

MINUTES
EMMET COUNTY ROAD COMMISSION
HARBOR SPRINGS, MICHIGAN

The Emmet County Board of Road Commissioners met in special session at the offices in Harbor Springs on January 26, 2021, for the purposes of discussing road issues with township officials from Pleasantview, Springvale, Littlefield, and Maple River Township.

Commissioners Present: Frank Zulski, Robert Notestine, and Wade Williams

Staff Present: Brian Gutowski – Engineer-Manager, Shawn Beckman – Project Manager, James Godzik-Permit/CADD Tech, John Gray - Road Foreman, and Lisa Kleeman - Finance Director/Clerk of the Board

Guests Present: None

Pleasantview Township:

Supervisor – Robert Rogier
Clerk – Debra Bosma
Treasurer – Maureen Barkley
Trustee – Bob Wurst

Springvale Township:

Supervisor – Randy McCune
Clerk – Patricia McCune
Trustee – Becky Fettig
Trustee – Kyle Urlich

Littlefield Township:

Supervisor – Damien Henning
Clerk – Sondra Festerling
Treasurer – Kimberli Shomin
Trustee – Dean Morford
Trustee – Katie Derrohn

Maple River Township:

Supervisor – John Eby

Chairman Zulski called the meeting to order at 6:00 p.m. and welcomed Pleasantview Township officials. He gave opening comments that consisted of an overview of current financial conditions along with plans for road projects and equipment.

Gutowksi reviewed the asset management concept and how the Paser Rating System is used in Emmet County. He explained current ratings on primary and local roads along with a history from the beginning of the millage funding; showing trends and discussing future plans for improvements. He then presented Pleasantview Township's Local Road 2021 Paser Ratings, explained the logic behind the numerical definition for each rating and required funding per lane mile for specific maintenance or fixes.

The average local road rating for Pleasantview Township is 7.01, down from 7.51 last year. Gutowski went on to show where Pleasantview Township ranks amongst the rest of the 16 townships. The township's local roads are currently rated at 51% good, 49% fair, and 0% poor condition.

Gutowski presented 2021 suggested repairs in Pleasantview Township for about \$300,650. Crack sealing is planned for 1.75 miles with road commission funds. He recommends ultra-thins on 2.60 miles for \$160,650 as some roads are split with Little Traverse Township. He also noted the BIA is planning a project on 2.99 miles of Stutsmanville Road and suggests upgrading .75 miles of gravel roads; Stutsmanville for .25 miles and Welsheimer for .50 miles for approximately \$140,000.

Bosma mentioned Highland Pike needs additional curbing because drivers keep driving off the edge and Rogier stated it needs additional shoulder gravel. Foreman Gray will look at this area.

Wurst stated the allocation that is built up could be used on the Stutsmanville turn around project. The other project, Welsheimer, north of Stutsmanville Road, he understands there was only 3 inches of new gravel added during the last project and it will need more than that for future paving. In Nubs Knob, two roads need to be completed with ultra-thins; Winter Park Drive and Lauretian. Gutowski will get him an updated estimate on these two roads. Wurst also discussed Highlands Pike and adding a right turn lane trying to stop bad accidents and help with traffic flow. Gutowski mentioned applying for a safety grant for this. He also let Wurst know that 6 inches of gravel was placed on Welsheimer in 2019 but each winter you lose some gravel and more would need to be added before paving. Wurst also discussed North Ayr Road and cracks by Grangers; Gutowski will be sure it gets crack sealed this year. Wurst thanked Gray for tree removal on North Conway and Edwards Road, it was a great improvement.

Rogier summarized the following projects for this year: Lauretian, Winter Park, Welsheimer, Stutsmanville east of Pleasantview, and North Ayr crack sealing.

With no further business, the Pleasantview Township officials left the meeting at 6:20 p.m.

Chairman Zulski welcomed Springvale Township officials at 6:30 p.m. He gave an overview of current financial conditions along with plans for road projects and equipment.

Gutowksi reviewed the asset management concept and how the Paser Rating System is used in Emmet County. He explained current ratings on primary and local roads along with a history from the beginning of the millage funding; showing trends and discussing future plans for improvements. He then

presented Springvale Township's Local Road 2021 Paser Ratings, explained the logic behind the numerical definition for each rating and required funding per lane mile for specific maintenance or fixes.

The average local road rating for Springvale Township is 7.25, down from 7.40 last year. Gutowski went on to show where Springvale Township ranks amongst the rest of the 16 townships. The township's local roads are currently rated at 79% good, 15% fair, and 6% poor condition.

Gutowski presented 2021 suggested repairs in Springvale Township for a total of \$530,000. Crack sealing is planned for .55 miles with road commission funds in the amount of \$1,485. He recommends an ultra-thin on Silver Creek Road for 1.00 mile for approximately \$90,000 and a reconstruct of Rustic Road for 1.04 miles for approximately \$440,000 with additional funding by Bear Creek Township in the amount of \$35,000 for .26 miles.

McCune will get back with Gutowski after his next month's meeting if they plan to do Silver Creek Road; Gutowski will get him an estimate for this before the meeting. Bids for Rustic Road are due February 16, 2021, and the township will have an opportunity to decide at that time if they plan to complete this project. McCune will stop and pick up the contract for Rustic Road.

Urlich had a question about Wildwood Road; on the right going up the hill, it washes out pretty consistently and he inquired if there is another option to stop this. Foreman Gray agreed Wildwood has been an ongoing issue for years and even though they have tried several options, we need to find a way to control the water because it is a long grade and steep.

Gutowski discussed several primary roads in Springvale Township are in poor condition but the history of the lack of funding, even though the state had promised an increase in funds, has contributed to this and delays making improvements.

Fettig questioned the condition of Blanchard Road and Gutowski stated it is ready for an asphalt cap if funding could be obtained.

With no further business, the Springvale Township officials left the meeting at 6:50 p.m.

Chairman Zulski welcomed Littlefield Township officials at 6:58 p.m. He gave an overview of current financial conditions along with plans for road projects and equipment.

