

# Funding Local Road Improvements in Washtenaw County

*Spring 2024*



Questions? Contact Us!

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## Introduction

Each year, the Washtenaw County Board of County Road Commissioners (the WCRC Board) and township boards partner to provide local road improvements. In 2024, the WCRC Board increased its investment in local infrastructure to \$2 million, expanded its criteria of culvert maintenance replacements, and will continue to perform dust control as normal maintenance. While road funding is limited, both parties work hard to spend this precious funding efficiently and effectively. The following packet was assembled for both seasoned officials who are very familiar with the process and for officials new to their positions to help them better understand the intricacies of local road funding.

## Lyndon Township Summary

The following is a summary of the roads, bridges and culverts located in Ann Arbor Township and the 2024 allocation made by the WCRC Board for local roads in Ann Arbor Township.

### Primary Roads

- 14.42 miles of paved primary roads
- 3.62 miles unpaved primary roads
- 0 bridges (more than 20' span)
- 0 culverts, greater than 5' in diameter

### Local Roads

- 0.58 miles of local paved roads
- 37.35 miles of local unpaved roads
- 1 bridge (more than 20' span)
- 1 culvert on local collector roads, greater than 5' in diameter

## 2024 Local Road Matching Program Allocation

Notification of the intent to use matching funds is due to WCRC by **Friday, May 17, 2024**. See Appendix B for the full program conditions.

| Township | Allocation |
|----------|------------|
| Lyndon   | \$55,655   |

## Local Road Needs

| Township | Paved Local Road Needs | Unpaved Local Road Needs | Total Local Road Needs | Average 10-year Annual Expenditure Needed |
|----------|------------------------|--------------------------|------------------------|---|
| Lyndon   | \$100,320              | \$3,693,200              | \$3,793,520            | \$379,352                                 |

## Local Road Bridges/Culverts of Concern

The chart below shows local road bridges or culverts in the township that are in poor or failed condition. WCRC regularly inspects these structures. Additional load restrictions, up to road closure, may be put in place as conditions deteriorate.

The WCRC Board remains committed to partnering with townships to invest in culverts and bridges located on local roads. See page 6 for more information.

| Township | Road Name    | Type    | Condition Rating (1- failed, 10 – good) | Span (inches) | Length (feet) | Material Type         | Legal Posting   |
|----------|--------------|---------|---|---------------|---------------|-----------------------|-----------------|
| Lyndon   | Joslin Drive | Culvert | 4                                       | 60            | 30            | Corrugated Steel Pipe | Load Rating 20T |

## Historic Township Road Contributions 2019 – 2023

This chart includes all contributions made by the township to WCRC including local road investments, non-motorized improvements, bond payments, primary road investments by a township, etc. See Appendix D for a map of these investments.

| Township | 2019     | 2020      | 2021      | 2022     | 2023      | 5 -Yr. Annual Average |
|----------|----------|-----------|-----------|----------|-----------|-----------------------|
| Lyndon   | \$32,872 | \$ 17,424 | \$ 76,395 | \$72,297 | \$118,210 | \$ 63,440             |

## Contact Information

| District Foreman  | Director of Operations  | WCRC's Customer Service  |
|---|---|--|
| Scott Burby<br><a href="mailto:burbys@wcroads.org">burbys@wcroads.org</a><br>Office: (734) 761-1500 | Adam Lape<br><a href="mailto:lapea@wcroads.org">lapea@wcroads.org</a><br>Office: (734) 327-6697 | Main phone: (734) 761-1500<br><a href="mailto:wcrc@wcroads.org">wcrc@wcroads.org</a><br>Submit a road request via <a href="http://wcroads.org">wcroads.org</a> or download the WCRC Fix It App |

## Funding for Local Roads

### Overview

Roads in Michigan have been chronically underfunded for decades. There are numerous reasons behind this fact but no matter the cause, Michiganders see the results. This is especially true for local roads, which connect people from the primary road system to their homes and businesses. Local roads can be further divided into local collector roads and subdivision roads. Local collector roads are those that connect residential and business areas to the primary road system. Local subdivision roads mostly service residents or businesses within subdivisions and business parks.

Washtenaw County has more than 1,060 centerline miles of local roads. See Appendix A for a chart breaking down mileage by township.

Primary and local designations are determined by MDOT. These designations are critical since they play an important role in how much WCRC receives from the Michigan Transportation Fund (MTF)<sup>1</sup>. In 2023, WCRC received \$2,986 for each mile of rural primary road and \$3,287 for each mile of rural local road. In the urban areas, the amount increases to reflect additional traffic and lanes. The urban primary roads receive \$20,045 per mile and urban local roads receive \$6,130 per mile.

In addition to this part of the formula, WCRC receives funds from vehicle registration fees collected through the Secretary of State. Vehicle registration fees are distributed to county road agencies based on the number of vehicles registered in each county.

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<sup>1</sup> Michigan Transportation Fund (MTF) is WCRC's primary source of funding. It is made up of revenue from state fuel tax and vehicle registration fees which are allocated through a formula to MDOT, county road agencies and cities/villages. WCRC is expecting to receive \$36,000,000 from MTF in 2024.

