



AGENDA

LENAWEE COUNTY ROAD COMMISSION 2019 TOWNSHIP ANNUAL MEETING

1. Introductions
2. 2018 Maintenance Cost
3. 2018 Project Cost Report
4. Past years Project Map 2012 to 2018
5. Three Year Primary Construction Plan
6. Engineering Update
7. 2019 Township Projects List from Foreman

Blissfield Township - 35

Local Maintenance

Work Description	2016	2017	2018
	Amount Spent	Amount Spent	Amount Spent
Culvert Inspection	\$1,008.28	\$0.00	\$345.80
Bridge Inspection	\$0.00	\$124.29	\$123.66
Paser Rating	\$0.00	\$185.63	\$852.51
Traffic Count	\$344.28	\$0.00	\$409.05
Soil Erosion	\$9,740.16	\$0.00	\$0.00
Foreman Patrol	\$11,030.08	\$9,066.31	\$6,877.87
Dust Control	\$1,354.54	\$1,683.65	\$1,201.87
Shoulder Maintenance	\$386.05	\$322.48	\$347.98
Tree and Brush Removal	\$170.50	\$216.37	\$1,139.19
Drainage and Ditching	\$1,686.31	\$0.00	\$0.00
Grass and Weed control	\$2,126.96	\$2,547.45	\$2,468.80
Winter Maintenance Operation	\$15,502.18	\$10,463.54	\$15,455.40
Traffic Signs	\$1,492.88	\$1,063.46	\$1,293.66
Re-Sign Program	\$0.00	\$0.00	\$10,400.14
Pavement Marking	\$806.40	\$215.97	\$1,832.28
Scraping	\$514.57	\$994.51	\$1,035.28
Asphalt Paving	\$2,631.71	\$0.00	\$0.00
Cold Patching	\$2,258.15	\$1,929.20	\$471.47
Spot Patching	\$0.00	\$160.81	\$1,156.25
Total	\$51,053.05	\$28,973.67	\$45,411.21

Salt Brine Order

2018		2019		2020	
Order	Township	Order	Township	Order	Township
1	33-Madison	1	16-Macon	1	32-Dover
2	24-Raisin	2	15-Tecumseh-14 Clinton	2	12-Cambridge
3	42-Seneca	3	41-Medina	3	31-Hudson
4	23-Adrian	4	13-Franklin	4	22-Rome
5	31-Hudson	5	44-Ogden	5	23-Adrian
6	22-Rome	6	24-Raisin	6	42-Seneca
7	34-Palmyra	7	33-Madison	7	11-Woodstock
8	25-Ridgeway	8	43-Fairfield	8	35-Blissfield
9	35-Blissfield	9	21-Rollin	9	25-Ridgeway
10	11-Woodstock	10	36-Deerfield	10	34-Palmyra
11	13-Franklin	11	32-Dover	11	16-Macon
12	41-Medina	12	12-Cambridge	12	15-Tecumseh-14 Clinton
13	44-Ogden	13	31-Hudson	13	41-Medina
14	16-Macon	14	22-Rome	14	13-Franklin
15	15-Tecumseh-14 Clinton	15	23-Adrian	15	44-Ogden
16	12-Cambridge	16	42-Seneca	16	24-Raisin
17	32-Dover	17	11-Woodstock	17	33-Madison
18	36-Deerfield	18	35-Blissfield	18	43-Fairfield
19	21-Rollin	19	25-Ridgeway	19	21-Rollin
20	43-Fairfield	20	34-Palmyra	20	36-Deerfield

	May
	June
	July
	August

JACKSON COUNTY

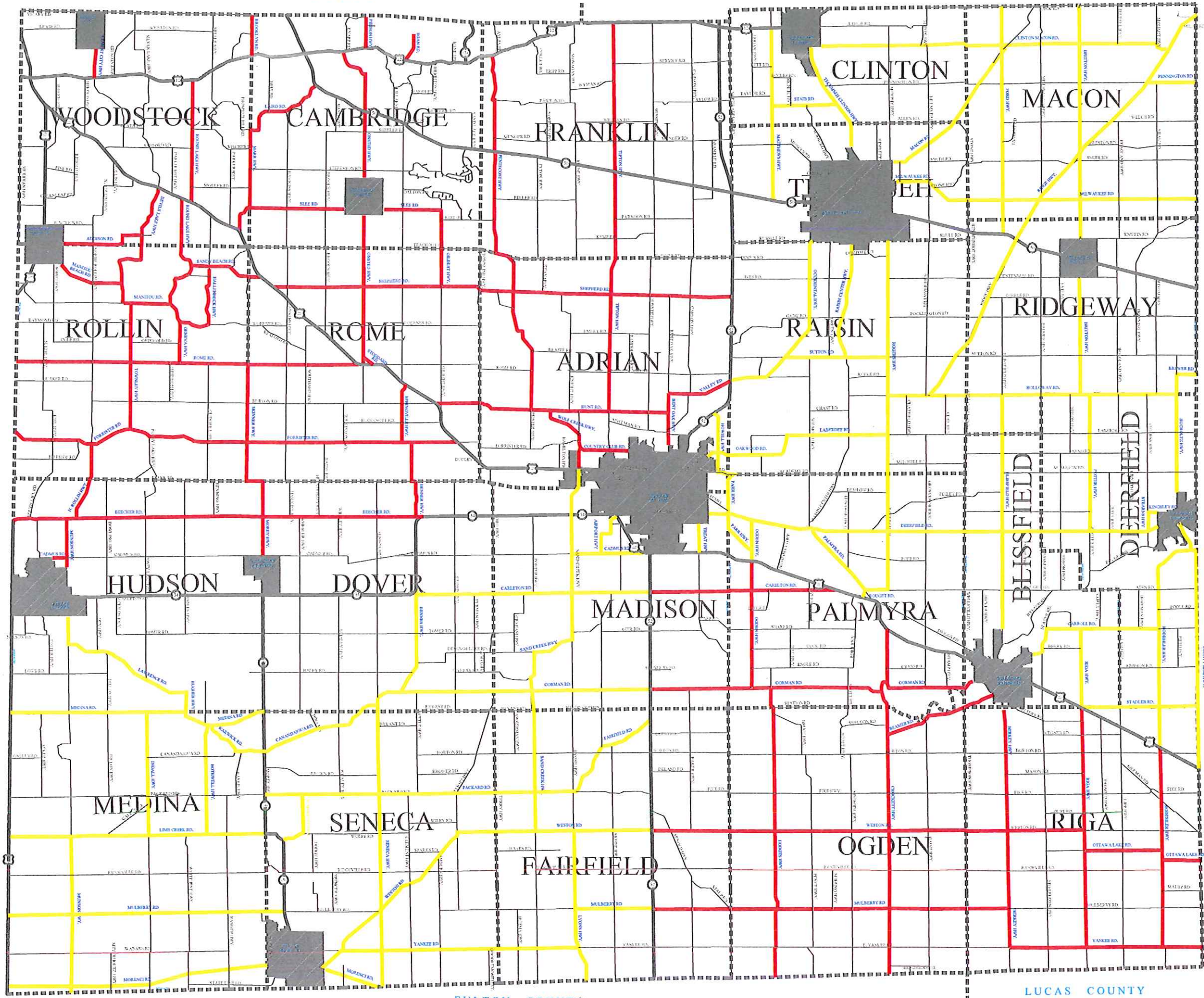
WASHTENAW COUNTY



HILLSDALE COUNTY

MONROE COUNTY

- LEGEND**
- TOWNSHIP BOUNDARIES
 - EVEN YEAR BRUSH SPRAY
 - ODD YEAR BRUSH SPRAY



FULTON COUNTY

LUCAS COUNTY

Blissfield Township 2018 Billing Summary

Project Number	Project Description	Est.	Contract Amount	Date	Invoice No.	Invoice Amount	Received	Balance
183401	Wellsville Hwy	3618	6,115.24	05/03/18	Advance		(1,070.17)	(1,070.17)
	Crackfill			08/22/18	100508	3,057.62		1,987.45
				09/11/18	100651		(1,987.45)	0.00
	50% Palmyra Township		(3,057.62)					
PROJECT SUMMARY 50%			<u>3,057.62</u>			<u>3,057.62</u>	<u>(3,057.62)</u>	<u>0.00</u>
183403	Wellsville Hwy	3619	35,373.75	05/03/18	Advance		(6,190.41)	(6,190.41)
	Village Limits to Rouget			07/25/18	100815	10,755.16		4,564.75
	Crackfill, Seal Coat & Fog Seal			08/08/18			(4,564.75)	0.00
				08/22/18	100892	588.91		588.91
				09/11/18			(588.91)	0.00
				09/27/18	100977	1,758.37		1,758.37
				10/10/18	101053	67.47		1,825.84
				10/24/18			(1,758.37)	67.47
	50% Palmyra Township		(17,686.88)	10/24/18			(67.47)	0.00
PROJECT SUMMARY 50%			<u>17,686.88</u>			<u>13,169.91</u>	<u>(13,169.91)</u>	<u>0.00</u>
183501	Ricker Hwy	3308	103,883.00	05/24/18	Advance		(36,359.05)	(36,359.05)
	Underseal & Asphalt Overlay			07/25/18	100817	17,111.65		(19,247.40)
				08/22/18	100894	1,146.36		(18,101.04)
				09/27/18	100979	75,663.08		57,562.04
				10/10/18	101055	3,542.38		61,104.42
				10/24/18			(57,562.04)	3,542.38
				10/24/18			(3,542.38)	0.00
				11/15/18	101085	175.33		175.33
				11/30/18			(175.33)	0.00
PROJECT SUMMARY			<u>103,883.00</u>			<u>97,638.80</u>	<u>(97,638.80)</u>	<u>0.00</u>
183503	Driggs Rd	3621	1,354.10	05/03/18	Advance		(473.94)	(473.94)
	Crackfill			08/22/18	100895	1,354.10		880.16
				09/11/18			(880.16)	0.00
PROJECT SUMMARY			<u>1,354.10</u>			<u>1,354.10</u>	<u>(1,354.10)</u>	<u>0.00</u>
TOTALS FOR 2018 PROJECTS			<u>125,981.60</u>			<u>115,220.43</u>	<u>(115,220.43)</u>	<u>0.00</u>
Split with Palmyra Township								

PROJECT HISTORY

(actual dollars spent)

TOWNSHIP	2014	2015	2016	2017	2018
WOODSTOCK	\$149,367	\$186,269	\$127,912	\$68,584	\$100,479
CAMBRIDGE	\$106,744	\$535,792	\$540,785	\$119,274	\$209,276
FRANKLIN	\$138,941	\$139,828	\$222,496	\$216,309	\$270,291
CLINTON	\$75,397	\$118,928	\$93,567	\$121,908	\$120,002
TECUMSEH	\$168,985	\$75,312	\$57,128	\$93,072	\$91,391
MACON	\$73,615	\$116,348	\$74,940	\$134,550	\$139,117
ROLLIN	\$149,332	\$141,312	\$117,506	\$86,919	\$234,802
ROME	\$72,864	\$139,689	\$77,633	\$76,834	\$73,207
ADRIAN	\$56,375	\$72,669	\$771,341	\$344,996	\$198,224
RAISIN	\$194,250	\$375,398	\$476,102	\$422,830	\$540,096
RIDGEWAY	\$116,804	\$236,572	\$346,483	\$93,007	\$36,752
HUDSON	\$119,780	\$111,054	\$92,184	\$86,071	\$90,553
DOVER	\$75,110	\$133,380	\$82,734	\$101,233	\$193,460
MADISON	\$294,068	\$202,729	\$198,643	\$149,443	\$319,420
PALMYRA	\$67,039	\$28,014	\$105,032	\$172,872	\$144,294
BLISSFIELD	\$154,310	\$162,986	\$302,818	\$80,104	\$115,220
DEERFIELD	\$226,656	\$145,526	\$106,637	\$122,629	\$51,447
MEDINA	\$150,545	\$212,805	\$238,450	\$160,568	\$194,398
SENECA	\$58,705	\$163,692	\$51,627	\$0	\$0
FAIRFIELD	\$182,459	\$122,420	\$164,448	\$134,974	\$173,923
OGDEN	\$217,375	\$116,621	\$155,289	\$195,340	\$138,160
RIGA	\$165,074	\$182,300	\$120,414	\$100,262	\$134,972
TOTAL	\$3,013,794	\$3,719,643	\$4,524,168	\$3,081,778	\$3,569,482

TOWNSHIP PROJECT CONTRIBUTION HISTORY

(2014-2018)

TOWNSHIP	5 YEAR AVERAGE CONTRIBUTION PER YEAR	5 YEAR AVERAGE CONTRIBUTION PER MILE	5 YEAR AVERAGE PER CAPITA PER YEAR
WOODSTOCK	\$126,522	\$2,577	\$46
CAMBRIDGE	\$302,374	\$5,024	\$63
FRANKLIN	\$197,573	\$3,391	\$62
CLINTON	\$105,960	\$4,279	\$84
TECUMSEH	\$97,178	\$4,704	\$49
MACON	\$107,714	\$2,750	\$72
ROLLIN	\$145,974	\$3,018	\$49
ROME	\$88,046	\$1,879	\$49
ADRIAN	\$288,721	\$4,865	\$48
RAISIN	\$401,735	\$5,989	\$53
RIDGEWAY	\$165,924	\$3,640	\$174
HUDSON	\$99,928	\$2,778	\$75
DOVER	\$117,183	\$2,447	\$71
MADISON	\$232,861	\$5,606	\$27
PALMYRA	\$103,450	\$2,278	\$50
BLISSFIELD	\$163,087	\$5,761	\$258
DEERFIELD	\$130,579	\$3,144	\$195
MEDINA	\$191,353	\$3,747	\$176
SENECA	\$54,805	\$1,132	\$45
FAIRFIELD	\$155,645	\$2,556	\$88
OGDEN	\$164,557	\$2,947	\$169
RIGA	\$140,604	\$2,082	\$100
TOTAL	\$3,581,773	\$3,432	\$64

POLICY OF THE
BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF LENAWEЕ

Category: Operations

Subject: Township Participation

Adopted On: December 21, 2017
Revised On: April 19, 2018
October 18, 2018

The monetary contribution by the Lenawee County Road Commission to Local Road projects shall be limited to the following areas:

LOCAL BRIDGE PROGRAM

The Lenawee County Road Commission will contribute those monies required for participation in the Local Bridge Program. Participation will be at 50% for design engineering, 50% for construction engineering, and 50% in the local match with the Local Bridge Program funding.

