

## Cheboygan County Road Commission

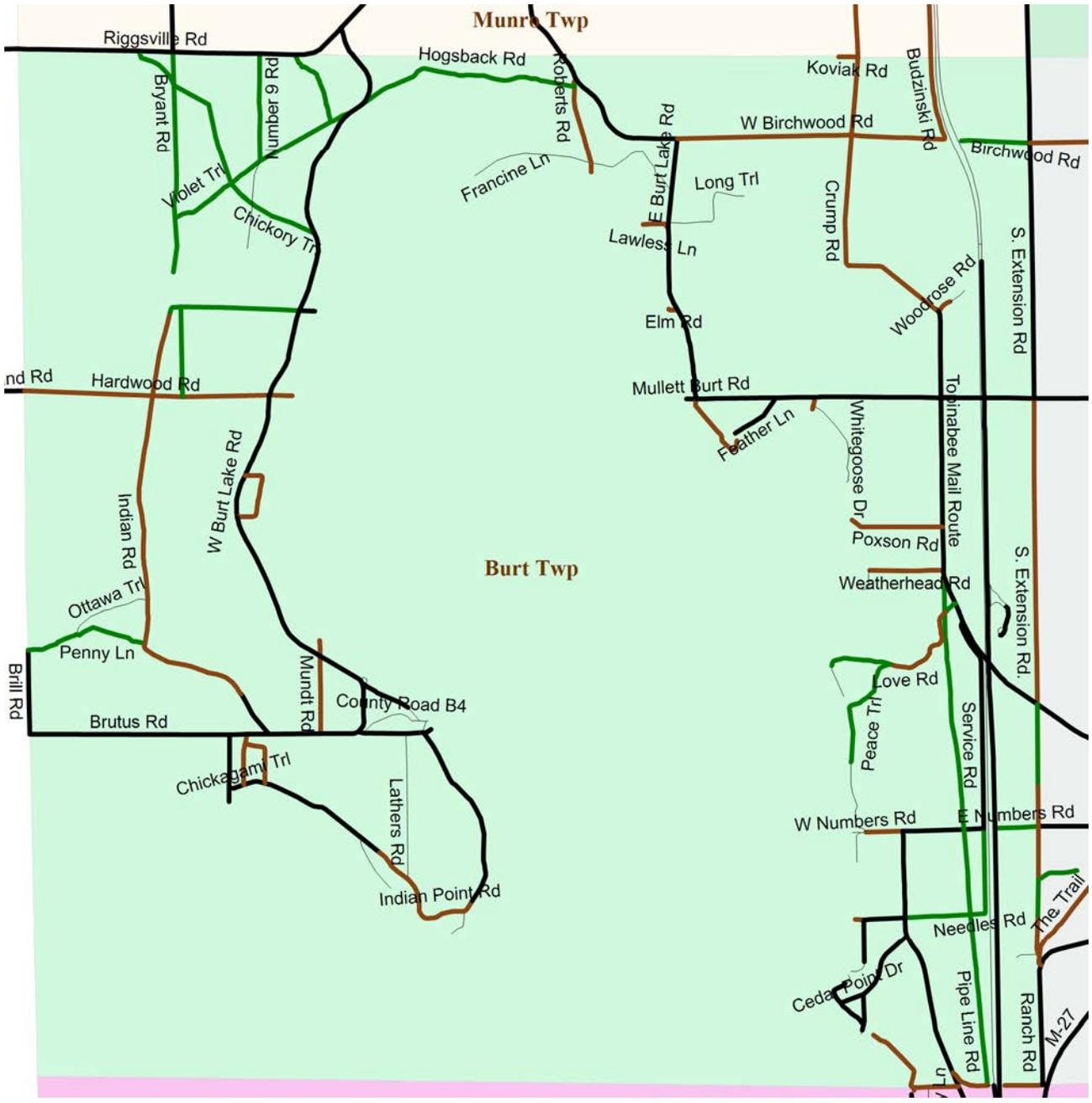
# Burt Township Local Road Ratings Report for 2020

