

Cheboygan County Road Commission
Tuscarora 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 Ultra-thin Asphalt Overlay	\$ 29,000 \$ 63,000
5	Asphalt Wedging Asphalt Wedging and Sealcoat Asphalt Wedging and Ultra-thin Asphalt Overlay	\$ 47,000 \$ 75,000 \$ 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

Tuscarora Township Paved Local Road Ratings

Current Road Ratings

PASER Rating	Road Name	Limits	Length (miles)
10			
9			
8	Apple Blossom Street Barbara Avenue Barbara Avenue Burt Court	Gratit St. to end of the road. Witt Blvd. to Dorothy Avenue. Dorothy Avenue to end of public road. Link Blvd. to end of road.	0.25 0.19 0.12 0.04
7	Burchfield Avenue Fisher Woods Road Holden Avenue Link Boulevard Mack Avenue Mackinac Court Poplar Street River Street South Avenue Witt Boulevard	Witt Blvd. to Straits Highway. Arthur Hills Street to Wilson Road Witt Blvd. to Poplar Street. Wood Hollow to end of road. Witt Blvd. to end of road. Link Boulevard to end of road. Holden Avenue to South Avenue. Straits Highway then easterly to end of road. Burt Lake to Witt Blvd.. Holden Avenue to end of the road at the Indian River.	0.23 0.22 0.11 0.54 0.10 0.04 0.06 0.10 0.13 0.24
6	Arthur Street Floyd Street Hemlock Street Juno Street Oakhill Street Poplar Street River Street South Avenue The Pike Wilson Road	Constance Avenue to Poplar Street. Juno Street to Straits Highway. Gatewood Avenue to Straits Highway. Lake Street to River Street. Straits Highway then east to end of road. South Avenue to Oakley Street. The Pike to Floyd Street. Straits Highway to Poplar Street. Witt Blvd. to Straits Highway. Constance Avenue to Poplar Street. Schultz Road to Fisher Woods Road.	0.06 0.08 0.08 0.18 0.27 0.11 0.06 0.16 0.23 0.07 0.36