DRAINAGE STRUCTURES

The Lenawee County Road Commission will participate at 50% for replacement of drainage structures (i.e. culverts, bridges). Total yearly contributions are capped at \$150,000.00 for all such projects and will be awarded on a first come first serve basis. The total amount available for this match on a yearly basis may increase or decrease depending on available funding.

ROAD RESURFACING

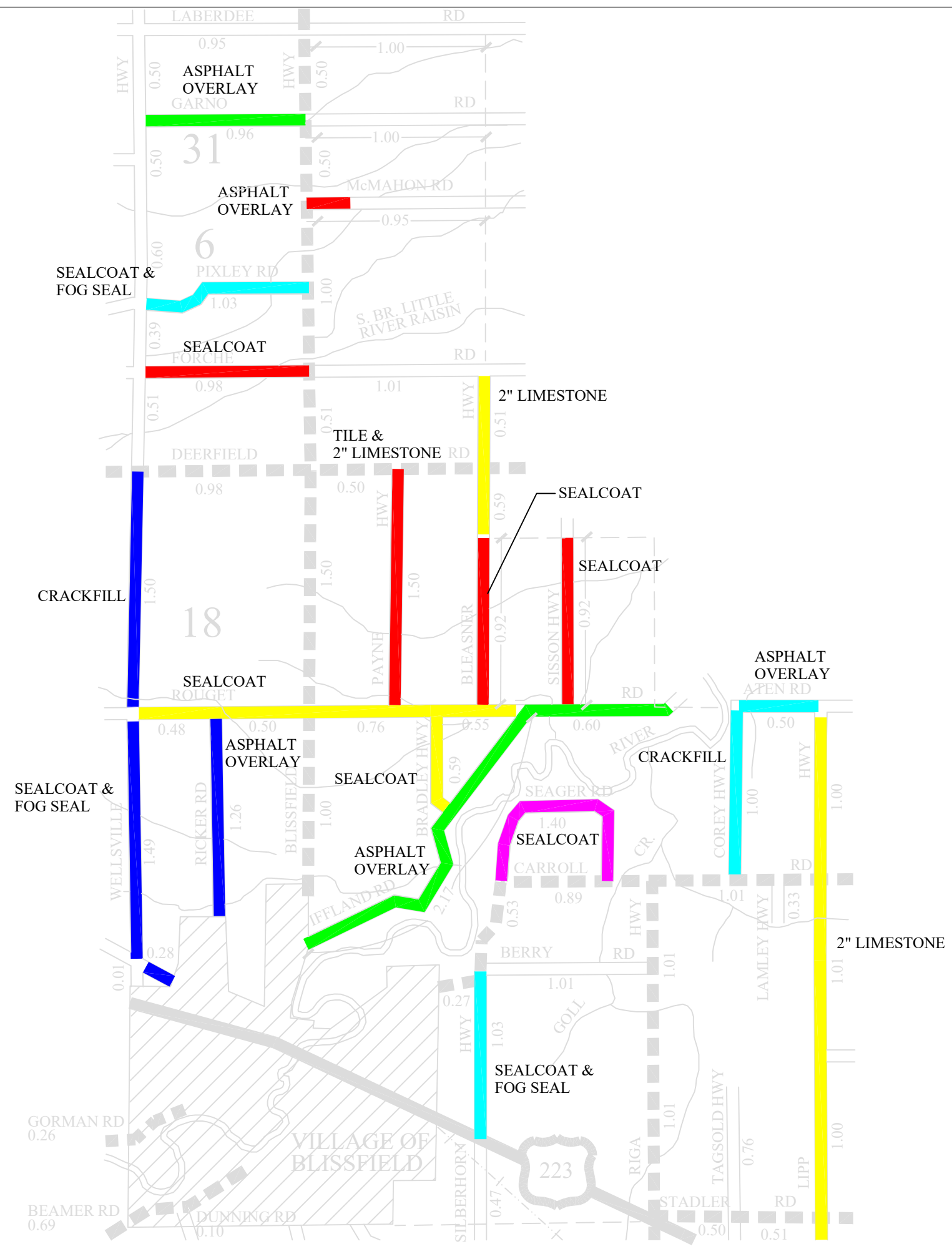
Beginning in 2019, the Legislature intends to appropriate income tax revenue to road agencies, according to the Act 51 formula, in these amounts: 2019 (\$150 million), 2020 (\$325 million), 2021 and thereafter (\$600 million). Pending receipt of these additional fund from the State General Fund the **Lenawee County Road Commission will participate 50% in road resurfacing projects or treatments** at the following amounts countywide: *2019 (\$250,000), 2020 (\$540,000), 2021 and thereafter (\$1,000,000).

The match dollars per township is be based upon each townships current percentage of local roads in comparison to the countywide local road system. **Matching funds do not carry over and must be spent in the fiscal year allocated.** The matching dollar amounts are shown below:

<u>Township</u>	<u>Percentage</u>	<u>* 2019</u>	<u>2020</u>	<u>2021 +</u>
Adrian	5.69 %	\$ 14,216	\$ 30,707	\$ 56,864
Blissfield	2.71 %	\$ 6,781	\$ 14,647	\$ 27,124
Cambridge	5.76 %	\$ 14,410	\$ 31,126	\$ 57,640
Clinton	2.37 %	\$ 5,931	\$ 12,810	\$ 23,723
Deerfield	3.98 %	\$ 9,948	\$ 21,487	\$ 39,790
Dover	4.59 %	\$ 11,471	\$ 24,777	\$ 45,884
Fairfield	5.83 %	\$ 14,587	\$ 31,508	\$ 58,349
Franklin	5.58 %	\$ 13,957	\$ 30,148	\$ 55,829
Hudson	3.45 %	\$ 8,616	\$ 18,610	\$ 34,463
Macon	3.75 %	\$ 9,382	\$ 20,266	\$ 37,529
Madison	3.98 %	\$ 9,950	\$ 21,492	\$ 39,800
Medina	4.89 %	\$ 12,233	\$ 26,423	\$ 48,931
Ogden	5.35 %	\$ 13,373	\$ 28,885	\$ 53,491
Palmyra	4.35 %	\$ 10,879	\$ 23,499	\$ 43,517
Raisin	6.43 %	\$ 16,068	\$ 34,706	\$ 64,270
Ridgeway	4.37 %	\$ 10,918	\$ 23,582	\$ 43,671
Riga	6.47 %	\$ 16,173	\$ 34,934	\$ 64,692
Rollin	4.63 %	\$ 11,584	\$ 25,021	\$ 46,334
Rome	4.49 %	\$ 11,224	\$ 24,244	\$ 44,897
Seneca	4.64 %	\$ 11,593	\$ 25,041	\$ 46,373
Tecumseh	1.98 %	\$ 4,949	\$ 10,689	\$ 19,795
Woodstock	4.70 %	\$ 11,758	\$ 25,398	\$ 47,034

*** Due to additional state funding received for FY2019, the 2019 matching dollars will be increased to the 2020 amounts.**

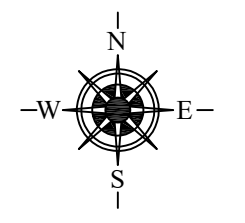
This policy supersedes and replaces all previous policies on this subject matter.



- COUNTY LINE
- CORPORATE LIMITS
- STATE TRUNKLINE
- COUNTY PRIMARY
- COUNTY LOCAL
- AJACENT COUNTY
- CITY OR VILLAGE STREETS

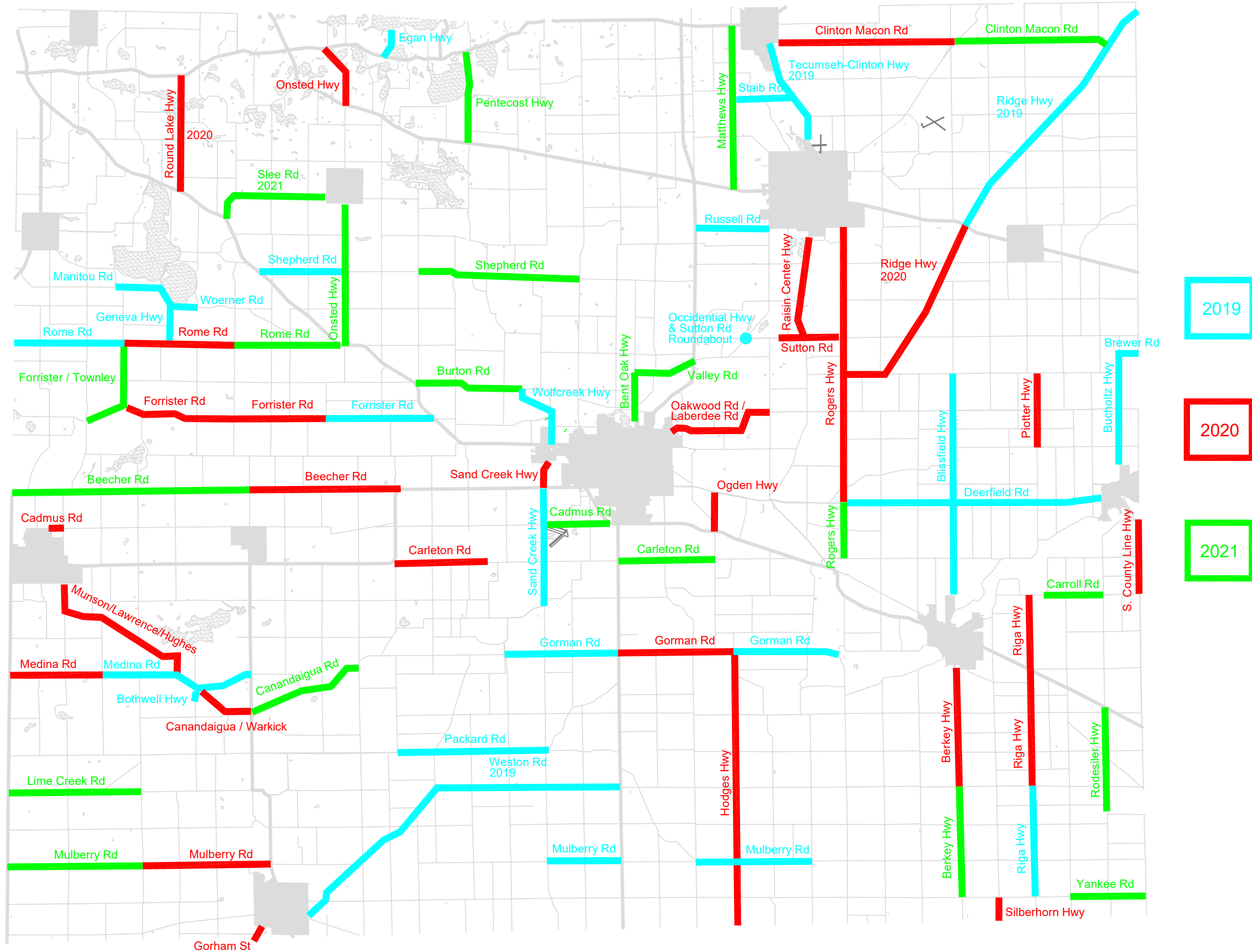
PRIMARY ROAD SYSTEM IS 13.66 MILES
 LOCAL ROAD SYSTEM IS 28.31 MILES

- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018



BLISSFIELD TWP

LENAWEE COUNTY ROAD COMMISSION PRIMARY ROAD - 3 YEAR PLAN 2019 TO 2021



2019

PROJECT LOCATION

DESCRIPTION OF WORK

MILEAGE

Asphalt

Staib Rd	Matthews to Tecumseh Clinton	Underseal and 185 lb Asphalt Overlay	1.67
Gorman Rd	M-52 to Sand Creek Hwy	Underseal and 185 lb Asphalt Overlay	3.09
Forrister Rd	US-223 to Wilkinson	FDR and Asphalt Overlay	2.95
Bothwell Bridge	off Medina Hwy	Underseal and 185 lb Asphalt Overlay	0.38
Mulberry Rd	Neuroth to Treat Hwy	Re-Build	3.15
Rome Rd	Hillsdale Line to Townley	Underseal and 185 lb Asphalt Overlay	2.97

