

2017  
ANNUAL MEETING  
NORTHFIELD TOWNSHIP



COMMISSIONERS  
DOUGLAS E. FULLER  
CHAIR  
BARBARA RYAN FULLER  
VICE-CHAIR  
WILLIAM MCFARLANE  
MEMBER

**WASHTENAW COUNTY**  
**BOARD OF COUNTY ROAD COMMISSIONERS**  
555 NORTH ZEEB ROAD  
ANN ARBOR, MICHIGAN 48103  
WWW.WCROADS.ORG

ROY D. TOWNSEND, P.E.  
MANAGING DIRECTOR  
SHERYL SODERHOLM SIDDALL, P.E.  
DIRECTOR OF ENGINEERING  
COUNTY HIGHWAY ENGINEER  
JAMES D. HARMON, P.E.  
DIRECTOR OF OPERATIONS  
TELEPHONE (734) 761-1500  
FAX (734) 761-3737

Dear Northfield Township Board of Trustees:

We would like to thank all townships for their financial assistance improving local roads in 2016. In total, townships provided \$4.2M in local road funding and \$853,000 in primary road funding in 2016.

Without your assistance, most local road improvements would not be possible. By law, the Road Commission can only provide 50% of the funding for improvements on local roads. Washtenaw County has 1,060 miles of local roads. Without your continued financial partnership these road repairs would remain unfunded and this joint responsibility of the Road Commission and Township is essential for the continued success of improving our local roads and quality of life in our communities.

We are pleased to provide Northfield Township Officials with our 2017 Annual Local Road Program. Due to increases in state funding, we have increased our total amount of conventional matching funds by \$200,000.

In addition, we have included a few other updates on our activities and major project initiatives in your township. We have also included cost summaries of 2016 expenditures and projects in your township.

To better assist townships in determining an appropriate level of funding for local road improvements in 2017, our annual meeting booklet includes the 2017 Local Road Program and matching fund allocations, proposed local road projects and dust control program, the 2017 road and bridge improvement projects, the countywide millage projects for 2017 and a summary of additional local road funding options available to townships.

Please note **May 19** is the written commitment due date for this year's 2017 Local Road Program in order to obligate allocated matching funds. Your timely response and participation is essential to successfully accomplishing this year's local road program.

We annually look forward to this opportunity to discuss common issues with the township officials and your citizens as we seek solutions to the funding challenges that we face.

If you have any immediate concerns related to the attached information, please feel free to contact me at 327-6662 or our Director of Operations, Jim Harmon at 327-6653.

Very truly yours,

*Roy D. Townsend*

Roy D. Townsend, P.E.  
Managing Director

RDT:tvf

**WASHTENAW COUNTY ROAD COMMISSION**  
**2017 LOCAL MATCHING PROGRAM**

The Washtenaw County Road Commission is anticipating it will receive \$18,500,000 in Michigan Transportation Fund (MTF) revenues for 2016. Due to the road funding bills that were passed into law in November of 2015, the Road Commission is anticipating increased MTF revenues in 2017 for a total budgeted amount of \$22,900,000.

The Road Commission has recognized that local road funds are inadequate to maintain the 1,060 centerline miles of local roads in Washtenaw County; the Road Commission has historically transferred funds from the Primary Road Fund to the Local Road Fund, even though this transfer severely limits maintenance activity on our primary road system.

A summary of our 2017 budget as approved by the Board of Road Commissioners at its regular meeting on December 6, 2016 (RC16-454) is provided as follows.

**2017 Road Commission Budget**

**Revenues**

Michigan Transportation Fund	\$ 22,900,000
Federal/ State Funds	\$ 10,578,000
Trunkline Maintenance	\$ 2,370,000
Township Contributions	\$ 3,528,000
Other Contributions	\$ 4,970,000
Miscellaneous Income	<u>\$ 6,099,000</u>
Total	\$ 50,445,000

**Expenditures**

Administration	\$ 1,105,000
Operations	\$ 9,085,000
Engineering	\$ 2,935,000
Non-Departmental	\$ 7,926,000
Debt Service	\$ 1,473,000
Road Improvement Program	<u>\$ 31,051,000</u>
Total	\$ 53,574,000

**Matching Funds**

The Road Commission has allocated a total of \$700,000 for 2017 for the conventional Local Road Matching Program, which represents a \$200,000 increase over the 2016 program. This consists of a countywide allocation of \$592,308 for matching programs on local roads in all twenty townships based on the distribution formula used by the Michigan Department of Transportation to allocate local road funds to the 83 counties of Michigan. In addition to this, recognizing the fact that the urban local roads receive a higher allocation of Michigan Transportation Funds, \$107,692 is allocated based on the amount of urban local miles within eligible townships. Ann Arbor, Augusta, Dexter, Lima, Lodi, Northfield, Pittsfield, Salem, Saline, Scio, Superior, Sylvan, Webster, York and Ypsilanti Townships are within the urban area and are eligible for these additional matching funds.

The Road Commission has allocated \$200,000 for the 2017 Drainage Matching Program for local uncurbed, non-subdivision roads. The Road Commission has recognized the need for directing more resources towards improving the drainage along our local roads. The drainage matching program is in addition to the conventional local road matching program available to the Townships. Some of the key features of drainage matching program include:

- Funding distribution is based on the total uncurbed, non-subdivision local road centerline mileage for each township
- Eligible work activities are limited to uncurbed, non-subdivision local roads
- Eligible work activities include roadside berm removal, ditch establishment & restoration, small culvert installation, rehabilitation or replacement.

Replacement of local road culverts and bridges that require permits from the Michigan Department of Environmental Quality and/or the Washtenaw County Water Resources Commissioner's Office will be funded by the Road Commission at no greater than 50% of total cost. This funding source is separate from the conventional and other drainage matching funds identified herein and will be applied on a case-by-case basis in partnership with interested townships by formal, written agreement.

TOWNSHIP	2016 CONVENTIONAL LOCAL ROAD MATCHING PROGRAM	2017 CONVENTIONAL LOCAL ROAD MATCHING PROGRAM	2016 DRAINAGE MATCHING PROGRAM	2017 DRAINAGE MATCHING PROGRAM
Salem	\$ 16,425	\$ 22,989	\$ 10,493	\$ 10,493
Northfield	25,002	34,999	13,732	13,732
Webster	17,770	24,875	11,792	11,792
Dexter	16,023	22,429	6,932	6,932
Lyndon	11,995	16,791	10,048	10,048
Sylvan	13,443	18,826	11,489	11,489
Lima	15,447	21,623	12,745	12,745
Scio	37,425	52,389	7,157	7,157
Ann Arbor	10,580	14,810	3,833	3,833
Superior	31,412	43,672	8,793	8,793
Ypsilanti	104,177	146,131	5,924	5,924
Pittsfield	68,741	96,227	4,669	4,669
Lodi	22,623	31,668	12,879	12,879
Freedom	13,575	19,003	13,684	13,684
Sharon	10,442	14,617	9,971	9,971
Manchester	14,316	20,041	13,176	13,176
Bridgewater	11,765	16,470	11,481	11,481
Saline	9,504	13,305	8,125	8,125
York	27,206	38,161	8,521	8,521
Augusta	22,127	30,975	14,554	14,554
	\$ 500,000	\$ 700,000	\$ 200,000	\$ 200,000

\*Totals do not equal sum of individual allocations due to rounding

The WCRC Matching Program is subject to the following conditions:

a) Township Assistance

In order to allow local road improvements to proceed in a timely manner, townships are asked to assist Road Commission personnel in acquiring necessary tree removal and grading permits, holding public hearings and coordinating any necessary property owner contacts.

b) Project Overruns

Road Commission staff will provide an estimated cost for each individual project to be included within the agreement between the township and the Road Commission. If, prior to

beginning an individual project, it is determined that the original cost estimate will not cover project costs, the Road Commission will notify the township to determine, if the township desires to proceed with the project with a reduced scope or an additional funding commitment. Budgets are closely monitored on each project and every effort is made to avoid overruns. Any unexpected project cost overrun shall be taken from any unexpended funds remaining in that township's total township agreement. If the overrun exceeds the total township agreement, the Road Commission may bill the township up to an additional 10 percent of the total agreement amount with the township. At the township's option, such overruns can be taken from the following years matching funds.

