

Cheboygan County Road Commission
Burt Township Local Road Ratings Report for 2018

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.

PASER Road Rating System

All the local paved and gravel 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 or a scale of 2 to 10 for gravel surfaces. 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

PASER Rating and Treatments for Gravel Roads

Road Rating	Existing Condition / Recommended Repair	Estimated Cost per Mile
10	No maintenance necessary. New Road	\$ 0
8	Good crown and drainage throughout. Adequate gravel for traffic. Maintain with grading and dust control.	\$ 500
6	Existing crown with drainage on 50% or more of roadway. Additional gravel needed in some areas along with ditching.	\$ 45,000
4	Little or no crown. Ditched on less than 50% of the road. Additional gravel needed on entire road along with ditching.	\$ 85,000
2	Failed road. Reconstruction.	\$ 250,000

Burt Township Paved Local Road Ratings

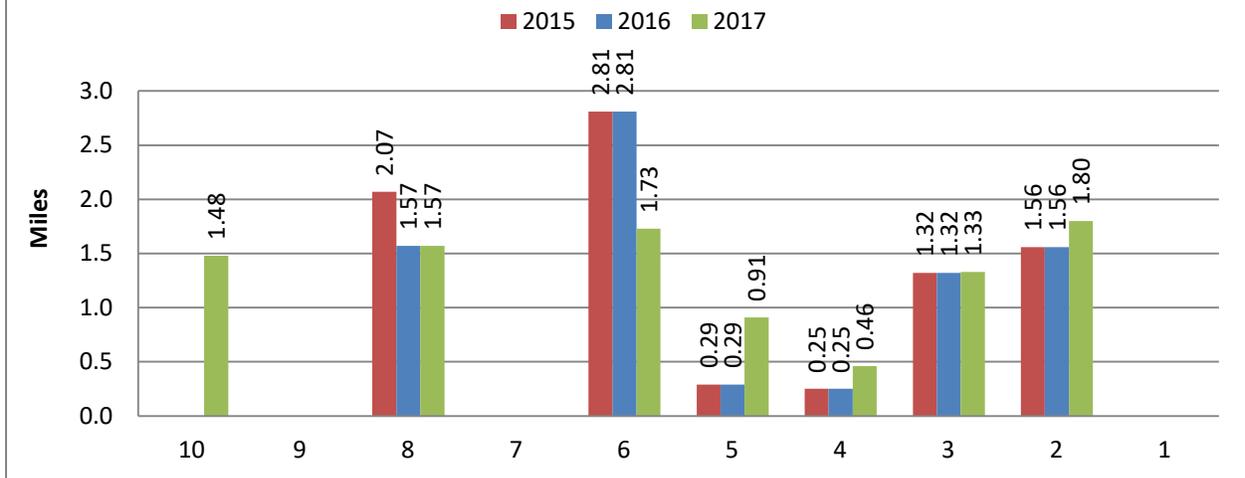
Current Road Ratings

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

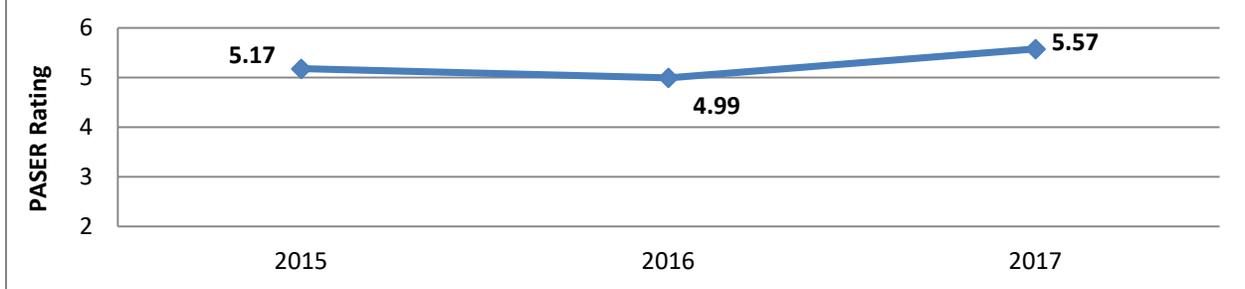
Average PASER Rating for Paved Local Roads 5.57

2016 Average 4.99

2015 - 2017 PASER Ratings for Paved Local Roads



Average PASER Rating for Paved Local Roads



Estimate Cost to Repair Local Paved Roads Based on 2017 PASER Ratings

Road Rating	Miles	Estimated Cost per Mile	Total Cost
10	1.48	\$ 0	\$ 0
9	0	\$ 0	\$ 0
8	1.57	\$ 600	\$ 942
7	0	\$ 3,200	\$ 0
6	1.73	\$ 63,000	\$ 108,990
5	0.91	\$ 47,000	\$ 42,770
4	0.46	\$ 142,000	\$ 65,320
3	1.33	\$ 240,000	\$ 319,200
2	1.80	\$ 350,000	\$ 630,000
1	0	\$ 350,000	\$ 0