Gutowski reviewed the asset management concept and how the Paser Rating System is used in Emmet County. He explained the current ratings on primary and local roads along with a history from the beginning of the millage funding; showing trends and discussing future plans for improvements. He then presented Littlefield Township's Local Road 2021 Paser Ratings, explained the logic behind the numerical definition for each rating and required funding per lane mile for specific maintenance and fixes.

The average local road rating for Littlefield Township is 6.14, down from 6.41 last year. Gutowski went on to show where Littlefield ranks amongst the rest of the 16 townships. The township's local roads are currently rated at 46% good, 35% fair, and 19% poor condition.

Gutowski presented 2021 suggested repairs in Littlefield Township for a total of \$800,300. The Road Commission plans crack sealing on 1.37 miles. He suggests ultra-thins on 3.62 miles for \$325,800 and reconstruction and paving on Crump Road for .94 miles for an estimated \$395,000. Forest Funds in the amount of \$15,000 have been allocated for the Crump Road Project.

Henning stated they will discuss which projects to complete more thoroughly at their meeting next week, but Crump Road is primary. Gutowski put Crump Road out for bid, they are due February 16, 2021, and sent the contract to the township.

The road ending off Williams Street is a paper road and people are parking boats and such there and Gutowski is receiving a lot of calls. One caller requested signs be placed and Gutowski wants to know what the township would like done. Godzik stated boat carriers have been moved over somewhat. Henning stated this is a very small platted area. Derrohn stated the township needs to talk about this situation and Henning said there is no history of the township every letting a road end go except one time. Festerling stated the township could post this area as a public access and Gutowski confirmed this. Derrohn stated residents are also using the MDOT right of way for storage sheds and yard refuse. She also asked about another access to the lake on Summerfield that does not have signage. Godzik mentioned he believed there is signage at this location but will check on it.

Gutowski discussed the stop signs at Milton and Powers Roads. He is proposing removing the stop signs on Powers Road. There was a discussion of leaving it as is until the bike path is moved and most felt the high speed of drivers necessitates keeping the signs. Henning mentioned one advantage would be not having to stop after you leave US 31, especially if it is icy.

Henning discussed the status of any plans for Banwell Road and Gutowski said this would be a good candidate as a shovel ready project if stimulus funds were available. If no extra funding becomes available, we plan some heavy wedging.

Gutowski reminded the township that the bridge at Cedar Creek and Banwell Road will be out from May 1 through June 1.

With no further business, the Littlefield officials left the meeting at 7:23 p.m.

Chairman Zulski welcomed Maple River Township officials at 7:30 p.m. He gave an overview of current financial conditions along with plans for road projects and equipment.

Gutowski reviewed the asset management concept and how the Paser Rating System is used in Emmet County. He explained the current ratings on primary and local roads along with a history from the

beginning of the millage funding; showing trends and discussing future plans for improvements. He then presented Maple River Township's Local Road 2021 Paser Ratings, explained the logic behind the numerical definition of each rating and required funding per lane mile for specific maintenance or fixes.

The average local road rating for Maple River Township is 5.80, down from 6.03 last year. Gutowski went on to show where Maple River ranks amongst the rest of the 16 townships. The township's local roads are currently rated at 27% good, 58% fair, and 15% poor condition.

Gutowski presented 2021 suggested repairs in Maple River Township. Gutowski suggests wedging on Woodland Road for .87 miles for approximately \$47,850. The road commission plans to fund crack sealing on 1.82 miles for approximately \$4,900.

Eby stated hey had initially planned on chip sealing over a wedge that was already done on one of their roads. They definitely would like to wedge Woodland out by the highway and from Pine Trail to Gregory to Sand. Sand Road from Plains Road to the county line has wedging on it but it isn't solid and will need more put on it. Durkalic Road has wedging already done and would like to separate the half mile from the one mile for seal coating. Eby asked about plans for seal coating and Gutowski said he plans to gather information and bid out the seal coating. He believes it will be right around \$27,000 per mile, about same price we charged if our crew did it. Gutowski will meet with the rest of the townships and make a list of others interested. Eby went on to discuss Emmet County's valuation and how the 4 townships around the bay hold three quarters of the county's total valuation. The other 12 townships need chip sealing to save their roads, so when others say they hate chip sealing, they can't forget the northern townships. Gutowski has specifications to bid out, but he needs more than one township. He will let Eby know if there is additional interest on Friday after the rest of the meetings.

Eby stated when looking at future projects, their goal is to have most of wedging done after three years. On US 31 north of Brutus, a maple tree is growing in the roadbed, right in front of the church on Maple River Road. Godzik will measure and be sure the tree can be removed.

With no further business, Chairman Zulski adjourned the meeting at 7:45 p.m.



Lisa Kleeman – Finance Director/Clerk of the Board



Date

2021 PLEASANTVIEW TOWNSHIP 5-YEAR ROAD PRIORITY LIST

December 3, 2020

PASER ROAD RATING SYSTEM

ROAD RATING	SUGGESTED REPAIR	COST PER MILE
10	No maintenance necessary. New Road.	\$ 0
9	No maintenance necessary. Smooth surface.	\$ 0
8	Crack filling or shoulder patching.	\$ 700
7	General crack sealing and/or minor patching.	\$ 2,700
6	Patching and sealcoat Micro-surface Ultra-Thin Asphalt	\$ 27,000 or \$ 35,000 or \$ 90,000
5	Asphalt wedging only Asphalt wedging and sealcoat Asphalt wedging and ultra-thin asphalt 1-1/2" Asphalt Cap	\$ 55,000 or \$ 82,000 or \$ 145,000 or \$ 105,000
4	Asphalt wedge and cap or heavy cap.	\$ 160,000
3	Pulverize, gravel and pave. Surface poor. Cold-in-Place with ultra-thin	\$ 290,000 \$ 240,000
2	Reconstruction. Very poor condition.	\$ 360,000 +/-
1	Reconstruction. Failed road surface.	\$ 360,000 +/-

PLEASANTVIEW TOWNSHIP

Pleasantview Township has assessed the 1 Mil approved by the voters for road improvements. The 1 Mil generates approximately \$133,300 per year. The township did not spend the allocation in 2020. All townships will receive \$15,491 in allocation for 2021. The total amount available for repairs in 2021 is approximately \$300,000