## **Local Road Matching Program**

Unfortunately, the MTF allocated for local roads barely covers WCRC's costs for routine maintenance such as snow plowing, pothole patching, grading, and dust control. In addition, under current state law, any improvements to a local road (for example resurfacing) must have at least 50% of its funding come from a source other than the road commission, often the township.

Knowing that local road funding is a challenge, the WCRC Board has historically provided a Local Road Matching Program.

WCRC's Local Road Matching Program is made up of two elements.

1. Local Road Matching
2. Local Road Culverts and Bridges Matching

The full conditions of the Local Road Matching Program can be found in Appendix B.

### **Local Road Matching**

This year, the WCRC Board approved a total of \$2 million for the Local Road Matching Program. These funds are allocated to each township based on the distribution formula used by MDOT to distribute road funds to the 83 counties of Michigan. In 2023, townships collectively funded over \$9.6 million in local road improvements.

See Appendix B for a listing of each township's matching fund allocation.

See Appendix C for a listing of each township's contribution from 2019 – 2023. See Appendix D for a map showing Lyndon Township's investment over the past 5 years.

### **Local Road Culvert and Bridges Matching**

In addition, the WCRC Board remains committed to covering 50% of the cost of replacing local road culverts and bridges. For 2024, the WCRC Board expanded the matching criteria as WCRC will replace existing culverts less than 5 feet in diameter at no cost to the township. Any existing culvert 5 feet in diameter or larger, required to be rehabilitated or replaced will require 50% match. This funding source is separate from the \$2 million local road matching funds.

## Planning Your Investments

Roads, like any other public infrastructure, require a lot of investment. Unfortunately, in Michigan, the needs far outweigh the funds available in any given year. So, how do WCRC and townships in Washtenaw County decide the best way to invest limited funds?

WCRC utilizes the principles of asset management when planning investments. According to Michigan's Transportation Asset Management Council, asset management is the "ongoing process of maintaining, preserving, upgrading and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment and investment to achieve established performance goals."

While this may be a daunting definition, the overall concept is simple. Staying on top of low-cost maintenance items is more cost-effective in the long run.

The WCRC Board adopted a [Transportation Asset Management Plan 2021-2023](#) for the primary road system in 2021 and updated the [project list](#) in December 2023. Visit [wcroads.org](http://wcroads.org) to read the full report.

## Inventory and Condition Assessment

For asset management to be effective, an agency must first understand what assets are under its jurisdiction and the current conditions of these assets. This is done through an inventory or physical inspection of each asset. The inventory and condition assessment process are different for paved roads and unpaved roads.

### Paved Roads

For paved roads, WCRC uses the Pavement Surface Evaluation and Rating (PASER) system. The PASER system rates paved roadways on a scale of 1 to 10. Roads are then designated into three groups: Good (10-8 rating), Fair (7-5 rating) and Poor (4-1 rating). All primary paved roads are evaluated every year, and all local paved roads are evaluated every two years in Washtenaw County.

The latest PASER for the roads in Lyndon Township are shown in the following map.





## **Unpaved Roads**

Michigan has thousands of miles of unpaved roads, including more than 700 miles in Washtenaw County. In Washtenaw County, unpaved roads are surfaced with limestone or gravel. WCRC does not use an official condition rating scale for unpaved roads since surface conditions depend so much on the weather. While subjective, each district foreman is highly familiar with the roads in his area and can provide an informal condition rating for each of them based upon the type of material present, drainage facilities and last date of improvements.

## **Bridges and Culverts**

Bridges are structures that span 20' or more. There are 125 bridges on Washtenaw County roads. By law, WCRC inspects bridges at least every two years. Bridges are rated Good, Fair or Poor.

Culverts are structures less than 20' span and vary in description, from a corrugated metal pipe (CMP) to an old-fashioned short-span bridge. There are not any state requirements to inspect culverts but in 2014 WCRC implemented an inspection program for culverts 5' or larger in diameter.

These inspections help WCRC staff and townships identify problems and plan for replacement costs, minimizing surprises. Inspections have also resulted in weight restrictions or culvert closures on primary and local roads for the safety of the traveling public.

WCRC bears all the cost to replace failed structures on primary roads but must partner with the respective township on local roads. To help, the WCRC Board committed to covering 50% of the cost to replace certain culverts on local roads (see page 6 for more information).

See Appendix E for a map showing the latest culvert condition ratings on local collector roads in Lyndon Township.

