

Primary Road and Bridge Report

2024

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ASSET MANAGEMENT

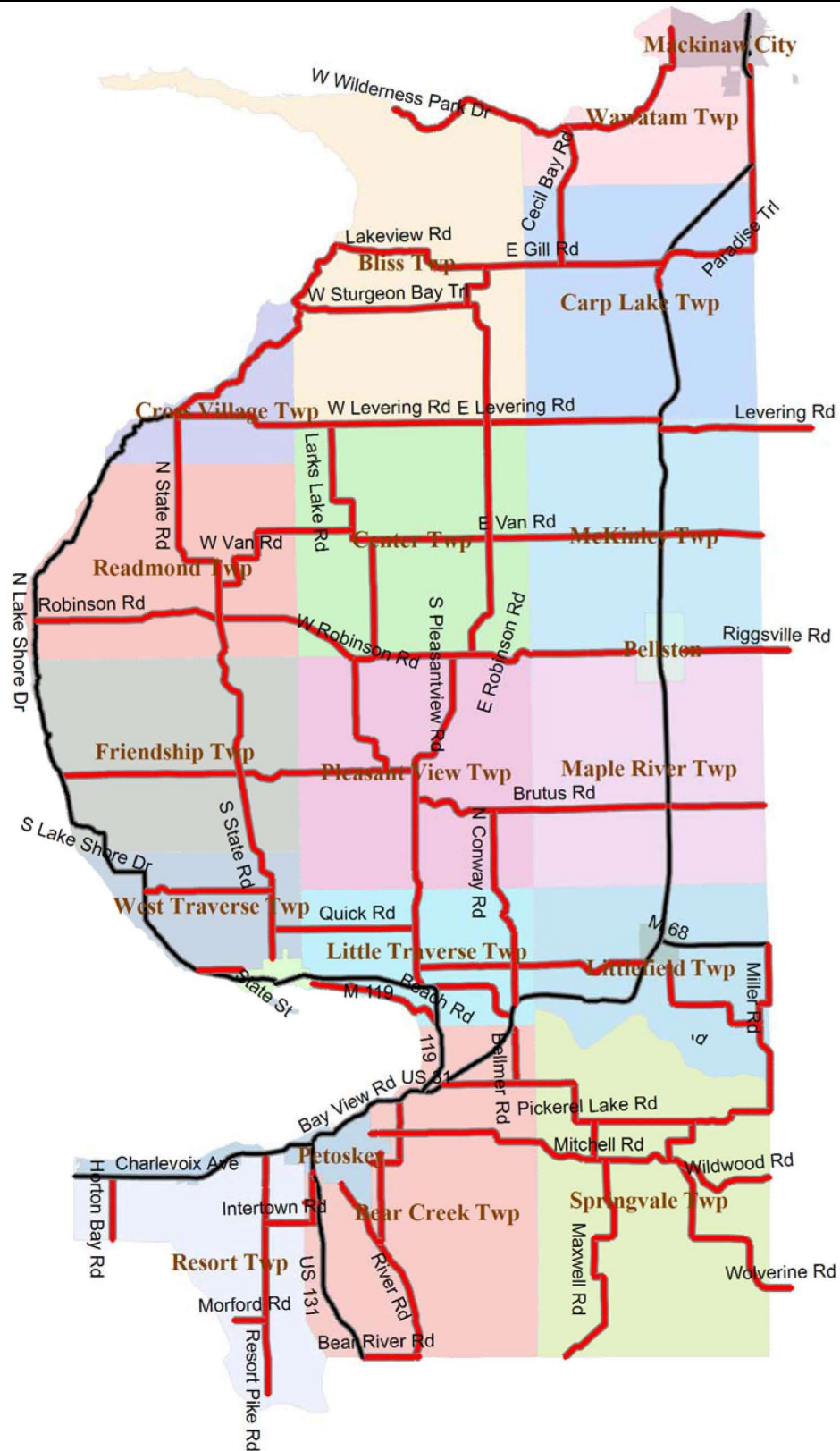
The goal of the Road Commission is to use Asset Management Strategies when planning projects for the roads and bridges under the jurisdiction of the Emmet County Road Commission. Asset management, as defined by Public Act 199 of 2007, is an “ongoing process of maintaining, upgrading and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment. Using asset management will allow the Road Commission and to invest the available road and bridge funds in a manner that will provide the greatest return.

Data gathered for this report is based on collection in 2024 or pervious years for bridges.