TOTAL 2021 INVESTMENT = \$300,000

TOTAL 5-YEAR ROAD EXPENSE = \$900,000

CATEGORIZATION OF HARD-SURFACED ROADS IN PLEASANTVIEW TOWNSHIP

PASER RATING	ROAD NAME	LIMITS
10	None	-
9	N. Ayr Road Larks Lake Road Pleasantview Road Scheirschmidt Road Sun Valley Drive Tower Road	From Brutus to Stutsmanville for 1.00 mile From Stutsmanville then north for 1.10 miles From Robinson to Wild Cherry for 5.79 miles From Pleasantview then east for 0.10 miles From Pleasantview to E. Loveland for 0.49 miles From N. Conway then west for 1.00 mile
8	Alphof Road Aspen Way N. Ayr Road Beech Lane Brutus Road	From Nubs Nob to Tyrol for 0.14 miles From Nubs Nob to Four Seasons for 0.13 miles From Valley then north for 0.81 miles From Hemlock to Wildcherry for 0.13 miles From Pleasantview to N. Conway for 2.21 miles

	<p>Chamonix Lane Evergreen Lane Falcons Roost Four Seasons Drive Hoyt Road Laurentian Drive Loveland Drive Meadow Wood Drive Nubs Nob Road Sun Valley Drive Tower Road Tyrol Lane Vail Trail Welsheimer Road Woodland Drive</p>	<p>From Alphof then east for 0.09 miles From N. Conway to Edwards for 0.26 miles From Royal View then south and east for 0.07 miles From Vail to Tyrol for 0.19 miles From Warwick to Heynig for 0.51 miles From Nubs Nob to Four Seasons for 0.13 miles From Winter Park to Loveland for 0.05 miles From Royal View to Stags for 0.42 miles From Alphof to Pleasantview for 0.40 miles From Pleasantview to E. Loveland for 0.49 miles From Pleasantview then east for 0.43 miles From Nubs Nob to Loveland for 0.16 miles From Nubs Nob to Four Seasons for 0.13 miles From Stutsmanville to Brutus for 0.75 mile From Elm to Beech for 0.12 miles</p>
7	<p>Valley Road Welsheimer Road</p>	<p>From N. Conway then west for 1.00 mile From Stutsmanville then south for 0.75 miles</p>
6	<p>N. Ayr Road Beaux Rivages Chez L'Arbes N. Conway Road Edwards Road Elm Lane Hemlock Lane Highland Pike Kandahar Lane Knollwood Drive Larve Petite Loveland Drive Meadow Wood Drive Pineview Circle Pleasantview Road Robinson Road Royal View Road Snow Mass Trail Stags Run Sumac Court Sumac Drive Valley Road Valleyview Drive Valleyview Trail Welsheimer Road Wild Cherry Lane Woods Drive</p>	<p>From Brutus then south for 0.19 miles (1/2 M. River) From Pleasantview then east for 0.73 miles From Beaux Rivages then south for 0.12 miles From Edward to Brutus for 1.99 miles (Fed-aid) From N. Conway to N. Ayr for 0.98 miles (1/2 L. T. Twp.) From Highland to Wild Cherry for 0.37 miles From Elm to Beach for 0.12 miles From Pleasantview to Hedrick for 1.25 miles (.65 1/2 L.T.) From Four Seasons to Sun Valley for 0.07 miles From Pineview then north for 0.18 miles From Beaux Rivages then south for 0.04 miles From Sun Valley to Winter Park for 0.10 miles From Royal View to Stags for 0.42 miles From Larks Lake to Sumac for 0.09 miles From L. Trav. Twp. to Wildcherry for 0.48 miles From S. Pleasantview to M. River Twp. for 2.10 miles From Pleasantview to Stags for 0.35 miles From Nubs Nob to Sun Valley for 0.20 miles From Royal View to Meadow Wood for 0.24 miles From Sumac Drive then north for 0.09 miles From Valleyview to Pineview for 0.11 miles From N. Ayr to N. Conway for 1.01 miles From Sumac then north for 0.15 miles From Hedrick to Stutsmanville for 0.37 miles From Brutus then south for 0.99 miles From Pleasantview to Elm for 0.21 miles From Valleyview to Stutsmanville for 0.21 miles</p>
5	<p>Hedrick Road Winter Park Drive</p>	<p>From Stutsmanville then south for 0.49 miles From Sun Valley to Loveland for 0.43 miles</p>
4	<p>Larks Lake Road</p>	<p>From Robinson then south for 0.06 miles</p>
3	<p>Brutus Road Robinson Road Stutsmanville Road</p>	<p>From N. Conway to N. Ayr for 1.01 miles (BIA) From Palmer to S. Pleasantview for 2.74 miles (BIA) From Pleasantview to Welsheimer for 2.99 miles</p>

2021 MILEAGE BREAKDOWN OF ROAD RATINGS FOR PLEASANTVIEW TOWNSHIP

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
10	0.00	\$ 0	\$ 0
9	9.48	0	0
8	7.63	700	5,341
7	1.75	2,700	4,725
6	13.17	90,000	1,185,300
5	0.92	145,000	133,400
4	0.06	160,000	9,600
3	6.74	290,000	1,954,600
2	0.00	360,000	0

TOTAL HARD-SURFACED ROAD MILES = 39.75 miles

COST = \$ 3,292,966

2021 AVERAGE ROAD SURFACE RATING = 6.61

(20' = 6.90, 19' = 6.36, 18' = 5.64, 17' = 5.70, 16' = 5.44, 15' = 5.53, 14' = 5.77, 13' = 5.90, 12' = 5.37, 11' = 5.42, 10' = 5.48, 09' = 5.65, 08' = 6.14, 07' = 6.03, 06' = 5.48, 05' = 5.29)

LOCAL ROAD BREAKDOWN

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
10	0.00	\$ 0	\$ 0
9	2.59	0	0
8	5.42	700	3,794
7	1.75	2,700	4,725
6	8.60	90,000	774,000
5	0.92	105,000	96,600
4	0.00	160,000	0
3	0.00	290,000	0
2	0.00	360,000	0

TOTAL HARD-SURFACED ROAD MILES = 19.28 miles

COST = \$ 879,119

2021 AVERAGE ROAD SURFACE RATING = 7.01

(20' = 7.51, 19' = 7.31, 18' = 7.24, 17' = 6.96, 16' = 7.06, 15' = 7.09, 14' = 7.19, 13' = 7.11, 12' = 6.97, 11' = 6.37, 10' = 6.97, 09' = 6.52, 08' = 6.33, 07' = 6.04, 06' = 4.99, 05' = 5.46)

The goal of Asset Management is to allocate public resources in the most cost-effective manner. It should be our goal to bring our system into a good condition and to maintain the system in a good condition over the next 5 years. Pleasantview Township has achieved that level with an average rating of 7.01. Good is considered to be 7 or better.