c) Billing Procedures

As has been the practice for the past several years, the first 40 percent of the total Matching Program for construction and heavy maintenance projects will be due in June or 30 days from receipt of the first invoice. A second 40 percent will be due in August or 30 days from receipt of the second invoice. A final billing will be due in December or 30 days from receipt of final invoice. Any credits due townships will be returned at the time of final billing or credited to the following year, as determined by the township. The above billing methods apply only to those projects considered to be construction and heavy maintenance and does not apply to dust control which will be billed at cost to the date at time of billing. Standard fringe and overhead rates will be applied as defined by PA 51 of 1951, as amended.

d) Primary Road Matching

Any township board may, at their option, request that a part or all of their allocated matching WCRC funds, along with an equal amount of township funds, be used on a Primary Road Project within their township boundaries.

e) Reallocation of Funds

Any township that has not notified the WCRC of their intent to utilize matching funds **on or before Friday, May 19, 2017** will forfeit the 2017 allocated matching money. The WCRC will determine the amount of unused matching funds and reallocate these funds to primary road maintenance.

f) Dust Control

Conventional matching funds can be used for dust control only for solid applications (spot or skip spraying is ineligible).

g) Local Matching Fund Carryover

If a township determines that they desire to carry over the funds allocated for a given year into the following year, the township must provide written notification to the Road Commission that they are requesting this carryover, and identify an eligible project for which the funds will be held. The Road Commission carry-over fund will be preserved for one year. Beyond this point the funds will be reallocated as stated in Paragraph e. The carryover option allows the township to accumulate the funds that are allocated with the previous year allocation; in other words, the carry over funds cannot exceed the previous year's allocation.

## NORTHFIELD TOWNSHIP 2016 ACTIVITIES

LOCATION	PROJECT	WCRC COST	TOWNSHIP COST	TOTAL COST
<b><u>PRIMARY</u></b>				
Maintenance	Roads	\$ 146,897.96		\$ 146,897.96
Maintenance	Winter	123,899.04		123,899.04
Maintenance	Traffic	43,473.00		43,473.00
^Whitmore Lake Rd	Mill and Resurface	\$ 251,708.47		251,708.47
Sutton Rd	Chipseal	\$ 16,000.76		16,000.76
Whitmore Lake Rd btwn Joy and N Territorial	Chipseal	\$ 54,041.93		54,041.93
Whitmore Lake Rd btwn Five and Six Mile	Chipseal	\$ 23,730.24		23,730.24
Dixboro Rd btwn Joy and N Territorial	Chipseal	\$ 21,937.50		21,937.50
*Pontiac Trl	Mill, HMA Resurface and Sealcoat	\$ 182,624.75		182,624.75
		-		-
		\$ 864,313.65		\$ 864,313.65
* PA 283 Project ^Federal Aid/State Aid				
<b><u>LOCAL</u></b>				
Maintenance	Roads	\$ 353,129.80		\$ 353,129.80
Maintenance	Winter	49,458.57		49,458.57
Maintenance	Traffic	16,332.51		16,332.51
Local Road	Dust Control	32,925.51	28,460.25	61,385.76
Township Wide	Ditching	5,710.08	14,717.91	20,427.99
Township Wide	Limestone	25,068.64	64,615.20	89,683.84
		-		-
		-	-	-
		\$ 482,625.11	\$ 107,793.36	\$ 590,418.47

## WASHTENAW COUNTY ROAD COMMISSION

### 2017 DUST CONTROL

<u>MATERIAL</u>	<u>COST/GALLON APPLIED</u>
Contract Brine	\$0.165

---

### NORTHFIELD TOWNSHIP OPTIONS

49.61 miles certified local gravel roads

#### Contract Brine

(Recommended application rate – 2,000 gallons per mile)

Two Solid Applications	198,440 gallons = \$ 32,742.60
------------------------	--------------------------------

#### For Information Only

2016 Use: 180,700 gallons Contract Brine  
(2 solid applications)

## **NORTHFIELD TOWNSHIP**

### **PROPOSED 2017 LOCAL ROAD PROJECTS**

- **DIXBORO ROAD, FIVE MILE ROAD TO SIX MILE ROAD**  
Work to include tree cutting, roadside berm removal, ditching, shaping the existing surface, placement of a 6" (C.I.P.) 23a limestone (approximately 3,650 tons) and associated project restoration.  
Proposed Township Share Project with Salem Township.  
Estimated project cost \$ 150,900  
Estimated project cost to Northfield Township \$ 75,450
  
- **JOY ROAD, DIXBORO ROAD TO EARHART ROAD**  
Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 4" (C.I.P.) 23a limestone (approximately 2,850 tons) with associated dust control and project restoration. This is a proposed township share project with Ann Arbor Township.  
Estimated project cost: \$ 139,400  
Estimated cost to Northfield Township: \$ 69,700
  
- **JOY ROAD, EARHART ROAD TO PONTIAC TRAIL**  
Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 4" (C.I.P.) 23a limestone (approximately 2,600 tons) with associated dust control and project restoration. This is a proposed township share project with Ann Arbor Township.  
Estimated project cost: \$ 105,900  
Estimated cost to Northfield Township: \$ 52,950
  
- **JOY ROAD, PONTIAC TRAIL TO NOLLAR ROAD**  
Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 5,250 tons) with associated dust control and project restoration. This is a proposed township share project with Ann Arbor Township.  
Estimated project cost: \$ 188,200  
Estimated cost to Northfield Township: \$ 94,100
  
- **JOY ROAD, NOLLAR ROAD TO WHITMORE LAKE ROAD**  
Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 5,000 tons) with associated dust control and project restoration. This is a proposed township share project with Ann Arbor Township.  
Estimated project cost: \$ 154,700  
Estimated cost to Northfield Township: \$ 77,350



- **JOY ROAD, HELLNER ROAD TO MAPLE ROAD**  
 Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 2,550 tons) with associated dust control and project restoration. This is a proposed township share project with Ann Arbor Township.  
 Estimated project cost: \$ 140,100  
 Estimated project cost to Northfield Township \$ 70,050
- **JOY ROAD, WHITMORE LAKE ROAD TO HELLNER ROAD**  
 Work to include ditching, roadside berm removal, tree cutting, culvert installations, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 4,950 tons) with associated dust control and project restoration. This is a proposed township share project with Ann Arbor Township.  
 Estimated project cost: \$ 196,500  
 Estimated project cost to Northfield Township \$ 98,250
- **JENNINGS ROAD, US-23 ON-RAMP TO E.O.P**  
 Work to include ditching, roadside berm removal, pulverizing the existing surface, the placement of a 3" HMA resurfacing, placement of limestone shoulders and associated project restoration.  
 Estimated project cost: \$ 230,200
- **JENNINGS ROAD, E.O.P. TO KEARNEY ROAD**  
 Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 6,100 tons) with associated dust control and project restoration.  
 Estimated project cost: \$ 271,100
- **JENNINGS ROAD, KEARNEY ROAD TO TOWNSHIP LINE**  
 Work to include roadside berm removal, tree cutting, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 1,600 tons) with associated dust control and project restoration.  
 Estimated project cost: \$ 84,900
- **SIX MILE ROAD, EARHART ROAD TO RUSHTON ROAD**  
 Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 6" (C.I.P.) 23a limestone (approximately 3,650 tons) with associated dust control and project restoration.  
 Estimated project cost: \$ 147,100
- **NOLLAR ROAD, N. TERRITORIAL ROAD SOUTH 0.28 MILES**  
 Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 6" (C.I.P.) 23a limestone (approximately 1,100 tons) with associated dust control and project restoration.  
 Estimated project cost: \$ 70,800