ROADS

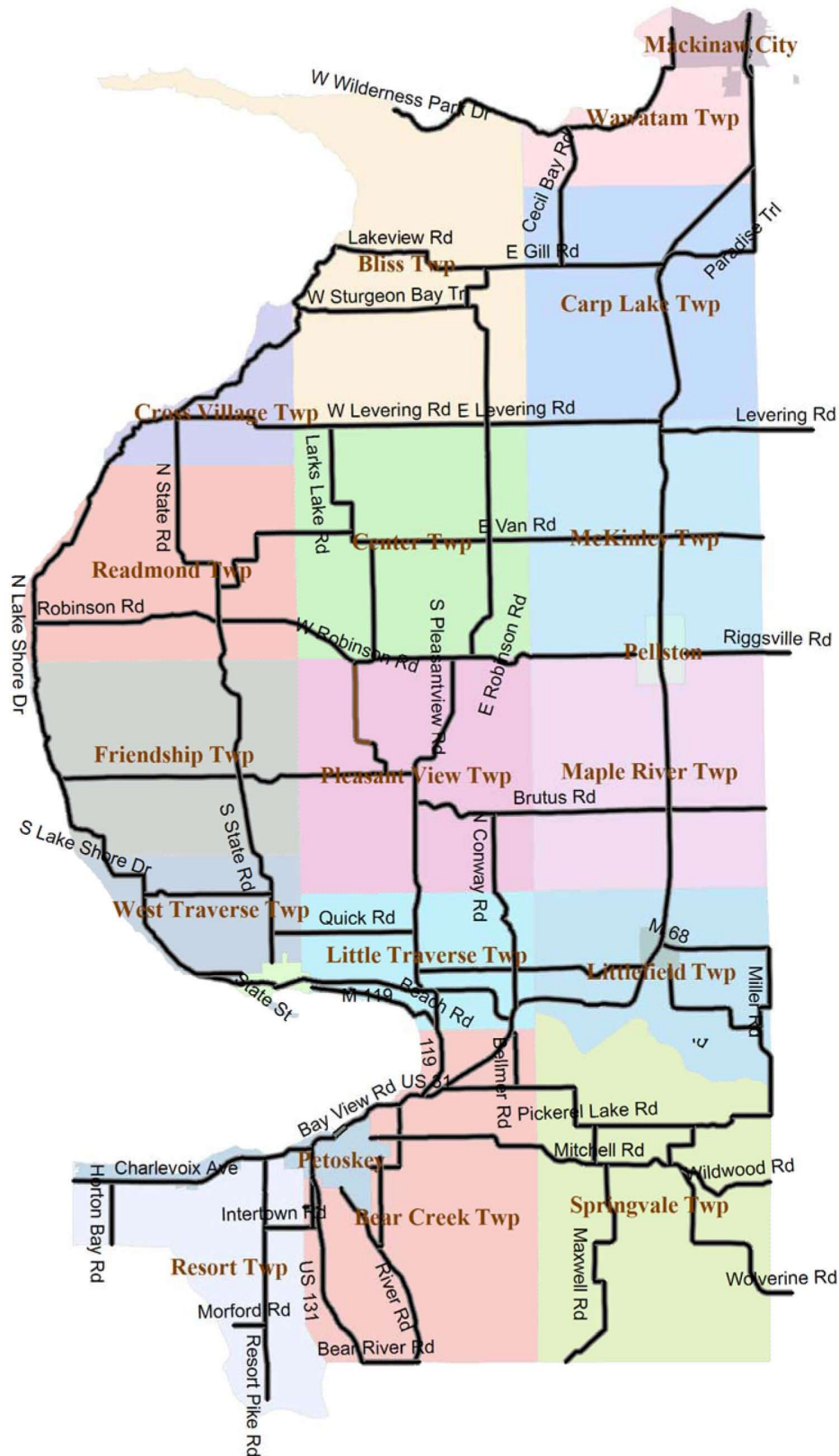


Primary Road Maps



State and Primary Roads

Black = State Highways – **Red** = County Primary Roads



Roads by Surface Type

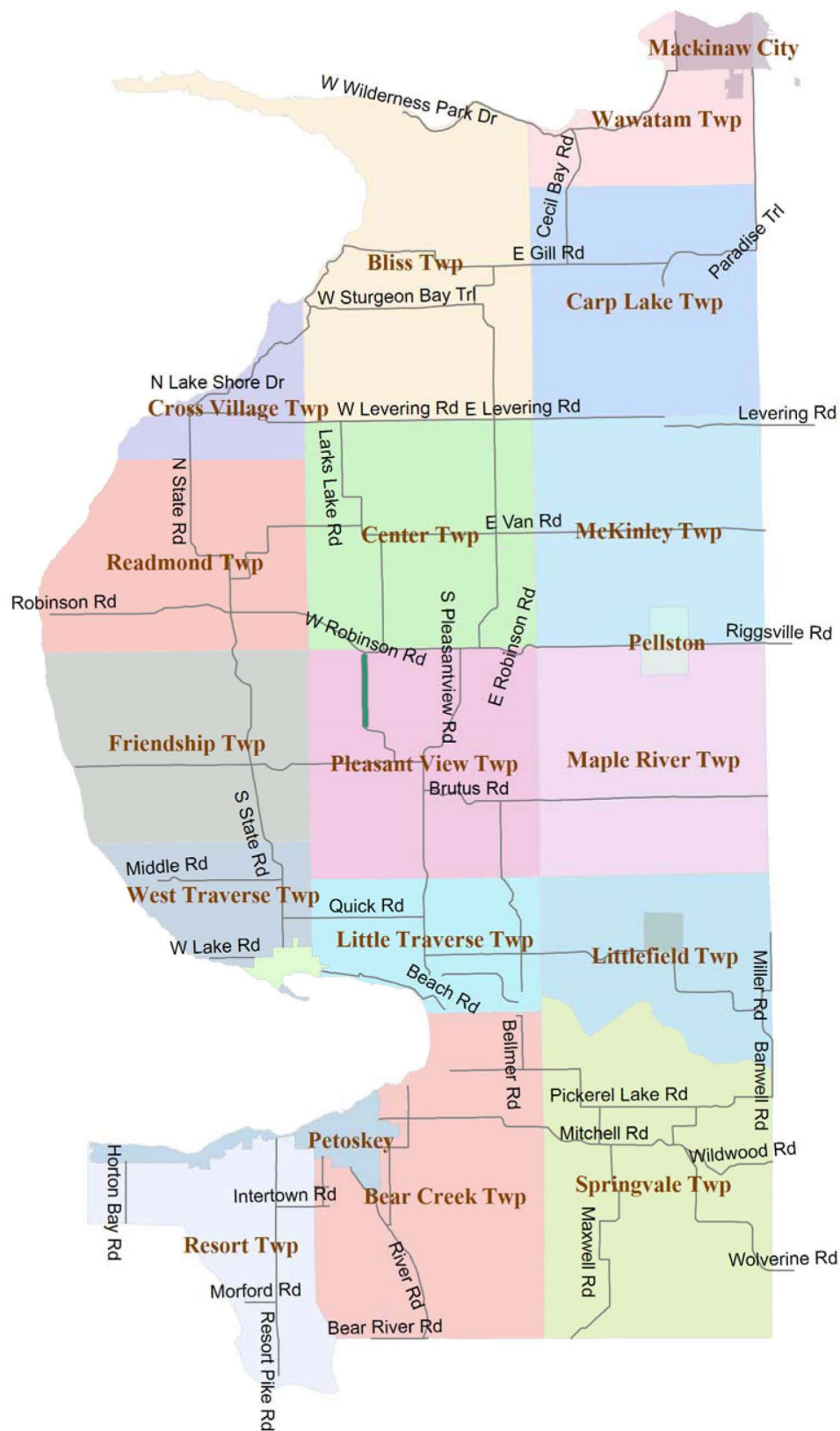
Black = Pavement – Brown = Gravel



Good / Fair / Poor Condition

Primary Paved Roads

Green = Good - Yellow = Fair - Red = Poor



Good / Fair / Poor Condition

Primary Gravel Roads

Green = Good - **Yellow** = Fair – **Red** = Poor

Road Rating Systems

All paved primary roads are rated each year using the PASER Road Rating system (seasonal roads are not included). PASER, or Pavement Surface Evaluation and Rating, is the rating system that is used in collecting data for RoadSoft. The roads are rated on a scale of 1 to 10 according to surface conditions of the pavement. The tables below show the rating and the suggested maintenance that would be required to preserve the road along with an estimated cost of repair.