PLEASANTVIEW TOWNSHIP SUGGESTED 5-YEAR ROAD REPAIR LIST

2021 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
7	\$ 2,700	1.75	Rd. Comm.	Valley (1.00)*, Welsheimer (0.75)*
6	\$ 90,000	2.60	\$ 160,650	Edwards (0.98)**, Highland (0.65)**, Highland (0.60), Valleyview Tr. (0.37)
3	\$ 290,000	2.99	BIA	Stutsmanville (1.00)***
Upgrade Gravel Roads		0.75	\$ 140,000	Stutsmanville (0.25) ¹ , Welsheimer (0.50) ¹

TOTAL SUGGESTED 2021 EXPENSE = \$ 300,650 *Road Commission
 **1/2 w/ L. T. Twp.
 ***BIA Project
 1 Asphalt Surface

2022 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
6	\$ 90,000	1.81	\$ 162,900	Elm (0.37), Hemlock (0.12), Loveland (0.10), Meadow Wood (0.42), Royal View (0.35), Stags (0.24), Wild Cherry (0.21)
3	\$ 290,000	3.76	BIA	Robinson (2.74)*

TOTAL SUGGESTED 2022 EXPENSE = \$ 162,900 *BIA Project

2023 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
6	\$ 90,000	3.82	\$ 164,700	N. Conway (1.99)*, Knollwood (0.18), Pineview (0.09), Snow Mass (0.20), Sumac Ct. (0.09), Sumac Dr. (0.11), Valley (1.01), Valleyview Dr. (0.15)

TOTAL SUGGESTED 2023 EXPENSE = \$ 164,700 *Fed-aid

2024 REPAIRS

6	\$ 90,000	1.15	\$ 103,500	N. Ayr (0.19), Beaux Rivages (0.73), Chez (0.12), Kandahar (0.07), Larve (0.04),
5	\$ 105,000	0.49	\$ 51,450	Hedrick (0.49)
3	\$ 290,000	1.01	BIA	Brutus (1.01)*

TOTAL SUGGESTED 2024 EXPENSE = \$ 154,950 *BIA Project

2025 REPAIRS:

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 105,000	0.43	\$ 45,150	Winter Park (0.43)

TOTAL SUGGESTED 2023 EXPENSE = \$ 45,150

TOTAL PROJECTED 5-YEAR COST

2021	\$ 300,650
2022	\$ 162,900
2023	\$ 164,700
2024	\$ 154,950
2025	\$ 45,150

TOTAL = \$ 828,350

The Asset Management process concentrates resources on roads that are relatively easy to maintain then allows resources to be expended on more expensive roads. The above scenario repairs all hard-surfaced local roads in the township in the next 5 years. This does not take into account the roads that fall further into disrepair from their current rating.

2021 SPRINGVALE TOWNSHIP 5-YEAR ROAD PRIORITY LIST
December 3, 2020

PASER ROAD RATING SYSTEM

ROAD RATING	SUGGESTED REPAIR	COST PER MILE
10	No maintenance necessary. New Road.	\$ 0
9	No maintenance necessary. Smooth surface.	\$ 0
8	Crack filling or shoulder patching.	\$ 700
7	General crack sealing and/or minor patching.	\$ 2,700
6	Patching and sealcoat Micro-surface Ultra-Thin Asphalt	\$ 27,000 or \$ 35,000 or \$ 90,000
5	Asphalt wedging only Asphalt wedging and sealcoat Asphalt wedging and ultra-thin asphalt 1-1/2" Asphalt Cap	\$ 55,000 or \$ 82,000 or \$ 145,000 or \$ 105,000
4	Asphalt wedge and cap or heavy cap.	\$ 160,000
3	Pulverize, gravel and pave. Surface poor. Cold-in-Place with ultra-thin	\$ 290,000 \$ 240,000
2	Reconstruction. Very poor condition.	\$ 360,000 +/-
1	Reconstruction. Failed road surface.	\$ 360,000 +/-

SPRINGVALE TOWNSHIP

Springvale Township brings in approximately \$130,400 for the 1 Mil they assess. Two separate 1 Mil road mills passed in the past few years which bring in another \$250,000 for road improvements. Springvale Township used the 2020 allocation and had approximately \$150,000 mill money left over. The 2021 allocation is \$15,491 for each township. Springvale has roughly \$550,000 to spend in 2021. **\$391,000 per year 2022 thru 2025.**

TOTAL 2021 INVESTMENT AVAILABLE = \$550,000
TOTAL 5-YEAR ROAD EXPENSE = \$2,114,000

CATEGORIZATION OF HARD-SURFACED ROADS IN SPRINGVALE TOWNSHIP

PASER RATING	ROAD NAME	LIMITS
10	Cincinnati Point Lane	From B. Cr. Twp. then east for 0.21 miles
9	Greenwood Road	From Berger to B. Cr. Twp. for 1.30 miles
8	Amacher Road	From Pickerel Lake then south for 0.27 miles
	Artesian Lane	From Ellsworth to the lake for 0.05 miles
	Bear River Road	From Bear Cr. Twp. to Maxwell for 0.72 miles
	Berger Road	From Greenwood to Mitchell for 2.11 miles
	Berry Creek Valley Rd.	From Mitchell thru entire loop for 0.95 miles
	Botsford Road	From Pickerel Lake then north for 0.49 miles
	Channel Road	From Pickerel Lake to Oden Island for 1.61 miles

