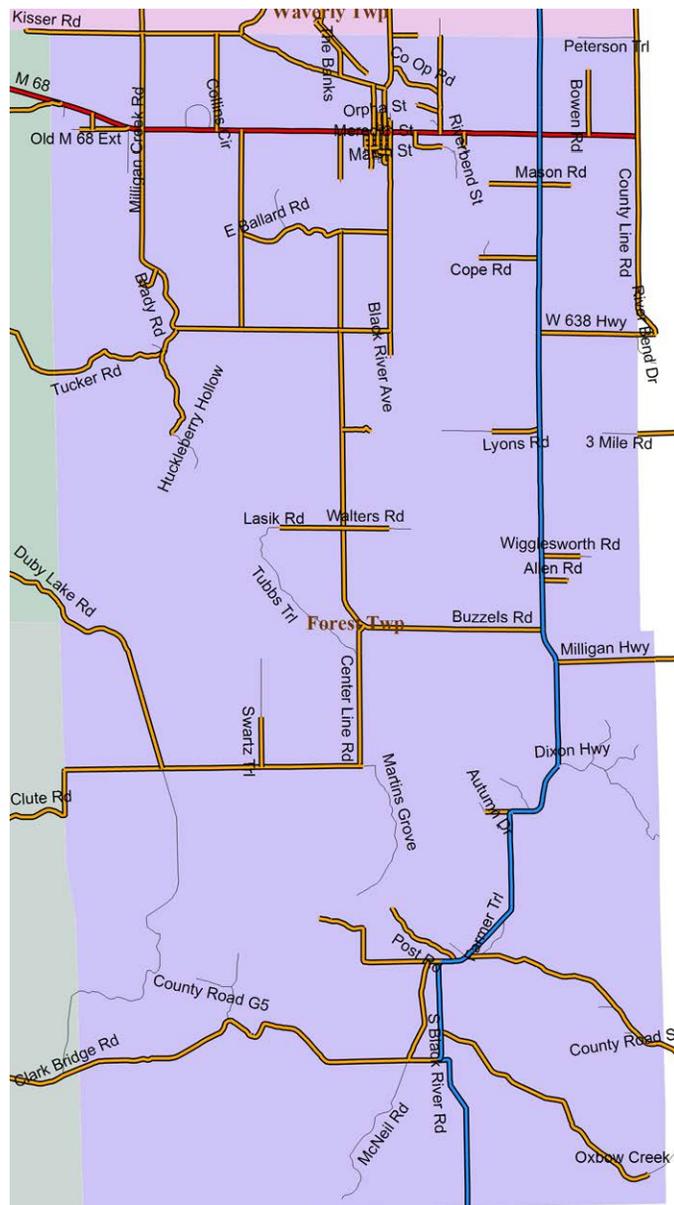


Cheboygan County Road Commission

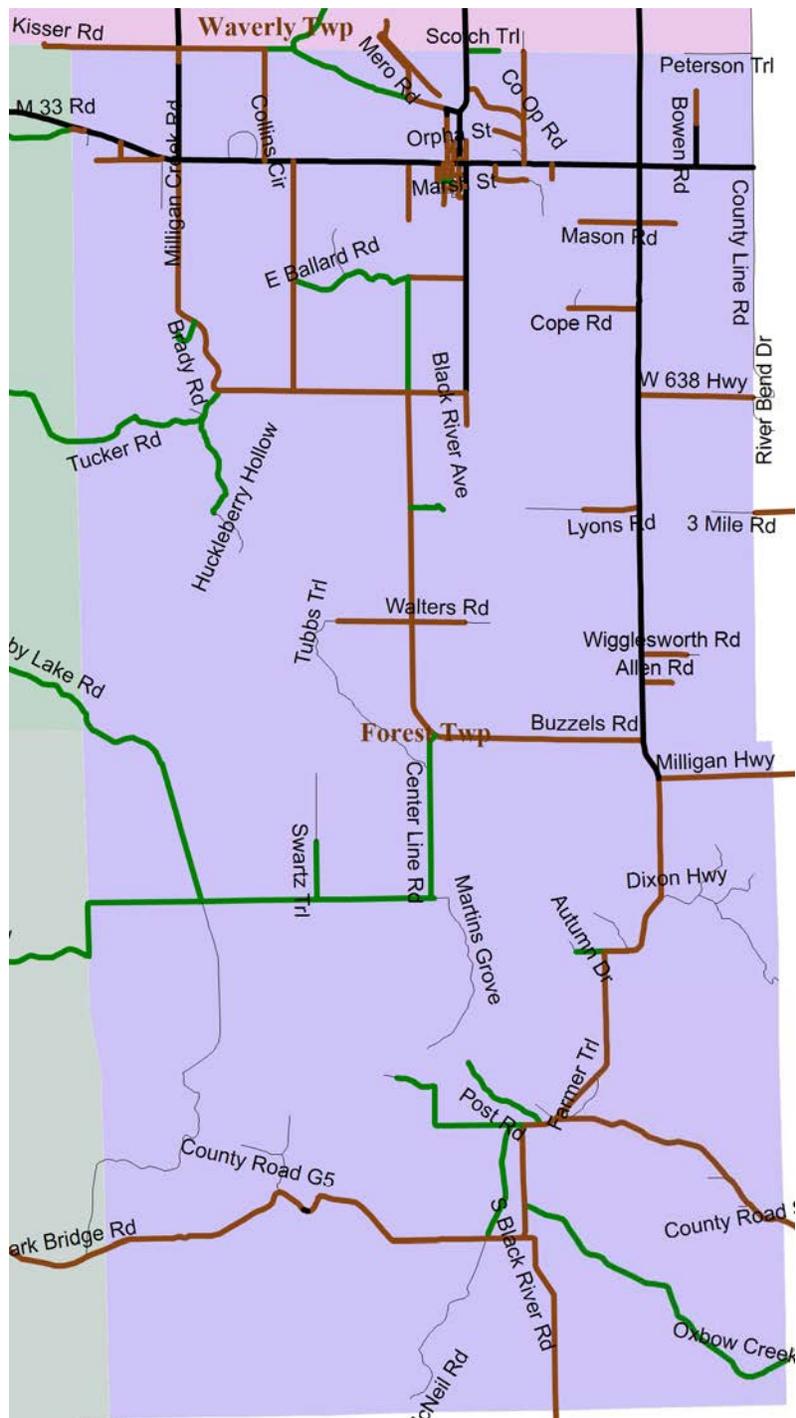
Forest Township Local Road Ratings Report for 2020

The goal of the Road Commission is to use Asset Management Strategies when planning projects for the roads under the jurisdiction of the Cheboygan 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 Township to invest the available road funds in a manner that will provide the greatest return.



Township Roads by Legal System

Red = State Highways – Blue = County Primary Roads – Orange = County Local Roads



Roads by Surface Type

Black = Pavement – Brown = Gravel – Green = Seasonal

Road Rating Systems

All the local paved roads are rated each year using the PASER Road Rating system in the Township (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	\$ 600
7	General Crack Sealing and/or Minor Patching	\$ 3,200
6	Patching and Sealcoat	\$ 29,000
	Ultra-thin Asphalt Overlay	\$ 63,000
5	Asphalt Wedging	\$ 47,000
	Asphalt Wedging and Sealcoat	\$ 75,000
	Asphalt Wedging and Ultra-thin Asphalt Overlay	\$ 106,000
4	Asphalt Wedging and Overlay	\$ 142,000
3	Pulverize, gravel and pave	\$ 240,000
2	Reconstruction.	\$ 350,000
1	Reconstruction. Failed Road.	\$ 350,000

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. From this evaluation a rating of 1 to 10 is calculated.