PASER Rating and Treatments for Paved Roads

Road Rating	Recommended Repair	Estimated* Cost per Mile
10	No maintenance necessary. New Road	\$ 0
9	No Maintenance necessary. Smooth Surface.	\$ 0
8	Minor Crack Sealing	\$ 1,200
7	General Crack Sealing and/or Minor Patching	\$ 2,800
6	Patching and Sealcoat Ultra-thin Asphalt Overlay	\$ 61,400 \$ 125,600
5	Asphalt Wedging Asphalt Wedging and Sealcoat Asphalt Wedging and Ultra-thin Asphalt Overlay 1.5-inch Asphalt Overlay	\$ 92,900 \$ 137,500 \$ 168,600 \$ 164,600
4	Asphalt Wedging and Overlay 2-inch Asphalt Overlay	\$ 223,000
3	Pulverize, gravel and pave 3-inch Asphalt Overlay	\$ 387,000 \$ 342,000
2	Reconstruction.	\$ 515,200
1	Reconstruction. Failed Road.	\$ 515,200

*Estimates will provide project planning level costs. All roads should have a specific estimate completed to address location specific road conditions.

Gravel roads are rated using the Inventory-Based Rating System™ for Gravel Roads (IBR). The IBR system considers three characteristics of a road segment to determine a rating for the segment. Surface width, drainage adequacy and structural adequacy are all evaluated to determine the segment rating.

IBR Rating and Treatments for Gravel Roads

Road Rating	Existing Condition / Recommended Repair	Estimated Cost per Mile
10	No maintenance necessary. New Road	\$ 0
8 – 9	Good crown and drainage throughout. Adequate gravel for traffic. Maintain with grading and dust control.	\$ 650
6 - 7	Existing crown with drainage on 50% or more of roadway. Additional gravel needed in some areas along with ditching.	\$ 80,000
3 - 5	Little or no crown. Ditched on less than 50% of the road. Additional gravel needed on entire road along with ditching.	\$ 125,000
1 - 2	Failed road. Reconstruction.	\$ 295,000

Service Life of Treatments

Service life is the expected time that a treatment will last before needing further reconstruction or resurfacing. In the table below, an expected service life for a particular treatment is listed. Before a treatment reaches the expected service life, preventative maintenance should be performed. Preventative maintenance will extend the expected service life of the pavement and treatment.

Service Life of Treatments for Paved Roads

Road Rating	Recommended Repair	Expected Service Life (years)
8	Minor Crack Sealing	5
7	General Crack Sealing and/or Minor Patching	5
6	Patching and Sealcoat Ultra-thin Asphalt Overlay	7 7 – 10
5	Asphalt Wedging Asphalt Wedging and Sealcoat Asphalt Wedging and Ultra-thin Asphalt Overlay 1.5-inch Asphalt Overlay	7 7 – 10 10 10
4	Asphalt Wedging and Overlay 2-inch Asphalt Overlay	12 – 15
3	Pulverize, gravel and pave 3-inch Asphalt Overlay	15 – 25
2	Reconstruction.	25 - 30
1	Reconstruction.	25 - 30

For example, if a road has a PASER rating of 6, a treatment of a ultra-thin asphalt overlay is selected. The expected service life for an ultra-thin asphalt overlay is 7- 10 years. Preventative maintenance in the form of crack sealing may be required after 2 years.

Expected service life may be shorter if the road is on poor soils that are not addressed as part of the treatment. If a project is selected that is not the recommended treatment, the service life listed in the table above will be shorter and preventative maintenance will need to be performed sooner.

Service Life for a gravel road is difficult to predict. Gravel road conditions can change rapidly based on weather, grading and traffic effects on the roads.