## Mix of Fixes

### Paved Roads

PASER can and should be used to make investment decisions on the paved road system. Before any decisions can be made, it is important to understand the various treatments available for paved road maintenance depending on the road condition. The key is applying the right fix at the right time on the right road.

| Pavement Condition (PASER) | Possible Treatment              | Estimated Cost per Mile for Two-Lane Road | Estimated Life Expectancy  | Who can conduct the work?       |
|----------------------------|---------------------------------|---|--|---------------------------------|
| Good (10-8 rating)         | Crack sealing                   | \$12,000                                  | Can last up to 3 years   | WCRC crews                      |
|                            | Seal coat (chip seal, fog seal) | \$40,000                                  | Can extend the life of a road by 3-5 years                               | WCRC crews                      |
| Fair (7-5 rating)          | Seal coat (chip seal, fog seal) | \$40,000                                  | Can extend the life of a road by 3-5 years                               | WCRC crews                      |
|                            | Mill and resurface              | \$220,000                                 | Can extend the life of a road for 5-7+ years (with proper maintenance)   | Contractor with WCRC inspection |
| Poor (4-1 rating)          | Pulverize and resurface         | \$440,000                                 | Can extend the life of a road for 10-15+ years (with proper maintenance) | Contractor with WCRC inspection |
|                            | Reconstruct                     | \$1,000,000+                              | Can last up to 15 to 20 years (with proper maintenance)                  | Contractor with WCRC inspection |

On the primary road system, WCRC's strategy is to focus most of the investment on maintaining roads already in good condition and elevating roads from fair to good. In addition, WCRC strives to fix a few miles of poor roads each year, depending on funding.

**Example:** Primary Road X was rated a 5 in the last round of PASER. This year, WCRC elects to mill and resurface it for \$220,000 per mile elevating it to a 10 rating. Next year, WCRC plans to apply a seal coat to it (both chip seal and fog seal) for \$40,000 per mile. WCRC will need to seal coat it again in approximately 5 years to keep it in good condition.

On the local road system, the strategy depends on the funding partner, usually the township. WCRC staff are happy to work with each township to develop the best strategy for the local paved road system and the township's budget.

## Unpaved Roads

Similar to paved roads, there is a range of treatment options for unpaved roads, and it is important to apply the right fix at the right time.

As a part of WCRC's routine maintenance, every unpaved road in Washtenaw County will be graded a couple times per year and WCRC crews will do limestone/gravel patching and dust control as needed.

Just like paved roads, unpaved roads require more than just routine maintenance including ongoing drainage improvements to keep water from standing on the roadway which leads to deterioration of the road. Unpaved roads also require resurfacing, which will be gravel or limestone depending upon the type of road.

Any work beyond routine maintenance on local roads comes at the direction of and is funded by the township. Funds from the Local Road Matching Program described on page 6 can be used for any of the following treatments.

| Possible Treatment                                       | Estimated Cost                  | Recommended Frequency             | Who can conduct the work?       |
|--|---------------------------------|-----------------------------------|---------------------------------|
| Drainage improvements (ditching, berming, tree trimming) | Varies significantly by project | Varies                            | WCRC crews                      |
| Resurfacing (with either limestone or gravel)            | Typically, \$100k per mile      | Should be done every 8 – 10 years | WCRC crews                      |
| Paving an unpaved road <sup>2</sup>                      | \$1.5 million+ per mile         | N/A                               | Contractor with WCRC inspection |

## Bridges and Culverts

There are fewer options available on bridges and culverts to help extend the life of the structure. WCRC will often invest money to rehabilitate or preserve a bridge deck or substructure. Some culverts can be lined to help extend their life. Most often, investments in culverts, especially those on local roads, are for a full replacement after the condition has deteriorated significantly.

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<sup>2</sup> It should be noted, especially when considering whether to pave local unpaved roads, many residents have expressed strong feelings against paving the road they live on, while other residents and drivers expect the road to be paved.

## **Project Selection**

As shown in the charts above, there are more options for investing in the local road system than the funding available. To help prioritize where to invest each year, WCRC staff work with township officials to create an annual proposed local road improvement program with project estimates. These discussions typically start in late fall and carry on throughout the winter. Final project agreements are created in mid to late spring. The full conditions of the Local Road Matching Program can be found in Appendix B.

See Appendix F for a summary of needs on local paved and unpaved roads, by township.

## **Funding Options for Townships**

Townships are not legally required to contribute to the maintenance, construction or reconstruction of county roads. However, Act 51 does restrict how much state funding a road commission can spend on local county road construction. In addition, road commissions do not have taxing authority, so their funding sources are limited.

Washtenaw County is not alone in its challenges securing much needed local road funding. Looking beyond county lines, we see townships throughout Michigan turning to other taxing mechanisms to generate the revenue necessary to repair and maintain local roads.

Whereas WCRC does not have any legal taxing authority, townships have three options to help raise revenue to fund road improvements: a millage through Act 51, a township-wide millage or a special assessment district.

### **Act 51 Millage**

Act 51 of 1951 outlines two options for townships to raise revenue for the maintenance and improvement of local roads.

1. Township boards can levy a property tax of no more than three mills in any year, without a vote of the people, for the maintenance or improvement of county roads within the township.
2. 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.

## **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.

In 2021, Ypsilanti Charter Township used this option to place Proposition C on the ballot to fund recreation, bike paths, sidewalks, roads, parks and general operating purposes. The measure passed with 76% of the vote.

See Appendix G for taxable values with various millage scenarios, by township.