IBR Rating and Treatments for Gravel Roads

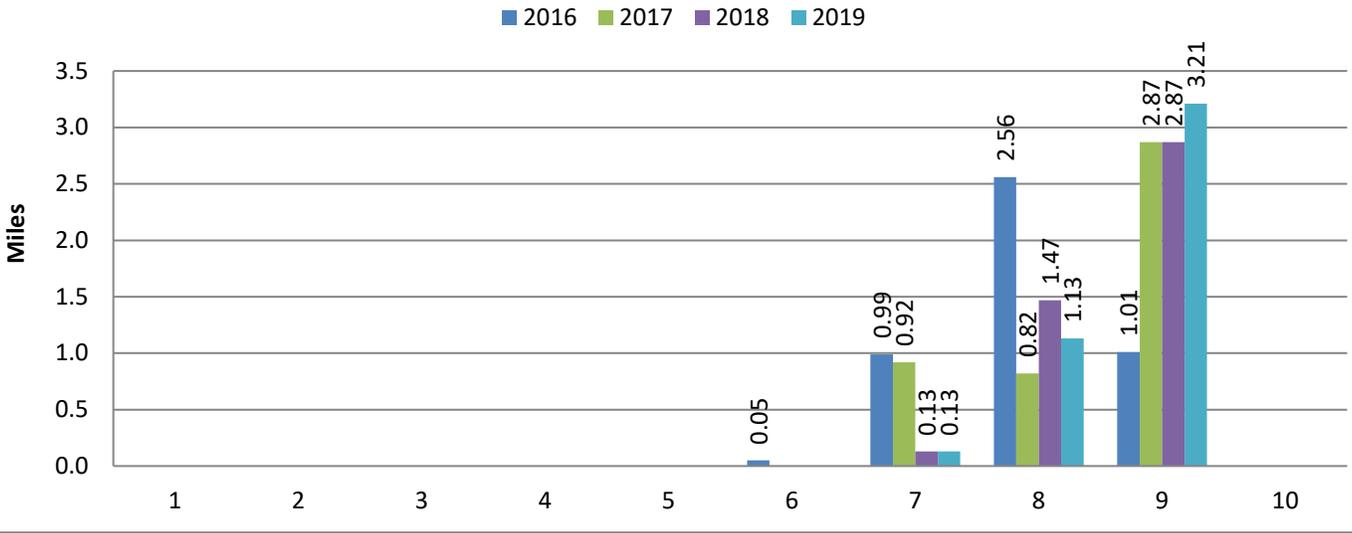
Road Rating	Existing Condition / Recommended Repair	Estimated Cost per Mile
10	No maintenance necessary. New Road	\$ 0
8 – 9	Good crown and drainage throughout. Adequate gravel for traffic. Maintain with grading and dust control.	\$ 500
6 - 7	Existing crown with drainage on 50% or more of roadway. Additional gravel needed in some areas along with ditching.	\$ 55,000
3 - 5	Little or no crown. Ditched on less than 50% of the road. Additional gravel needed on entire road along with ditching.	\$ 95,000
1 - 2	Failed road. Reconstruction.	\$ 250,000