Paved Primary Road Ratings

Current Paved Road Ratings

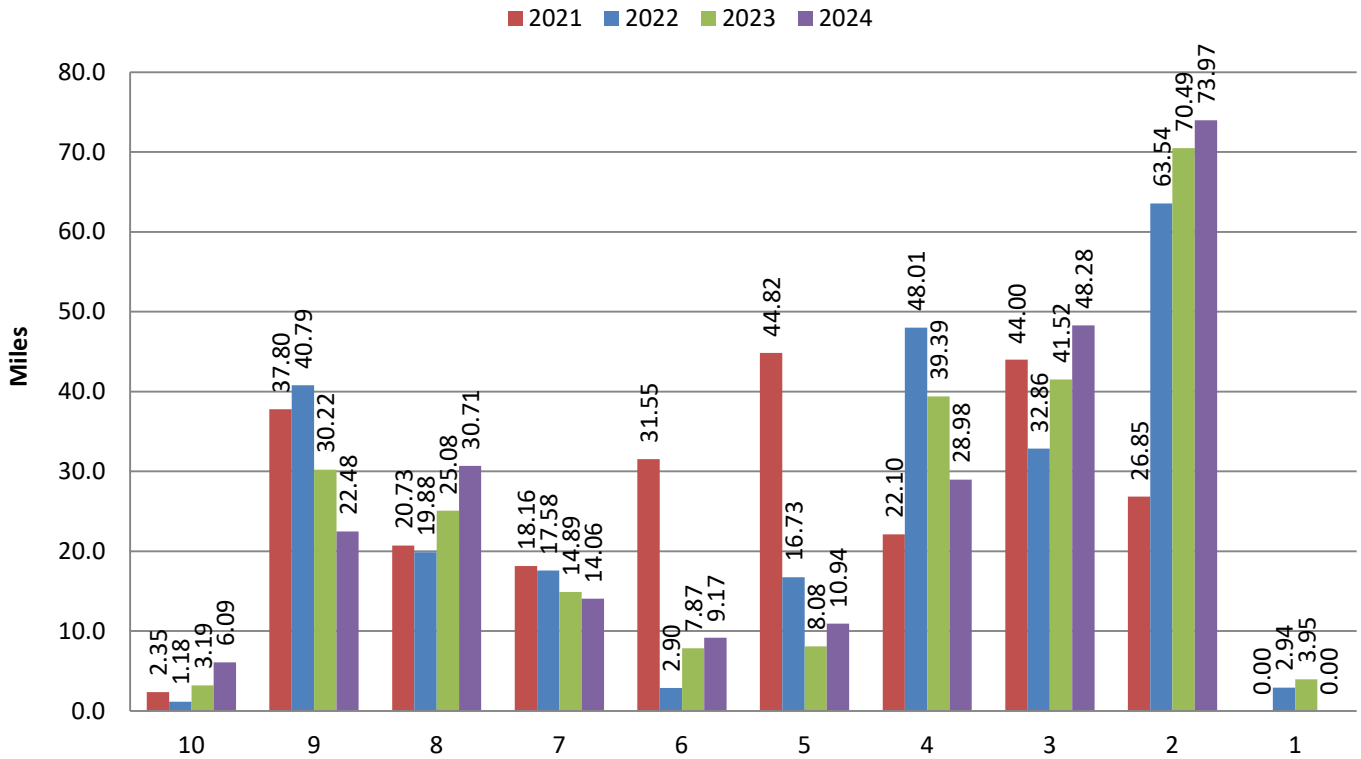
PASER Rating	Road Name	Limits	Length (miles)
10	Lake Shore Drive	Stone Church Rd to Sturgeon Bay Tr.	4.83
	Robinson Road	Teal Rd to Larks Lake Rd.	1.26
9	Division Road	Atkins Rd to US-31.	1.62
	Ellsworth Road	Mitchell Rd to Pickerel Lake Rd.	1.60
	Hathaway Road	Mink Rd to North Conway Rd.	1.52
	Headlands Road	Wilderness Park Dr to Central Ave.	1.00
	Lake Shore Drive	State Rd to Stone Church Rd.	0.17
	Lakeview Road	Gill Rd then north 0.65 miles to curve.	0.65
	Levering Road	Pleasantview Rd to US-31.	4.46
	Mitchell Road	Petoskey City Limits to Division Rd.	0.75
	North Conway Road	US-31 to Hathaway Rd.	0.99
	Pickerel Lake Road	US-31 to Bellmer Rd.	2.01
	Powers Road	North Conway Rd to Township Line.	0.54
	Powers Road	Milton Rd to US-31.	0.10
	Robinson Road	State Rd to Teal Rd.	3.19
	West Conway Road	Heydey St to US-31	0.12
	Wilderness Park Drive	Pointe Dr to Headlands Rd.	3.76
8	Atkins Road	McDougal Rd to Division Rd.	0.50
	Beach Road	Ferrn Ave to Bridge St.	0.17
	Blanchard Road	Mitchell Rd to Pickerel Lake Rd.	0.98
	Lake Road	M-119 to Harbor Springs City Limits.	1.19
	Larks Lake Road	Robinson Rd then north 0.75 miles.	0.75
	Larks Lake Road	Division Rd to Levering Rd.	1.00
	North Conway Road	Hathaway Rd to Edwards Rd.	2.27
	Paradise Trail	Gill Rd to Pine.	1.40
	Pennsylvania Avenue	Beach Dr to Fern Ave.	0.27
	Pleasantview Road	Cassidy Rd to Garber Rd.	1.00
	Resort Pike	Intertown Rd to Sterzik Rd (East).	0.50
	Robinson Road	Durkalic Rd to the Pellston Village Limits (west).	1.76
	State Road	LaCount Rd to M-119.	12.55
	Stutsmanville Road	State Rd to Pleasantview Rd.	4.63
	Van Road	State Rd to Gregory Rd.	1.74
7	Levering Road	US-31 then east 0.87 miles.	0.87

7	Levering Road	Hill Rd to Larks Lake Rd.	2.18
	Mackinaw Highway	US-31 to Trails End Rd.	2.00
	Mitchell Road	Hopper Rd to County Line	2.93
	Pickerel Lake Road	Channel Rd to Blanchard Rd.	1.50
	Pleasantview Road	Wild Cherry Ln to Stutsmanville Rd.	2.58
	Stutsmanville Road	Beacon Hill Ln to State Rd.	1.50
	Stutsmanville Road	Terpening Rd to Five Mile Creek Rd.	0.50
6	Horton Bay Road	Stolt Rd to Martinchek Rd.	1.00
	Lakeview Road	Lake Shore Dr to West Bliss Rd.	1.14
	Powers Road	Township Line to Milton Rd.	3.01
	West Conway Road	M-119 to Heydey St.	2.43
	Wilderness Park Drive	Campground to Nebo Trail.	1.59
5	Brutus Road	Pleasantview Rd to North Conway Rd.	0.50
	Gill Road	US-31 to Paradise Tr.	0.04
	Larks Lake Road	Kaz Rd to Division Rd.	1.98
	Levering Road	Ingleside Rd then west 1.19 miles.	1.19
	Levering Road	State Rd to Hill Rd.	2.00
	McDougal Road	Atkins Rd to Petoskey City Limits.	0.26
	Mackinaw Highway	Trails End Rd to Mackinaw City Limits.	0.47
	Paradise Trail	US-31 to Gill Rd.	0.30
	Pleasantview Road	Stutsmanville Rd to Tower Rd.	2.45
	Pleasantview Road	Munger Rd to Munger Rd.	0.46
	Resort Pike	Sterzik Rd (East) to US-31.	1.29
4	Atkins Road	Petoskey City Limits to McDougal Rd.	0.25
	Bellmer Road	Pickerel Lake Rd to Graham Rd.	1.41
	Click Road	River Rd to McDougal Rd.	0.11
	Graham Road	US-31 to Bellmer Rd.	0.15
	Hathaway Road	Pleasantview Rd to Mink Rd.	1.00
	Horton Bay Road	Martincheck Rd to US-31.	0.61
	Intertown Road	Anderson Rd to US-131.	0.31
	Lears Road	Cemetery Rd to Anderson Rd.	0.39
	Levering Road	Larks Lake Rd to Pleasantview Rd.	4.04
	McDougal Road	Click Rd to Atkins Rd.	2.03
	Mitchell Road	Division Rd to Springvale Township Line.	3.70
	Mitchell Road	Maxwell Rd to Hopper Rd.	4.04
	Reed Road	Levering Rd to Schmalzried Rd.	2.00
	River Road	Bear River Rd to Howard Rd.	4.86
	Stutsmanville Road	Five Mile Creek Rd to Beacon Hill Ln.	1.50
	Wilderness Park Drive	Nebo Trail to Pointe Dr.	2.58