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

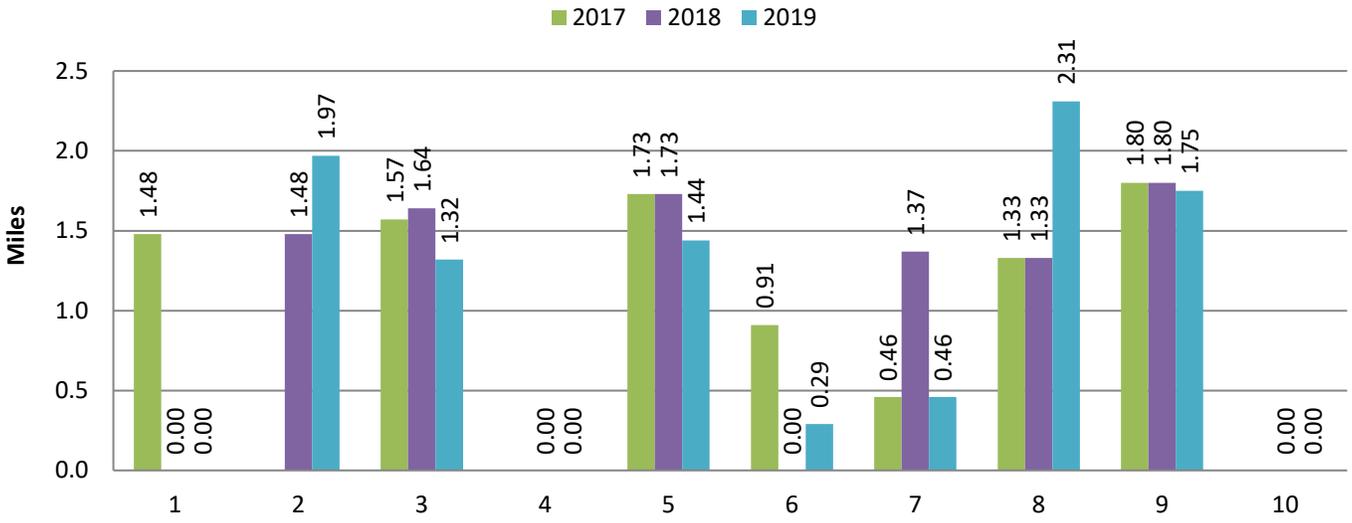
Road Rating	Existing Condition / Recommended Repair	Estimated Cost per Mile
10	No maintenance necessary. New Road	\$ 0
8 – 9	Good crown and drainage throughout. Adequate gravel for traffic. Maintain with grading and dust control.	\$ 500
6 - 7	Existing crown with drainage on 50% or more of roadway. Additional 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