Seal Coat

Riga Hwy	Weston to Yankee	Crackfill, Wedges & Seal Coat, Fog Seal	3.01
Ridge Hwy	M-50 to County Line	Underseal	7.50
Blissfield Hwy	Blissfield Village to Holloway	Crackfill, Wedges & Seal Coat, Fog Seal	6.15
Brewer Rd	Bucholtz to County Line	Crackfill, Wedges & Seal Coat, Fog Seal	0.51
Bucholtz Hwy	Deerfield Village to Brewer	Crackfill, Wedges & Seal Coat, Fog Seal	3.02
Deerfield Rd	Rogers to Deerfield Village	Crackfill, Wedges & Seal Coat, Fog Seal	7.01
Egan Hwy	US-12 to Cedar St	Crackfill, Wedges & Seal Coat, Fog Seal	1.21
WolfCreek Hwy	US-223 to Burton Rd	Crackfill, Wedges & Seal Coat, Fog Seal	2.00
Geneva Hwy	Rome to Round Lake	Crackfill, Wedges & Seal Coat, Fog Seal	1.60
Manitou Rd	Devils Lake to Round Lake	Crackfill, Wedges & Seal Coat, Fog Seal	1.23
Russell Rd	M-52 to City of Tecumseh	Crackfill, Wedges & Seal Coat, Fog Seal	2.00
Sand Creek Hwy	Lyons Hwy to M-34	Crackfill, Wedges & Seal Coat, Fog Seal	3.55
Woerner Rd	Geneva to Hallenbeck	Crackfill, Wedges & Seal Coat, Fog Seal	0.77
Gorman Rd	Hodges to Crockett	Crackfill & Seal Coat, Fog Seal	2.94
Packard Rd	Tuttle to Fairfield	Crackfill, Wedges & Seal Coat, Fog Seal	4.33
Medina Rd	M-156 to Dillon	Crackfill, Wedges & Seal Coat, Fog Seal	2.53

Gravel

Mulberry Rd	M-52 to Lyons	2" Gravel	2.01
Shepherd Rd	Onsted to US-223	2" Gravel	2.34

Total

2020

PROJECT LOCATION

DESCRIPTION OF WORK

MILEAGE

Asphalt

Rome Rd	Townley to Skinner	Underseal and 185 lb Asphalt Overlay	3.02
Raisin Center Hwy	City to Sutton	Underseal and 185 lb Asphalt Overlay	3.04
Riga Hwy	Carroll to US-223	Underseal and 185 lb Asphalt Overlay	2.01
Berkey Hwy	Weston to Village Limits	Underseal and 185 lb Asphalt Overlay	3.18
Silberhorn Hwy	Ohio Line to Yankee	Underseal and 185 lb Asphalt Overlay	0.58
Forrister Rd	Wilkinson to Skinner	FDR and Asphalt Ovarlay	2.51

Seal Coat

Gorman Rd	M-52 to Hodges	Crackfill & Seal Coat, Fog Seal	3.17
Riga Hwy	Weston to US-223	Crackfill, Wedges & Seal Coat, Fog Seal	3.18
Cadmus Rd	Hudson City to Munson	Crackfill, Wedges & Seal Coat, Fog Seal	0.38
Canandaigua / Warwick	M-156 to Medina Rd	Crackfill, Wedges & Seal Coat, Fog Seal	1.72
S. County Line Hwy	Carroll to Rodesiler	Crackfill, Wedges & Seal Coat, Fog Seal	2.01
Gorham St	Ohio Line to Morenci City	Crackfill, Wedges & Seal Coat, Fog Seal	0.26
Hodges Hwy	Ohio Line to Gorman	Crackfill, Wedges & Seal Coat, Fog Seal	7.51
Oakwood Rd/Laberdee Rd	City Limits to Wilmoth	Crackfill, Wedges & Seal Coat, Fog Seal	3.07
Ogden Hwy	US-223 to Deerfield	Crackfill, Wedges & Seal Coat, Fog Seal	1.08
Onsted Hwy	M-50 to US-12	Crackfill, Wedges & Seal Coat, Fog Seal	1.85
Sand Creek Hwy	M-34 to Adrian City	Crackfill, Wedges & Seal Coat, Fog Seal	0.73
Sutton Rd	0.2 mi W of Green to Rogers	Crackfill, Wedges & Seal Coat, Fog Seal	1.70
Clinton Macon Rd	Village to Ford	Crackfill & Seal Coat, Fog Seal	4.71
Ridge Hwy /Holloway	M-50 to Rogers	Underseal	5.74
Rogers Hwy	Russell to Deerfield	Crackfill & Seal Coat, Fog Seal	7.49
Round Lake Hwy	US-223 to US-12	Underseal	3.16
Medina Rd	Dillon to US-127	Crackfill, Wedges & Seal Coat, Fog Seal	2.53
Beecher Rd	M-34 to Morey	Crackfill & Seal Coat, Fog Seal	4.13
Munson/Lawrence/Hughes	City to Medina	Crackfill, Wedges & Seal Coat, Fog Seal	5.18

Gravel

Mulberry Rd	M-156 to Ingall	2" Gravel	3.00
Piotter Hwy	Holloway to McMahon	2" 411 Limestone	2.01
Carleton Rd	Benner to End	2" Gravel	2.50
Forrister Rd	Skinner to Posey Lake	2" Gravel	1.54

01/10/2019

2021

PROJECT LOCATION**DESCRIPTION OF WORK****MILEAGE****Asphalt**

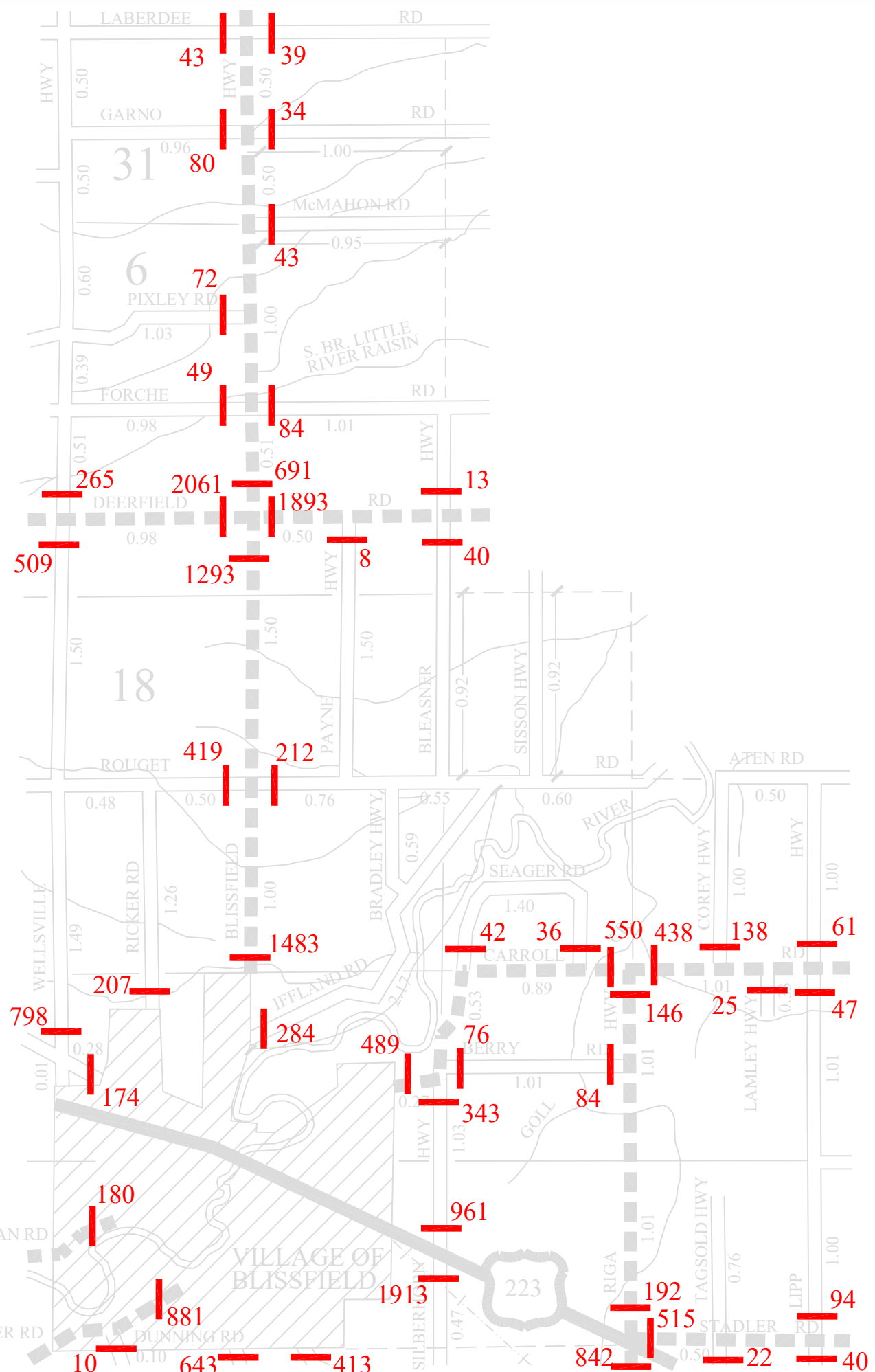
Rome Rd	Skinner to US-223	Underseal and 185 lb Asphalt Overlay	2.91
Limecreek Hwy	US-127 to Ingall	FDR and Asphalt Pave	3.62
Yankee Rd	County Line to Lipp Hwy	Re-Build.	2.03
Berkey Hwy	Weston to Yankee	Underseal and 185 lb Asphalt Overlay	2.99
Carleton Rd	M-52 to Ogden	Underseal and 185 lb Asphalt Overlay	2.61
Canandaigua Rd	M-156 to Seneca Hwy	Underseal and 185 lb Asphalt Overlay	3.32

Seal Coat

Bent Oak and Valley	City to M-52	Crackfill, Wedges & Seal Coat, Fog Seal	3.06
Slee Rd	US-223 to Village Limits	Underseal	3.71
Onsted Hwy / Stoddard	US-223 to Village of Onsted	Crackfill, Wedges & Seal Coat, Fog Seal	4.08
Clinton Macon Rd	Ridge to Ford	Crackfill, Wedges & Seal Coat, Fog Seal	4.41
Rogers Hwy	Deerfield to Rouget	Crackfill, Wedges & Seal Coat, Fog Seal	0.83
Burton Rd	US-223 to Wolf Creek	Crackfill, Wedges & Seal Coat, Fog Seal	2.94
Pentecost Hwy	M-50 to US-12	Crackfill, Wedges & Seal Coat, Fog Seal	2.58
Beecher Rd	Morey to US-127	Crackfill, Wedges & Seal Coat, Fog Seal	6.53
Forrister / Townley	Rollin to Manitou	Crackfill, Wedges & Seal Coat, Fog Seal	4.36
Carroll Rd	Rodesiler to 1.75 miles West	Crackfill, Wedges & Seal Coat, Fog Seal	1.75
Matthews Hwy	M-50 to US-12	Crackfill, Wedges & Seal Coat, Fog Seal	4.48
Cadmus Rd	US-223 to Sand Creek Hwy	Crackfill, Wedges & Seal Coat, Fog Seal	1.80
Shepherd Rd	Gilbert to Tipton	Crackfill, Wedges & Seal Coat, Fog Seal	4.48
Rodesiler Hwy	US-223 to New Bridge	Crackfill, Wedges & Seal Coat, Fog Seal	2.74

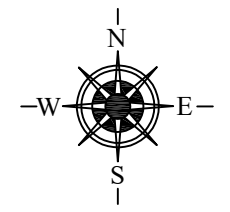
Gravel

Mulberry Rd	Ingall to US-127	2" Gravel	3.68
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- COUNTY LINE
- CORPORATE LIMITS
- STATE TRUNKLINE
- COUNTY PRIMARY
- COUNTY LOCAL
- AJACENT COUNTY
- CITY OR VILLAGE STREETS

PRIMARY ROAD SYSTEM IS **13.66** MILES
 LOCAL ROAD SYSTEM IS **28.31** MILES



BLISSFIELD TWP TRAFFIC COUNTS AUGUST 2018

Why Rate Roads?