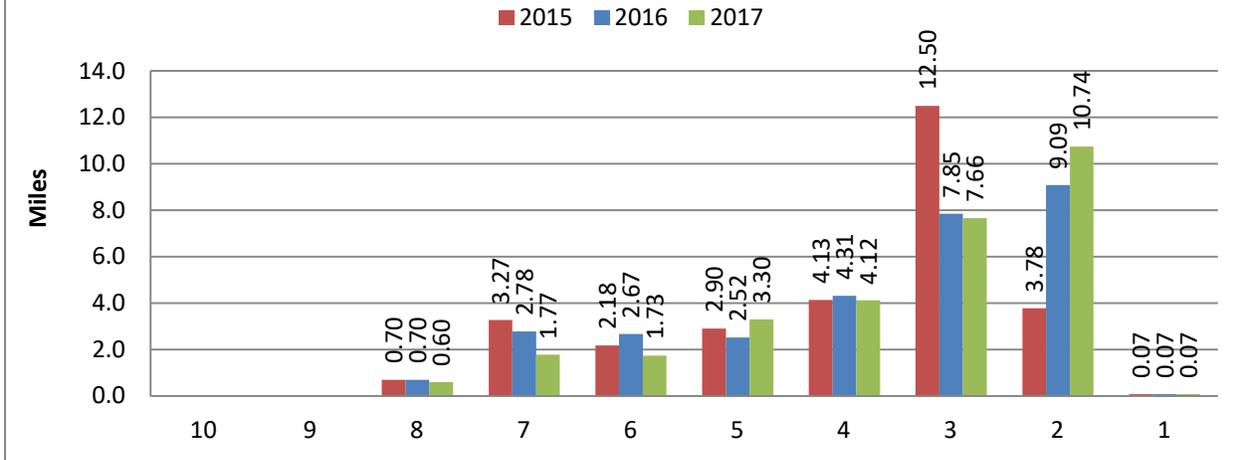
6	Wood Hollow	Link Blvd. to end of road.	0.07
5	Arthur Hills Street	Mona Street to Louise Drive.	0.09
	Berry Lane	Oakhill Street to Township Line.	0.20
	Burchfield Avenue	Dorris Avenue to Witt Blvd.	0.19
	Daily Road	Township Line to Oak Hill Street.	0.27
	Doris Place	Barbara Avenue to Burchfield Avenue.	0.05
	Dorothy Street	Mona Street to Louise Drive.	0.09
	Floyd Street	Poplar Street to Juno Street.	0.08
	Hemlock Street	Spruce Street to Gatewood Avenue.	0.08
	Holden Avenue	Witt Blvd to end of road.	0.13
	Juno Street	Floyd Street to Lake Street	0.10
	King Road	M-68 to Fisher Trail.	0.02
	Link Boulevard	Link Place to Wood Hollow.	0.53
	Mona Street	Dorothy Street to Arthur Hills Street.	0.09
	Oak Glen Street	Witt Blvd. to end of road.	0.07
	Prospect Street	Straits Highway the southeasterly to end of road.	0.08
	Spruce Street	Hemlock Street to end of road.	0.03
	The Pike	Witt Blvd. to Constance Avenue.	0.10
	Rotter Road	M-68 to Lakeview Lane	0.10
	Vola Road	Wilson Road to end of road.	0.15
	Waterway Street	Straits Highway to the end of road.	0.13
	Wilson Road	W Wilson Road north to end of road.	0.31
		Oakhill Street then north to end of pavement.	0.05
		South end of road to Schultz Road.	0.19
	Witt Boulevard	Barbara Avenue to Holden Avenue.	0.17
4	Arthur Hills Street	Louise Drive to Fisher Woods Road.	0.11
	Brudy Road	M-68 then south to the end of pavement.	0.12
	Club Road	Prospect Street to Hemlock Street.	0.11
	Commerce Blvd.	M-68 to end of the road.	0.37
	Dorothy Avenue	Barbara Avenue to end of pavement.	0.09
	Ellinger Road	M-68 to end of pavement.	1.21
	Louise Drive	Arthur Hills Street to end of road.	0.25
	Mack Avenue	Straits Highway then west to end	0.06
		Poplar Street to Witt Blvd.	0.12
	Plymouth Beach Drive	Eagle's Nest Road to Margaret Drive.	0.77
	Shawnee Avenue	Frontenac Avenue then south to end of road.	0.40
	Tuscarora Circle	Straits Highway to Straits Highway.	0.51
3	Barbara Avenue	M-68 to Witt Blvd.	0.16
	Bosserman Court	Straits Highway to end or road.	0.24
	Chippewa Beach Road	Frontenac Avenue to Waubun Road.	0.15
	Constance Avenue	The Pike to Arthur Street.	0.06
	Eastway Road	Fisher Woods Road to Maplewood Road.	0.17
	Elmwood Road	Westway Road to Eastway Road.	0.17
	Fisher Trail	Parke Road to M-68.	0.50
	Fisher Woods Road	South Straits Highway to Eastway Drive.	0.22
	Frontenac Avenue	Shawnee Avenue to Chippewa Beach Road.	0.71
	Hamilton Road	McMichael Road to the end of pavement.	0.14
	Hidden Ridge Road	Bowman Road to end of road.	0.23
	Lake Street	Straits Highway to end of road.	0.22

3	Link Boulevard	Straits Highway Link Place.	0.22
	Link Place	Link Boulevard to end of road.	0.37
	Maplewood Road	Westway Road to Eastwood Road.	0.17
	McMichael Road	M-68 to Hamilton Road.	0.93
	Pembrook Road	Straits Highway to Eastwood Road.	0.21
	Poplar Street	Floyd Street to River Street	0.18
	Prospect Street	End of road to Spruce Street.	0.27
	Resort Road (N/S)	M-68 to Rotter Road.	0.91
	E/W Resort Road	McMichael Road to end of road.	0.33
	Springwell Road	McMichael Road to the end of road.	0.48
	Westway Road	Maplewood Road to Elmwood Road.	0.12
	W Wilson Road	Straits Highway to Wilson Road.	0.50
	2	Argonaut Trail	M-68 then 0.30 miles northeasterly.
Arlene Avenue		Bellchase Drive to Lori Drive.	0.11
Bellchase Drive		Gratiot Road to end of the road.	0.22
Bunker Road		Straits Highway then 0.25 miles west.	0.25
Chippewa Beach Road		Spruce Street to Frontenac Avenue.	2.68
Club Road		M-68 to Martha Street.	0.40
Cressy Street		South Straits Highway to end of road.	0.12
Diane Drive		Arlene Drive to end of road.	0.11
Ellinger Road		M-68 then south to the end of pavement.	0.05
Forest Trail		M-68 to end of Road.	0.27
Frontenac Avenue		Wahbee Avenue to Shawnee Avenue.	0.11
Grandview Beach Road		South Straits Highway to Township Line	1.79
Gratiot Street		Hemlock Street to Bellchase Drive	0.34
Gratiot Street		Bellchase Drive to South Straits Highway	0.15
Hemlock Street		Straits Highway to Gratiot Street.	0.10
Juno Street		Oakley Street to Floyd Street.	0.05
Kings Point Resort Road		Ellinger Road then westerly to end of road.	0.06
Lori Lane		Arlene Avenue to end of road.	0.17
McMichael Road		Rogers Road to M-68.	1.07
Oakley Avenue		Poplar Street to Straits Highway.	0.16
Oosting Road		Resort Road to the end of pavement.	0.11
Plymouth Beach Road		Margaret Drive to end of road.	0.52
Poplar Street		Oakley Avenue to The Pike	0.06
Prospect Street		Spruce Street to Straits Highway.	0.14
Resort Road (N/S)		Rotter Road to Resort Road (E/W).	0.56
E/W Resort Road		M-68 to McMichael Road.	0.50
Sherwood Drive		M-68 to end of road.	0.27
Spruce Street	Prospect Street to Hemlock Street.	0.07	
1	Gatewood Avenue	Prospect Street to Hemlock Street.	0.07