## Burt Township Paved Local Road Ratings

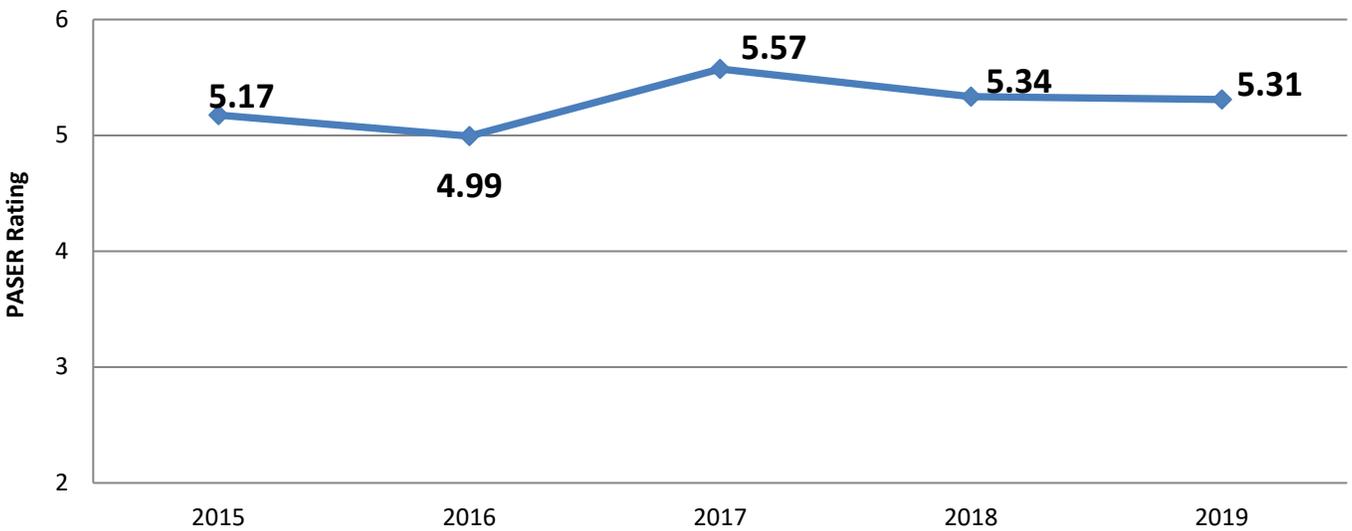
### Current Road Ratings

PASER Rating	Road Name	Limits	Length (miles)
10			
9	Brutus Road Indian Point Road Needles Road Strafford Lane	West Burt Lake Road to Indian Point Road. Brutus Road to End of Asphalt. Eagles Nest Road to Strafford Lane. Needles Road south to end of road.	0.37 1.11 0.24 0.25
8	Maple Bay Road Service Road	Chickagami Road to Burt Lake West Numbers Road to Topinabee Mail Route.	0.07 1.25
7			
6	Crump Road Eagles Nest Road	Topinabee Mail Route then north to end of pavement. Sturgeon bay Drive to Cedar Point Drive.	0.52 0.92
5	Indian Road	Brutus Road north to Township Dump.	0.29
4	Numbers Road	Eagles Nest Road to Service Road.	0.46
3	Cedar Drive Cedar Point Drive Deerfield Lane Eagles Nest Road Elmhurst Road  Feather Lane	Cedar Point Drive then northwesterly to end of road. Cedar Drive to Eagles Nest Road. Cedar Point Drive to Cedar Drive. Cedar Point Drive to Numbers Road. West Burt Lake Road then southeasterly to end of public road. Mullett-Burt Road to end of road.	0.35 0.57 0.16 0.62 0.29  0.32
2	Cedar Drive Chickagami Trail Deerfield Lane Indian Road Maple Bay Road Mullett-Burt Road	Deerfield Lane to Cedar Point Drive Maple Bay Road easterly to end of pavement. Cedar Drive to end of pavement. West Burt Lake Road east to end of road. Brutus Road to Chickagami Trail. Burt Lake to East Burt Lake Road.	0.19 1.00 0.05 0.13 0.32 0.06
1			

## 2017 - 2019 PASER Ratings for Paved Local Roads



## Average PASER Rating for Paved Local Roads



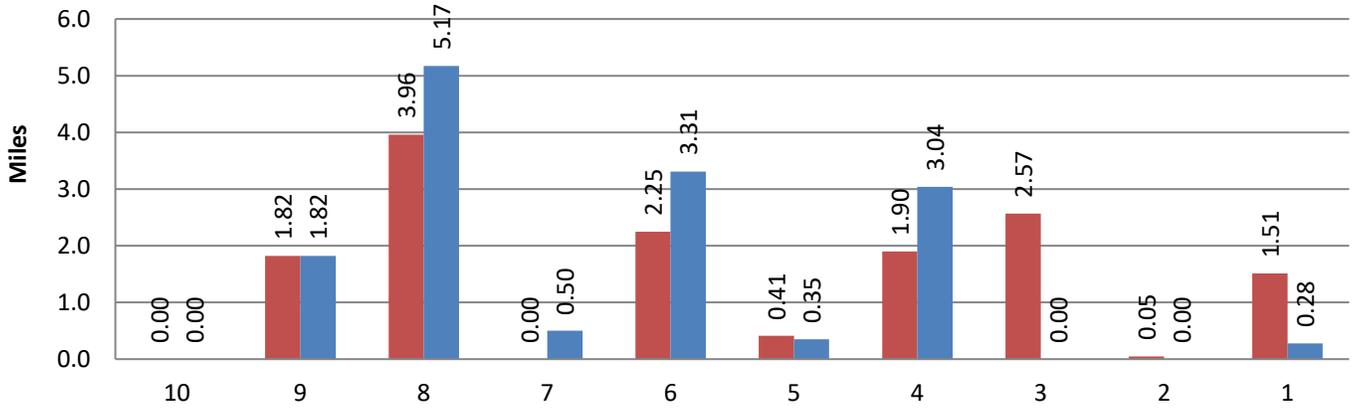
## Burt Township Gravel Local Road Ratings