To see how road condition is changing

Why Rate Roads?

Roadsoft v2017.5 : Van Buren (County)

File TAMC Asset Management Safety Analysis Reporting LDC Tools Settings Help

Map

Road Segment - Zoom Options - Filter - View Module

Extended Service Life Calculation

Options

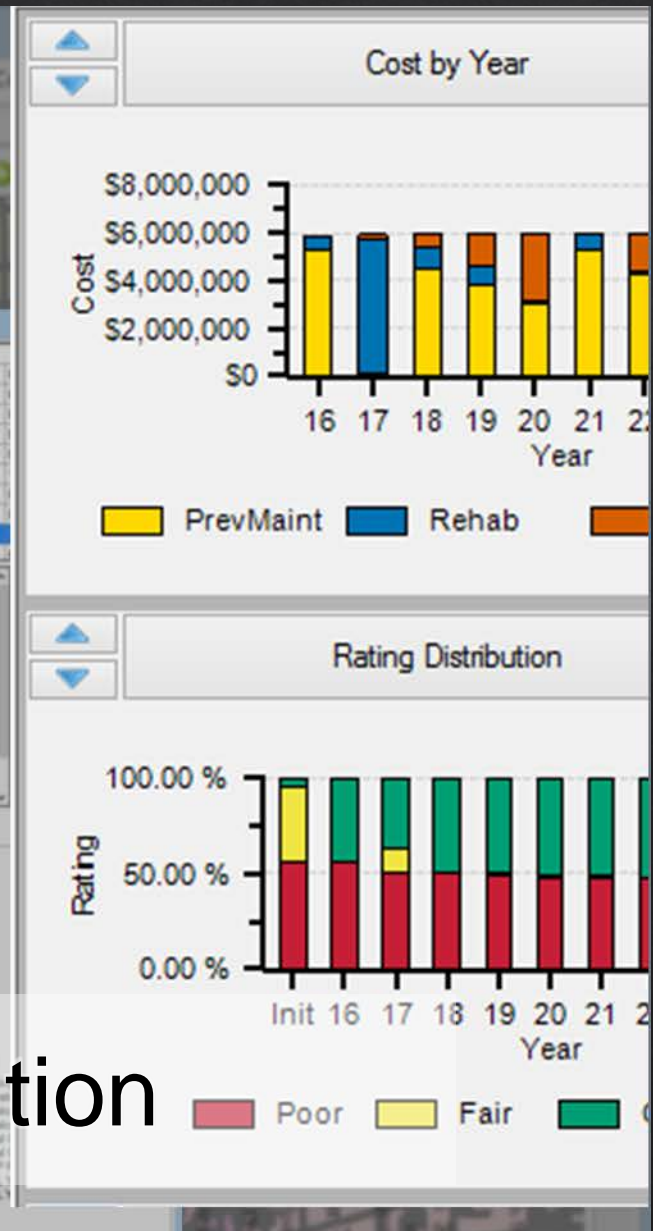
Data points before treatment (minimum): 1
Data points after treatment (minimum): 2
Network (Optional): Road Rating 2014
ESL Calculation method: Additional Years until CDP reached
 Years until Rating repeats

Use	TreatDate	Fulfilment	Stop
<input checked="" type="checkbox"/>	8/31/2014	Lake Shore	0.000
<input checked="" type="checkbox"/>	8/31/2014	Lake Shore	0.042
<input checked="" type="checkbox"/>	8/31/2014	Lake Shore	0.067
<input checked="" type="checkbox"/>	8/31/2014	J St	0.000
<input checked="" type="checkbox"/>	8/31/2014	J St	0.064
<input checked="" type="checkbox"/>	8/30/2014	19th Ave	1.492
<input checked="" type="checkbox"/>	8/30/2010	49th St	0.000
<input checked="" type="checkbox"/>	8/30/2010	18th Ave	0.433
<input checked="" type="checkbox"/>	8/30/2010	4th St	0.145
<input checked="" type="checkbox"/>	8/30/2010	29th Ave	0.210

Surface Type	Surface SubType	Treatment
Asphalt	Asphalt Blue Star	
Asphalt	Asphalt Rural	
Asphalt	Asphalt Rural 2	
Asphalt	Asphalt Standard	Seal Coat W/Fog Seal (per mile)
Asphalt	Asphalt Urban	
Asphalt	Composite	
Asphalt	VBORC Asphalt C	
Asphalt	VBORC FED AID	
Brick	Brick	
Concrete	Concrete Slab-on	
Earth	Graded Earth	

Date	Treatment	Rating	Use Rating
8/4/2015		8	<input checked="" type="checkbox"/>
8/31/20	Seal Coat W/F	8	<input checked="" type="checkbox"/>
8/28/20		7	<input checked="" type="checkbox"/>
9/12/20		7	<input checked="" type="checkbox"/>
8/24/20		7	<input checked="" type="checkbox"/>
8/4/2011		6	<input checked="" type="checkbox"/>
8/30/20	Seal Coat W/F	8	<input checked="" type="checkbox"/>
10/3/20		3	<input checked="" type="checkbox"/>
11/11/2		6	<input checked="" type="checkbox"/>
7/1/2004	Sealcoat - 07	8	<input checked="" type="checkbox"/>

Deterioration Curve for 45th St Segment: 0.749-1.764
Surface Subtype: Asphalt-Standard, Treatment: Seal Coat W/Fog Seal (per mile)
ESL Method: Additional Years until CDP reached



To estimate future road condition

Why Rate Roads?



To measure effectiveness of past improvements

Why Rate Roads?

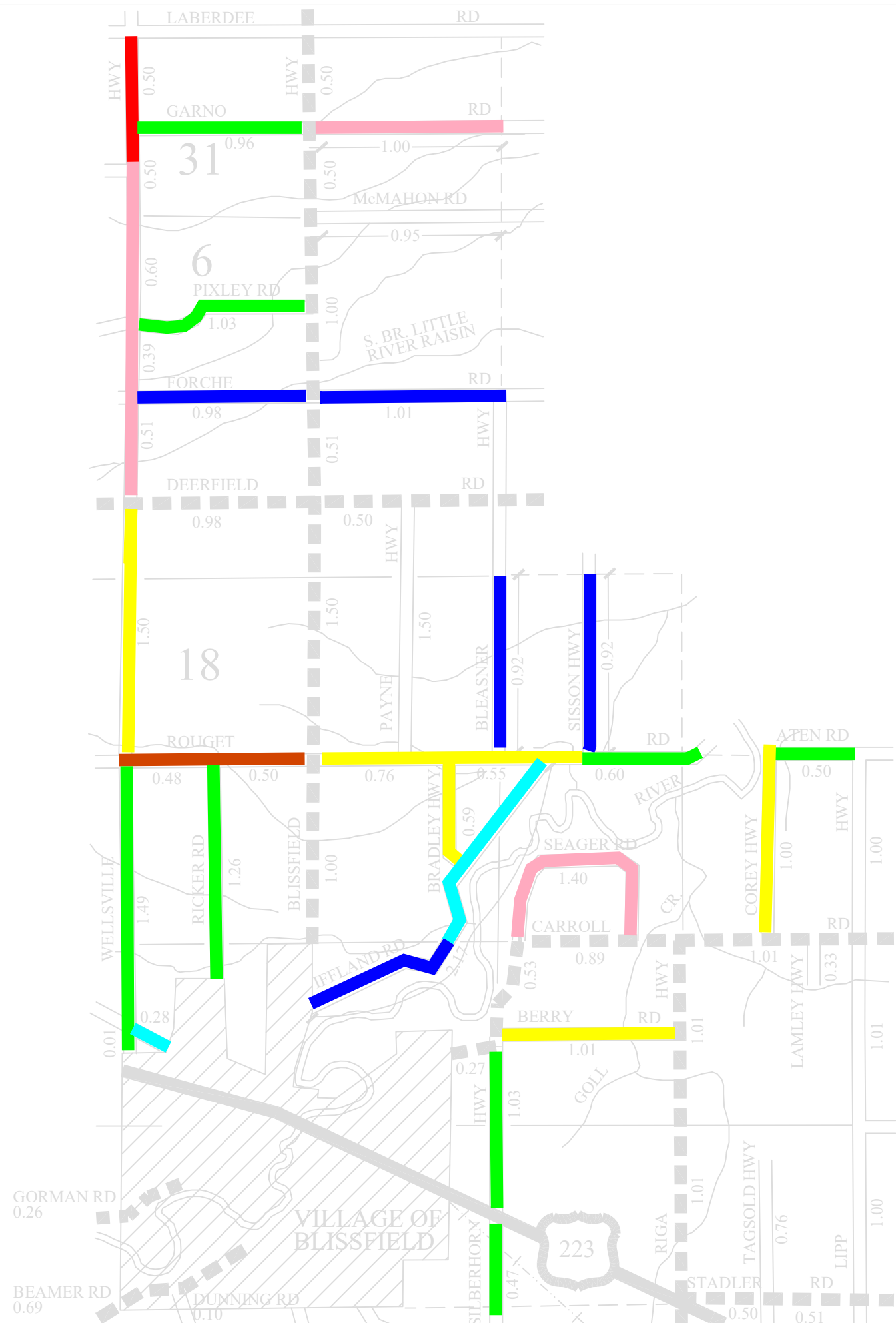


To determine what/where/when improvements are needed

Why Rate Roads?



To submit data to TAMC

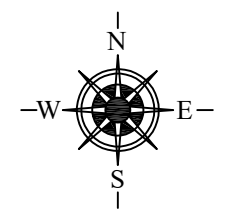


- COUNTY LINE
- CORPORATE LIMITS
- STATE TRUNKLINE
- COUNTY PRIMARY
- COUNTY LOCAL
- AJACENT COUNTY
- CITY OR VILLAGE STREETS

PRIMARY ROAD SYSTEM IS **13.66** MILES
 LOCAL ROAD SYSTEM IS **28.31** MILES

- 1 - PASER RATING
- 2 - PASER RATING
- 3 - PASER RATING
- 4 - PASER RATING
- 5 - PASER RATING
- 6 - PASER RATING
- 7 - PASER RATING
- 8, 9, 10 - PASER RATING

BLISSFIELD TWP 2018 PASER RATINGS



Blissfield Township
Local Road Pavement
2018 Condition Cost Summary

Paser Rating	Improvement Type	Miles	Cost per Mile	Total
10		0.00	\$0	\$0
9		1.72	\$0	\$0
8		5.44	\$0	\$0
7	Crackseal	5.64	\$10,000	\$56,400
6	Sealcoat	1.01	\$20,000	\$20,200
5	Wedge & Sealcoat	5.42	\$30,000	\$162,600
4	2" Overlay	0.98	\$120,000	\$117,600
3	3" Overlay	3.82	\$200,000	\$764,000
2	FDR and 3.5" Asphalt	1.02	\$400,000	\$408,000
1	Reconstruction	0.00	\$600,000	\$0
Total Paved Roads		25.05		\$1,528,800