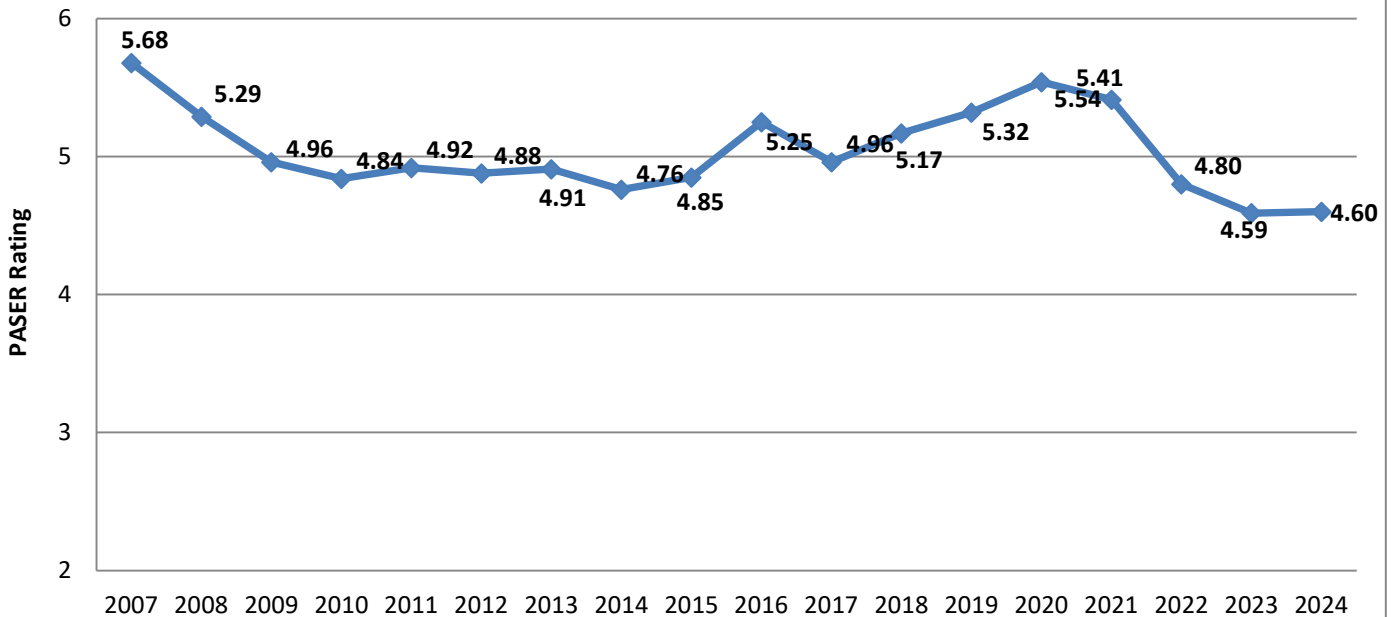
3	Anderson Road	Intertown Rd to Petoskey City Limits.	1.26
	Beach Road	Forest Ave (big curve) to M-119.	1.13
	Bear River Road	Sterly Rd to River Rd.	0.59
	Brutus Road	US-31 to Brill Rd.	2.47
	Cecil Bay Road	Sportsman Dr to Wilderness Park Dr.	3.13
	Howard Road	River Rd to Petoskey City Limits.	0.25
	Gill Road	Cecil Bay Rd to US-31.	2.62
	Larks Lake Road	Van Rd then south 2.23 miles.	2.23
	Levering Road	Ingleside Rd to the County Line.	0.45
	Middle Road	M-119 to State Rd.	3.30
	Mitchell Road	Springvale Township Line to Maxwell Rd.	2.08
	Paradise Trail	Pine to Mackinaw Highway.	0.53
	Pennsylvania Avenue	Harbor Springs City Limits to 3rd Ave.	0.31
	Pleasantview Road	M-119 to Wild Cherry Ln.	3.09
	Pleasantview Road	Tower Rd to Robinson Rd.	1.00
	Quick Road	State Rd to Pleasantview Rd.	3.71
	Resort Pike	Lake Grove Rd to Intertown Rd.	4.40
	Robinson Road	M-119 to Frank Rd.	3.16
	Robinson Road	Pleasantview Rd (south) to Durkalic Rd.	3.13
	Schmalzried Road	Reed Rd to US-31.	0.78
	State Road	Harbor Springs City Limits to LaCount Rd.	2.88
	Stutsmanville Road	M-119 to Terpening Rd.	1.09
	Van Road	Gregory Rd to Skiba Rd.	2.10
	Van Road	US-31 to County Line.	2.59
2	Banwell Road	Pickerel Lake Rd to Armock Rd.	6.09
	Beach Road	Bridge St to Forest Ave (big curve).	1.80
	Brutus Road	North Conway Rd to US-31.	4.51
	Cecil Bay Road	Gill Rd to Sportsman Dr.	0.51
	Gill Road	Lakeview Rd to Cecil Bay Rd.	3.18
	Intertown Road	Resort Pike to Anderson Rd.	1.10
	Lake Shore Drive	Sturgeon Bay Tr to Lakeview Rd.	2.13
	Lakeview Road	West Bliss Rd then east 1.21 miles to curve.	1.21
	Larks Lake Road	Stutsmanville Rd then north to end of pavement.	1.03
	Larks Lake Road	Van Rd (south) to Kaz Rd.	0.45
	Morford Road	Lake Grove Rd to Resort Pike.	0.83
	Mackinaw Highway	Paradise Tr to US-31.	2.23
	Maxwell Road	Bear River Rd to Mitchell Rd.	6.07
	Miller Road	Banwell Rd to M-68.	2.33
	North Conway Road	Edwards Rd to Brutus Rd.	2.00
	Pennsylvania Avenue	3rd Ave. to Beach Dr.	0.37

2	Pickerel Lake Road	Bellmer Rd to Channel Rd.	1.49
	Pickerel Lake Road	Blanchard Rd to Banwell Rd.	4.70
	Pleasantview Road	Robinson Rd to Cassidy Rd.	7.27
	Pleasantview Road	Garber Rd to Munger Rd (west leg).	1.84
	Pleasantview Road	Munger Rd (east leg) to Gill Rd.	0.54
	Robinson Road	Pellston Village Limits (east) to the County Line.	2.00
	Robinson Road	Frank Rd to State Rd.	1.62
	Robinson Road	Larks Lake Rd to Pleasantview Rd (south).	2.00
	Sturgeon Bay Trail	Lake Shore Dr to Pleasantview Rd.	4.33
	Van Road	Skiba Rd to US-31	8.90
	Wilderness Park Drive	West end of road then east 0.90 miles (campground).	0.90
	Wildwood Road	Mitchell Rd to Boyer Hill Rd (County Line).	2.54
1			