## **Special Assessment Districts**

Public Act 188 of 1954 allows townships to pay for road improvements through a special assessment district (SAD). A SAD is an area where the majority of property owners agree to allow a government agency to levy a property tax in exchange for a specific service such as road improvements. Act 188 outlines the process for levying a SAD.

## Appendix A: Public Road Miles Chart, By Township

| Townships     | Primary Paved | Primary Unpaved | Primary Bridges | Primary Culverts | Local Paved   | Local Unpaved | Local Bridges | Local Culverts |
|---------------|---------------|-----------------|-----------------|------------------|---------------|---------------|---------------|----------------|
| Ann Arbor     | 22.56         | 0.00            | 2               | 8                | 5.68          | 13.99         | 4             | 7              |
| Augusta       | 28.98         | 2.49            | 6               | 20               | 9.24          | 48.33         | 13            | 22             |
| Bridgewater   | 12.24         | 9.16            | 1               | 7                | 0.55          | 39.68         | 3             | 6              |
| Dexter        | 25.85         | 3.75            | 3               | 3                | 13.14         | 25.99         | 0             | 2              |
| Freedom       | 11.92         | 4.47            | 0               | 2                | 1.68          | 46.27         | 0             | 5              |
| Lima          | 18.94         | 5.75            | 3               | 6                | 5.45          | 40.45         | 12            | 7              |
| Lodi          | 18.85         | 2.53            | 0               | 8                | 13.36         | 42.35         | 5             | 19             |
| Lyndon        | 14.42         | 3.62            | 0               | 0                | 0.58          | 37.35         | 1             | 1              |
| Manchester    | 10.80         | 8.81            | 1               | 1                | 1.20          | 46.41         | 1             | 7              |
| Northfield    | 25.81         | 4.64            | 1               | 8                | 11.45         | 47.33         | 2             | 8              |
| Pittsfield    | 42.80         | 0.00            | 0               | 11               | 81.82         | 14.73         | 0             | 8              |
| Salem         | 34.25         | 0.94            | 0               | 12               | 7.5           | 33.6          | 2             | 17             |
| Saline        | 12.21         | 11.65           | 1               | 9                | 1.97          | 27.96         | 3             | 10             |
| Scio          | 48.98         | 0.00            | 12              | 9                | 28.30         | 30.96         | 8             | 10             |
| Sharon        | 10.18         | 11.00           | 2               | 1                | 0.25          | 34.69         | 3             | 2              |
| Superior      | 32.90         | 0.00            | 6               | 14               | 32.09         | 29.13         | 1             | 12             |
| Sylvan        | 16.5          | 0.44            | 1               | 7                | 15.00         | 26.5          | 3             | 7              |
| Webster       | 22.81         | 4.70            | 2               | 4                | 1.27          | 41.82         | 1             | 11             |
| York          | 41.96         | 3.89            | 6               | 20               | 28.44         | 27.17         | 4             | 16             |
| Ypsilanti     | 60.10         | 0.00            | 8               | 9                | 137.16        | 9.93          | 2             | 9              |
| <b>Totals</b> | <b>513.06</b> | <b>77.84</b>    | <b>55</b>       | <b>159</b>       | <b>395.41</b> | <b>665.31</b> | <b>68</b>     | <b>186</b>     |

## **Appendix B: Local Road Matching Program Conditions**



## Washtenaw County Road Commission 2024 Local Road Matching Program

The Washtenaw County Road Commission (WCRC) is anticipating it will receive approximately \$36 million in Michigan Transportation Fund (MTF) revenues for 2024 as presented in its 2024 Preliminary Budget adopted on December 6, 2023.

WCRC recognizes that local road funds are inadequate to maintain the 1,060 centerline miles of local roads in Washtenaw County. As a result, WCRC has historically transferred funds from its Primary Road Fund to its Local Road Fund.

### Matching Funds

- a. Road Projects. WCRC has budgeted \$2,000,000 in 2024 for the Local Road Matching Program. The program distributes the total amount to all twenty townships based on the formula used by the Michigan Department of Transportation to allocate local road funds to the 83 counties of Michigan.

| Township    | 2024 Local Matching Program Allocation | 2023 Local Matching Program Allocation |
|-------------|--|--|
| Salem       | \$74,547                               | \$55,910                               |
| Northfield  | 101,480                                | 76,110                                 |
| Webster     | 75,517                                 | 56,637                                 |
| Dexter      | 71,082                                 | 53,312                                 |
| Lyndon      | 55,655                                 | 41,741                                 |
| Sylvan      | 62,292                                 | 46,719                                 |
| Lima        | 70,147                                 | 52,610                                 |
| Scio        | 133,253                                | 99,940                                 |
| Ann Arbor   | 39,266                                 | 29,449                                 |
| Superior    | 126,552                                | 94,914                                 |
| Ypsilanti   | 372,441                                | 279,331                                |
| Pittsfield  | 253,551                                | 190,163                                |
| Lodi        | 90,435                                 | 67,827                                 |
| Freedom     | 63,359                                 | 47,520                                 |
| Sharon      | 49,092                                 | 36,819                                 |
| Manchester  | 67,285                                 | 50,464                                 |
| Bridgewater | 54,877                                 | 41,158                                 |
| Saline      | 44,542                                 | 33,407                                 |
| York        | 99,609                                 | 74,707                                 |
| Augusta     | 95,015                                 | 71,262                                 |
|             | <b>\$2,000,000</b>                     | <b>\$1,500,000</b>                     |





## Washtenaw County Road Commission 2024 Local Road Matching Program

- b. Culverts. Replacement of local road culverts, existing size of 5' diameter and larger, and bridges will be funded by WCRC at no greater than 50% of total cost. This funding source is separate from the \$2 million local road matching funds.