	Cove Road Driftwood Drive Ellsworth Road Graham Road Greenwood Road Harmon Road Hency Road Mitchell Road Newson Road Oden Island Drive Twildo Road Welsh Road	From Pickerel Lake then north for 0.32 miles From Cove then east for 0.22 miles From Pickerel Lake to Artesian for 0.98 miles From Bear Creek Twp. to Crooked Lake for 0.58 miles From Berger to Maxwell for 0.48 miles From Maxwell to Welsh for 0.44 miles From Pickerel Lake then north for 0.66 miles From Maxwell to Hopper for 4.09 miles From Maxwell to Welsh for 0.51 miles From Channel to Littlefield Twp. for 0.42 miles From Wildwood to Mitchell for 1.46 miles From Harmon to Newson for 1.05 miles
7	Township Park Road	From Ellsworth then east for 0.55 miles
6	Blanchard Road Mitchell Road Pickerel Lake Road Silver Creek Road	From Mitchell to Pickerel Lake for 0.97 miles From B. C. Twp. to Maxwell for 2.04 miles From Channel to Blanchard for 1.50 miles From Mitchell to Pickerel Lake for 1.00 mile
5	Mitchell Road	From Hopper to Cheb. Cty. for 2.82 miles
4	Camp Petosega Road Channel Road Maxwell Road Pickerel Lake Road Wildwood Road	From Banwell then west and north for 0.78 miles From Oden Island then east for 1.07 miles From Taylor to Newson for 1.30 miles From Amacher then east for 0.28 miles From Twildo to Boyer Hill for 1.00 mile
3	Banwell Road Ellsworth Road Maxwell Road Maxwell Road Pickerel Lake Road Pickerel Lake Road Rustic Road Wildwood Road	From Pickerel Lake to Littlefield Twp. for 0.62 miles From Mitchell to Pickerel Lake for 1.58 miles From Bear River to Taylor for 1.23 miles From Newson to Greenwood for 1.24 miles From Channel then west for 0.70 miles From Banwell to Blanchard for 4.67 miles From Pickerel Lake then east for 1.30 miles (1.04, 0.26) From Mitchell to Twildo for 1.67 miles
2	Maxwell Road	From Greenwood to Mitchell for 2.49 miles

2021 MILEAGE BREAKDOWN OF ROAD RATINGS FOR SPRINGVALE TOWNSHIP (all)

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
10	0.21	\$ 0	\$ 0
9	1.30	0	0
8	17.41	700	12,187
7	0.55	2,700	1,485
6	5.51	90,000	495,900
5	2.82	145,000	408,900
4	4.43	160,000	708,800
3	13.01	290,000	3,772,900
2	2.49	360,000	896,400

TOTAL HARD-SURFACED MILES = 47.73 miles COST = \$ 6,296,572

2021 AVERAGE ROAD SURFACE RATING = 5.57

(20' = 5.63, 19' = 5.22, 18' = 5.51, 17' = 5.66, 16' = 5.66, 15' = 5.53, 14' = 5.64, 13' = 5.14, 12' = 5.05, 11' = 5.11, 10' = 5.04, 09' = 5.12, 08' = 5.35, 07' = 5.49, 06' = 5.70, 05' = 5.60)

LOCAL ROAD BREAKDOWN

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
10	0.21	\$ 0	\$ 0
9	1.30	0	0
8	13.32	700	9,324
7	0.55	2,700	1,485
6	1.00	90,000	90,000
5	0.00	145,000	0
4	1.85	160,000	296,000
3	1.30	290,000	377,000
2	0.00	360,000	0

TOTAL HARD-SURFACED MILES = 19.53 COST = \$ 773,809

2021 AVERAGE ROAD SURFACE RATING = 7.25

(20' = 7.40, 19' = 6.75, 18' = 7.16, 17' = 6.87, 16' = 6.71, 15' = 6.44, 14' = 6.41, 13' = 5.93, 12' = 5.41, 11' = 5.38, 10' = 4.81, 09' = 4.44, 08' = 4.68, 07' = 4.49, 06' = 4.34, 05' = 5.06)

The goal of Asset Management is to allocate public resources to be spent in the most cost-effective manner. It should be our goal to bring our system into a good condition and to maintain the system in a good condition over the next 5 years. Springvale has achieved the goal the average rating of 7.25. Good is considered to be 7 or better.

SPRINGVALE TOWNSHIP SUGGESTED 5-YEAR ROAD REPAIR LIST

2021 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
7	\$ 2,700	0.55	\$ 1,485*	Township Park (0.55)*
6	\$ 90,000	1.00	\$ 90,000	Silver Creek (1.00)
3	\$ 290,000	1.30	\$440,000**	Rustic (1.30) (1.04, 0.26***)

TOTAL SUGGESTED 2021 EXPENSE = \$ 530,000 *Road Commission
 **Per Design
 ***Partial with B. Cr. Twp.

2022 REPAIRS

RATINGS	PER MILE	# MILES	COST	SELECTED ROADS (miles)
4	\$ 160,000	1.85	\$ 296,000	Camp Petosega (0.78), Channel (1.07)

TOTAL SUGGESTED 2022 EXPENSE = \$ 296,000

2023 REPAIRS, 2024 REPAIRS, 2025 REPAIRS

Gravel or primary road improvements

TOTAL PROJECTED 5-YEAR COST

- 2021 \$ 530,000 (plus gravel or primary improvements)
- 2022 296,000
- 2023 Gravel or primary road improvements
- 2024 Gravel or primary road improvements
- 2025 Gravel or primary road improvements

TOTAL = \$ 826,000

The Asset Management process concentrates resources on roads that are relatively easy to maintain then allows resources to be expended on more expensive roads. The above scenario repairs all of the local roads in the township in the next 2 years. This does not take into account the roads that fall further into disrepair from their current rating.