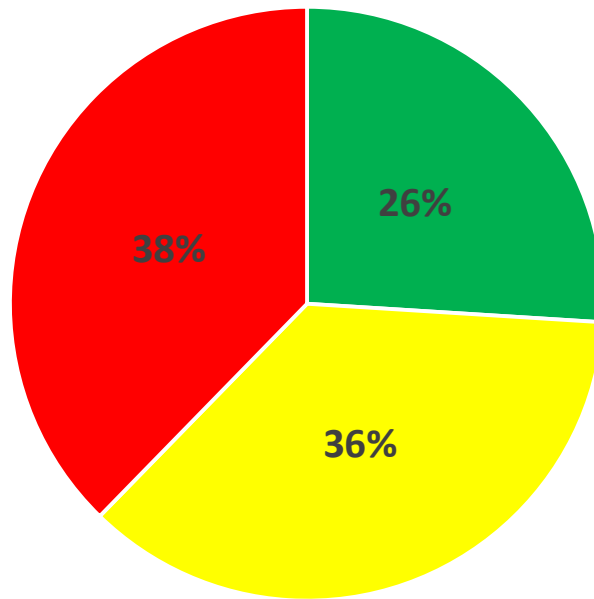
2022 - 2024 PASER Ratings for Primary Roads



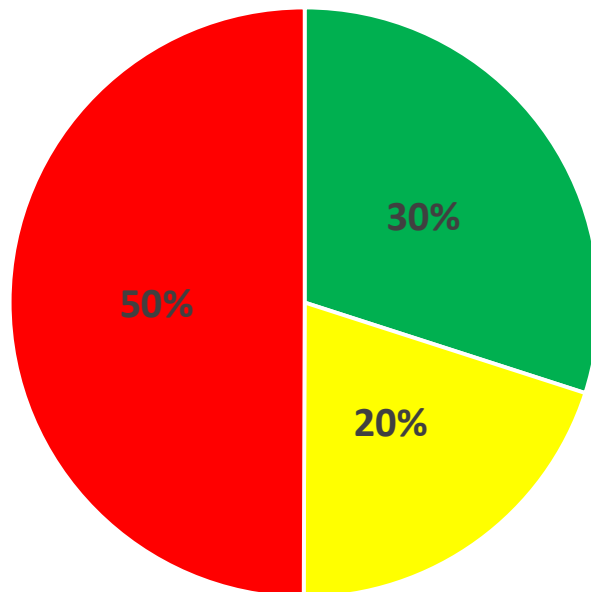
Average PASER Rating for Primary Roads



Statewide Federal Aid Eligible Roads



Emmet County Paved Primary Roads



Good = PASER Rating 10-9-8 / **Fair** = PASER Rating 7-6-5 / **Poor** = PASER Rating 4-3-2-1

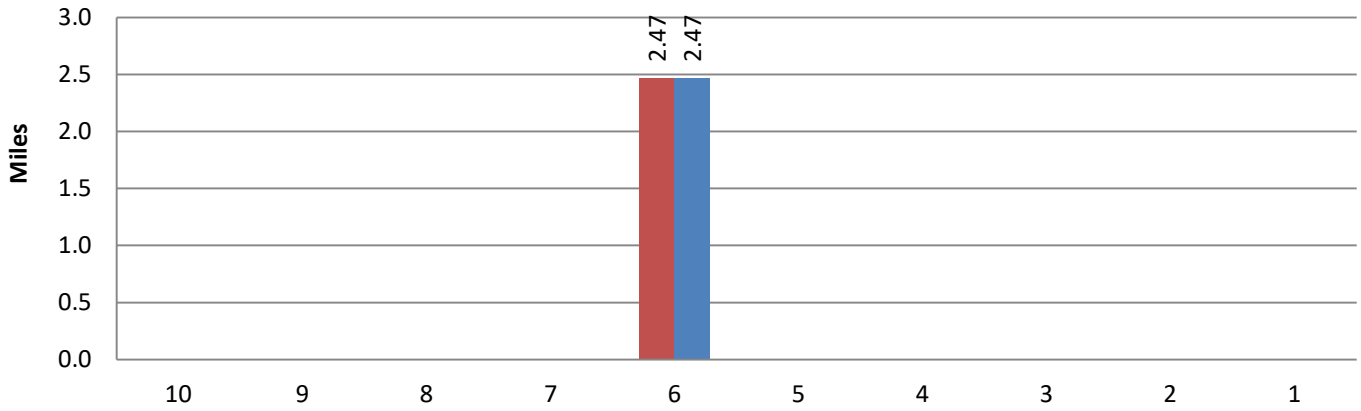
Gravel Primary Road Ratings

Current Gravel Road Ratings

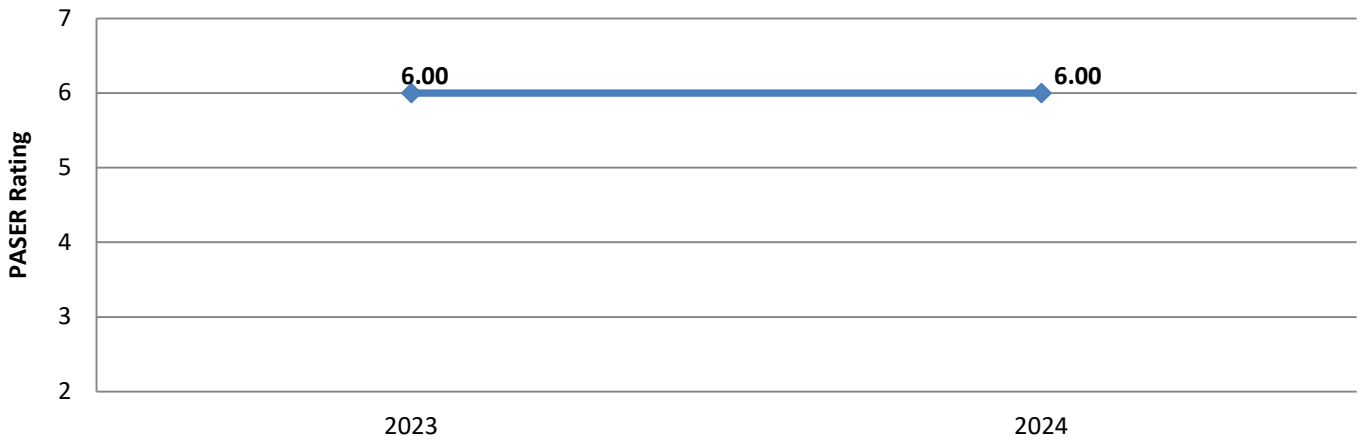
IBR	Road Name	Limits	Length (miles)
10			
9			
8			
7			
6	Larks Lake Road	Robinson Road then south to the pavement.	2.47
5			
4			
3			
2			
1			

2023 - 2024 IBR Ratings for Gravel Primary Roads

■ 2023 ■ 2024



Average IBR Rating for Gravel Primary Roads



Road Projects

The goal of Asset Management is to allocate public resources in the most cost-effective manner. It should be our goal to bring our system into a good condition and to maintain the system in a good condition. Good condition is considered a rating of 7 or above. The Asset Management process concentrates resources on roads that are relatively easy to improve then allows resources to be expended on more expensive improvement or repairs.