As was the case in 2023, WCRC will continue to cover all costs for dust control applications on local roads as a maintenance cost. Dust control will be applied by WCRC crews as needed throughout the season, typically May – October.

**Townships must notify WCRC on or before Friday, May 17, 2024 of their intent to use matching funds.**

The WCRC Matching Program is subject to the following conditions:

- a) Project Overruns

WCRC staff will provide an estimated cost for each individual project to be included within an agreement between the township and WCRC. If, prior to beginning an individual project, WCRC determines that the original cost estimate will not cover project costs, WCRC 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, WCRC 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 year's matching funds.

- b) Billing Procedures

WCRC will send the first billing mid-summer for an amount that equates to 50 percent of the estimated project costs. Township payment is required within 30 days from receipt of the invoice. The final billing will be sent upon completion of the project(s) and due 30 days from receipt of final invoice. Any credits due to townships will be returned at the time of final billing or credited to the following year, as determined by the township. Standard fringe and overhead rates will be applied as defined by PA 51 of 1951, as amended.

- c) Primary Road Matching

Any township board may, at their option, request that a part or all of its allocated WCRC matching funds, along with an equal amount of township funds, be used on a primary road project within the township boundaries.

- d) 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 WCRC that they are requesting this carryover and identify an eligible project for which the funds will be held. The WCRC carryover fund will be preserved for one year. After this time, WCRC will reallocate the funds as stated in Paragraph e.

## Washtenaw County Road Commission 2024 Local Road Matching Program



### e) Reallocation of Funds

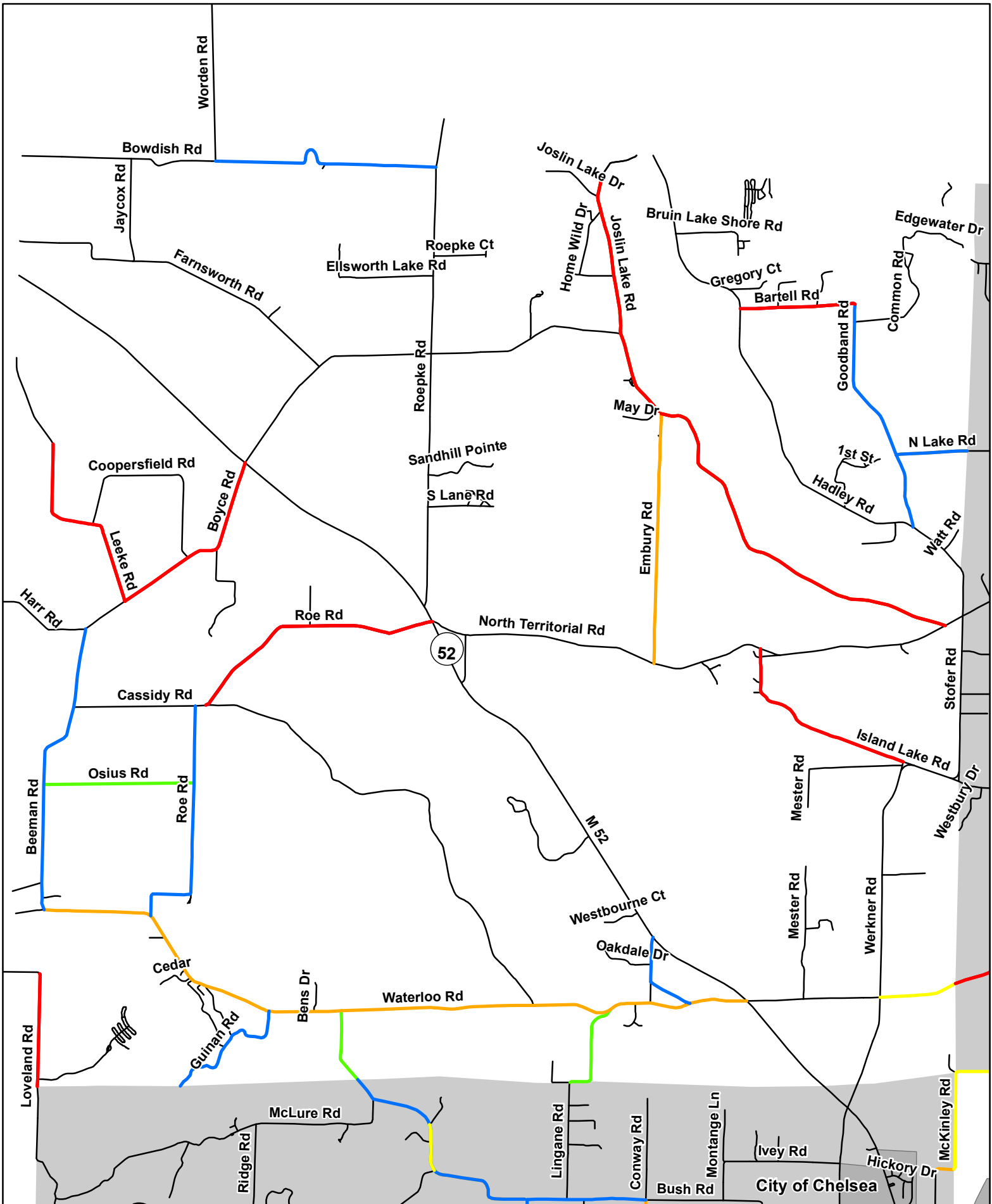
Any township that has not notified WCRC of their intent to use matching funds **on or before Friday, May 17, 2024** will forfeit the allocated matching money. WCRC will determine the amount of unused matching funds and reallocate these funds to primary road maintenance.