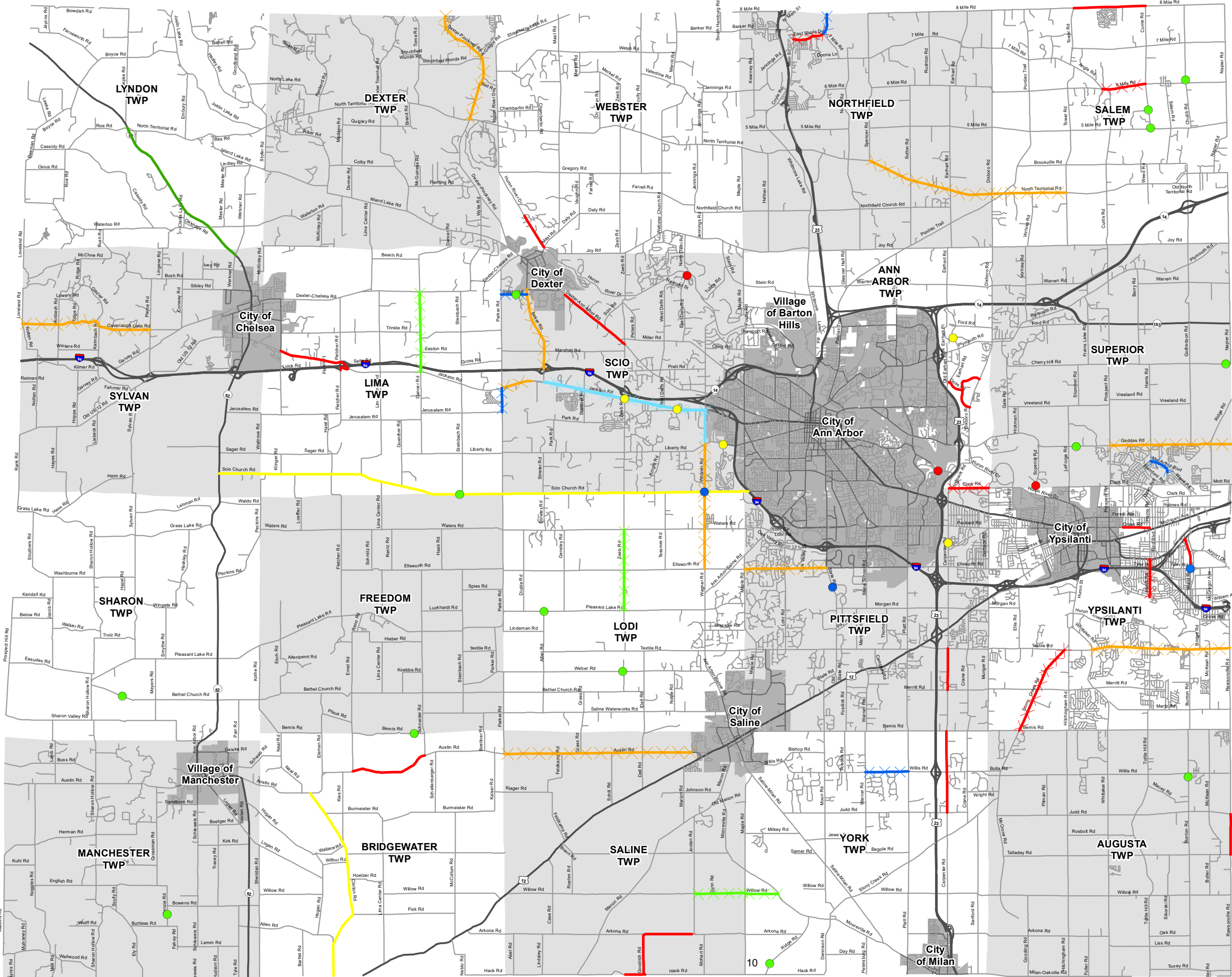
- **NOLLAR ROAD, NORTHFIELD CHURCH ROAD NORTH 1 MILE**  
Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 6" (C.I.P.) 23a limestone (approximately 3,850 tons) with associated dust control and project restoration.  
Estimated project cost: \$ 173,800
- **NOLLAR ROAD, NORTHFIELD CHURCH ROAD TO JOY ROAD**  
Work to include ditching, roadside berm removal, tree cutting, shaping the existing surface, the application of 8" (C.I.P.) 23a limestone (approximately 5,350 tons) with associated dust control and project restoration.  
Estimated project cost: \$ 173,400



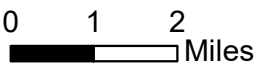
# 2017 Road & Bridge Improvement Projects

## Legend - Project Type

- XXX Millage Project
- Mill/Overlay
- Pulverize/Overlay
- Chipseal
- Non-Motorized Path
- Limestone Overlay
- Safety & Signal Improvement
- Concrete Repairs
- Bridge/Culvert Replacement
- Bridge Deck Maintenance
- Intersection Project
- Safety & Signal Improvement



Printed: March, 2017



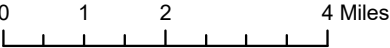
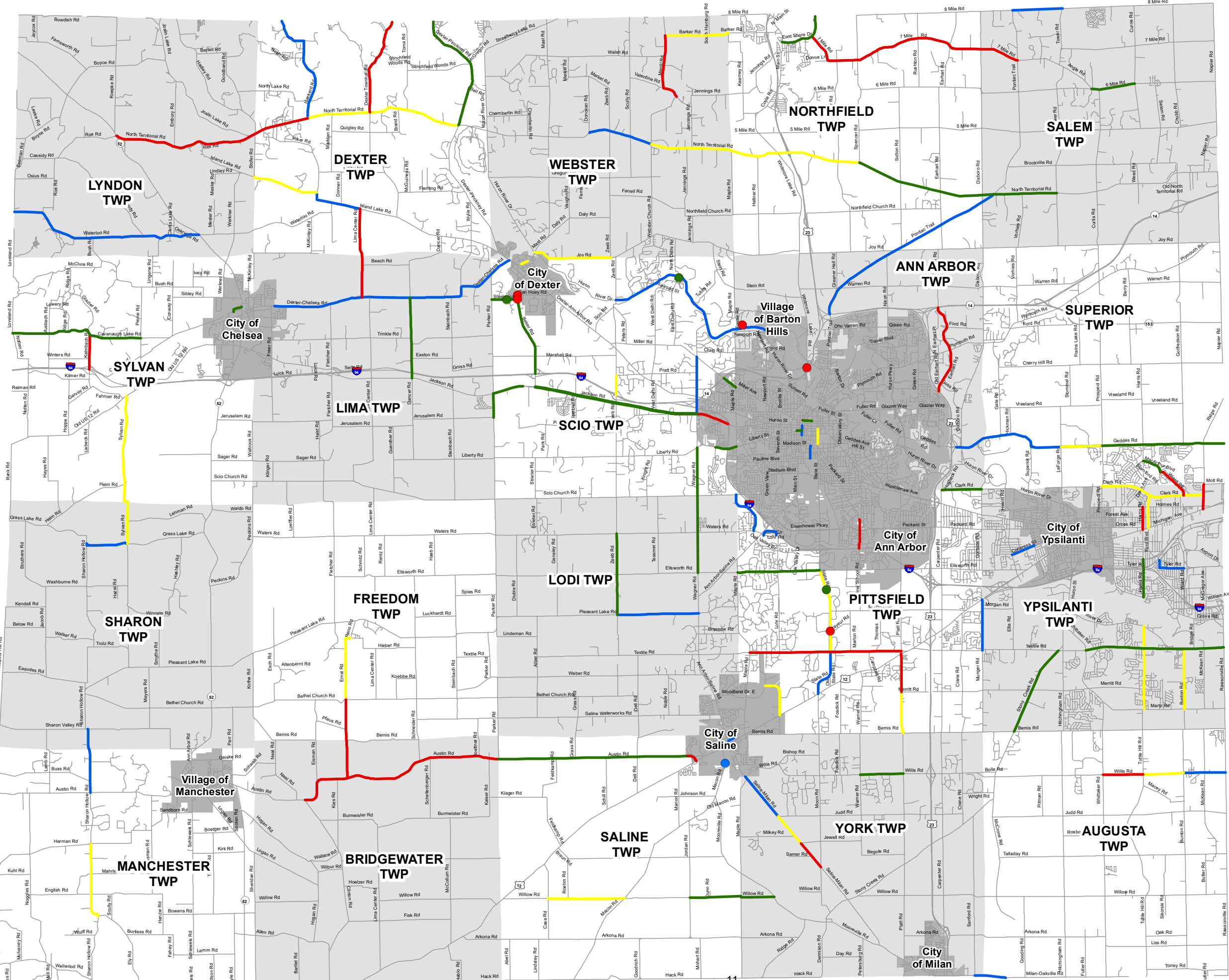