2025 Planned Projects

Road Name / Limits	PASER Rating	Length (miles)	Proposed Work	Estimated Cost Funding Source
Maxwell Road Mitchell Road then south 4500 feet	2	0.85	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, and restoration.	\$ 561,800 Federal Aid (\$380,800) State D Grant (\$146,000) Road Commission (\$35,000)
Robinson Road End of 2024 project to Pleasantview Road (north)	5	2.00	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, and restoration.	\$ 1,500,000 BIA
Brutus Road US-31 to County Line (Brill Road)	3	2.47	Trenching, shoulder widening, 26 ft. wide HMA paving, gravel shoulders, restoration and pavement markings.	\$ 1,473,000 Federal HIP Grant (\$1,100,000) Federal Aid (buyout \$300,000) State D Grant (\$73,000)
Various Roads	7/6	??	Crack Sealing	\$ 50,000 Maintenance (MTF)

2026 Planned Projects

Road Name / Limits	PASER Rating	Length (miles)	Proposed Work	Estimated Cost Funding Source
Anderson Road Intertown Road to Petoskey City Limits	4	1.25	Asphalt Mill/Fill	\$ 481,250 Small Urban Funds (\$385,000) Road Commission (\$96,250)
Robinson Road 0.10 miles west of North Ayr Road to 0.25 miles west of Durkalic Road	5	1.32	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, and restoration.	\$ 725,600 Federal Aid (buyout \$552,800) State D Grant (\$74,000) Road Commission (\$98,800)
Brutus Road Culp Road to US-31	3	1.50	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, and restoration.	\$ 1,000,000 BIA
Various Roads	7/6	??	Crack Sealing	\$ 50,000 Maintenance (MTF)

2027 Planned Projects

Road Name / Limits	PASER Rating	Length (miles)	Proposed Work	Estimated Cost Funding Source
Pickerel Lake Road Botsford Road to Banwell Road	2	1.01	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, and restoration.	\$ 826,000 Federal Aid (\$680,000) State D Grant (\$73,000) Road Commission (\$73,000)
Robinson Road 0.20 miles east of North Ayr Road to Durkalic Road	5	1.25	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, guardrail, and restoration.	\$ 1,000,000 BIA

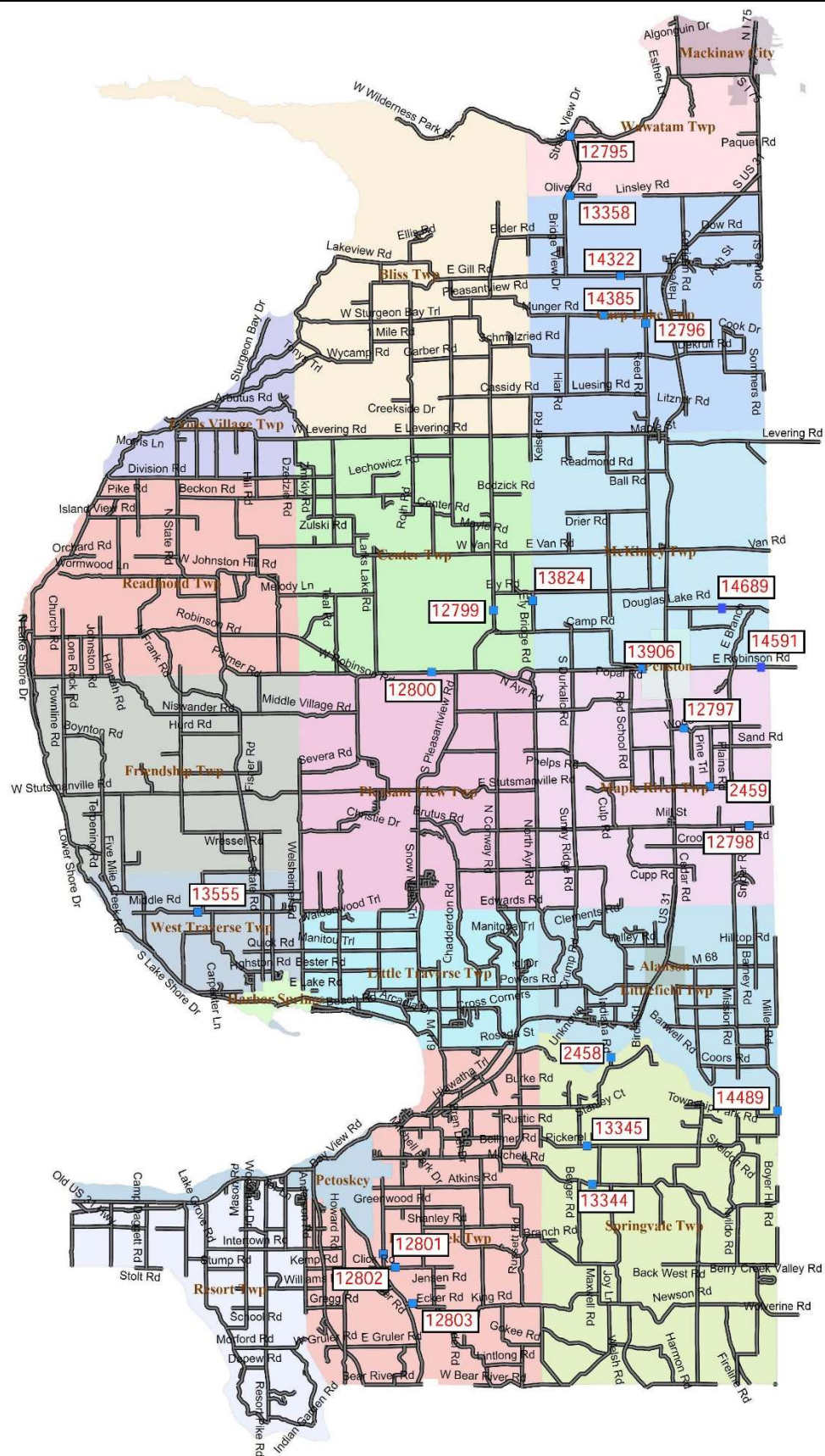
2028 Planned Projects

Road Name / Limits	PASER Rating	Length (miles)	Proposed Work	Estimated Cost Funding Source
Banwell Road Pickerel Lake Road to Coors Road	2	1.85	Reconstruction including, Crushing and shaping, gravel base, asphalt paving, shoulders, and restoration.	\$ 826,000 Federal Aid (\$680,000) State D Grant (\$73,000) Road Commission (\$73,000)
Brutus Road North Ayr Road to Culp Road	2	1.99	Trenching, shoulder widening, 26 ft. wide HMA paving, gravel shoulders, restoration and pavement markings.	\$ 1,000,000 BIA