## Appendix C: Township Contribution Summary, 2019 – 2023

This chart includes all contributions made by a township to WCRC including local road investments, non-motorized improvements, primary road investments by a **township, etc.**

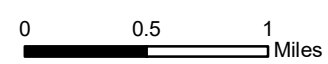
| <b>Township</b> | <b>2019</b>        | <b>2020</b>        | <b>2021</b>        | <b>2022</b>        | <b>2023</b>      | <b>5-Year Average</b> |
|-----------------|--------------------|--------------------|--------------------|--------------------|------------------|-----------------------|
| Ann Arbor       | \$232,862          | \$240,137          | \$601,919          | \$115,034          | \$418,599        | \$321,710             |
| Augusta         | 145,470            | 277,080            | 174,157            | 330,775            | 342,894          | 254,075               |
| Bridgewater     | 64,606             | 16,831             | 59,417             | 63,105             | 97,709           | 60,334                |
| Dexter          | 150,361            | 96,797             | 75,393             | 723,922            | 723,926          | 354,080               |
| Freedom         | 39,090             | 44,743             | 70,463             | 144,034            | 158,564          | 91,379                |
| Lima            | 171,533            | 206,634            | 199,727            | 211,230            | 267,561          | 211,337               |
| Lodi            | 196,082            | 117,308            | 511,702            | 629,674            | 964,296          | 483,812               |
| Lyndon          | 32,872             | 17,424             | 76,395             | 72,297             | 118,210          | 63,440                |
| Manchester      | 38,747             | 31,502             | 67,212             | 136,612            | 353,356          | 125,486               |
| Northfield      | 91,657             | 74,283             | 106,071            | 231,864            | 245,447          | 149,864               |
| Pittsfield      | 2,601,981          | 994,362            | 1,798,975          | 886,052            | 2,302,344        | 1,716,743             |
| Salem           | 3,283,602          | 1,740,718          | 235,209            | 86,211             | 270,001          | 1,123,148             |
| Saline          | 149,038            | 557,529            | 145,983            | 219,427            | 199,347          | 254,265               |
| Scio            | 20,383             | 501,479            | 230,744            | 350,224            | 469,462          | 314,458               |
| Sharon          | 98,669             | 54,138             | 109,206            | 248,572            | 48,258           | 111,769               |
| Superior        | 168,491            | 65,626             | 450,374            | 186,050            | 167,544          | 207,617               |
| Sylvan          | 26,115             | 114,611            | 96,908             | 106,823            | 90,822           | 87,056                |
| Webster         | 198,297            | 38,428             | 487,377            | 412,905            | 74,693           | 242,340               |
| York            | 205,542            | 375,053            | 843,327            | 1,008,932          | 564,022          | 599,375               |
| Ypsilanti       | 1,147,958          | 809,371            | 978,513            | 968,850            | 1,765,042        | 1,133,947             |
| <b>Totals</b>   | <b>\$9,063,358</b> | <b>\$6,374,053</b> | <b>\$7,319,072</b> | <b>\$7,132,591</b> | <b>9,642,096</b> | <b>\$7,472,268</b>    |