Total Roads in Township 28.31

Gravel Roads	4" Gravel / Drainage	3.26	\$50,000	\$163,000
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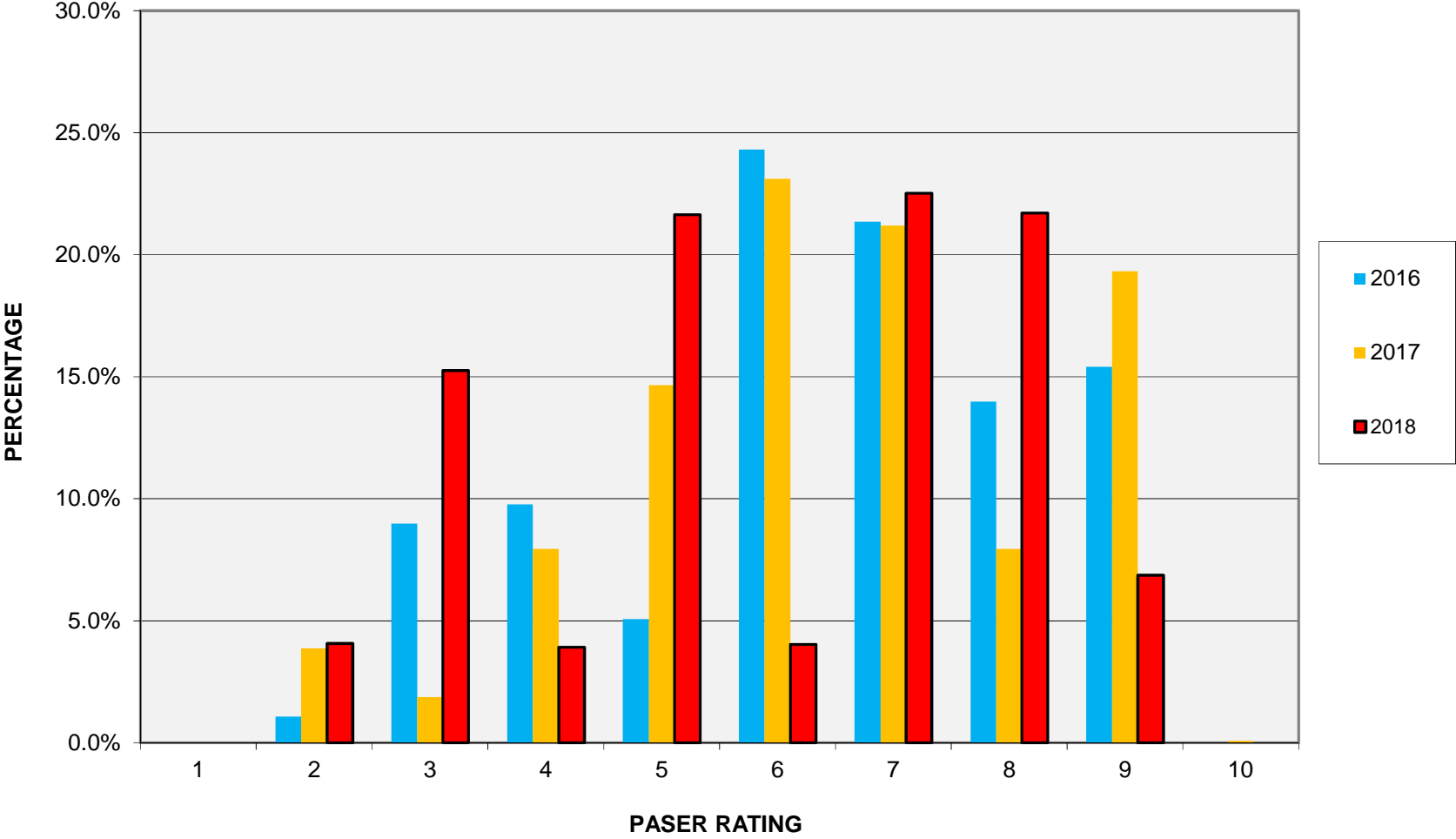
Total Cost to Improve all Township Roads \$1,691,800

Improvement costs (Paved Roads) based upon 2018 Rating Data = \$1,528,800

Improvement costs (Paved Roads) based upon 2017 Rating Data = \$999,800

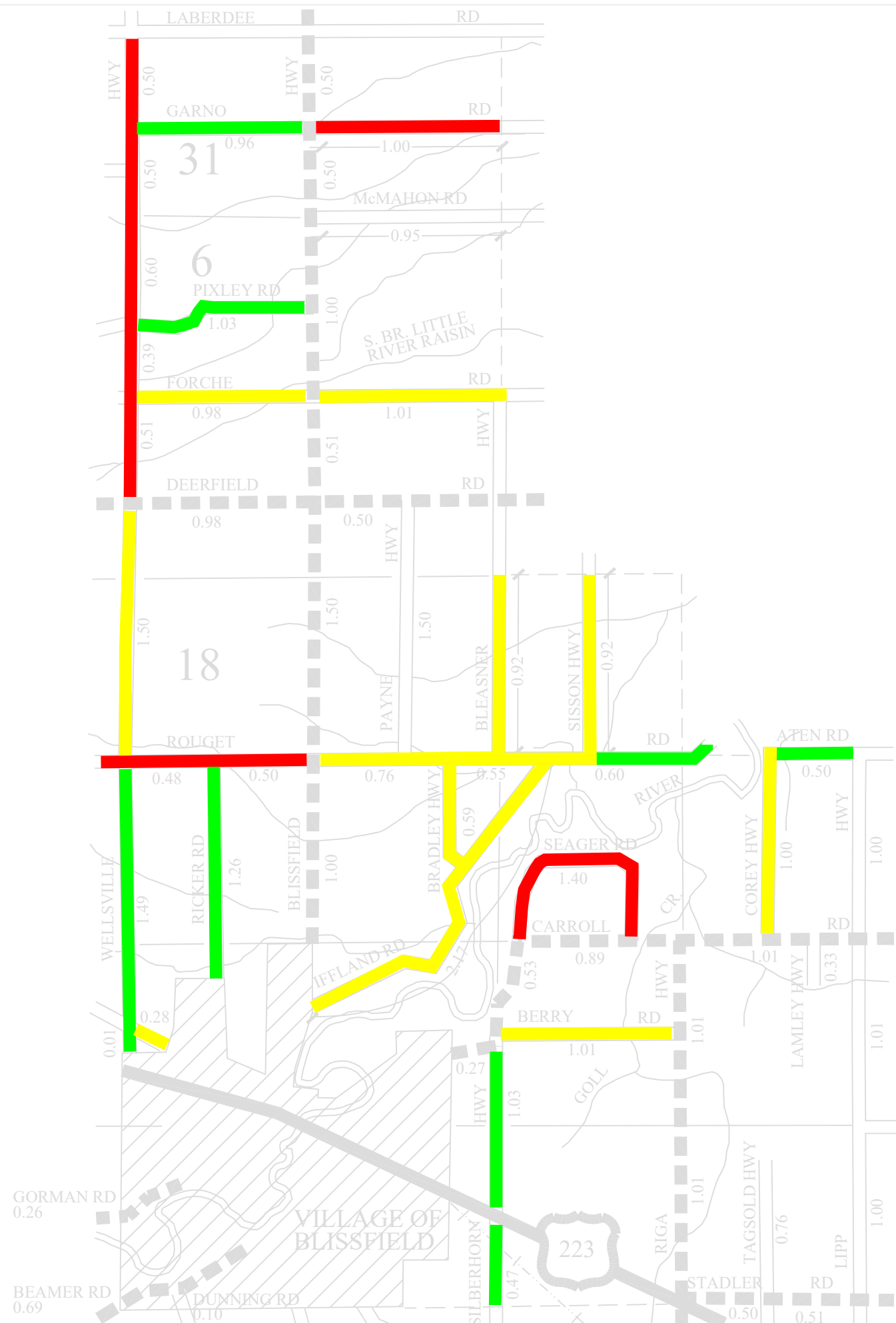
Cost increase from 2017 to 2018 using same dollars per mile = \$529,000

Blissfield Township Local Pavement Condition



Local Road PASER Ratings

TOWNSHIP	CURRENT LOCAL MILEAGE	SUBDIV. MILEAGE ONLY	Paved Miles (PASER)	AVG PASER Rating 2014	AVG PASER Rating 2016	AVG PASER Rating 2017	AVG PASER Rating 2018
WOODSTOCK	49.09	6.72	12.16	5.78	7.06	6.68	5.71
CAMBRIDGE	60.16	18.47	34.55	5.34	6.01	5.94	6.03
FRANKLIN	58.27	3.38	5.41	5.08	3.89	3.87	5.73
CLINTON	24.76	1.31	14.46	4.99	5.49	5.68	6.28
TECUMSEH	20.66	6.48	15.72	6.55	6.57	6.23	6.53
MACON	39.17	0.21	0.69	6.38	5.32	7.55	8.26
ROLLIN	48.36	8.74	19.54	6.25	6.35	5.81	6.33
ROME	46.86	0.00	7.42	4.64	7.06	5.82	6.22
ADRIAN	59.35	16.67	31.68	4.83	5.00	5.58	5.73
RAISIN	66.60	18.65	49.27	3.94	4.69	4.97	5.75
RIDGEWAY	45.58	0.21	7.51	5.21	6.60	6.23	5.25
HUDSON	35.97	0.15	1.90	7.68	6.65	6.70	7.68
DOVER	47.89	0.00	7.57	2.92	3.32	3.03	3.66
MADISON	41.54	11.99	31.88	6.82	6.64	6.55	6.96
PALMYRA	45.42	0.61	30.15	4.86	3.95	4.16	4.20
BLISSFIELD	28.31	0.00	25.05	6.34	6.40	6.44	5.95
DEERFIELD	41.53	0.00	9.12	7.15	7.24	7.24	7.06
MEDINA	51.07	1.24	7.27	6.90	7.05	6.41	6.46
SENECA	48.40	0.63	12.50	4.54	4.22	3.76	3.44
FAIRFIELD	60.90	4.34	19.45	5.12	4.74	4.62	4.89
OGDEN	55.83	0.18	48.97	4.53	4.06	4.39	4.38
RIGA	67.52	0.22	42.79	4.39	4.13	4.42	4.55
TOTAL	1,043.24	100.20	435.05	5.16	5.25	5.29	5.47

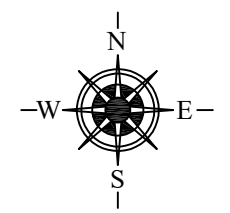


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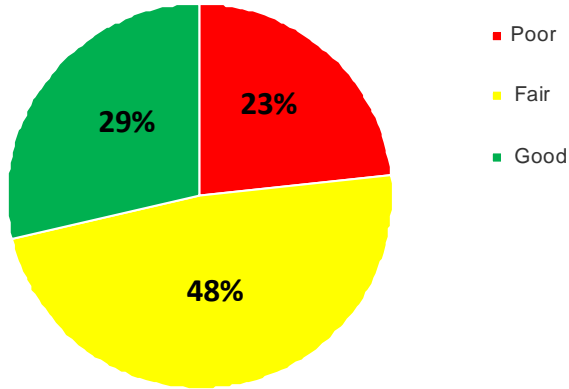
PRIMARY ROAD SYSTEM IS 13.66 MILES
 LOCAL ROAD SYSTEM IS 28.31 MILES

- 1-4 PASER RATING (POOR)
- 5-7 PASER RATING (FAIR)
- 8-10 PASER RATING (GOOD)

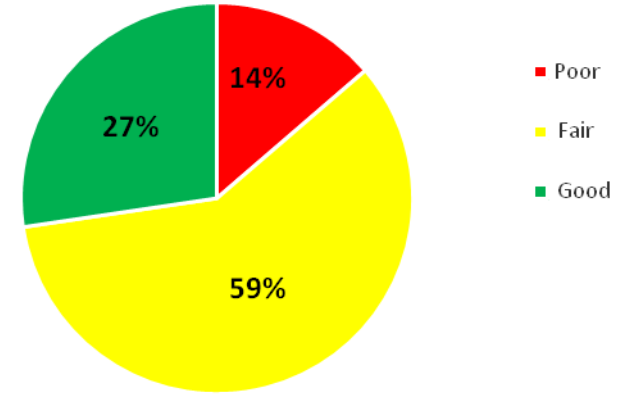
BLISSFIELD TWP 2018 PASER RATINGS



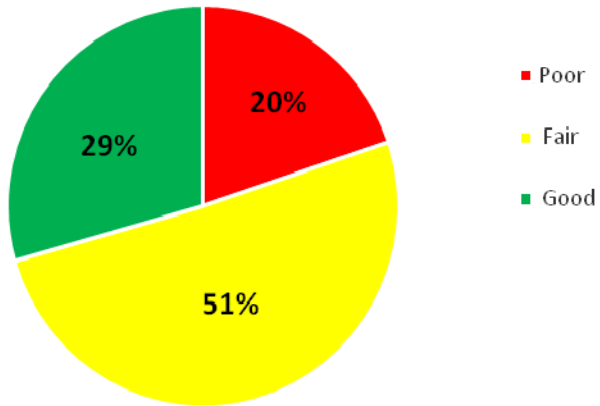
Blissfield Township - Local Roads
2018 Pavement Condition



