Resurface	270,000	630,000		900,000	HIP
	Northland Dr.	Cedar Springs City Limits to Ritchie Ave.	1.0	2.0	Resurface	270,000	930,000		1,200,000	STP-R
	Crush & Shape	Various Locations	6.1	13.4	Resurface	1,500,000	-		1,500,000	
	Mill & Fill	Various Locations	6.1	13.4	Resurface	1,500,000	-		1,500,000	
Total Reconstruction			22.4	57.7		5,542,447	8,662,553	260,000	14,465,000	
Resurfacing										
	Overlays	Various Locations	5.3	11.6	Resurface	750,000			750,000	
Total Resurfacing			5.3	11.6		750,000	-	-	750,000	
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										
	Patterson Ave. at Burton St.				Traffic Signal Upgrade	140,000			140,000	
	68th St. at Plaza Center Dr.				Traffic Signal Upgrade	140,000			140,000	
	100th St. at Division Ave.				New Traffic Signal	230,000			230,000	
	Various Locations				Capacity / Safety Improvement	490,000			490,000	
Total Safety						1,000,000	-	-	1,000,000	
Bridges and Culverts										
	Ada Bridge #5	Knapp St. over the Grand River			Preservation	21,000	399,000		420,000	LBF
	Tyrone Bridge #21	18 Mile Rd. over the Rogue River			Rehabilitation	23,150	439,850		463,000	LBF
	Spencer Bridge #22	Lincoln Lake Ave. - 300 ft. north of 18 Mile Rd			Rehabilitation	150,000			150,000	
	Preventive Maintenance	Various Locations				750,000			750,000	
Total Bridges						944,150	838,850	-	1,783,000	
Total Primary Projects			128.6	291.5		\$ 13,236,597	\$ 9,501,403	\$ 260,000	\$ 22,998,000	

(A) Local road that would be requested to be primary after improvements

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total	Program
						KCRC	Federal/State	Local		
Reconstruction										
	Expansion/All-Season									
(A)	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.	Thornapple River Dr. S to Whitneyville Ave.	1.0	2.0	All-Season	1,400,000			1,400,000	
	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	240,000	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		8,928,852	3,797,762	-	12,726,614	
Resurfacing										
	Overlays	Various Locations	8.0	17.6	Resurface	660,973			660,973	
Total Resurfacing			8.0	17.6		660,973	-	-	660,973	
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										
	84th & Kalamazoo	Intersection			Roundabout	678,054	600,000		1,278,054	HSIP
	Various Locations				Capacity / Safety Improvement	910,973			910,973	
Total Safety						1,589,027	-	-	910,973	
Bridges and Culverts										
	Preventive Maintenance	Various Locations				2,000,000			2,000,000	
Total Bridges						2,000,000	-	-	2,000,000	
Total Primary Projects			133.7	299.2		\$ 18,428,852	\$ 3,797,762	\$ -	\$ 21,548,560	

(A) = Obligated in 2022

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total	Program
						KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
68th St.	Kraft Ave. to Cherry Valley Dr.		1.0	2.0	All-Season	\$ 300,000	\$ 1,200,000		\$ 1,500,000	STP-U
100th St.	Patterson Ave. to Kraft Ave.		1.0	2.0	All-Season	280,000	1,120,000		1,400,000	STP-U
84th St.	East Paris Ave. to Patterson Ave.		1.0	3.0	All-Season	387,992	1,062,008		1,450,000	STP-U
Wilson Ave.	76th to M-6		1.3	2.6	All-Season	360,000	1,440,000		1,800,000	
Lincoln Lake Ave.	Belding Rd. to Strotheide St.		0.8	1.6	All-Season	224,000	896,000		1,120,000	STP-R
Ada Dr	Forest Hill Ave to Alta Dale Ave		1.5	4.6	Expansion	520,000	2,080,000		2,600,000	EDF-C
3 Mile Rd	E of I-96 to East Beltline Ave		2.1	6.4	Expansion	300,000	1,200,000		1,500,000	EDF-C
Full Depth Pavement										
60th St	Broadmoor Ave to Thornapple River Dr		2.5	5.0		200,000	800,000		1,000,000	STP-U
West River Dr	Lamoreaux Dr to Pine Island Dr		0.95	4.8		200,000	800,000		1,000,000	STP-U
Leffingwell Ave	City Limits to Knapp St		0.5	1.5		50,000	200,000		250,000	STP-U
Crush & Shape	Various Locations		12.0	26.4	Resurface	2,250,000	-		2,250,000	
Mill & Fill	Various Locations		14.0	30.8	Resurface	1,800,000	200,000		2,000,000	STP-U
Total Reconstruction			38.7	90.6		6,871,992	10,998,008	-	17,870,000	
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										
Fallasburg Covered Bridge					Preservation	20,000	180,000		200,000	TAP
										-
Preventive Maintenance	Various Locations					2,000,000			2,000,000	
Total Bridges						2,000,000	-	-	2,000,000	
Total Primary Projects			145.7	326.0		\$ 17,121,992	\$ 10,998,008	\$ -	\$ 28,120,000	