2021 LITTLEFIELD TOWNSHIP 5-YEAR ROAD PRIORITY LIST

December 3, 2020

PASER ROAD RATING SYSTEM

ROAD RATING	SUGGESTED REPAIR	COST PER MILE
10	No maintenance necessary. New Road.	\$ 0
9	No maintenance necessary. Smooth surface.	\$ 0
8	Crack filling or shoulder patching.	\$ 700
7	General crack sealing and/or minor patching.	\$ 2,700
6	Patching and sealcoat Micro-surface Ultra-Thin Asphalt	\$ 27,000 or \$ 35,000 or \$ 90,000
5	Asphalt wedging only Asphalt wedging and sealcoat Asphalt wedging and ultra-thin asphalt 1-1/2" Asphalt Cap	\$ 55,000 or \$ 82,000 or \$ 145,000 or \$ 105,000
4	Asphalt wedge and cap or heavy cap.	\$ 160,000
3	Pulverize, gravel and pave. Surface poor. Cold-in-Place with ultra-thin	\$ 290,000 \$ 240,000
2	Reconstruction. Very poor condition.	\$ 360,000 +/-
1	Reconstruction. Failed road surface.	\$ 360,000 +/-

LITTLEFIELD TOWNSHIP

The township assesses the 1 Mil passed by the voters in 2020. The 1 Mil brings in approximately \$163,400 per year. Littlefield Township did not use the allocation the last 5 years. The 2021 allocation is \$15,491 bringing the total allocation available at \$64,604. Therefore, the amount available for road repair in 2020 is approximately \$660,000.

TOTAL 2021 INVESTMENT = \$660,000
TOTAL 5-YEAR ROAD EXPENSE = \$1,376,400

CATEGORIZATION OF HARD-SURFACED ROADS IN LITTLEFIELD TOWNSHIP

PASER RATING	ROAD NAME	LIMITS
10	None	-
9	Oden Island Road Powers Road	From Springvale Twp. then north for 0.12 miles From L. Trav. Twp. then east for 1.20 miles
8	Armock Road Barney Road Barney Road Burley Road Cincinnati Point Honeysette Road Kuebler Drive Lakeview Road Lakeview Road	From Lakeview then east for 0.68 miles From M-68 to Hilltop for 0.50 miles From M-68 then south for 0.58 miles From Banwell then south for 0.08 miles From U.S.31 to Crooked Lake for 0.19 miles From Valley then north for 0.61 miles From Luce then west for 0.23 miles From Banwell to Crooked Lake for 1.13 miles From Armock to Banwell for 1.01 miles

	Lake Street Luce Street Milton Road Mission Road Mission Road Mission Road Powers Road Rose Street Russell Street Valley Road	From U.S.31 to Crooked Lake for 0.19 miles From Powers to U.S.31 for 0.78 miles From U.S.31 then west for 0.03 miles From M-68 to Hilltop for 0.51 miles From Smith to Banwell for 0.55 miles From Banwell then south for 0.09 miles From U.S.31 to Luce for 1.83 miles From U.S.31 to High for 0.15 miles From Luce then east for 0.14 miles From Moore to Milton for 1.15 miles
7	Kilmer Road Lakeview Road Petoskey Street	From Valley to Lakeview Lane for 0.60 miles From U.S.31 to Lake for 0.27 miles From Armock to M-68 for 0.50 miles
6	S. Ayr Road High Street Main Street Mission Road Moore Road Valley Road	From Powers then south for 0.50 miles From Luce then east for 0.25 miles From U.S.31 to High for 0.14 miles From M-68 to Smith for 1.01 miles From Luce to Powers for 1.47 miles From Moore to Maple River Twp. for 1.26 miles
5	Armock Road Grubaugh Road Moore Road Old Stagecoach Drive Smith Road	From Banwell to Lakeview for 0.54 miles From Lakeview Lane then north for 0.15 miles From Valley to Powers for 1.02 miles From Moore then south for 0.22 miles From Mission to Lakeview for 1.01 miles (0.51, 0.50)
4	Miller Road	From Banwell to M-68 for 2.33 miles
3	Banwell Road Lakeview Lane Meeker Avenue Milton Road Milton Road Mission Road Park Avenue Smith Road Summerfield Avenue	From Alanson to Springvale Twp. for 5.30 miles From Grubaugh then west for 0.35 miles From U.S.31 to Cincinnati for 0.02 miles From Powers then south 0.98 miles From Valley to M. River Twp. for 1.03 miles From 0.09 miles s. of Banwell then south for 0.82 miles From U.S.31 to Cincinnati for 0.03 miles From Banwell to Lakeview for 0.49 miles From U.S.31 to Cincinnati for 0.04 miles
2	Cincinnati Street Luce Street Main Street Water Street Williams Street	From U.S.31 to Summerfield for 0.15 miles From U.S.31 to Water for 0.04 miles From U.S.31 to Water for 0.02 miles From U.S.31 to Luce for 0.11 miles From U.S.31 to U.S.31 for 0.10 miles

GRAVEL Crump Road From Powers then north for 0.94 miles

2021 MILEAGE BREAKDOWN OF ROAD RATINGS FOR LITTLEFIELD TOWNSHIP (all)

<u>PASER RATING</u>	<u># OF MILES</u>	<u>AVERAGE REPAIR COST</u>	<u>TOTAL</u>
10	0.00	\$ 0	\$ 0
9	1.23	0	0
8	10.43	700	7,301
7	1.37	2,700	3,699
6	4.63	90,000	416,700
5	2.94	145,000	426,300
4	2.33	160,000	372,800
3	9.06	290,000	2,627,400
2	0.42	360,000	151,200

TOTAL HARD-SURFACED ROAD MIELS = 32.41 miles

COST = \$ 4,005,400

2021 AVERAGE ROAD SURFACE RATINGS = 5.67

(20' = 5.86, 19' = 6.04, 18' = 6.00, 17' = 5.91, 16' = 5.96, 15' = 5.57, 14' = 5.50, 13' = 5.43, 12' = 5.48, 11' = 5.48, 10' = 5.27, 09' = 5.18, 08' = 5.65, 07' = 5.69, 06' = 5.43, 05' = 5.25)