2017 Average PASER Rating for Paved Local Roads 3.50

2016 Average 3.76

2015 - 2017 PASER Ratings for Paved Local Roads

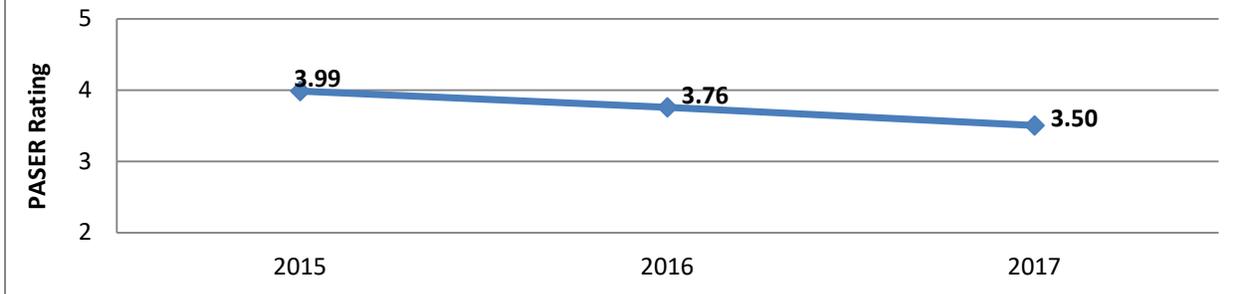


Estimate Cost to Repair Local Paved Roads Based on 2017 PASER Ratings

Road Rating	Miles	Estimated Cost per Mile	Total Cost
10	0	\$ 0	\$ 0
9	0	\$ 0	\$ 0
8	0.60	\$ 600	\$ 360
7	1.77	\$ 3,200	\$ 5,664
6	1.73	\$ 29,000	\$ 50,170
5	3.30	\$ 47,000	\$ 155,100
4	4.12	\$ 142,000	\$ 585,040
3	7.66	\$ 240,000	\$ 1,838,400
2	10.74	\$ 350,000	\$ 3,759,000
1	0.07	\$ 350,000	\$ 24,500

Total Cost in 2018 = \$ 6,418,234

Average PASER Rating for Paved Local Roads



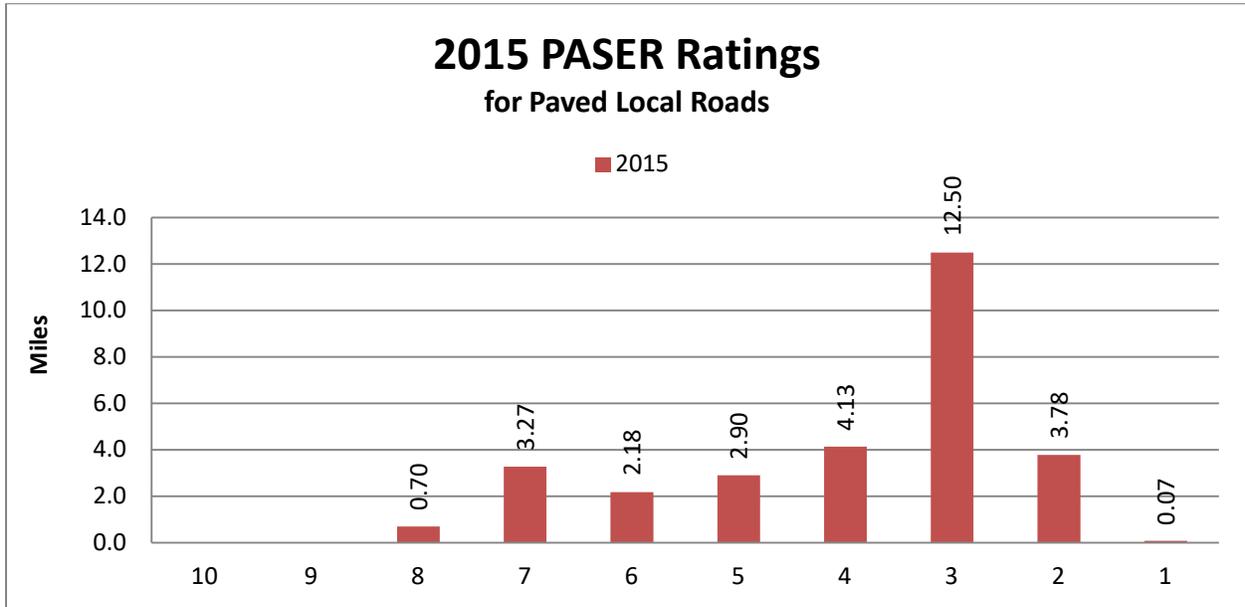
Tuscarora Township Gravel Local Road Ratings