Forest Township Paved Local Road Ratings

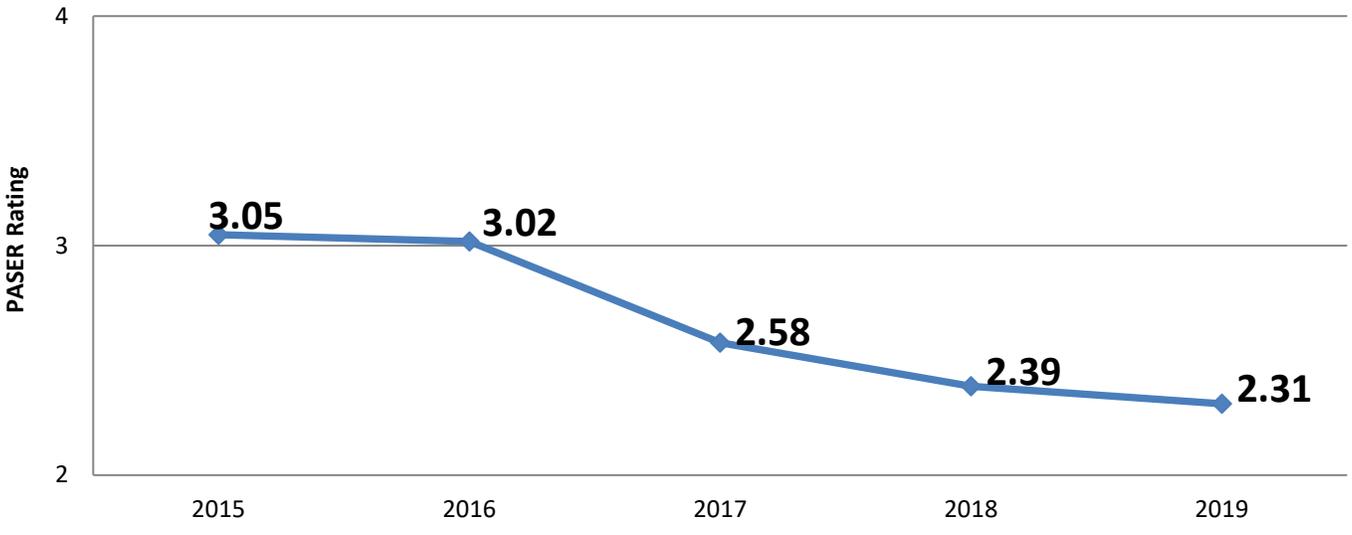
Current Road Ratings

PASER Rating	Road Name	Limits	Length (miles)
10			
9			
8			
7			
6			
5			
4	Barclay Avenue	M-68 to Orpha Street.	0.13
3	Barclay Avenue	Orpha Street to Township line.	0.90
	Black River Avenue	M-68 to State Street.	0.04
	Davies Avenue	Kisser Road to end of pavement.	0.05
	Kisser Road	Davies Road to Barclay Avenue.	0.12
	Riverbend Drive	M-68 to end of pavement.	0.02
2	Black River Avenue	Tucker Road to M-68.	2.01
	Bowen Road	M-68 to Trail.	0.34
	Brady Road	M-68 to end of pavement.	0.86
1			

2016 - 2019 PASER Ratings for Paved Local Roads



Average PASER Rating for Paved Local Roads



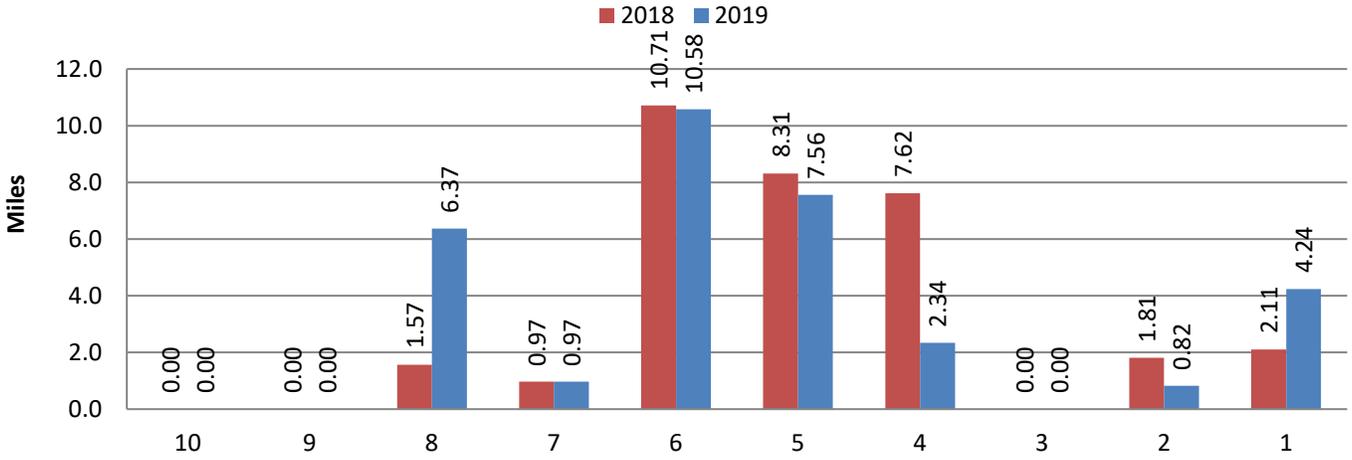
Forest Township Gravel Local Road Ratings