LOCAL ROAD BREAKDOWN

<u>PASER RATING</u>	<u># OF MILES</u>	<u>AVERAGE REPAIR COST</u>	<u>TOTAL</u>
10	0.00	\$ 0	\$ 0
9	0.12	0	0
8	8.60	700	6,020
7	1.37	2,700	3,699
6	4.63	90,000	416,700
5	2.94	105,000	308,700
4	0.00	160,000	0
3	3.76	290,000	1,090,400
2	0.42	360,000	151,200

TOTAL LOCAL HARD-SURFACED MILES = 21.84 miles

COST = \$ 1,976,719

2021 AVERAGE LOCAL SURFACE RATINGS = 6.14

(20' = 6.41, 19' = 6.64, 18' = 6.53, 17' = 6.32, 16' = 6.34, 15' = 6.06, 14' = 6.08, 13' = 5.79, 12' = 5.80, 11' = 6.15, 10' = 5.95, 09' = 5.55, 08' = 5.80, 07' = 5.66, 06' = 5.28, 05' = 5.10)

The goal of Asset Management is to allocate public resources in the most cost effective manner. It should be our goal to bring our system into a good condition and to maintain the system in a good condition over the next 5 years. Our goal should be to improve the average ratings from the current 6.14 to a good condition. Good is considered to be 7 or better.

LITTLEFIELD TOWNSHIP SUGGESTED 5-YEAR ROAD REPAIR LIST

2021 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
7	\$ 2,700	1.37	Rd. Comm.*	Kilmer (0.60), Lakeview (0.27), Petoskey (0.50)
6	\$ 90,000	3.62	\$ 325,800	S. Ayr (0.50), High (0.25), Main (0.14), Moore (1.47), Valley (1.26)
Gravel Upgrade	\$ 360,000	0.94	\$ 350,000	Crump (0.94)**

TOTAL SUGGESTED 2021 EXPENSE = \$ 675,800 *R.C.
**Total Construct

2022 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
6	\$ 90,000	1.01	\$ 90,900	Mission (1.01)
5	\$ 105,000	0.69	\$ 72,450	Armock (0.54), Grubaugh (0.15)
3	\$ 290,000	2.50	\$ 137,500	Milton (0.98)*, Milton (1.03)*

TOTAL SUGGESTED 2022 EXPENSE = \$ 163,350 *MDOT

2023 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 105,000	1.75	\$ 183,750	Moore (1.02), Old Stagecoach (0.22), Smith (0.51)

TOTAL SUGGESTED 2023 EXPENSE = \$ 183,750

2024 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 105,000	0.50	\$ 52,500	Smith (0.50)
3	\$ 290,000	0.40	\$ 126,000	Lakeview (0.35), Meeker (0.02)*, Park (0.03)*
2	\$ 360,000	0.42	\$ 60,000	Cincinnati (0.15)*, Luce (0.04)*, Main (0.02)*, Water (0.11)*, Williams (0.10)*

TOTAL SUGGESTED 2024 EXPENSE = \$ 186,000 *Heavy Cap

2025 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
3	\$ 290,000	0.82	\$ 51,700	Mission (0.82)

TOTAL SUGGESTED 2025 EXPENSE = \$ 237,800

TOTAL PROJECTED 5-YEAR COST

2021	\$ 675,800
2022	\$ 163,350
2023	\$ 183,750
2024	\$ 186,000
<u>2025</u>	<u>\$ 237,800</u>
TOTAL =	\$ 1,446,700

The Asset Management process concentrates resources on roads that are relatively easy to maintain then allows resources to be expended on more expensive roads. The above scenario repairs all local roads in the township in the next 5 years. This does not take into account the roads that fall further into disrepair from their current rating.

2021 MAPLE RIVER TOWNSHIP 5-YEAR ROAD PRIORITY LIST

December 3, 2020

PASER ROAD RATING SYSTEM

ROAD RATING	SUGGESTED REPAIR	COST PER MILE
10	No maintenance necessary. New Road.	\$ 0
9	No maintenance necessary. Smooth surface.	\$ 0
8	Crack filling or shoulder patching.	\$ 700
7	General crack sealing and/or minor patching.	\$ 2,700
6	Patching and sealcoat Micro-surface Ultra-Thin Asphalt	\$ 27,000 or \$ 35,000 or \$ 90,000
5	Asphalt wedging only Asphalt wedging and sealcoat Asphalt wedging and ultra-thin asphalt 1-1/2" Asphalt Cap	\$ 55,000 or \$ 82,000 or \$ 145,000 or \$ 105,000
4	Asphalt wedge only Asphalt wedge and cap or heavy cap.	\$ 55,000 or \$ 160,000
3	Pulverize, gravel and pave. Surface poor. Cold-in-Place with ultra-thin	\$ 290,000 \$ 240,000
2	Reconstruction. Very poor condition.	\$ 360,000 +/-
1	Reconstruction. Failed road surface.	\$ 360,000 +/-

MAPLE RIVER TOWNSHIP

Maple River Township assesses ½ Mil which brings in approximately \$30,500. The township spent their allocation in 2020. The 2021 allocation is \$15,491. There is \$46,000 available for road improvements in 2021.

TOTAL 2021 INVESTMENT AVAILABLE = \$46,000

TOTAL 5-YEAR ROAD EXPENSE = \$230,000

CATEGORIZATION OF HARD-SURFACED ROADS IN MAPLE RIVER TOWNSHIP

PASER RATING	ROAD NAME	LIMITS
10	None	-
9	Devils Elbow Robinson Road Woodland Road	From Snider then east for 0.68 miles From W. Pellston then west for 2.12 miles From 0.30 miles E. of U.S.31 then east for 0.19 miles
8	N. Ayr Road Gregory Road Maple River Road Maple River Road Red School Road Red School Road Sunny Ridge Road	From Valley then north for 0.81 miles From Maple River then north for 0.12 miles From Gregory then west for 0.10 miles From Gregory then east for 0.18 miles From Robinson to Tower for 0.80 miles From Ringler to Johnson for 0.96 miles From Brutus to Valley for 0.98 miles
7	N. Ayr Road Milton Road	From Brutus to Stutsmanville 1.00 mile From U.S.31 to Littlefield Twp. for 0.57 miles