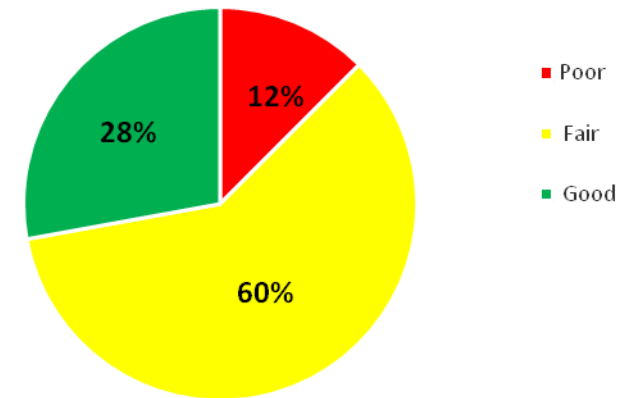
Blissfield Township - Local Roads
2017 Pavement Condition



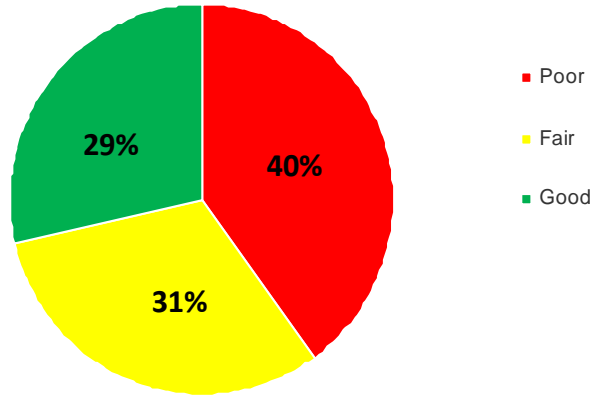
Blissfield Township - Local Roads
2016 Pavement Condition



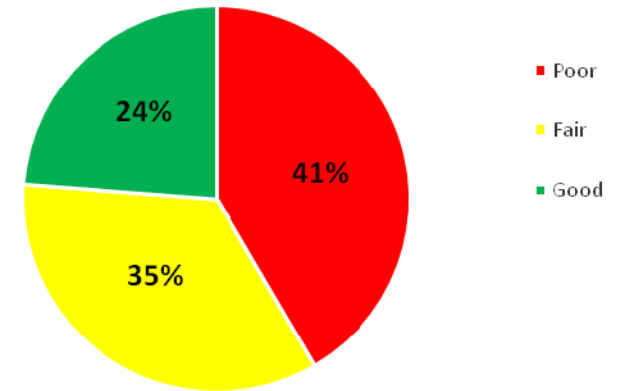
Blissfield Township - Local Roads
2014 Pavement Condition



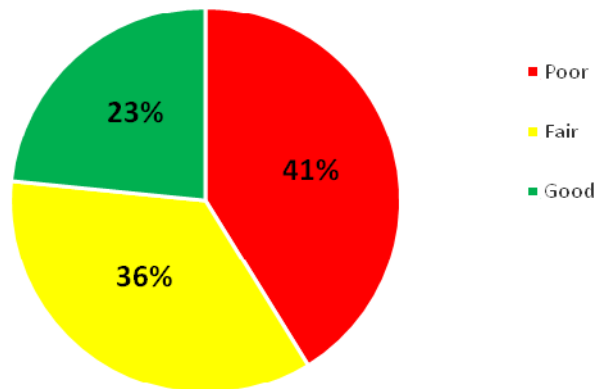
Countywide Local Roads
2018 Pavement Condition



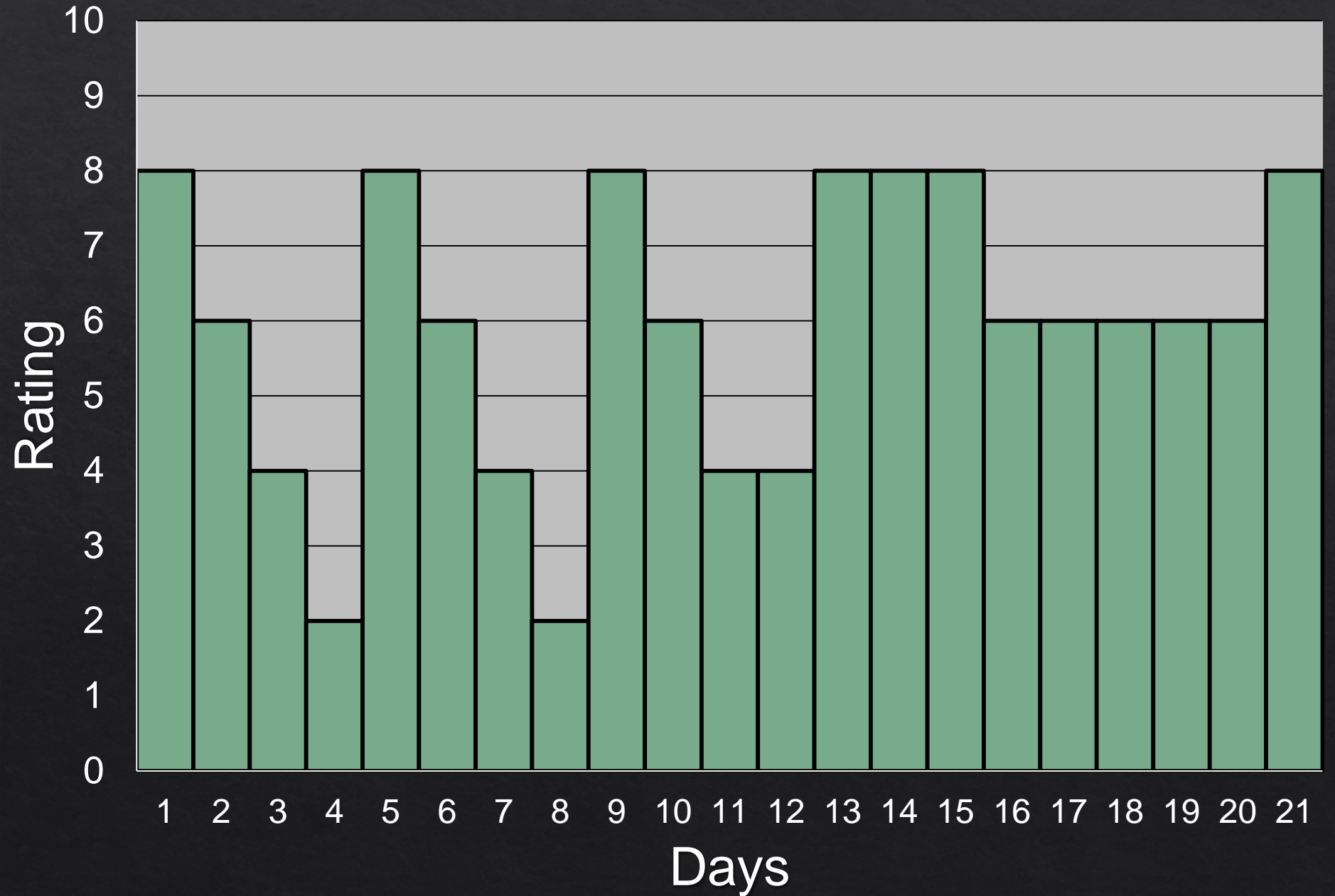
Countywide Local Roads
2017 Pavement Condition



Countywide Local Roads
2016 Pavement Condition



Surface Condition Rating System



The rating scale is...

Good

Fair

Poor

Measured Features

Surface Width

Drainage Adequacy

Structural Adequacy



IBR System™ Overview

1 to 9 IBR number is generated by Roadsoft

The screenshot displays the Roadsoft IBR System interface. On the left, a map shows a road network with a red line indicating the selected road. The central panel shows the road details for PR#23106 - S 2nd St, with a rating of 5. The right panel shows a table of segments on S 40th St, with columns for Selected, BMP, EMP, From, To, and Length. The bottom panel shows the identification and history of the selected road segment.

Road Details Panel:

- PR#23106 - S 2nd St (3.005 - 4.009 (5301 ft.))
- Buttons: Delete, Adjust, Split
- Inventory | Rating | History
- Buttons: Undo Rating, Update Rating
- Surface Subtype: Gravel-Standard
- Width: Good, Fair, Poor
- Drainage: Good, Fair, Poor
- Structure: Good, Fair, Poor
- IBR Rating = 5
- Buttons: Add/Edit Memo

Segments on S 40th St Table:

Selected	BMP	EMP	From	To	Length
<input checked="" type="checkbox"/>	0.000	0.501	Z	E Y Z Ave	0.501 (2645 ft.)
<input type="checkbox"/>	0.501	1.001	E Y Z Ave	X	0.500 (2640 ft.)
<input type="checkbox"/>	1.001	1.002	[Undescribed Rating Segment Split]	Y	0.001 (5 ft.)
<input type="checkbox"/>	1.002	1.003	Y	E Y Ave	0.001 (5 ft.)
<input type="checkbox"/>	1.003	2.004	E Y Ave	E X Ave	1.001 (5285 ft.)
<input type="checkbox"/>	2.004	3.005	E X Ave	E W Ave	1.001 (5285 ft.)
<input type="checkbox"/>	3.005	3.255	E W Ave	Attribute Change	0.250 (1320 ft.)
<input type="checkbox"/>	3.255	3.275	Attribute Change	Dead End or Start	0.020 (106 ft.)

Identification Panel:

- Segment Name: S 40th St
- From: Z
- To: E Y Z Ave
- City/Twp: Wakasha...
- Maintained By: Yes
- Physical/Design: Number of Lanes: 2, Surface Width: 20.00, Right of Way: 0, Divided Direction: Undivided, Access Control: Undefined, Median Type: Undefined

Inventory Based Rating (IBR) History:

- 5/15/2017 - IBR: 6 (W Good - D Fair - S Poor)
- 5/9/2017 - IBR: 9 (W Good - D Fair - S Good)

PASER Rating/Treatment History:

- 5/15/2017 (Add 2" & Regrade)
- 5/9/2017 (Add 2" & Regrade)

Bottom Panel:

PRNo	RoadName	Bmp	Emp	Length	SegmentName	FromDesc	ToDesc	SurfaceType	SurfaceSubType	LastRating	LastRatingDate
1 selections shown on Road (0.501 centerline miles selected, 1.002 lane miles selected)											

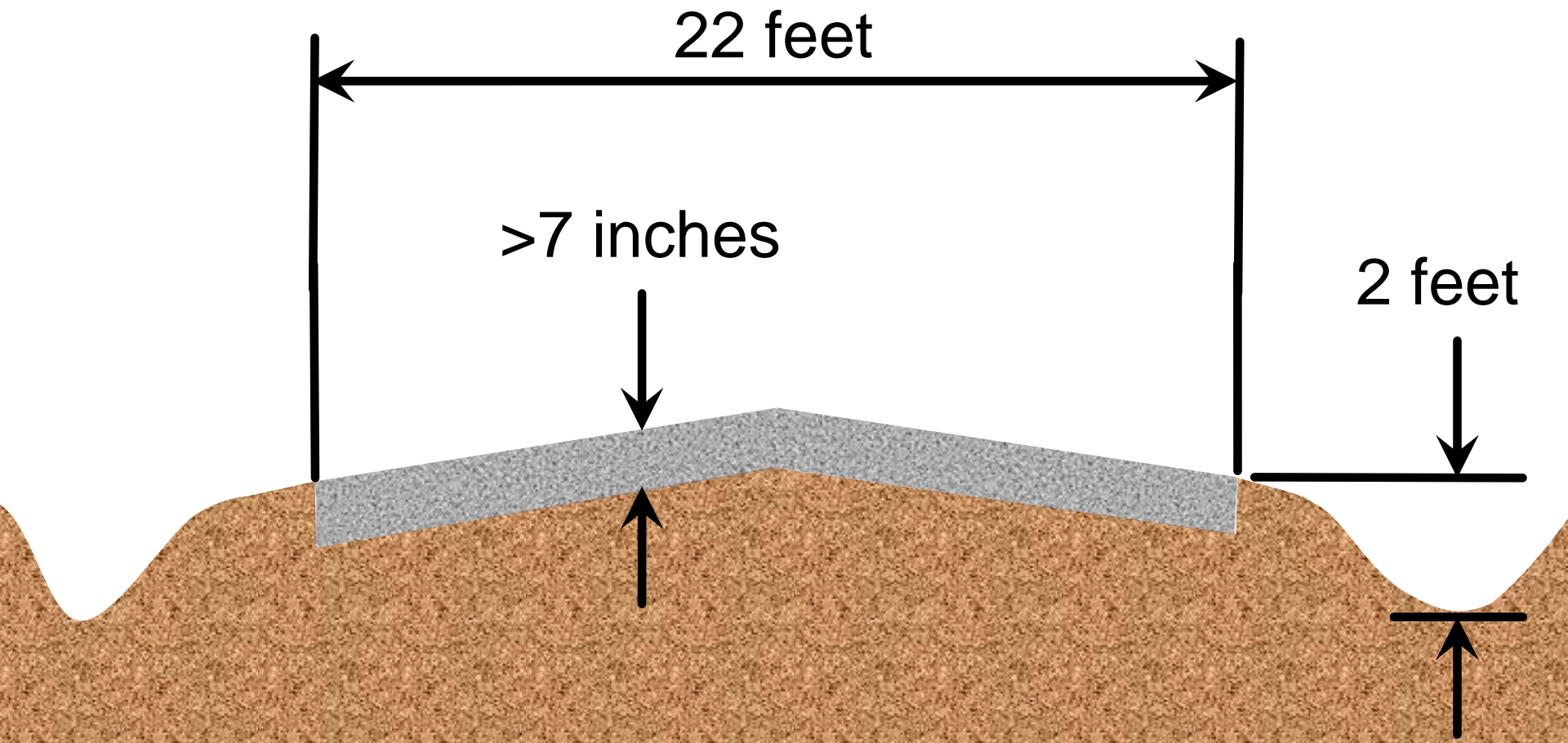
Rating Lookup Chart

Width	Drainage	Structure	Rating
Good	Good	Good	10***
Good	Good	Good	9
Good	Good	Fair	8
Good	Good	Poor	7
Good	Fair	Good	9
Good	Fair	Fair	8
Good	Fair	Poor	6
Good	Poor	Good	7
Good	Poor	Fair	6
Good	Poor	Poor	5
Fair	Good	Good	8
Fair	Good	Fair	7
Fair	Good	Poor	6
Fair	Fair	Good	7
Fair	Fair	Fair	6
Fair	Fair	Poor	5
Fair	Poor	Good	6
Fair	Poor	Fair	5
Fair	Poor	Poor	4
Poor	Good	Good	5
Poor	Good	Fair	4
Poor	Good	Poor	3
Poor	Fair	Good	4
Poor	Fair	Fair	3
Poor	Fair	Poor	
Poor	Poor	Good	3
Poor	Poor	Fair	2
Poor	Poor	Poor	1