Washtenaw County  
Road Millage Projects  
2017-2020

Road Millage Projects

- 2017
- 2018
- 2019
- 2020



Updated: September 9, 2016

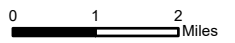
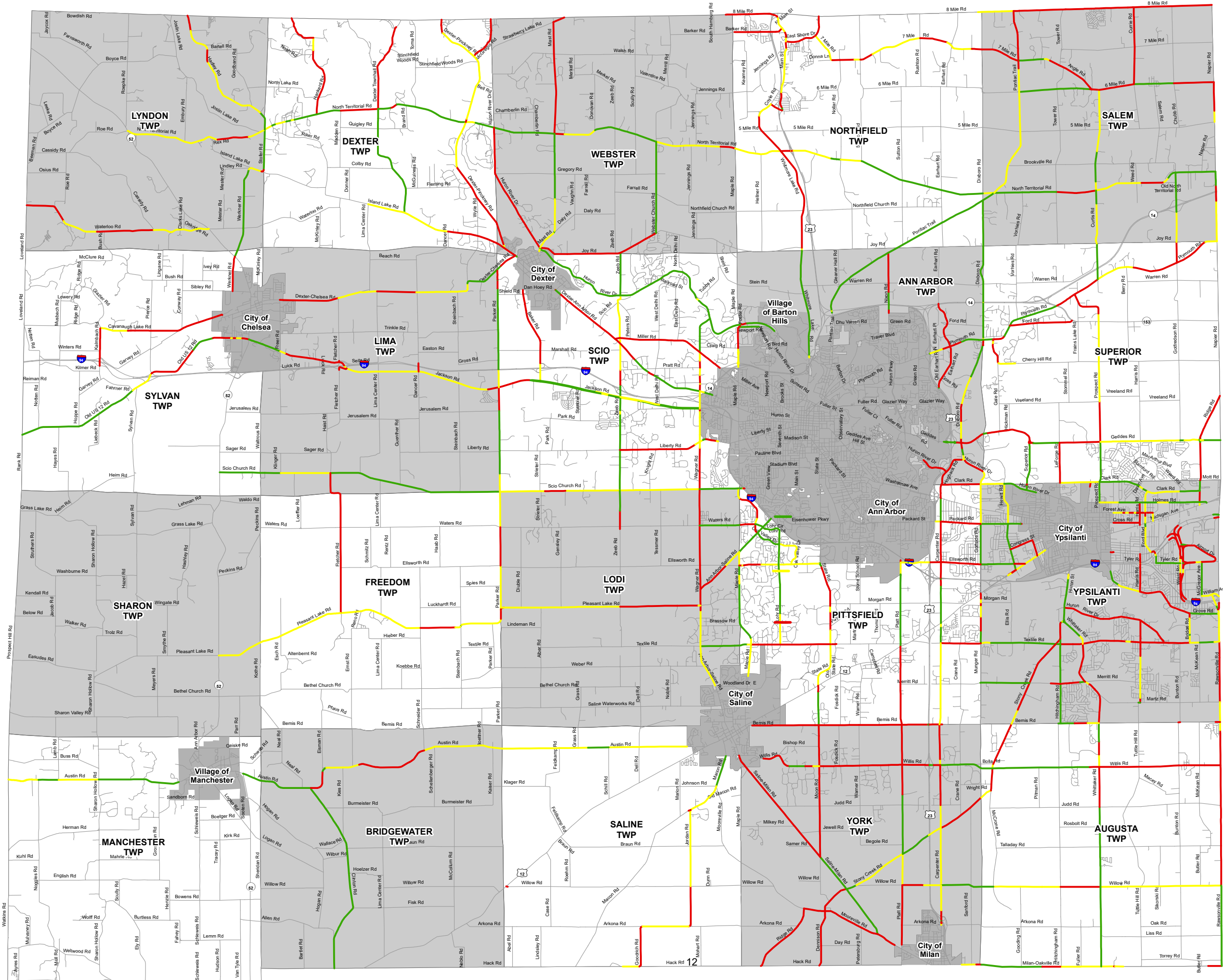




Federal Aid  
Eligible Paved Roads

2016 Pavement Surface  
Evaluations and Ratings  
(PASER)

- Good - Routine Maintenance  
150.2 Miles
- Fair - Capital Preventative  
Maintenance  
132.7 Miles
- Poor - Structural  
Improvement  
198.1 Miles



Date: February 20, 2017





# Northfield Township

## Federal Aid Eligible Paved Roads

### PASER RATINGS

PASER stands for Pavement Surface Evaluation and Rating. The PASER rating ranges from 1- failed conditions, to 10 - brand new pavement. A pavement will only be a 10 the first year of its life, the second year it will automatically become a 9. Any condition of 8 or greater is considered to be a good condition; 7, 6 or 5 are fair; 4 or lower is poor.

- PASER based on 2016 ratings and project improvements
- Private and Gravel roads not rated.

### THE RIGHT FIX AT THE RIGHT TIME

The WCRC determines the best fix to optimize service life for each of our projects. Good pavement management involves less expensive treatments earlier in the life of the pavement in order to take full advantage of infrastructural investments.

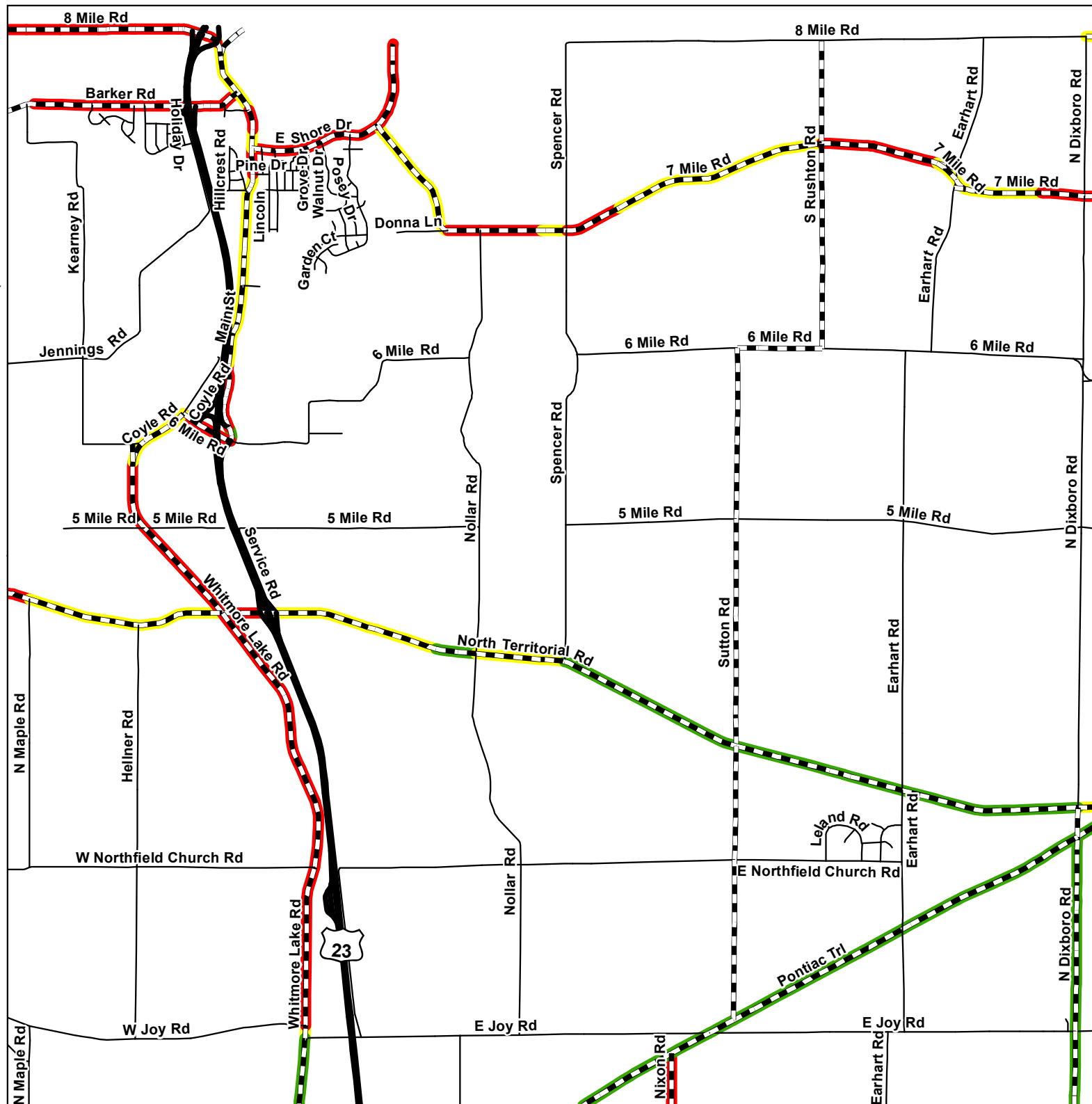
#### Road Classification

- State Trunkline
- County Primary
- County Local
- City
- City/Village Boundary

#### Road Ratings

- Good (10, 9, 8)
- Fair (7, 6, 5)
- Poor (4, 3, 2, 1)

0 0.5 1 Miles





# Northfield Township

## Paved Local & Non-Federal Aid Roads

### PASER RATINGS

PASER stands for Pavement Surface Evaluation and Rating. The PASER rating ranges from 1- failed conditions, to 10 - brand new pavement. A pavement will only be a 10 the first year of its life, the second year it will automatically become a 9. Any condition of 8 or greater is considered to be a good condition; 7, 6 or 5 are fair; 4 or lower is poor.

