

Cheboygan County Road Commission
2018 - 2022 Primary Road Plan

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 to invest the available road funds for the primary roads in a manner that will provide the greatest return.

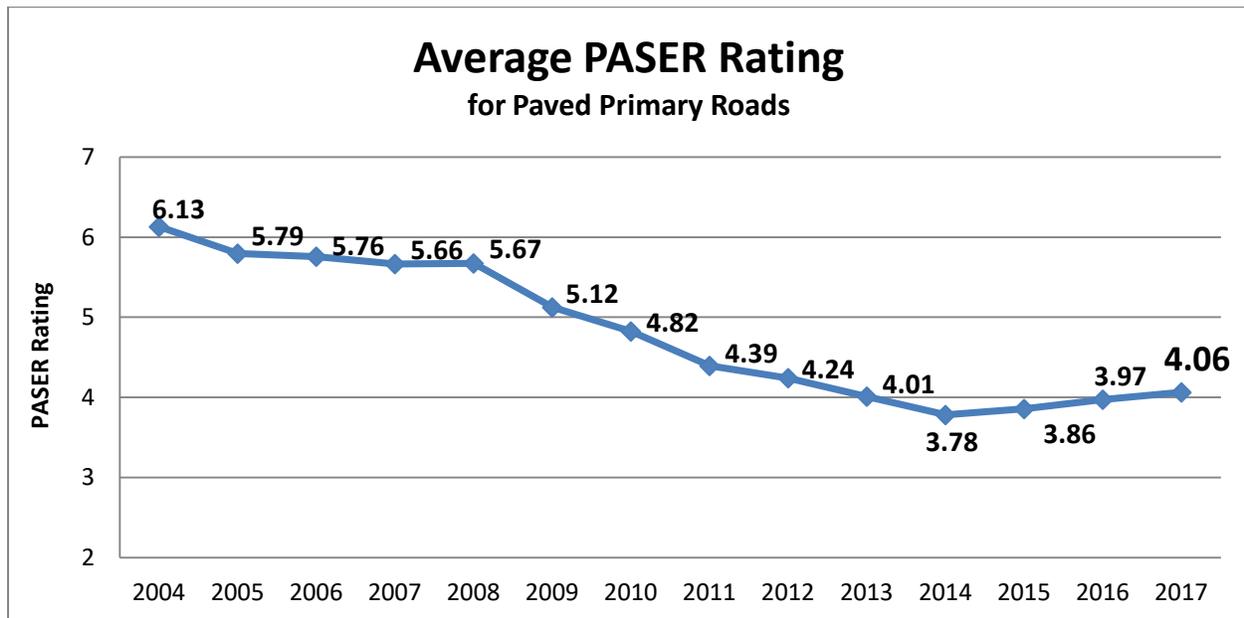
PASER Road Rating System

All the paved primary roads are rated each year using the PASER Road Rating system. 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 chart below shows 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