**Appendix D: Township Local Road Investment Map**

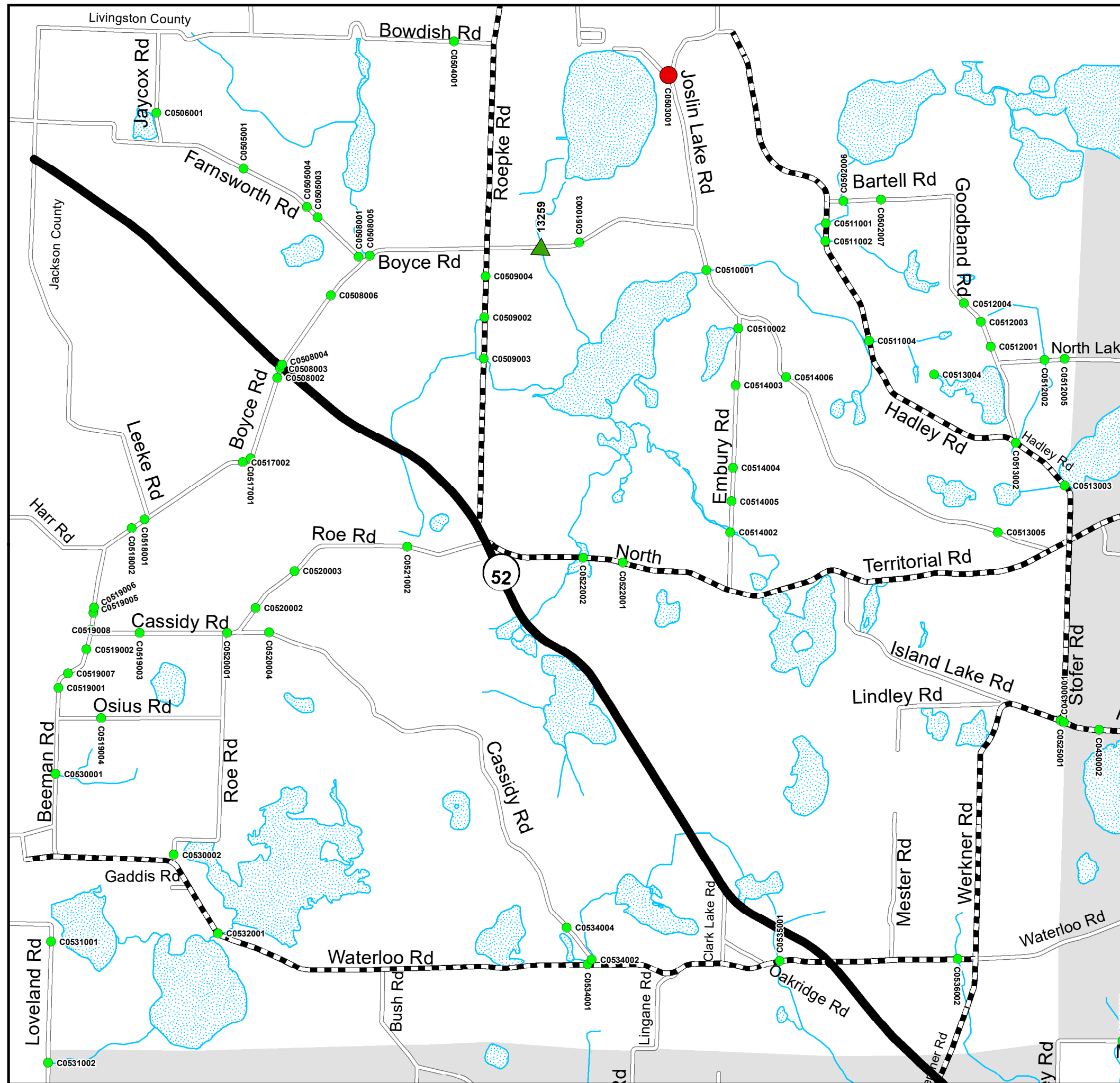


- 2019 — 2022 —
- 2020 — 2023 —
- 2021 —

**Lyndon Township**  
 Locally Funded  
 Road Improvement Projects  
 2019 - 2023



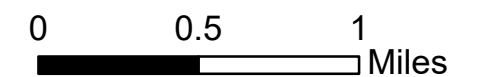
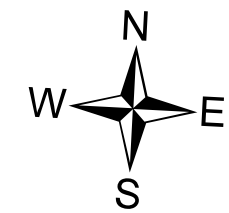
## Appendix E: Local Collector Road Bridges and Culverts



# LYNDON TOWNSHIP

## LEGEND

- State Trunkline
- County Primary
- County Local
- Township Boundary
- Lake/River
- Culvert Locations
  - Span Size Less than 5 feet
  - Greater than 5 feet
  - Poor Condition Rating
- Bridge Locations
  - 20 Feet and Greater
  - Poor Condition Rating