- PASER based on 2015 ratings and project improvements
- Private and Gravel roads not rated.

### THE RIGHT FIX AT THE RIGHT TIME

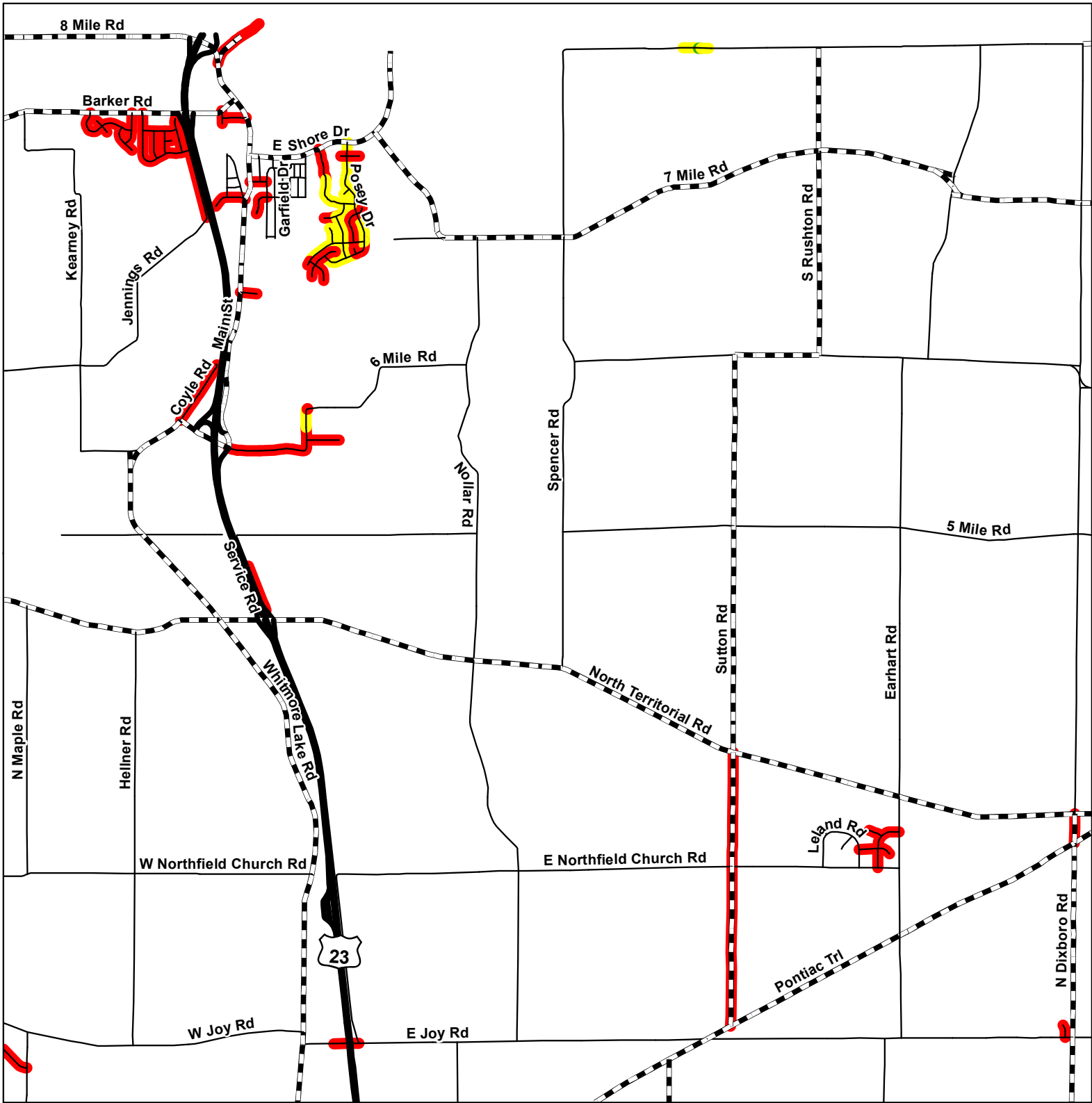
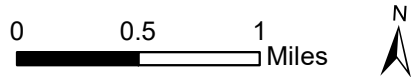
The WCRC determines the best fix to optimize service life for each of our projects. Good pavement management involves less expensive treatments earlier in the life of the pavement in order to take full advantage of infrastructural investments.

**Road Classification**

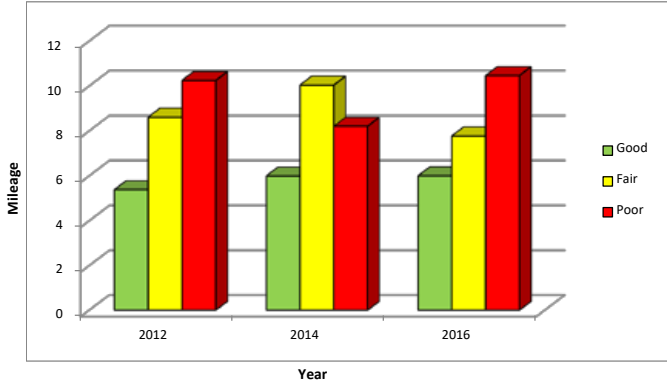
- State Trunkline
- County Primary
- County Local
- City
- City/Village Boundary

**Road Ratings**

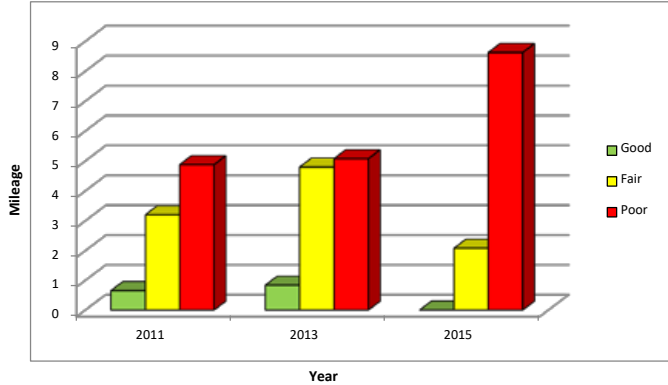
- Good (10, 9, 8)
- Fair (7, 6, 5)
- Poor (4, 3, 2, 1)