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

Cheboygan County Paved Primary Road Ratings



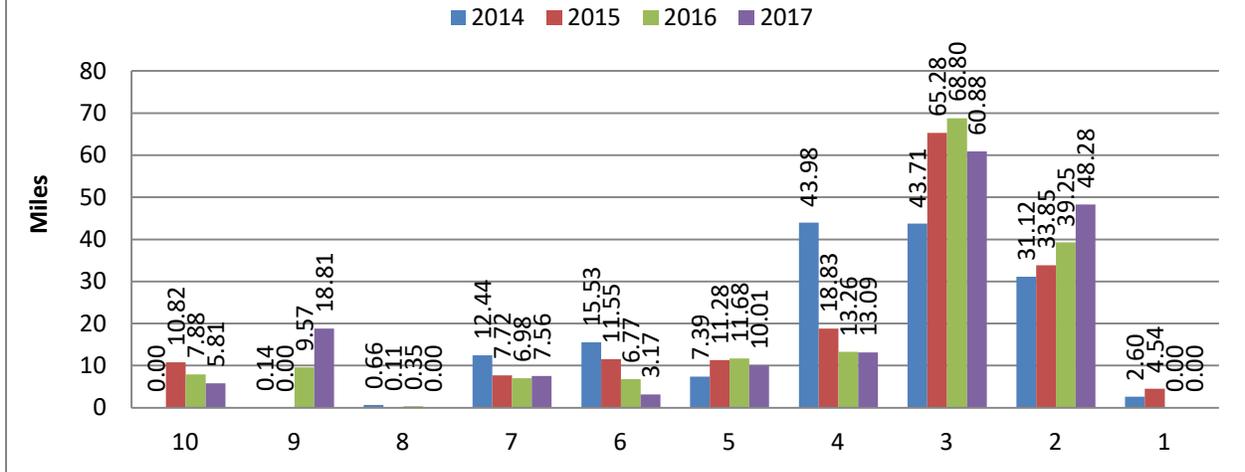
Current Road Ratings

PASER Rating	Road Name	Limits	Length (miles)
10	Mullett Burt Road	East Burt Lake Road to Topinabee Mail Route	1.43
	East Mullett Lake Road	Hackleburg Road to Old School Road.	2.76
	South Straits Highway	Wolverine Village Limits (north) to Haakwood Road.	1.62
9	Black River Road	Mann Road to Zolner Road.	2.25
	Club Road	Martha Street to Onaway Road.	0.16
	Devereaux Lake Road	East Mullett Lake Road to M-33.	3.16
	Levering Road	Cheboygan County Line to MacArthur Road.	1.36
		Inverness Trail to Cheboygan City Limits.	1.49
	Mann Road	Pallister Road to Black River Road.	2.45
	East Mullett Lake Road	Onaway Road to Stewart Road.	1.97
		Gannon Drive to Devereaux Lake Road.	0.93
	Onaway Road	Club Road to East Side of I-75.	0.33
	Riggsville Road	East Burt Lake Road to S/B I-75 Ramp.	2.68
South Straits Highway	Hemlock Street to S/B I-75 Ramp.	2.03	
8			
7	Black River Road	Grant/Waverly Township Line to Maxon Road.	3.92
	South Extension Road	Mullett Burt Road to Mullett/Inverness Township Line.	1.99
		Indian Trail Road to Riggsville Road.	1.65
6	Black River Road	Zolner Road to 5 Mile Point Road.	1.41
	Pickereel Lake Road	Reams Road to end of pavement.	0.47
	Reams Road	Pickereel Lake Road to end of pavement.	0.16
	South Straits Highway	River Street to Hemlock Street.	0.19
		Bilder Road Cutoff to Shire Road.	0.94

5	Afton Road	Townhall Road to Goose Lake Road	0.27
	West Burt Lake Road	Brutus Road to Elmhurst Road.	0.30
	Mullett Burt Road	Topinabee Mail Route to Bennett Road.	1.81
	Seffern Road	US-23 to Cheboygan Point Road.	1.09
	Twin Lakes Road	Doriva Beach Road to end of pavement.	1.06
	Wolverine Road	County Line to Hunters Road. Henry Collins Road to Bilder Road Cutoff.	4.63 0.85
4	Afton Road	Townhall Road to Pigeon River Road	2.20
		Beebe School Road to M-68.	2.54
	Black River Road	Abbey Road to Mann Road.	0.75
		5 Mile Point Road to Grant/Waverly Township Line.	0.92
	West Burt Lake Road	Hardwood Road to Chickory Trail.	0.93
	Martha Street	Straits Highway to Club Road.	0.08
	Orchard Beach Road	M-33 to Little Canada Road.	1.00
	Parke Road	Jaciuk Road to end of pavement.	0.41
	South Straits Highway	Perry Road Road to Shire Road.	2.85
Wolverine Road	Hunters Road to Henry Collins Road. Shire Road to Wolverine Village Limits.	1.10 0.31	
3	Afton Road	Shann Road to Webb Road.	0.88
		Webb Road to Shooks Road.	1.00
		Ford Road to Dunham Road.	1.53
		Pigeon River Road to Beebe School Road.	0.51
	Black River Road	Orchard Beach Road to Page Road.	2.79
		Twin Lakes Road to Abbey Road.	1.25
		Maxon Road to Forest/Waverly Twp. Line.	3.00
		M-68 to Wigglesworth Road.	4.54
	Brutus Road	Mundt Road to West Burt Lake Road.	0.25
	East Burt Lake Road	Birchwood Road to Riggsville Road.	1.58
	Butler Road	Black River Road to US-23.	2.08
	Court Street	Cheboygan City Limits to Levering Road.	0.53
	Dorvia Beach Road	Twin Lakes Road to Cheboygan County Line.	3.79
	South Extension Road	Mullett/Inverness Township Line to Indian Trail.	0.50
	Levering Road	Heilman Road to North Extension Road.	2.02
		Wollangur Road to Inverness Trail.	3.89
	Mullett Burt Road	Bennett Road to M-27.	1.32
	East Mullett Lake Road	Stewart Drive to Parrott Point Drive.	1.79
		Old School Road to Gannon Drive.	0.71
	Old Mackinaw Road	Cheboygan City Limits to Pries Road.	2.80
	Onaway Road	East side of I-75 to English Trail.	1.93
	Pries Road	Old Mackinaw Road to US-23.	0.24
	Riggsville Road	Bryant Road to East Burt Lake Road.	2.37
		S/B I-75 Ramp to Richardson Road.	2.65
		Kitchen Road to Cheboygan City Limits.	3.66
	South Straits Highway	South County Line (Ashley Road) to Perry Road.	2.14
		Shire Road to Wolverine Village Limits (south).	0.44
	Haakwood Road to Wildwood Road.	4.63	
	M-68 to River Street.	0.64	
Topinabee Mail Route	Columbine Street to M-27.	0.20	
Townline Road	M-27 to Stempky Road.	2.50	
3	Twin Lakes Road	Chamberlin Road to Doriva Beach Road.	0.99