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total	Program
						KCRC	Federal/State	Local		
Reconstruction										
	Expansion/All-Season									
	84th St.	Patterson Ave. to Kraft Ave	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	300,000	1,200,000		1,500,000	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	STP-U
	76th St	Byron Center to Burlingame	1.0	4.0	Expansion	400,000	1,600,000		2,000,000	STP-U
	Full Depth Pavement									
	Patterson Ave	M-37 to Burton St	4.1	20.4	Resurface	160,000	640,000		800,000	NHPP
	Crush & Shape	Various Locations	15.0	33.0	Resurface	2,000,000	1,500,000		3,500,000	STP-U
	Mill & Fill	Various Locations	15.0	33.0	Resurface	2,000,000	1,500,000		3,500,000	STP-U
Total Reconstruction			38.9	99.8		7,048,000	8,628,000	-	15,676,000	
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				2,000,000			2,000,000	
Total Bridges						2,000,000	-	-	2,000,000	
Total Primary Projects			145.9	335.2		\$ 17,298,000	\$ 8,628,000	\$ -	\$ 25,926,000	

Note: Projects are subject to change.

Category	Road	Limits	Miles	Lane Miles	Improvement	Source of Funds			Project Total	Program
						KCRC	Federal/State	Local		
Reconstruction										
Expansion/All-Season										
	Myers Lake Ave	13 Mile Rd to 14 Mile Rd	1.0	2.0	All-Season	\$ 300,000	\$ 1,200,000		\$ 1,500,000	STP-U
	84th St.	Kraft Ave to Broadmoor Ave	0.8	2.4	All-Season	1,500,000			1,500,000	
	84th St.	Broadmoor Ave to Thornapple River Dr	1.1	2.3	All-Season	320,000	1,280,000		1,600,000	STP-U
	Lincoln Lake Ave	Heffron St to 11 mile Rd	1.7	3.3	All-Season	320,000	1,280,000		1,600,000	STP-R
	76th St	Burlingame Ave to W of Clyde Park Ave	0.9	3.6	Expansion	320,000	1,280,000		1,600,000	EDF-C
Full Depth Pavement										
	Division Ave	76th St to 68th St	1.0	5.0	Resurface	200,000	800,000		1,000,000	NHPP
	Kalamazoo Ave	68th St to 60th St	1.0	5.0	Resurface	369,000	731,000		1,100,000	NHPP
	Crush & Shape	Various Locations	1.0	2.2	Resurface	1,500,000	1,500,000		3,000,000	STP-U
	Mill & Fill	Various Locations	1.0	2.2	Resurface	1,500,000	1,500,000		3,000,000	STP-U
Total Reconstruction			9.5	28.0		6,329,000	9,571,000	-	15,900,000	
Resurfacing										
	Overlays	Various Locations	6.5	14.3	Resurface	1,500,000			1,500,000	
Total Resurfacing			6.5	14.3		1,500,000	-	-	1,500,000	
Preservation										
	Surface Treatments	Various Locations	80.0	176.0	Sealcoat and Micro Surface	4,000,000			4,000,000	
	Thin Overlays		5.0	11.0		500,000			500,000	
Total Preservation			85.0	187.0		4,500,000	-	-	4,500,000	
Safety										
	Various Locations				Capacity / Safety Improvement	2,000,000			-	
Total Safety						2,000,000	-	-	2,000,000	
Bridges and Culverts										
	Preventive Maintenance	Various Locations				2,000,000			2,000,000	
Total Bridges and Culverts						2,000,000	-	-	2,000,000	
Total Primary Projects			101.0	229.3		\$ 16,329,000	\$ 9,571,000	\$ -	\$ 25,900,000	