Federal Aid Road Ratings

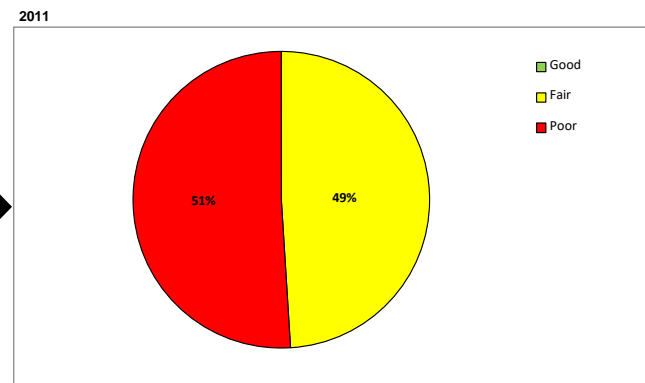
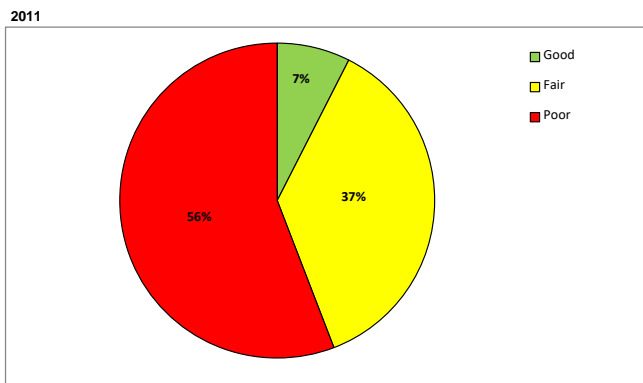
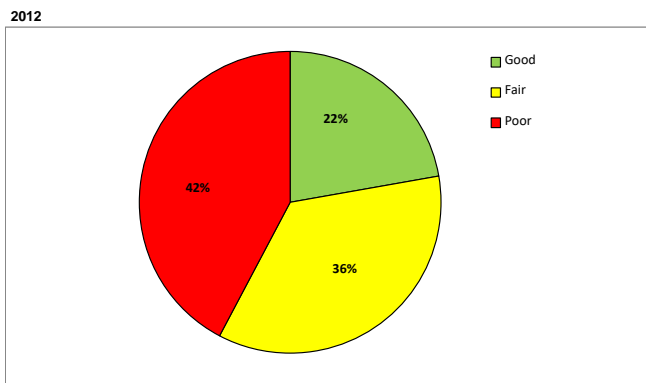
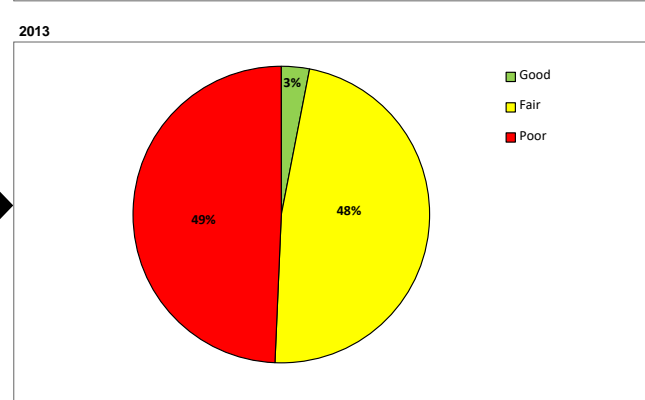
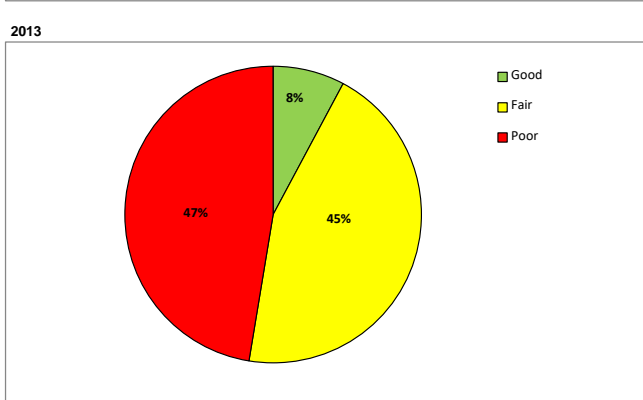
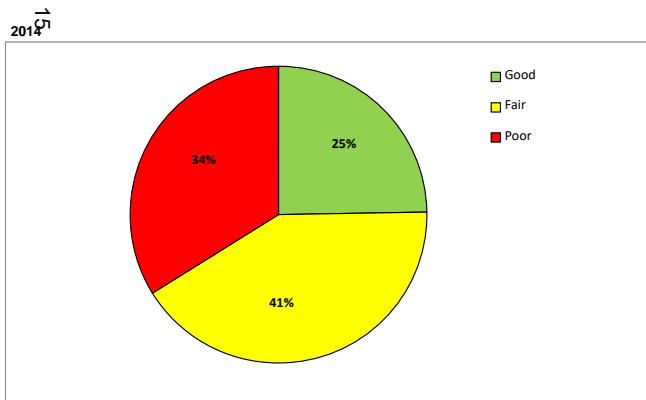
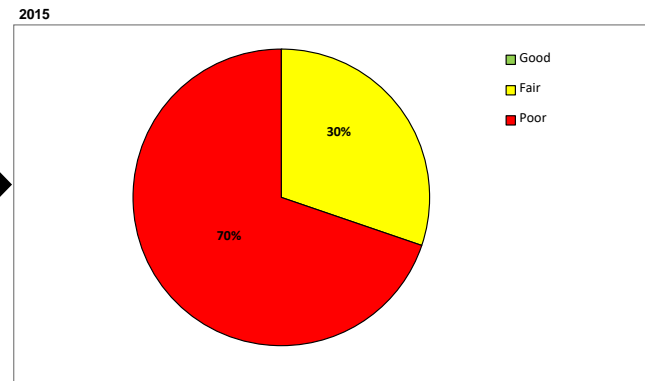
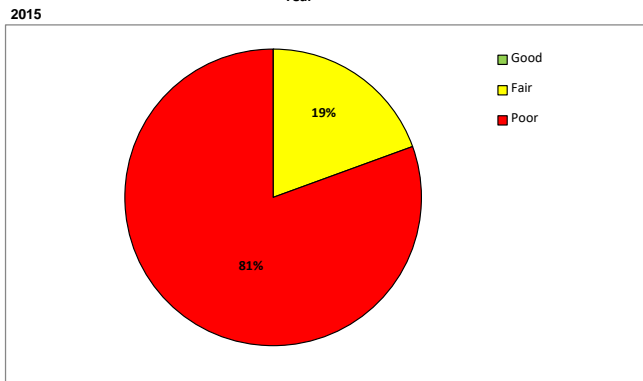
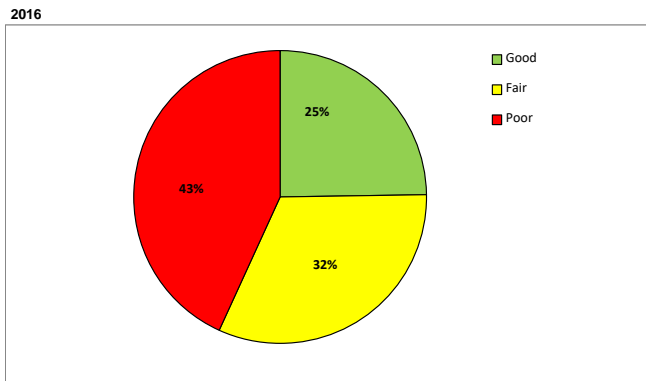


Local & Non Federal Aid Road Ratings



# Northfield Township

Local Subdivision Road Ratings





# Funding Local Road Improvements: Options for Townships

Townships are not legally required to contribute to the construction, reconstruction or maintenance of county roads. However, Act 51 does limit how much state funding the Road Commission can spend on local county road construction. Often WCRC is limited to no more than 50% of the project's total cost. The other 50% of a project's cost must come from a "local source" – which often takes the form of a township contribution.

While the recently approved countywide millage and new state revenue will help improve our primary road system, we still have 1,060 miles of local roads that need maintenance and repairs. Washtenaw County is not alone in its challenges securing needed funding. Looking beyond county lines, we see townships throughout Michigan turning to township millages or special assessment districts as a tool to generate the revenue needed to repair and maintain roadways.

In 2016, 75 townships throughout Michigan placed a road millage on the ballot. 93% of the millages passed; 70 passed, and only five failed. The average rate of passage was 67% of voters. We saw our county-wide millage pass by 71% during the November election. We have found that voters tend to support road taxes when there is a detailed plan and a commitment to raise and keep the funds local.

Described below are three options available to townships to raise revenue that can match WCRC's contributions on local road improvements:

## Act 51 Millage

Act 51 established the Michigan Transportation Fund (MTF) which distributes state-generated funds to county road agencies, cities/villages and the Michigan Department of Transportation. Act 51 also outlines two options for townships to raise revenue for the maintenance and improvement of local roads.

- Township boards can levy a property tax of no more than 3 mills in any year, without a vote of the people, for the maintenance or improvement of county roads within the township.
- With voter approval, township boards may levy a property tax of no more than 6 mills in any year for the maintenance or improvement of county roads within the township.

Read more in Act 51, section 247.670 "UNEXPENDED BALANCES OF TOWNSHIP FUNDS; APPROPRIATION FOR LOCAL ROAD MAINTENANCE OR IMPROVEMENT"

## Township-wide Millage

Section 6 of Article IX of the Constitution of Michigan of 1963 authorizes townships to levy millages with a majority vote of the people. Ypsilanti Charter Township used this option in 2016 to place Proposition C on the ballot to fund recreation, bike paths, sidewalks, roads, parks and general operating purposes. The measure passed with 58% of the vote.

## Special Assessment Districts: Township-wide or Neighborhood-to-Neighborhood

Public Act 188 of 1954 allows townships to pay for road improvements through a special assessment district (SAD). Act 188 outlines a specific process for levying a SAD. Scio Township's Board approved a township-wide SAD in 2013 which will raise \$500,000 annually for ten years and will fund improvements on all the gravel roads in the township. Numerous other townships in Michigan have taken this approach. Scio and Lodi Township have also approved neighborhood SAD projects, which are generally initiated by neighbors in a specific subdivision.