### Current Road Ratings

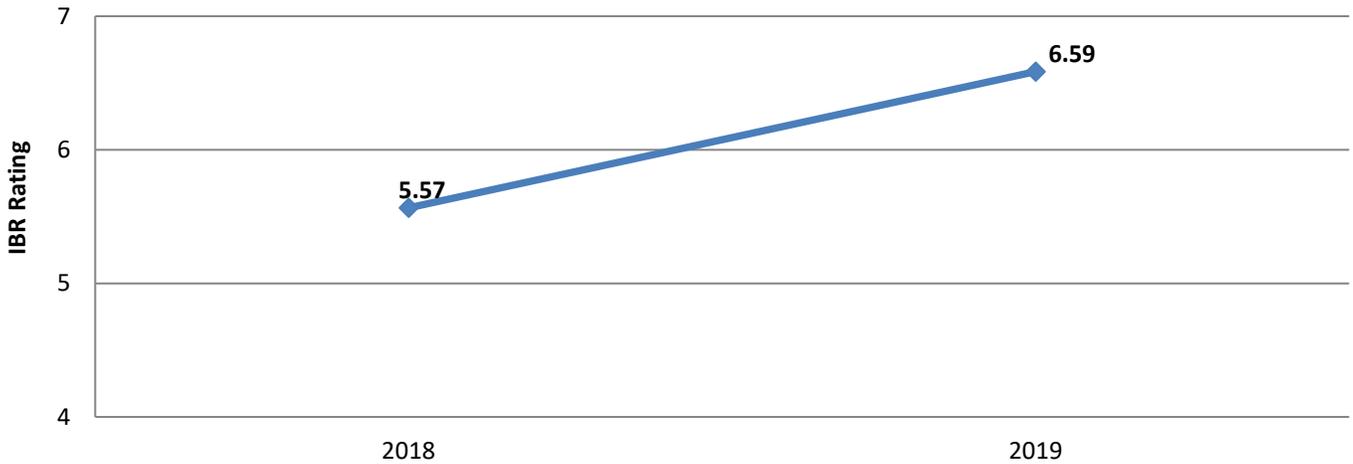
IBR Rating	Road Name	Limits	Length (miles)
10			
9	Birchwood Road Learning Lane	East Burt Lake Road to Budzinski Road. Ranch Road then west to end of road.	1.57 0.25
8	Budzinski Road Crump Road Greenman's Point Road Hardwood Road Horizon Trail Mundt Road Sturgeon Bay Road	Birchwood Road then north to Township Line. Burt Township Dump to Koviak Road. Brutus Road then north to Burt Lake. County Lin to Seneca Road. Eaglesnest Road then easterly to end of road. Mullett-Burt Road then southerly to end of road. Eaglesnest Road then west and north to end of road.	0.50 2.07 0.57 0.90 0.19 0.45 0.49
7	Hardwood Road	Seneca Road to West Burt Lake Road.	0.50
6	East Numbers Road Indian Road Nash Road Poxon Road Raver Drive Roberts Road Shiawasse Road White Goose Road	South Extension Road to I-75 Township Dump then north to Penny Lane. Shawassee Road to Chickagami Trail. Topinabee Mail Route west to end of road. West Burt Lake Road to West Burt Lake Road East Burt Lake Road then south to end of road. Chickagami Road to Brutus Road. Mullett-Burt Road then south to end of road.	0.28 0.65 0.54 0.32 0.45 0.70 0.30 0.07
5	Hardwood Road West Numbers Road	West Burt Lake Road to Burt Lake. Eaglesnest Road west to end of road.	0.13 0.22
4	Chickagami Trail Indian Road Weatherhead Road Woodrose Road	End of pavement to start of asphalt. Penny Lane to seasonal road. Topinabee Mail Route then west to end of road. Crump Road to end of road.	0.53 1.99 0.43 0.09
3			
2			
1	Elm Road Lawless Lane Needles Road	East Burt Lake Road to end of road. East Burt Lake Road to end of road. Burt Lake to Strafford Lane.	0.05 0.18 0.05

## 2018 - 2019 IBR Ratings for Gravel Local Roads

■ 2018 ■ 2019



## 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 Ultra-thin Asphalt Overlay	7 7 – 10
5	Asphalt Wedging Asphalt Wedging and Sealcoat Asphalt Wedging and Ultra-thin Asphalt Overlay	7 7 – 10 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.

## 5 Year Road Plan

### Burt Township Road Funding:

Township General Fund	\$ 50,000
Township Road Mileage	\$ 65,000
<u>Road Commission Match</u>	<u>\$ 25,000</u>
<b>Total Funds Available per Year</b>	<b>\$140,000</b>

The proposed road plan is based on the PASER rating and the associated repairs for the surface. The plan provides budgetary numbers, actual project costs will still need to be estimated on a per project basis. Review of the expected service life must also be considered when selecting projects and repairs based on the PASER rating. If a longer service life is desired then a different repair would be selected. The following plan does not incorporate maximum service life (ie. total reconstruction) in the proposed repairs. The Road Commission matching dollars is expected to grow moving forward as Road Commission funding increases.

### 2019 Projects

Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Cedar Point Drive	Eagles Nest Road to Cedar Drive	0.57	\$ 136,800	3
Strafford Lane*	Needles Road to end.	0.25	\$ 35,500	4
Needles Road*	Eagles Nest Road to Strafford Lane.	0.25	\$ 60,000	3

\*2018 Carryover Projects

**Total Investment for 2019      \$ 136,800**

### 2020 Projects

Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Cedar Drive	Cedar Point Drive to end.	0.35	\$ 91,000	3
Deerfield Lane	Cedar Point Drive to end.	0.21	\$ 54,600	3

**Total Investment for 2020      \$ 145,600**

### 2021 Projects

Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Various Crack Sealing		4.0	\$ 10,000	7
Chickagami Trail	Maple Bay Road then east 0.50 miles	0.50	\$ 175,000	2

**Total Investment for 2021      \$ 185,000**

**2022 Projects**

Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Chickagami Trail	End of 2021 Project then 0.50 miles east to end of paved section of road.	0.50	\$ 175,000	2

**Total Investment for 2022      \$ 175,000**

**2023 Projects**

Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Maple Bay Road	Brutus Road to Cjickagami Road	0.32	\$ 157,000	2

**Total Investment for 2023      \$ 157,000**