***Segment is less than one year old

IBR System™ Overview

Based on cost to reach baseline condition



Surface Width Assessment



Good

22 feet

Fair

16 to 21 feet

Poor

15 feet or less



Surface Width Categories Philosophy

Good – Reducing speed to pass is unnecessary

Fair – Drivers should reduce speed to pass

Poor – One driver should pull over to pass

Include drivable shoulders in width measurement

Drainage Adequacy Assessment

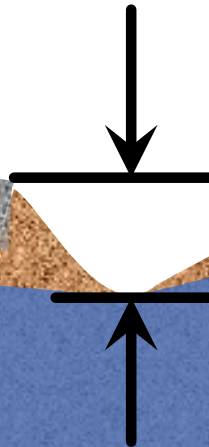
Good

2 feet
or more



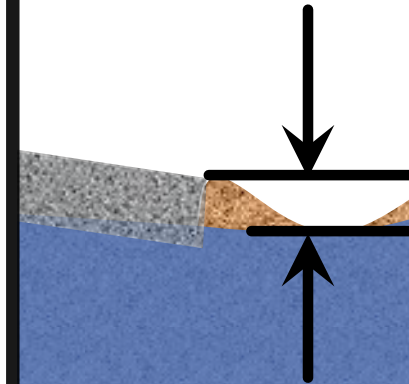
Fair

0.5 to
< 2 feet



Poor

Less than
0.5'



Drainage Adequacy Categories

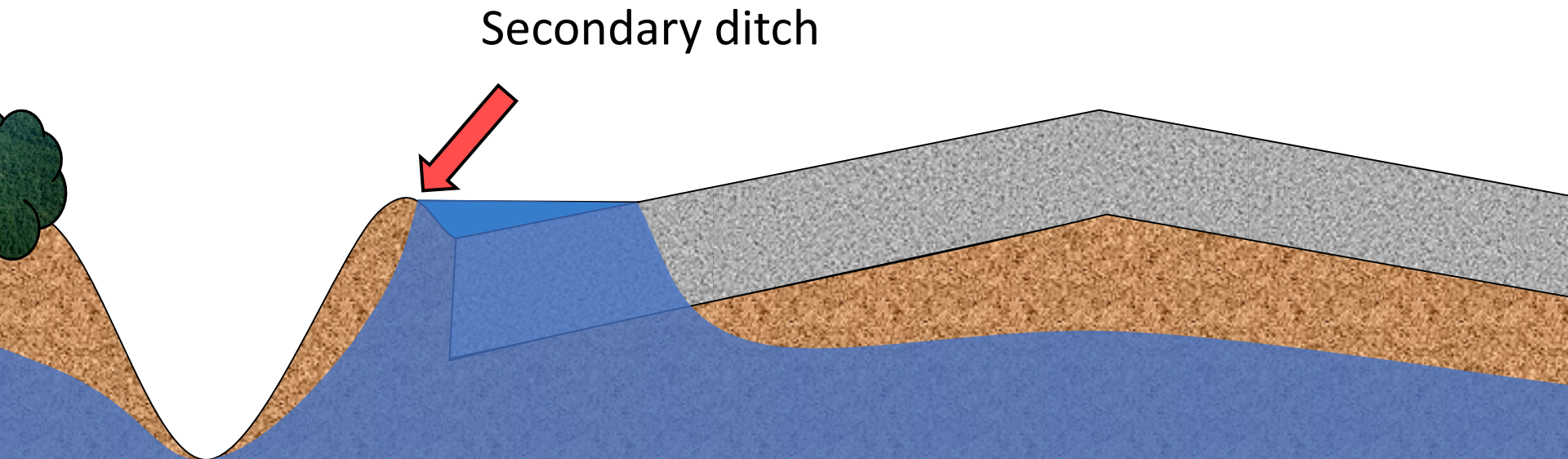
Philosophy

Good – Adequate ditch water separation from base

Fair – Ditches or swales need to be cleaned out

Poor – Ditches need to be created

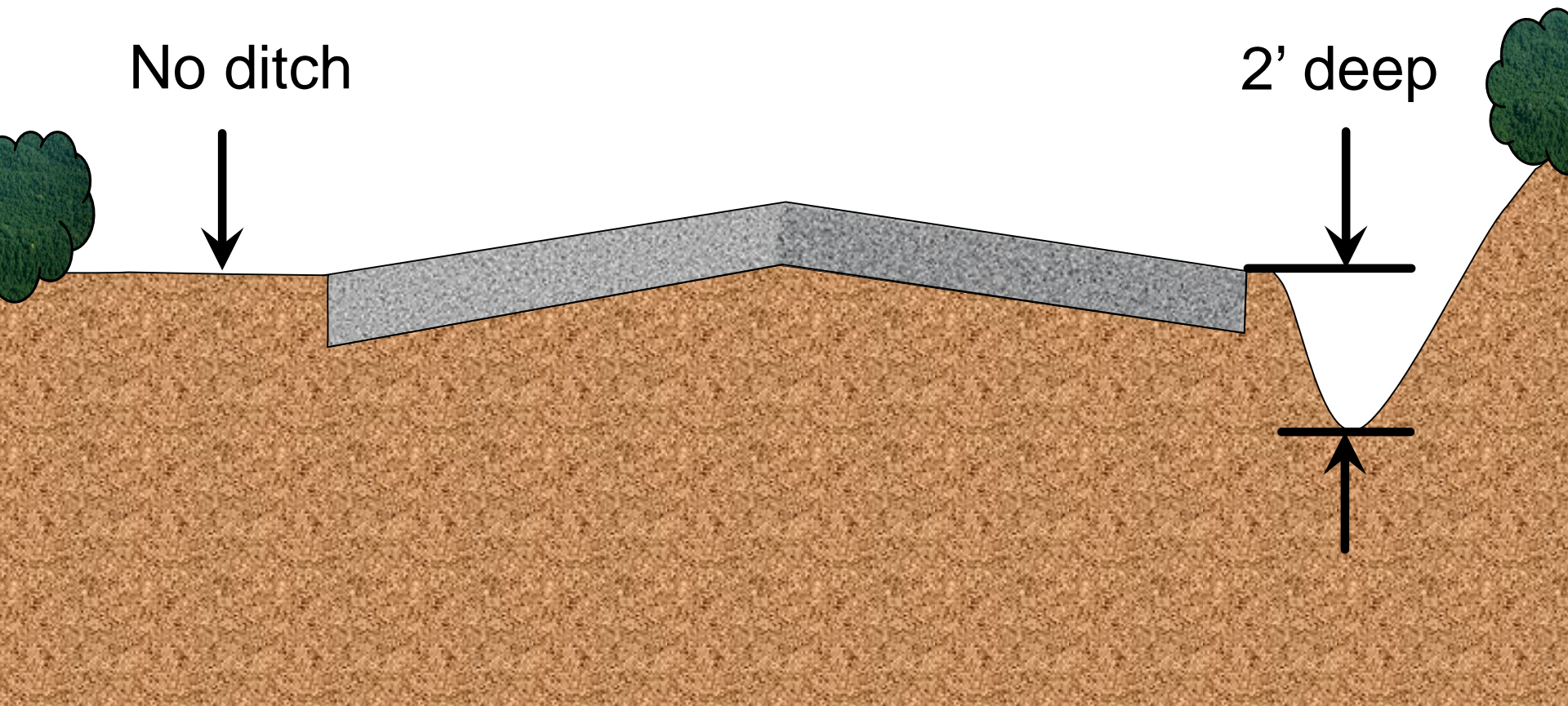
Extra Drainage Adequacy Details



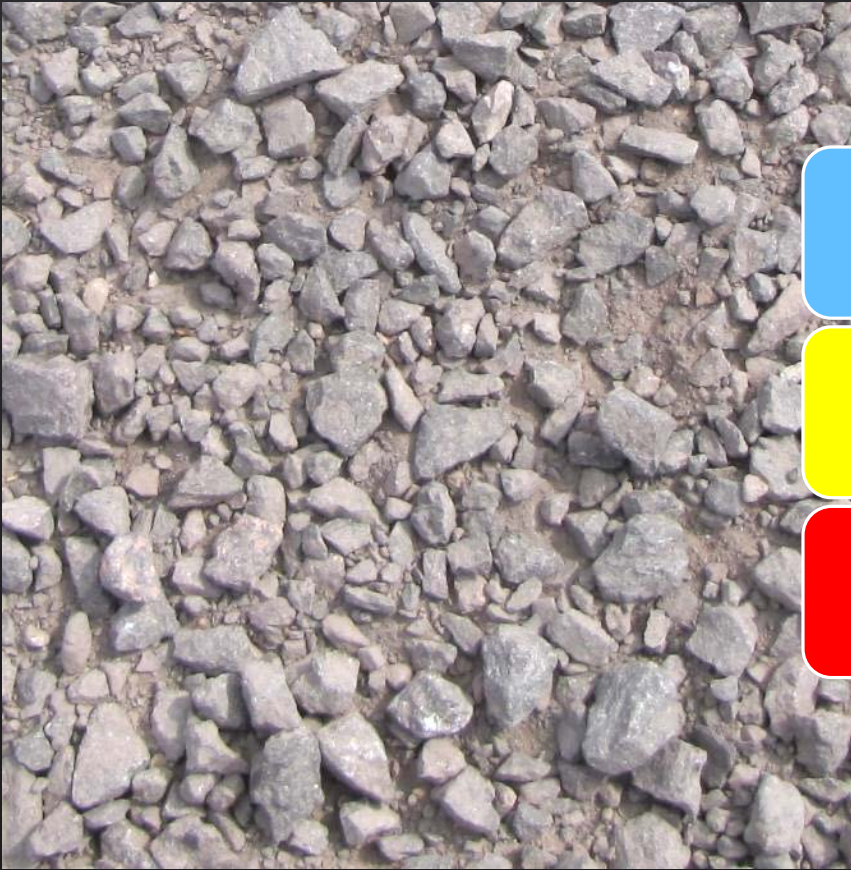
If greater than 6" tall, drop Good to Fair