Current Road Ratings

PASER Rating	Road Name	Limits	Length (miles)
10			
8	Eagles Nest Road	Straits Highway to Sturgeon Bay Road.	1.38
	Jaciuk Road	Parke Road to King Road.	0.50
	King Road	Bowman Road to M-68.	0.49
6	Ellinger Road	End of pavement (south of M-68) south to end of road.	0.84
	Fisher Trail	King Road to M-68.	0.67
	Fisher Woods Road	Wilson Road then east to end of road.	0.13
	Hammersly Road	Inueary Trail to Nababois Trail.	0.14
	Inueary Trail	Nabanois Trail to the end of road.	0.33
	King Road	Fisher Trail to end of road.	0.15
	McMichael Road	King Road to Rogers Road.	1.00
	Mac A Vista Drive	McMillan Road to end of road.	0.13
	Miller Road	M-68 to end or road.	1.18
	Nabanois Trail	Onaway Road to Mingo Trail.	0.39
	Oak Ridge Road	Chippewa Beach Road north to the end of road.	0.26
	Rogers Road	Ellinger Road to Shortcut Road.	0.96
	Rotter Road	Ellinger Road to McMichael Road.	0.54
	South Rainbow Trail	Township Line to end of road.	0.25
4	Bowman Road	King Road to Rogers Road.	0.96
	Burdy Road	End of pavement then south to Township Line.	1.68
	Club Road	M-68 then south to Township Line.	1.85
	Eden Court	Rainbows End Drive to end of road.	0.05
	Ellinger Road	End of pavement to Burt Lake.	0.04
	Fisher Woods Road	Straits Highway to Bunker Road.	0.25
	Goerke Road	Grandview Beach Road then south to end of road.	0.41
	Grace Beach Road	Grandview Beach Road to S Grandview Beach Road.	0.28
	S Grandview Beach Road	Grandview Beach Road to Grace Beach Road.	0.23
	King Road	McMichael Road to Bowman Road.	0.98
	Linda Lane	Plymouth Beach Road to end of road.	0.04
	Mac A Vista Drive	Chippewa Beach Road to McMillan Road.	0.63
	Milton Road	Vola Road then south to end of road.	0.08
	Mingo Trail	Nabanois Trail to end of road.	0.10
	Ottaws Trail	Nabanois Trail then west to end of road.	0.06
	Pleasant Beach Court	Grace Beach Road to S Grandview Beach Road.	0.18
	Rainbows End Drive	Straits Highway to end of road.	0.67
	Resort Road	King Road to Rogers Road.	1.00
	Rickett Road	Reams Road then west to end of road.	0.41
	River Street	Poplar Street to end of road.	0.03
	Rogers Road	M-68 to Bowman Road.	0.44
	Rotter Road	Resort Road then west to pavement.	0.35
	Shortcut Road	Resort Road to Rogers Road.	0.10
	Victor Drive	Onaway Road to end of road.	0.40
4	N Wabun Road	Chippewa Beach Road to end of road.	0.38

	Wahbee Avenue Waubun Beach Road Woods Trail	Chippewa Beach Road to Straits Highway. Onaway Road to Ottaws Trail	0.40 1.22 0.06
2	Alden Trail Canal Street Gatewood Avenue S Grandview Beach Road Irish Drive Juno Street Margaret Drive Resort Road N River Street Sturgeon Avenue	Inuery Trail to end of road. Hemlock Street to end of road. Grandview Beach Road to Pleasant Beach Court. Club Road to Canal Street. River Street to the end of road. Plymouth Beach Road to end of road. Rogers Road to M-68. River Street to end of road. Barbara Avenue to end of road.	0.12 0.05 0.03 0.18 0.09 0.04 0.04 0.09 0.03 0.18

Average PASER Rating for Gravel Local Roads 4.93



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.