# **TOWNSHIP CONTRIBUTION SUMMARY 2012 - 2016**

Contributions																	
TOWNSHIP	TOTAL 2012			TOTAL 2013			TOTAL 2014			TOTAL 2015			TOTAL 2016			5 Year Average	per Capita
ANN ARBOR			\$ 54,000		\$ 122,000		\$ 224,919		\$ 43,175		\$ 112,300		\$ 111,278.80	\$ 27.36			
AUGUSTA			\$ 202,000		\$ 203,000		\$ 192,169		\$ 158,618		\$ 190,800		\$ 189,317.40	\$ 28.07			
BRIDGEWATER			\$ 34,000		\$ -		\$ 40,306		\$ 54,651		\$ 30,400		\$ 31,871.40	\$ 19.04			
DEXTER			\$ 105,000		\$ 82,000		\$ 536,784		\$ 55,724		\$ 22,200		\$ 160,341.60	\$ 26.54			
FREEDOM			\$ 45,000		\$ 57,000		\$ 31,716		\$ 51,334		\$ 47,100		\$ 46,430.00	\$ 32.51			
LIMA			\$ 51,000		\$ 70,000		\$ 117,285		\$ 118,676		\$ 171,300		\$ 105,652.20	\$ 31.95			
LODI			\$ 415,000		\$ 141,000		\$ 483,502		\$ 67,065		\$ 602,000		\$ 341,713.40	\$ 56.41			
LYNDON			\$ 23,000		\$ 16,000		\$ 45,285		\$ 19,390		\$ 38,500		\$ 28,435.00	\$ 10.45			
MANCHESTER			\$ 128,000		\$ 47,000		\$ 64,246		\$ 77,675		\$ 59,000		\$ 75,184.20	\$ 30.34			
NORTHFIELD			\$ 62,000		\$ 84,000		\$ 93,195		\$ 109,907		\$ 99,800		\$ 89,780.40	\$ 10.89			
PITTSFIELD			\$ 792,000		\$ 393,000		\$ 880,819		\$ 907,340		\$ 841,100		\$ 762,851.80	\$ 22.01			
SALEM			\$ 296,000		\$ 1,042,000		\$ 459,327		\$ 425,626		\$ 525,400		\$ 549,670.60	\$ 97.68			
SALINE			\$ 92,000		\$ 110,000		\$ 143,066		\$ 159,024		\$ 180,900		\$ 136,998.00	\$ 72.26			
SCIO			\$ 1,245,000		\$ 833,000		\$ 1,108,452		\$ 1,269,480		\$ 1,015,000		\$ 1,094,186.40	\$ 66.44			
SHARON			\$ 34,000		\$ 20,000		\$ 14,755		\$ 24,306		\$ 26,800		\$ 23,972.20	\$ 13.80			
SUPERIOR			\$ 280,000		\$ 322,000		\$ 324,001		\$ 244,797		\$ 491,300		\$ 332,419.60	\$ 25.46			
SYLVAN			\$ 10,000		\$ 8,000		\$ 26,852		\$ 73,968		\$ 38,100		\$ 31,384.00	\$ 11.08			
WEBSTER			\$ 153,000		\$ 89,000		\$ 16,019		\$ 15,765		\$ 190,500		\$ 92,856.80	\$ 14.67			
YORK			\$ 34,000		\$ 108,000		\$ 418,883		\$ 460,000		\$ 121,800		\$ 228,536.60	\$ 26.24			
YPSILANTI			\$ 4,970,000		\$ 2,794,000		\$ 2,510,384		\$ 1,048,026		\$ 826,800		\$ 2,429,842.00	\$ 45.54			
			\$ 9,025,000		\$ 6,541,000		\$ 7,731,965		\$ 5,384,547		\$ 5,631,100		\$ 6,862,722.40	\$ 33.44			

**Five year avg. 2012 - 2016**

**\$ 6,862,722**

03/08/2017

**2016 Summary of Paved Local and Subdivision Roads Needs for each TOWNSHIP**

TOWNSHIP	Crack Seal Road Miles	Crack Sealing at \$8k/mi	Surface Treatment Road Miles	Surface Treatment at \$32k/mi	Mill & Overlay Road Miles	Mill & Overlay at \$190k/mi	Pulverization & Pave Road Miles	Pulverization & Pave at \$ 320k/mi	Total Needs for Local & Subd Paved Roads	2016	2014
										Average 10 year Expenditure Needs for Paved Roads	Average 10 year Expenditure Needs for Paved Roads
ANN ARBOR	0.4	\$ 3,200	0.5	\$ 16,000	2.0	\$ 380,000	2.1	\$ 672,000	\$ 1,071,200	\$ 107,120	\$ 90,100
AUGUSTA	1.6	\$ 12,800	2.8	\$ 89,600	0.1	\$ 19,000	2.0	\$ 640,000	\$ 761,400	\$ 76,140	\$ 57,245
BRIDGEWATER	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.5	\$ 160,000	\$ 160,000	\$ 16,000	\$ 15,000
DEXTER	0.0	\$ -	2.2	\$ 70,400	5.4	\$ 1,026,000	3.0	\$ 960,000	\$ 2,056,400	\$ 205,640	\$ 196,000
FREEDOM	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.5	\$ 160,000	\$ 160,000	\$ 16,000	\$ 15,000
LIMA	0.0	\$ -	1.0	\$ 32,000	2.2	\$ 418,000	0.8	\$ 256,000	\$ 706,000	\$ 70,600	\$ 46,190
LODI	0.2	\$ 1,600	0.0	\$ -	4.2	\$ 798,000	6.7	\$ 2,144,000	\$ 2,943,600	\$ 294,360	\$ 210,700
LYNDON	0.0	\$ -	0.0	\$ -	0.2	\$ 38,000	0.0	\$ -	\$ 38,000	\$ 3,800	\$ 600
MANCHESTER	0.0	\$ -	0.0	\$ -	0.6	\$ 114,000	0.0	\$ -	\$ 114,000	\$ 11,400	\$ 15,900
NORTHFIELD	0.0	\$ -	2.1	\$ 67,200	5.0	\$ 950,000	1.8	\$ 576,000	\$ 1,593,200	\$ 159,320	\$ 119,290
PITTSFIELD	8.4	\$ 67,200	29.5	\$ 944,000	27.6	\$ 5,244,000	5.9	\$ 1,888,000	\$ 8,143,200	\$ 814,320	\$ 521,750
SALEM	0.9	\$ 7,200	0.3	\$ 9,600	2.4	\$ 456,000	1.0	\$ 320,000	\$ 792,800	\$ 79,280	\$ 22,020
SALINE	0.0	\$ -	0.0	\$ -	0.6	\$ 114,000	0.7	\$ 224,000	\$ 338,000	\$ 33,800	\$ 21,900
SCIO	2.6	\$ 20,800	2.5	\$ 80,000	4.9	\$ 931,000	6.2	\$ 1,984,000	\$ 3,015,800	\$ 301,580	\$ 285,750
SHARON	0.0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -	\$ -	\$ -	\$ -
SUPERIOR	4.3	\$ 34,400	4.8	\$ 153,600	9.9	\$ 1,881,000	7.2	\$ 2,304,000	\$ 4,373,000	\$ 437,300	\$ 238,650
SYLVAN	0.8	\$ 6,400	0.6	\$ 19,200	11.1	\$ 2,109,000	2.1	\$ 672,000	\$ 2,806,600	\$ 280,660	\$ 266,800
WEBSTER	0.2	\$ 1,600	0.0	\$ -	0.8	\$ 152,000	0.4	\$ 128,000	\$ 281,600	\$ 28,160	\$ 23,400
YORK	2.3	\$ 18,400	7.5	\$ 240,000	7.8	\$ 1,482,000	5.5	\$ 1,760,000	\$ 3,500,400	\$ 350,040	\$ 343,610
YPSILANTI	13.3	\$ 106,400	59.3	\$ 1,897,600	29.2	\$ 5,548,000	6.3	\$ 2,016,000	\$ 9,568,000	\$ 956,800	\$ 461,800
<b>TOTALS</b>	<b>35.0</b>	<b>\$ 280,000</b>	<b>113.1</b>	<b>\$ 3,619,200</b>	<b>114.0</b>	<b>\$ 21,660,000</b>	<b>52.7</b>	<b>\$ 16,864,000</b>	<b>\$ 42,423,200</b>	<b>\$ 4,242,320</b>	<b>\$ 2,951,705</b>