Drainage Adequacy Rating Tips

Rate the worst side



Structural Adequacy Assessment



Gravel Thickness

Good

>7 inches

Fair

4 to 7 inches

Poor

< 4 inches

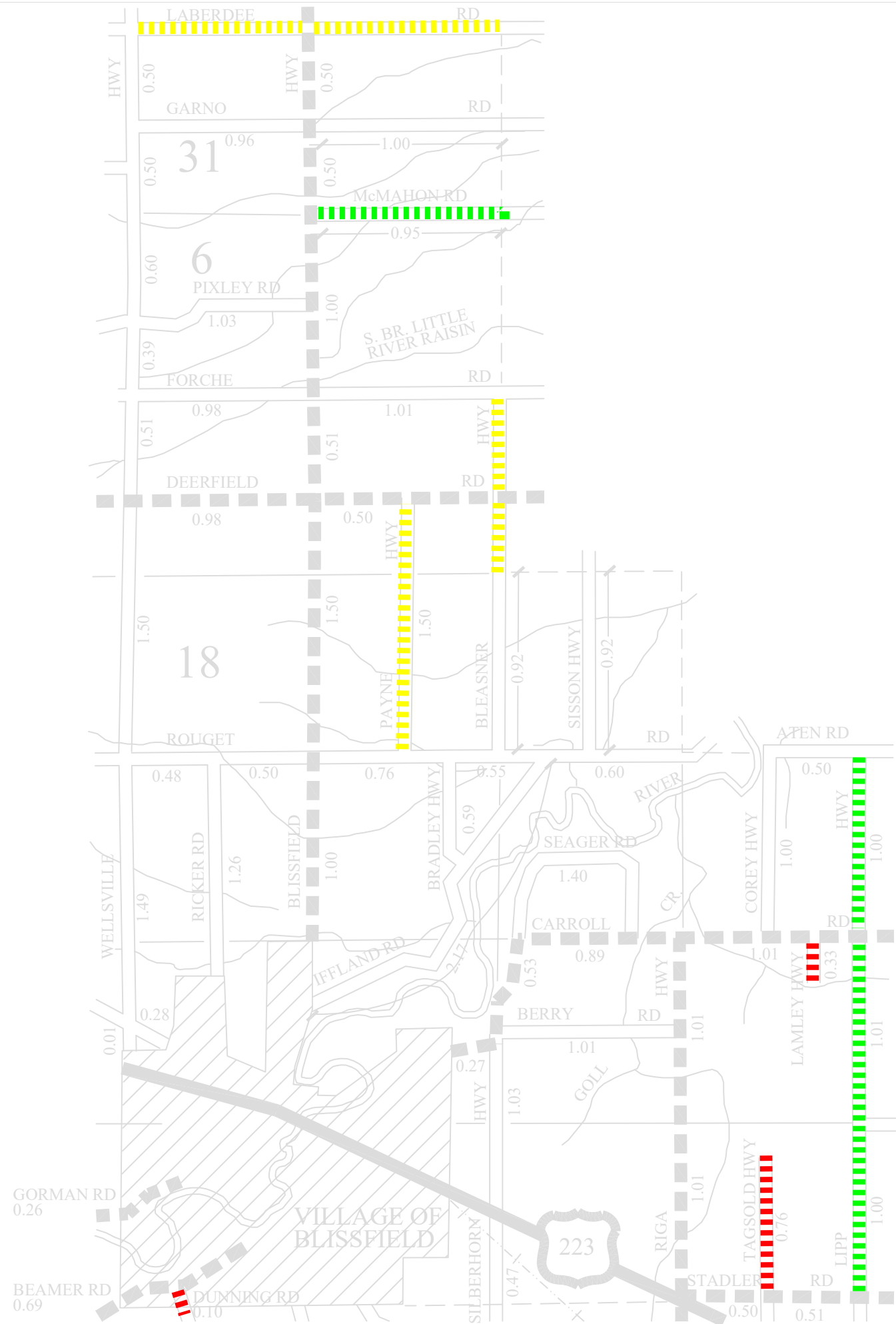
Structural Adequacy Categories Philosophy

Traffic Level

Relative Quality of Roadbed Soil	Traffic Level		
	Low	Medium	High
Very Good	6"	11"	15"
Good	7"	12"	17"
Fair	7"	12"	17"
Poor	9"	*	*
Very Poor	10"	*	*

* Higher type pavement design recommended

U.S. Climatic Region III recommended aggregate base thickness from the AASHTO Design Catalogs given in the Gravel Roads Maintenance and Design Manual

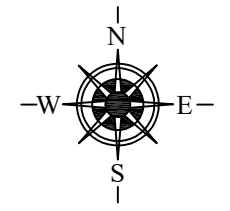


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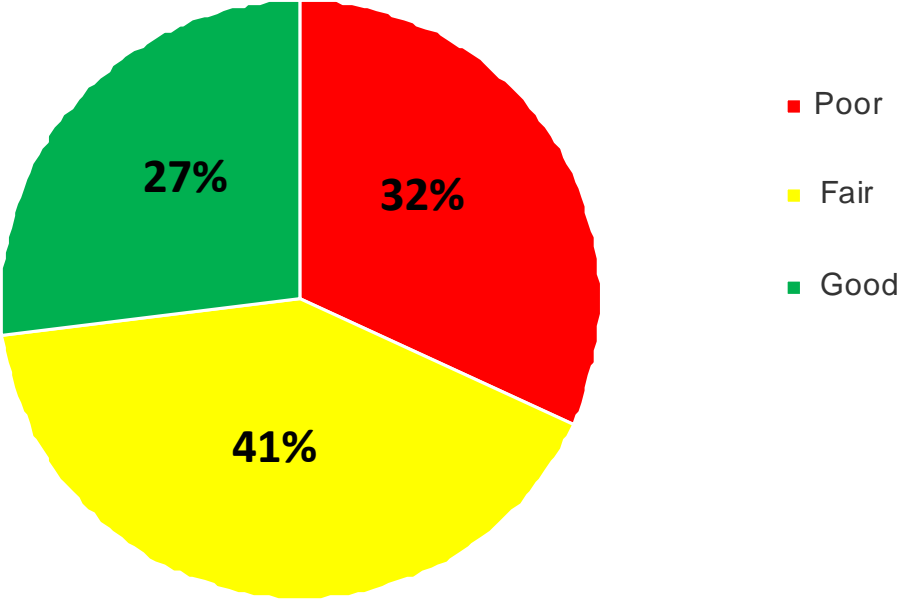
PRIMARY ROAD SYSTEM IS **13.66** MILES
 LOCAL ROAD SYSTEM IS **28.31** MILES

- POOR - IBR RATING (1-4)
- FAIR - IBR RATING (5-7)
- GOOD - IBR RATING (8-10)

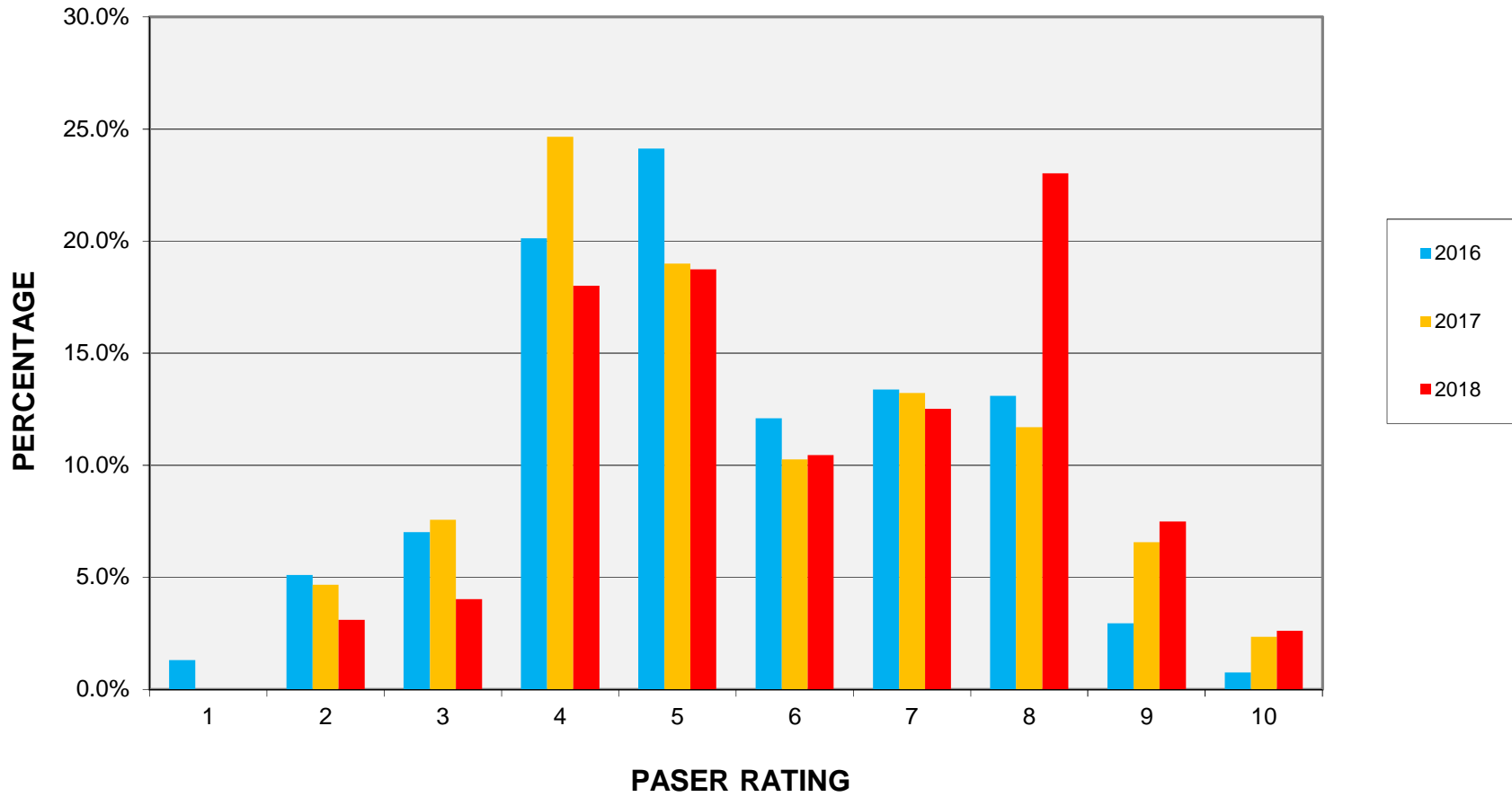
BLISSFIELD TWP GRAVEL ROAD 2018 PASER RATINGS



Blissfield Township - Local Gravel Roads 2018 IBR Condition



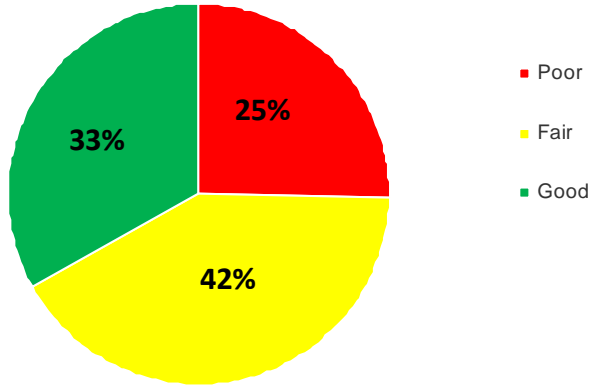
Countywide Primary Roads Pavement Condition



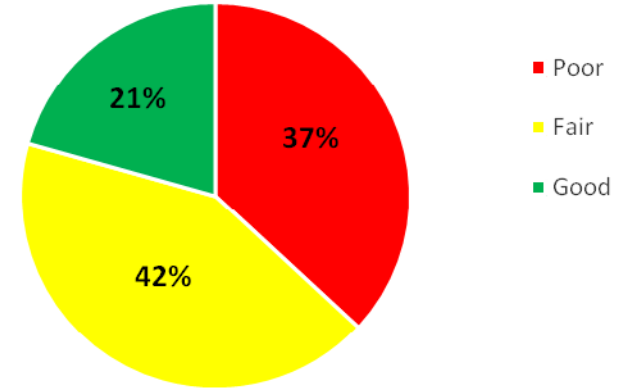
Primary Road PASER Ratings

CURRENT PRIMARY MILEAGE	Paved Miles (PASER)	AVG PASER Rating 2014	AVG PASER Rating 2016	AVG PASER Rating 2017	AVG PASER Rating 2018
488.50	446.85	5.39	5.39	5.56	6.12

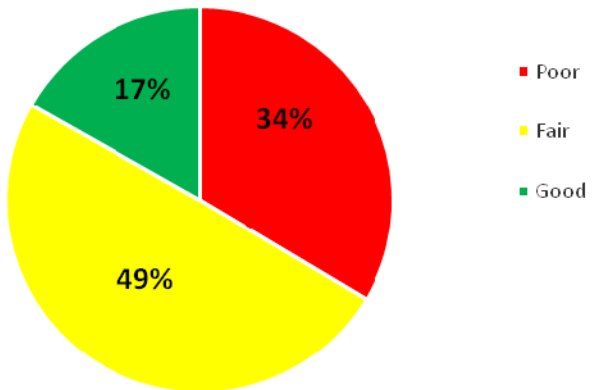
Countywide Primary Roads
2018 Pavement Condition



Countywide Primary Roads
2017 Pavement Condition



Countywide Primary Roads
2016 Pavement Condition



Countywide Primary Roads
2014 Pavement Condition