BRIDGES AND LARGE CULVERTS



Bridge Location Map



Bridge Rating System

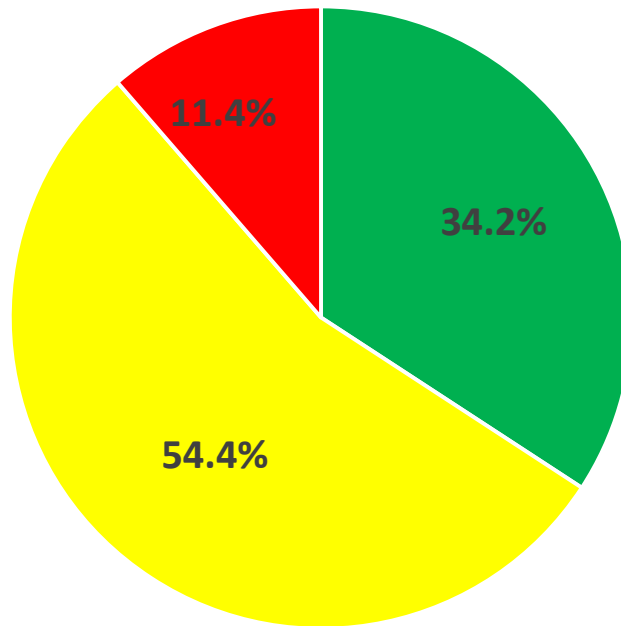
The bridges in Emmet County are rated on a 2-year cycle. Ratings are completed using the Nation Bridge Inspection Standards. Structures included in these inspections have a span greater than 20 feet. Structure types include timber, concrete and steel bridges and large culverts or multiple culverts with a total a span of 20 feet or more. The structures, road surface and water channels (if applicable) are part of the total structure rating.

Bridge Ratings

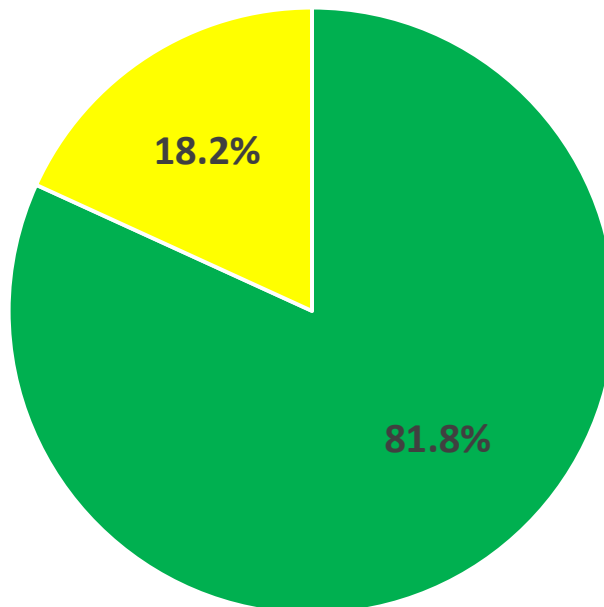
Current Bridge Ratings

Structure Number	Road	Feature Intersected	Year Built	Bridge Material	Structure Condition (rating)
2458	Oden Island Road	Crooked Lake Channel	1996	Timber	Fair (6)
2459	Maple River Road	Maple River	2015	Concrete	Good (8)
12795	Wilderness Park Drive	Carp River	1968	Steel	Fair (5)
12796	Reed Road	Carp Lake River	2020	Timber	Good (8)
12797	Woodland Road	Maple River	2018	Timber	Good (7)
12798	Brutus Road	Maple River	2016	Timber	Good (7)
12799	Pleasantview Road	Maple River	2011	Timber	Good (7)
12800	Robinson Road	Maple River	2007	Steel Culv.	Good (8)
12801	McDougal Road	Bear River	1972	Steel Culv.	Fair (5)
12802	Click Road	Bear River	2012	Timber	Good (7)
12803	Evergreen Trail	Bear River	1964	Steel Culv.	Fair (5)
13344	Mitchell Road	Minnehaha Creek	2006	Timber	Good (8)
13345	Pickerel Lake Road	Minnehaha Creek	2018	Timber	Good (8)
13358	Oliver Road	Carp Lake River	2006	Timber	Good (7)
13555	Middle Road	Greenbriar Road	2018	Timber	Good (8)
13824	Ely Bridge Road	West Branch Maple River	2014	Timber	Good (7)
13906	Robinson Road	Maple River	2015	Timber	Good (7)
14322	Gill Road	Carp Lake River	2019	Timber	Good (8)
14385	Munger Road	Carp Lake River	2020	Timber	Good (8)
14489	Banwell Road	Cedar Creek	2021	Timber	Good (7)
14591	Robinson Road	Maple River	2022	Timber	Good (9)
14689	Douglas lake Road	Maple River	2023	Timber	Good (9)

Statewide Bridge Conditions



Emmet County Bridge Conditions



Good = Rating 10-9-8-7 / **Fair** = Rating 6-5-4 / **Serious/Critical** = Rating 3-2-1

Bridge Projects

The goal of Asset Management is to allocate public resources in the most cost-effective manner. It should be our goal to bring our bridge system into a good/fair condition and to maintain the system in the same condition. Good/Fair condition is considered a rating of 5 or above.

Since all bridges under Road Commission jurisdiction are currently in good of fair condition, resources may be spent on improving other structures in the County. Some existing culverts may be upgraded to a bridge that would be part of the inventoried system. Funding for these structure improvements is mostly outside funds with some Road Commission participation.

The Road Commission does not have any planned bridge projects.