3	VFW Road	Riggsville Road to M-27.	1.73
2	Afton Road	Wolverine Village Limits to Shann Road.	0.32
		Shooks Road to Ford Road.	1.03
		Dunham Road to Townhall Road.	1.00
	Black River Road	Vanyea Road to Orchard Beach Road.	9.16
		Page Road to Twin Lakes Road.	0.94
		Forest/Waverly Twp. Line to M-68.	1.03
		Wigglesworth Road to Milligan Highway.	1.12
	Brutus Road	Brill Road to Mundt Road.	1.69
	East Burt Lake Road	Greenman's Point Road to Birchwood Road.	1.54
	West Burt Lake Road	Elmhurst Road to Hardwood Road.	2.01
		Chickory Road to Riggsville Road.	1.45
	Levering Road	MacArthur Road to Heilman Road.	1.64
		North Extension Road to Wollangur Road.	1.18
	Mann Road	M-33 to Pallister Road.	2.55
	East Mullett Lake Road	Parrott Point Drive to Hackleburg Road.	0.47
	North Allis Highway	Maxon Road to Presque Isle County Line.	1.00
	Orchard Beach Road	Little Canada Road to Black River Road.	2.19
	Parke Road	M-68 to Jaciuk Road.	1.64
	Riggsville Road	West County Line to Byrant Road.	0.87
		Richardson Road to Kitchen Road.	1.61
	South River Road	Orchard Beach Road to Black River Road.	4.64
	South Straits Highway	Wildwood Road to M-68.	2.28
	Topinabee Mail Route	Mullett Burt Road to Woodruff Street.	2.88
	Twin Lakes Road	Black River Road to Chamberlin Road.	1.97
	Vanyea Road	Black River Road to Butler Road.	1.49
	Walker Road	M-68 to M-33.	0.38
	Wildwood Road	South Straits Highway to end of pavement.	0.20
1			

2014 - 2017 PASER Ratings for Paved Primary Roads



Estimate Cost to Repair Primary Roads Base on 2017 PASER Ratings

Road Rating	Miles	Estimated Cost per Mile	Total Cost
10	5.81	\$0	\$0
9	18.81	\$0	\$0
8	0.00	\$600	\$0
7	7.65	\$3,200	\$24,480
6	3.17	\$29,000	\$91,930
5	10.01	\$47,000	\$470,470
4	13.09	\$142,000	\$1,858,780
3	60.88	\$240,000	\$14,611,200
2	48.28	\$350,000	\$16,898,000
1	0	\$350,000	\$0

Total Cost in 2017 = \$ 33,954,860

Total Cost in 2016= \$32,900,256

Total Cost in 2015 = \$32,667,440

Total Cost in 2014 = \$ 30,037,626

Service Life of Treatments

Service life is the expected time that a treatment will last before needing complete reconstruction. In the table below, a 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

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.