	Red School Road	From Ringler to Tower for 0.25 miles
6	Crooked River Road Euclid Street High Street Johnson Road Maple Street Mill Street Plains Road Railroad Street Red School Road Ringler Road Robinson Road Robinson Road Snider Road Sunny Ridge Road Tower Road Valley Road Woodland Road	From 0.12 miles east of U.S.31 then east for 0.42 miles From Mill to Brutus for 0.21 miles From Railroad to Euclid for 0.07 miles From Red School then east for 0.39 miles From Railroad then west for 0.10 miles From U.S.31 then west for 0.14 miles From Sand to Robinson for 1.61 miles From Brutus to High for 0.20 miles From U.S.31 then west for 1.03 miles From Red School to U.S.31 for 1.02 miles From Center Twp. then east for 0.58 miles From Cheboygan Co. line to Pellston for 1.99 miles From Crooked River then south for 0.98 miles From Valley then south for 0.12 miles From Red School then west for 0.88 miles From Edds to Sunny Ridge for 1.73 miles From Plains to Gregory for 0.51 miles
5	Gregory Road Sand Road Snider Road Valley Road	From Woodland then south for 1.38 miles (0.86, 0.52) From Gregory to Cheboygan Co. for 1.50 miles From Brutus to Crooked River for 0.50 miles From N. Ayr then east for 0.81 miles
4	N. Ayr Road Brutus Road Brutus Road Crooked River Road Valley Road	From Brutus then south for 0.19 miles From Sunny Ridge to U.S.31 for 2.52 miles From U.S.31 to Brill for 2.46 miles From U.S.31 then east for 0.12 miles From Sunny Ridge then west for 0.18 miles
3	Brutus Road Crooked River Road Maple River Road Woodland Road Woodland Road	From N. Ayr to Sunny Ridge for 0.93 miles From end of pavement then west for 0.04 miles From U.S.31 then east for 0.85 miles (0.35, 0.50) From U.S.31 then east for 0.30 miles From Pine to Gregory for 0.57 miles
2	Durkalic Road Tower Road	From Tower to Robinson for 0.99 miles From Durkalic then east for 0.71 miles
1	None	-

2021 MILEAGE BREAKDOWN OF ROAD RATINGS FOR MAPLE RIVER TOWNSHIP (all)

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
10	0.00	\$ 0	\$ 0
9	2.99	0	0
8	3.95	700	2,765
7	1.82	2,700	4,914
6	11.98	90,000	1,078,200
5	4.19	145,000	607,550
4	5.47	160,000	875,200
3	2.69	290,000	780,100
2	1.70	360,000	612,000

TOTAL HARD-SURFACED MILES = 34.79

COST = \$ 3,960,729

2021 AVERAGE ROAD SURFACE RATING = 5.67

(20' = 5.83, 19' = 6.00, 18' = 5.76, 17' = 5.27, 16' = 5.25, 15' = 4.87, 14' = 4.61, 13' = 4.80, 12' = 4.92, 11' = 5.01, 10' = 5.02, 09' = 5.05, 08' = 5.11, 07' = 5.52, 06' = 5.52, 05' = 5.68)

LOCAL ROAD BREAKDOWN

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
10	0.00	\$ 0	\$ 0
9	0.87	0	0
8	3.95	700	2,765
7	1.82	2,700	4,914
6	9.41	90,000	846,900
5	4.19	105,000	439,950
4	0.49	160,000	78,400
3	1.76	290,000	510,400
2	1.70	360,000	612,000

TOTAL LOCAL HARD-SURFACED MILES = 24.19 miles

COST = \$ 2,495,329

2021 AVERAGE LOCAL ROAD SURFACE RATING = 5.80

(20' = 6.03, 19' = 6.18, 18' = 5.89, 17' = 5.64, 16' = 5.55, 15' = 5.40, 14' = 5.56, 13' = 5.44, 12' = 5.52, 11' = 5.58, 10' = 5.54, 09' = 5.35, 08' = 5.07, 07' = 5.70, 06' = 5.57, 05' = 6.08)

The goal of Asset Management is to allocate public resources in the most cost-effective manner. It should be our goal to bring our system into a good condition and to maintain the system in a good condition over the next 5 years. Our goal should be to improve the average ratings from the current 5.80 to a good condition. Good is considered to be 7 or better. However, with the revenue that Maple River Township generates with the millage, there is not enough money to bring all roads into a good condition. Therefore, it should be the goal to asphalt wedge the roads to bring the average road to a 6 rating.

MAPLE RIVER TOWNSHIP SUGGESTED 5-YEAR ROAD REPAIR LIST

2021 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
7	\$ 2,700	1.82	Rd. Comm.	N. Ayr (1.00)*, Milton (0.57)*, Red School (0.25)*
3	\$ 55,000	0.87	\$ 47,850	Woodland (0.30)**, Woodland (0.57)**

TOTAL SUGGESTED 2021 EXPENSE = \$ 47,850 *Road Commission
**Wedge only

2022 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 55,000	0.86	\$ 47,300	Gregory (0.86)*

TOTAL SUGGESTED 2022 EXPENSE = \$ 47,300 *Wedge only

2023 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 55,000	0.52	\$ 28,600	Gregory (0.52)*
3	\$ 55,000	0.35	\$ 19,250	Maple River (0.30)

TOTAL SUGGESTED 2023 REPAIR = \$ 47,850 * Wedge only

2024 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 55,000	0.50	\$ 27,500	Snider (0.50)
3	\$ 55,000	0.50	\$ 27,500	Maple River (0.50)*

TOTAL SUGGESTED 2024 REPAIR = \$ 55,000 * Wedge only

2025 REPAIRS

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 55,000	0.81	\$ 44,550	Valley (0.81)*

TOTAL SUGGESTED 2025 REPAIR = \$ 44,550 * Wedge only

TOTAL PROJECTED 5-YEAR COST

2021	\$ 47,850
2022	\$ 47,300
2023	\$ 47,850
2024	\$ 55,000
2025	\$ 44,550
TOTAL	= \$ 242,550

The Asset Management process concentrates resources on roads that are relatively easy to maintain then allows resources to be expended on more expensive roads. The above scenario repairs many roads in the township in the next 5 years. This does not take into account the roads that fall further into disrepair from their current rating.