Current Road Ratings

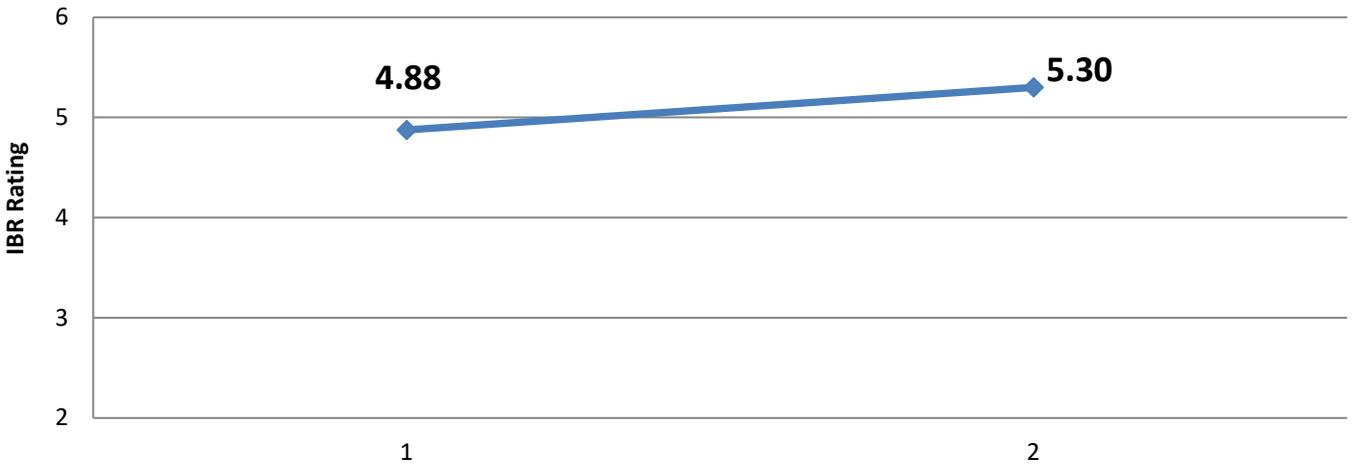
IBR Rating	Road Name	Limits	Length (miles)
10			
9			
8	Bowen Road Brady Road Errat Road Milligan Highway Buzzels Road Cope Road Davies Avenue Kisser Road Lyons Road The Banks	Trail to end of road. End of pavement to Kisser Road. Black River Road to County Line Black River Road to County Line. Centerline Road to Black River Road. Black River Road to end. M-68 to pavement. The Banks to Davies Avenue. Black River Road to end. Kisser Road to Brenda Lane.	0.29 0.12 0.99 1.00 1.84 0.61 0.43 0.33 0.48 0.64
7	East Tower Road	M-68 to Township Line.	0.97
6	Allan Road Ballard Road Brady Road Brenda Lane Centerline Road Clark Street Collins Road Freeman Road Mero Road Tucker Road Wigglesworth Road	Black River Road then east to end. Centerline Road to Black River Road Tucker Road to M-68. Waverly Township Line to end of road. Lasik Road to Tucker Road. Manderville Street to M-68. M-68 to Kisser Road. Tucker Road to M-68. Township Line to The Banks. Freeman Road to Black River Avenue. Black River Road then east to end of road.	0.26 0.50 2.20 0.54 2.02 0.16 1.00 1.97 0.18 1.36 0.39
5	Barklay Street Black River Avenue Canada Creek Road Centerline Road Charles Street Co-Op Road Johnson Street Kuchle Street Mack Street Marsh Street Meredith Street Old M-68 Old M-68 Extension Tower Street Tucker Road Veihl Road	Marsh Street to Tower Street. State Street to Orpha Street Tucker road then south to end of road. Black River Road to County Line. Buzzels Road to Lasik Road. Clark Street to Johnson Street. Barclay Avenue to Tower Road. South end to M-68. Johnson Street to Black River Avenue. M-68 then south to end of road. Barklay Street to Black River Avenue. Clark Street to Johnson Street. Old M-68 Extension to M-68. M-68 then west to end. Johnson Street to Black River Avenue. Brady Road to Freeman Road. M-68 to end of road.	0.29 0.08 0.25 2.22 1.07 0.13 0.61 0.23 0.13 0.35 0.06 0.13 0.16 0.58 0.13 0.67 0.47

4	Banks Avenue	M-68 to Orpha Street.	0.19
	Barklay Street	Tower Street to M-68.	0.10
	K-V Avenue	Tower Road then west to end.	0.24
	Lasik Road	Centerline Road then west to end of road.	0.64
	Manderville Street	Clark Street to Mack Street.	0.04
	Miller Street	Mack Street to Johnson Street.	0.06
	Orpha Street	Davies Avenue to Black River Avenue.	0.16
	Riverbend Street	End of pavement to end of road.	0.38
	State Road	Barclay Avenue to Black River Avenue.	0.06
	Walter Road	Centerline Road then east to end of road.	0.46
3			
2	Mason Road	West end to East end of road	0.82
1	Clark Bridge Road	Nunda Township Line to Black River Road.	4.08
	Sherwood Glen	M-68 then south to end of road.	0.13

2018 - 2019 IBR Ratings for Gravel Local Roads



Average IBR Rating for Gravel Local Roads



Service Life of Treatments

Service life is the expected time that a treatment will last before needing complete reconstruction. 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	7
	Ultra-thin Asphalt Overlay	7 – 10
5	Asphalt Wedging	7
	Asphalt Wedging and Sealcoat	7 – 10
	Asphalt Wedging and Ultra-thin Asphalt Overlay	10
4	Asphalt Wedging and Overlay	12 – 15
3	Pulverize, gravel and pave	15 – 25
2	Reconstruction.	25 - 30
1	Reconstruction. Failed Road.	25 - 30

For example, if a road has a PASER rating of 6, a treatment of a ultra-thin asphalt overlay is recommended (see the Table titled PASER Ratings and Treatment on page 1). 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.