Total Cost in 2018 = \$ 1,167,222

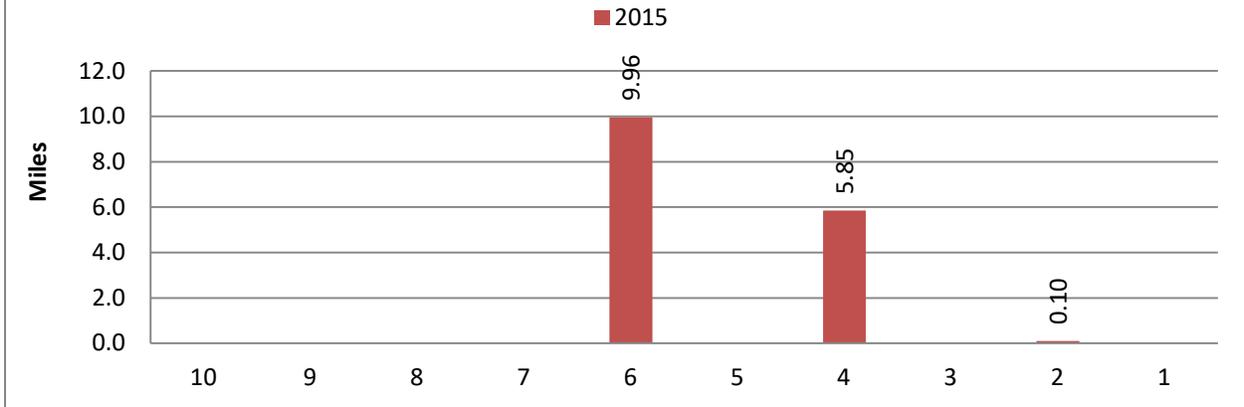
Burt Township Gravel Local Road Ratings

Current Road Ratings

PASER Rating	Road Name	Limits	Length (miles)
10			
8			
6	Birchwood Road	East Burt Lake Road to Budzinski Road.	1.57
	Budzinski Road	Birchwood Road then north to Township Line.	0.50
	Chickagami Trail	End of pavement to Lathers Road.	0.23
	Crump Road	Birchwood Road to Koviak Road.	0.69
	Hardwood Road	County Line then east to end of road.	1.53
	Horizon Trail	Eaglesnest Road then easterly to end of road.	0.19
	Indian Road	Township Dump then north to seasonal road.	2.67
	Learning Lane	Ranch Road then west to end of road.	0.25
	Nash Road	Shawassee Road to Chickagami Trail.	0.32
	Needles Road	Pipeline Road to Service Road.	0.23
	West Numbers Road	Eaglesnest Road west to end of road.	0.22
	Roberts Road	East Burt Lake Road then south to end of road.	0.70
	Shawassee Road	Chickagami Road to Brutus Road.	0.30
	Sturgeon Bay Road	Eaglesnest Road then west and north to end of road.	0.49
	White Goose Road	Mullett-Burt Road then south to end of road.	0.07
4	Brutus Road	West Burt Lake Road to Indian Point Road.	0.35
	Crump Road	Burt Township Dump to Birchwood Road.	1.38
	Greenman's Point Road	Mullett-Burt Road then southerly to end of road.	0.45
	Indian Point Road	Lathers Road to Brutus Road.	1.41
	Lawless Lane	East Burt Lake Road to end of road.	0.18
	Mundt Road	Brutus Road then north to Burt Lake.	0.57
	Poxon Road	Topinabee Mail Route west to end of road.	0.54
	Raver Drive	West Burt Lake Road to West Burt Lake Road.	0.45
	Weatherhead Road	Topinabee Mail Route then west to end of road.	0.43
	Woodrose Road	Crump Road to end of road.	0.09
2	Elm Road	East Burt Lake Road to end of road.	0.05
	Needles Road	Burt Lake to Strafford Lane.	0.05

Average PASER Rating for Gravel Local Roads 5.24

2015 PASER Ratings 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.

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>
Total Funds Available per Year	\$140,000

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.

2018 Projects

Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Elmhurst Road	West Burt Lake Road to end.	0.29	\$ 30,740	5
Strafford Lane	Needles Road to end.	0.25	\$ 35,500	4
Needles Road	Eagles Nest Road to Strafford Lane.	0.25	\$ 60,000	3

Total Investment for 2018 \$ 126,240

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

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