Primary Road Plan

Preventative maintenance and/or reconstruction of primary roads are funded by the Federal Aid System, the Cheboygan County Road Commission and the County Wide Road Millage. The Federal funds are a fairly steady source that flows from the State thru Task Force #9 to the Road Commission each year. In past years, the Road Commission has been able to spend some money on preventative maintenance with dollars from the Road Commission budget. In the current year, due to the increased costs faced by the Road Commission (salt prices, equipment maintenance, emergency repairs, ect..), there was no money available to budget towards the primary roads other than patching and grading for gravel primary roads. In the fall of 2014 the residents of Cheboygan County passed a county wide road millage. The millage provides much needed funds for a select list of roads. In 2018 the Road Commission will ask the residents to renew the Road Millage for another 4 years. The Michigan Transportation Fund (MTF) is expected to continue to increase due to general fund allocations from the Michigan Legislature. These funds will add more potential projects on the primary road system starting in 2019.

2018 Projects

FEDERAL AID FUNDING				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
East Mullet Lake Road	Stewart Road to Hackleburg Road	2.05	\$ 690,000	2/3

COUNTY ROAD MILLAGE FUNDS				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Townline Road	M-27 to VFW Road	1.50	\$ 420,000	3
Orchard Beach Road	M-33 to South River Road	2.00	\$ 690,000	2
Twin Lakes Road	Black River Road to Owens Road	1.00	\$ 140,000	2

2019 Projects

FEDERAL AID FUNDING				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Mann Road	Pallister Road to M-33	2.00	\$ 623,648	2

PROPOSED COUNTY ROAD MILLAGE FUNDS				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Mann Road	Pallister to M-33	0.54	\$ 300,000	2
South Straits Highway	M-68 to Wildwood Road	2.28	\$ 850,000	2
East Mullett Lake Road (Bid Savings)	Old School Road to Gannon Road	0.72	\$ 200,000	3

MTF FUNDING INCREASE				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Parke Road	End of Pavement to Reams Road	0.30	\$ 100,000	n/a
Reams Road	Parke Road to Pickerel Lake Road	1.30	\$460,000	n/a

2020 Projects

FEDERAL AID FUNDING				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
South River Road	Orchard Beach Road to Wylie Road	1.74	\$ 636,122	2

PROPOSED COUNTY ROAD MILLAGE FUNDS				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
East Burt Lake Road	Mullett Burt Road to Birchwood Road	1.54	\$ 680,000	2
VFW Road	Riggsville Road to M-27	1.73	\$ 520,000	3

MTF FUNDING INCREASE				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Bridge PM Program	Multiple Bridges in County	n/a	\$ 500,000	n/a
Onaway Road	I-75 to East Mullett Lake Road	1.73	\$ 500,000	3

2021 Projects

FEDERAL AID FUNDING				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
South River Road	Wylie Road to Walsh Road	1.81	\$ 635,200	2

PROPOSED COUNTY ROAD MILLAGE FUNDS				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
South River Road	Walsh to Black River Road	1.09	\$ 400,000	2
Black River Road	M-68 then 4000 feet north.	0.75	\$ 300,000	3

MTF FUNDING INCREASE				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
South Straits Highway	Wildwood Rd. to Sturgeon Valley Dr.	2.00	\$ 700,000	2
Seal Coat Project	Multiple Roads on Primary System	20.00	\$ 700,000	5/6

2022 Projects

FEDERAL AID FUNDING				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Levering Road	Hill Road to Inverness Trail	2.99	\$ 635,200	2

PROPOSED COUNTY ROAD MILLAGE FUNDS				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Riggsville Road	VFW Road to Kate Hanson Road	2.24	\$ 800,000	3
Topinabee Mail Route	South Extension Road to M-27	1.13	\$ 400,000	2/3
Black River Road	Butler Road to Meyers Pit Road	1.81	\$ 500,000	2

MTF FUNDING INCREASE				
Road Name	Limits	Length (miles)	Estimated Cost	PASER RATING
Black River Road	Vanyea Road to Butler Road	2.20	\$ 700,000	3
Afton Road	Webb Road to Ford Road	2.03	\$ 780,000	3/2

Total estimated road miles for improvement 2018 – 2022:

Federal Aid	10.59
Road Millage	18.27
MTF Funding Increase	<u>9.56</u>
	38.42 miles

Total estimated investment for 2017 – 2022:

Federal Aid	\$ 3,220,170
Road Millage	\$ 4,440,000
Road Millage	<u>\$ 6,200,000</u>
	\$13,860,170