## Summary of Gravel Local Roads Needs for each TOWNSHIP

TOWNSHIP	Local Gravel Road Miles	Local Gravel Road Needs at \$90k/mi	Subdivision Gravel Road Miles	Subd. Gravel Road Needs at \$ 60k/mi	Total Needs for Local & Subd Gravel Roads	Average 10 year Expenditure Needs for Gravel Roads
ANN ARBOR	10.7	\$ 963,000	5.6	\$ 336,000	\$ 1,299,000	\$ 129,900
AUGUSTA	48.7	\$ 4,383,000	2.0	\$ 120,000	\$ 4,503,000	\$ 450,300
BRIDGEWATER	38.7	\$ 3,483,000	0.0	\$ -	\$ 3,483,000	\$ 348,300
DEXTER	23.4	\$ 2,106,000	2.0	\$ 120,000	\$ 2,226,000	\$ 222,600
FREEDOM	46.7	\$ 4,203,000	0.0	\$ -	\$ 4,203,000	\$ 420,300
LIMA	41.6	\$ 3,744,000	0.0	\$ -	\$ 3,744,000	\$ 374,400
LODI	41.0	\$ 3,690,000	0.6	\$ 36,000	\$ 3,726,000	\$ 372,600
LYNDON	35.2	\$ 3,168,000	2.5	\$ 150,000	\$ 3,318,000	\$ 331,800
MANCHESTER	46.2	\$ 4,158,000	0.9	\$ 54,000	\$ 4,212,000	\$ 421,200
NORTHFIELD	45.7	\$ 4,113,000	3.9	\$ 234,000	\$ 4,347,000	\$ 434,700
PITTSFIELD	11.2	\$ 1,008,000	3.2	\$ 192,000	\$ 1,200,000	\$ 120,000
SALEM	36.8	\$ 3,312,000	1.0	\$ 60,000	\$ 3,372,000	\$ 337,200
SALINE	28.5	\$ 2,565,000	0.3	\$ 18,000	\$ 2,583,000	\$ 258,300
SCIO	22.8	\$ 2,052,000	10.7	\$ 642,000	\$ 2,694,000	\$ 269,400
SHARON	34.9	\$ 3,141,000	0.0	\$ -	\$ 3,141,000	\$ 314,100
SUPERIOR	30.9	\$ 2,781,000	0.9	\$ 54,000	\$ 2,835,000	\$ 283,500
SYLVAN	27.1	\$ 2,439,000	1.0	\$ 60,000	\$ 2,499,000	\$ 249,900
WEBSTER	41.3	\$ 3,717,000	2.2	\$ 132,000	\$ 3,849,000	\$ 384,900
YORK	26.9	\$ 2,421,000	1.8	\$ 108,000	\$ 2,529,000	\$ 252,900
YPSILANTI	4.0	\$ 360,000	0.3	\$ 18,000	\$ 378,000	\$ 37,800
<b>TOTALS</b>	642.3	\$ 57,807,000	38.9	\$ 2,334,000	\$ 60,141,000	\$ 6,014,100

### Summary of Revenue Generated with a TOWNSHIP Wide Special Assessment District (SAD)

TOWNSHIP	Parcel Count (2013)	Revenue at \$ 70/parcel	Revenue at \$ 80/parcel	Revenue at \$ 90/parcel	Revenue at \$ 100/parcel	Revenue at \$ 110/parcel	Revenue at \$ 120/parcel
ANN ARBOR	1,850	\$ 129,500	\$ 148,000	\$ 166,500	\$ 185,000	203,500	222,000
AUGUSTA	3,590	\$ 251,300	\$ 287,200	\$ 323,100	\$ 359,000	394,900	430,800
BRIDGEWATER	1,150	\$ 80,500	\$ 92,000	\$ 103,500	\$ 115,000	126,500	138,000
DEXTER	3,560	\$ 249,200	\$ 284,800	\$ 320,400	\$ 356,000	391,600	427,200
FREEDOM	1,180	\$ 82,600	\$ 94,400	\$ 106,200	\$ 118,000	129,800	141,600
LIMA	1,900	\$ 133,000	\$ 152,000	\$ 171,000	\$ 190,000	209,000	228,000
LODI	2,650	\$ 185,500	\$ 212,000	\$ 238,500	\$ 265,000	291,500	318,000
LYNDON	1,660	\$ 116,200	\$ 132,800	\$ 149,400	\$ 166,000	182,600	199,200
MANCHESTER	3,000	\$ 210,000	\$ 240,000	\$ 270,000	\$ 300,000	330,000	360,000
NORTHFIELD	4,620	\$ 323,400	\$ 369,600	\$ 415,800	\$ 462,000	508,200	554,400
PITTSFIELD	12,300	\$ 861,000	\$ 984,000	\$ 1,107,000	\$ 1,230,000	1,353,000	1,476,000
SALEM	3,490	\$ 244,300	\$ 279,200	\$ 314,100	\$ 349,000	383,900	418,800
SALINE	1,350	\$ 94,500	\$ 108,000	\$ 121,500	\$ 135,000	148,500	162,000
SCIO	6,000	\$ 420,000	\$ 480,000	\$ 540,000	\$ 600,000	660,000	720,000
SHARON	1,160	\$ 81,200	\$ 92,800	\$ 104,400	\$ 116,000	127,600	139,200
SUPERIOR	6,000	\$ 420,000	\$ 480,000	\$ 540,000	\$ 600,000	660,000	720,000
SYLVAN	1,780	\$ 124,600	\$ 142,400	\$ 160,200	\$ 178,000	195,800	213,600
WEBSTER	3,240	\$ 226,800	\$ 259,200	\$ 291,600	\$ 324,000	356,400	388,800
YORK	3,170	\$ 221,900	\$ 253,600	\$ 285,300	\$ 317,000	348,700	380,400
YPSILANTI	20,740	\$ 1,451,800	\$ 1,659,200	\$ 1,866,600	\$ 2,074,000	2,281,400	2,488,800
<b>TOTALS</b>	<b>84,390</b>	<b>\$ 5,907,300</b>	<b>\$ 6,751,200</b>	<b>\$ 7,595,100</b>	<b>\$ 8,439,000</b>	<b>9,282,900</b>	<b>10,126,800</b>

Township Taxable Valuation Data

	Township	2013 Taxable Valuation	Millage Amount			
			0.50	1.00	2.00	3.00
	Ann Arbor	\$482,650,050	\$241,325.03	\$482,650.05	\$965,300.10	\$1,447,950.15
	Augusta	\$200,848,017	\$100,424.01	\$200,848.02	\$401,696.03	\$602,544.05
	Bridgewater	\$94,334,800	\$47,167.40	\$94,334.80	\$188,669.60	\$283,004.40
	Dexter	\$339,238,532	\$169,619.27	\$339,238.53	\$678,477.06	\$1,017,715.60
	Freedom	\$100,953,350	\$50,476.68	\$100,953.35	\$201,906.70	\$302,860.05
	Lima	\$189,957,624	\$94,978.81	\$189,957.62	\$379,915.25	\$569,872.87
	Lodi	\$376,429,300	\$188,214.65	\$376,429.30	\$752,858.60	\$1,129,287.90
	Lyndon	\$130,967,000	\$65,483.50	\$130,967.00	\$261,934.00	\$392,901.00
	Manchester	\$180,313,050	\$90,156.53	\$180,313.05	\$360,626.10	\$540,939.15
	Northfield	\$343,517,940	\$171,758.97	\$343,517.94	\$687,035.88	\$1,030,553.82
	Pittsfield	\$1,603,066,200	\$801,533.10	\$1,603,066.20	\$3,206,132.40	\$4,809,198.60
	Salem	\$370,938,387	\$185,469.19	\$370,938.39	\$741,876.77	\$1,112,815.16
21	Saline	\$103,804,000	\$51,902.00	\$103,804.00	\$207,608.00	\$311,412.00
	Scio	\$1,259,961,600	\$629,980.80	\$1,259,961.60	\$2,519,923.20	\$3,779,884.80
	Sharon	\$101,044,997	\$50,522.50	\$101,045.00	\$202,089.99	\$303,134.99
	Superior	\$550,559,700	\$275,279.85	\$550,559.70	\$1,101,119.40	\$1,651,679.10
	Sylvan	\$174,551,900	\$87,275.95	\$174,551.90	\$349,103.80	\$523,655.70
	Webster	\$411,799,400	\$205,899.70	\$411,799.40	\$823,598.80	\$1,235,398.20
	York	\$347,969,500	\$173,984.75	\$347,969.50	\$695,939.00	\$1,043,908.50
	Ypsilanti	\$1,037,151,347	\$518,575.67	\$1,037,151.35	\$2,074,302.69	\$3,111,454.04
	<b>Total</b>	<b>\$8,400,056,694</b>	<b>\$4,200,028.35</b>	<b>\$8,400,056.69</b>	<b>\$16,800,113.39</b>	<b>\$25,200,170.08</b>