## Appendix F: Summary of Local Road Needs, By Township

| Township      | Total Needs for Local Paved Roads | Total Needs for Local Unpaved Roads | Total Needs for Local Roads | Average 10-year Annual Expenditure Needed for Local Roads |
|---------------|-----------------------------------|-------------------------------------|-----------------------------|---|
| Ann Arbor     | \$1,898,900                       | \$1,331,800                         | \$3,230,700                 | \$323,070   |
| Augusta       | \$2,399,560                       | \$4,796,600                         | \$7,196,160                 | \$719,616   |
| Bridgewater   | \$240,680                         | \$4,055,000                         | \$4,295,680                 | \$429,568   |
| Dexter        | \$3,691,100                       | \$2,559,800                         | \$6,250,900                 | \$625,090   |
| Freedom       | \$67,920                          | \$4,627,000                         | \$4,694,920                 | \$469,492   |
| Lima          | \$1,396,940                       | \$4,045,000                         | \$5,441,300                 | \$544,130   |
| Lodi          | \$2,599,600                       | \$4,223,000                         | \$6,822,600                 | \$682,260   |
| Lyndon        | \$100,320                         | \$3,693,200                         | \$3,793,520                 | \$379,352   |
| Manchester    | \$138,320                         | \$4,623,400                         | \$4,761,720                 | \$476,172   |
| Northfield    | \$3,573,560                       | \$4,725,800                         | \$8,298,240                 | \$829,824   |
| Pittsfield    | \$19,113,520                      | \$1,428,200                         | \$20,541,720                | \$2,054,172   |
| Salem         | \$1,356,640                       | \$3,343,000                         | \$4,699,640                 | \$469,964   |
| Saline        | \$137,440                         | \$2,790,400                         | \$2,927,840                 | \$292,784   |
| Scio          | \$5,970,480                       | \$2,942,400                         | \$8,912,880                 | \$891,288   |
| Sharon        | \$3,800                           | \$3,469,000                         | \$3,472,800                 | \$347,280   |
| Superior      | \$8,272,480                       | \$2,903,600                         | \$11,176,080                | \$1,117,608   |
| Sylvan        | \$5,776,280                       | \$2,621,800                         | \$8,398,080                 | \$839,808   |
| Webster       | \$562,720                         | \$4,138,800                         | \$4,701,520                 | \$470,152   |
| York          | \$8,171,120                       | \$2,682,800                         | \$10,843,800                | \$1,084,380   |
| Ypsilanti     | \$38,007,660                      | \$983,600                           | \$38,780,340                | \$3,878,034   |
| <b>TOTALS</b> | <b>\$103,479,040</b>              | <b>\$65,984,200</b>                 | <b>\$169,463,240</b>        | <b>\$16,946,324</b>                                       |



## Appendix G: Taxable Valuation Data, By Township

| Township      | 2023 Taxable Value      | Millage Amount        |                        |                        |                        |
|---------------|-------------------------|-----------------------|------------------------|------------------------|------------------------|
|               |                         | 0.50                  | 1.00                   | 2.00                   | 3.00                   |
| Ann Arbor     | \$686,946,281           | \$343,473.14          | \$686,946.28           | \$1,373,892.56         | \$2,060,838.84         |
| Augusta       | \$302,958,731           | \$151,479.37          | \$302,958.73           | \$605,917.46           | \$908,876.19           |
| Bridgewater   | \$114,823,834           | \$57,411.92           | \$114,823.83           | \$229,647.67           | \$344,471.50           |
| Dexter        | \$492,960,132           | \$246,480.07          | \$492,960.13           | \$985,920.26           | \$1,478,880.40         |
| Freedom       | \$249,440,148           | \$124,720.07          | \$249,440.15           | \$498,880.30           | \$748,320.44           |
| Lima          | \$297,474,548           | \$148,737.27          | \$297,474.55           | \$594,949.10           | \$892,423.64           |
| Lodi          | \$540,363,892           | \$270,181.95          | \$540,363.89           | \$1,080,727.78         | \$1,621,091.68         |
| Lyndon        | \$200,811,570           | \$100,405.79          | \$200,811.57           | \$401,623.14           | \$602,434.71           |
| Manchester    | \$247,203,183           | \$123,601.59          | \$247,203.18           | \$494,406.37           | \$741,609.55           |
| Northfield    | \$447,719,686           | \$223,859.84          | \$447,719.69           | \$895,439.37           | \$1,343,159.06         |
| Pittsfield    | \$2,553,545,058         | \$1,276,772.53        | \$2,553,545.06         | \$5,107,090.12         | \$7,660,635.17         |
| Salem         | \$473,617,438           | \$236,808.72          | \$473,617.44           | \$947,234.88           | \$1,420,852.31         |
| Saline        | \$145,379,367           | \$72,689.68           | \$145,379.37           | \$290,758.73           | \$436,138.10           |
| Scio          | \$1,657,080,716         | \$828,540.36          | \$1,657,080.72         | \$3,314,161.43         | \$4,971,242.15         |
| Sharon        | \$120,528,577           | \$60,264.29           | \$120,528.58           | \$241,057.15           | \$361,585.73           |
| Superior      | \$838,384,598           | \$419,192.30          | \$838,384.60           | \$1,676,769.20         | \$2,515,153.79         |
| Sylvan        | \$267,226,198           | \$133,613.10          | \$267,226.20           | \$534,452.40           | \$801,678.59           |
| Webster       | \$536,063,600           | \$268,031.80          | \$536,063.60           | \$1,072,127.20         | \$1,608,190.80         |
| York          | \$555,402,479           | \$277,701.24          | \$555,402.48           | \$1,110,804.96         | \$1,666,207.44         |
| Ypsilanti     | \$1,707,054,275         | \$853,527.14          | \$1,707,054.28         | \$3,414,108.55         | \$5,121,162.83         |
| <b>Totals</b> | <b>\$12,434,984,311</b> | <b>\$6,217,492.16</b> | <b>\$12,434,984.31</b> | <b>\$24,869,968.62</b> | <b>\$37,304,952.93</b> |