

Pavement Data Collection and Pavement Management System Implementation for the City of McHenry

Prepared For:
Chicago Metropolitan Agency for Planning
City of McHenry, Illinois

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Table of Contents

1. INTRODUCTION	1
1.1 Background	1
1.2 Project Kick-off and Records Review	1
1.3 Network Segmentation	2
1.4 Traffic Data.....	3
2. FIELD DATA COLLECTION AND ASSESSMENT	4
2.1 Digital Survey Vehicle (DSV).....	4
2.2 Pavement Condition Index Procedure	4
2.3 Pavement Network and Current Condition	7
3. PAVEMENT MANAGEMENT SYSTEM IMPLEMENTATION	11
3.1 PAVER™ Pavement Management System Overview	11
3.2 Pavement Performance Model.....	12
3.3 Treatment Matrix.....	15
3.4 Unit Costs	17
4. MAINTENANCE AND REHABILITATION ANALYSIS	17
4.1 Funding Scenario Results	18
4.2 Consequence of Local Distress Maintenance	22
5. SUMMARY AND RECOMMENDATION	22
5.1 Summary	22
5.2 Recommendations	23
APPENDIX — A	24

1. INTRODUCTION

1.1 Background

Chicago Metropolitan Agency for Planning (CMAP) selected the ARA team to develop pavement management plans for a selected number of local agencies from the CMAP region, including additional data collection for non-Federal Aid routes. The pavement management plans will provide participating local agencies with a document that describes the importance and types of pavement preservation, the current condition of pavement, scenarios evaluating the cost to meet different network-level pavement conditions, and a recommended capital plan based on the selected pavement condition/spending scenario. The pavement management plan includes summary tables, charts, graphics, and maps depicting current pavement condition and forecasted pavement conditions under different scenarios. CMAP staff managed the development of the pavement management plans in conjunction with City of McHenry.

As part of this project, ARA has evaluated the current condition of the City of McHenry's roadway pavement network, implemented pavement management system (PMS) using PAVER™ software, forecasted condition, generated budget scenario, and recommended future maintenance and rehabilitation (M&R) plans.

1.2 Project Kick-off and Records Review

The ARA team met with the City of McHenry and CMAP representatives for a project kick-off meeting on September 5, 2018. Based on the kick-off meeting and documents provided by the City and CMAP, pavement data was collected on October 11-13, 2018. The GIS shapefile was provided by CMAP and was used as the base map for the field data collection. The City of McHenry provided roadway network segmentation which was the primary source of roadway inventory for the pavement management database. The City responded with valuable information to the questionnaire that ARA developed for an understanding of the PMS inputs available from the City and any specific project requirements. The City also provided other pavement related attributes such as length, width, presence of curb and sidewalk, functional class, resurfacing year, crack seal application year, and rejuvenator application year. In addition, the City provided the work activities performed in 2019 and their annual M&R budget from 2019 through 2023 to plan future activities. The following documents were reviewed as part of this effort:

- GIS shapefile for local agency (CMAP)
- Pavement information spreadsheet (City of McHenry)
- Network Segmentation for collection (CMAP)
- Completed Questionnaire (City of McHenry)
- Review of network segmentation for PMS implementation (City of McHenry)

1.3 Network Segmentation

The City of McHenry manages approximately 128 miles of roadway pavements, consisting primarily of asphalt pavements. The pavement network was divided into 441 sections based on the feedback provided by the City. Figure 1 shows the network segmentation that was approved by the City.

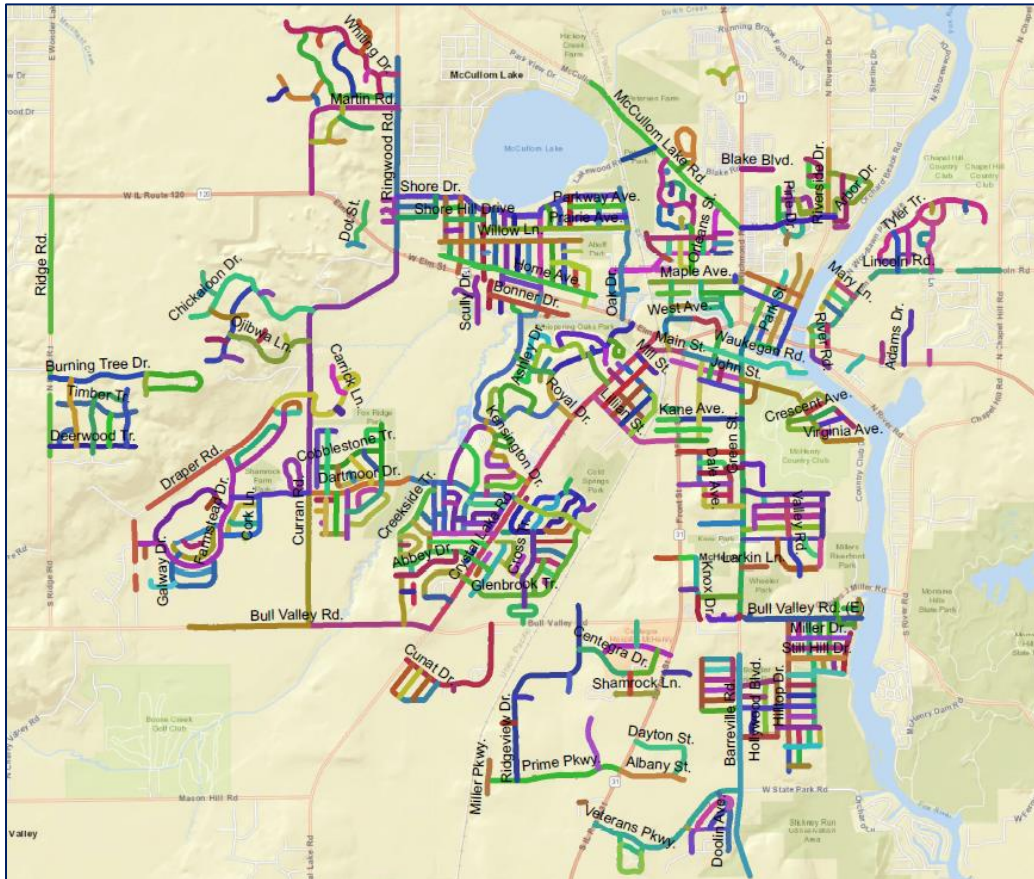


Figure 1. City of McHenry Roadway Network Segmentation.

Table 1 displays the distribution of network length based on functional class. As observed in Table 1, majority of the roadway network is comprised of collector and residential streets.

Table 1. City of McHenry’s Roadway Network Distribution.

Network/Functional Class	Length	Unit
Arterials	4.5	miles
Collector	38.5	miles
Industrials	7.5	miles
Residential	77.5	miles
Total Network	127.9	miles

1.4 Traffic Data

Average daily traffic (ADT) data for the City of McHenry network was obtained from the Illinois Department of Transportation (IDOT) transportation management system (<http://www.gettingaroundillinois.com/gai.htm?mt=aadt>). Table 2 shows traffic data based on the functional class of the streets. Traffic volumes range from 600 to 14,000 vehicles per day. Figure 2 shows annual average daily traffic (AADT) data for the individual pavement sections.

Table 2. Summary of Traffic Data.

Functional Class	Maximum AADT in 2018	Minimum AADT in 2018
Arterials	14,000	5,500
Collector	10,000	600
Industrial	6,150	4,500
Residential	3,200	1,750

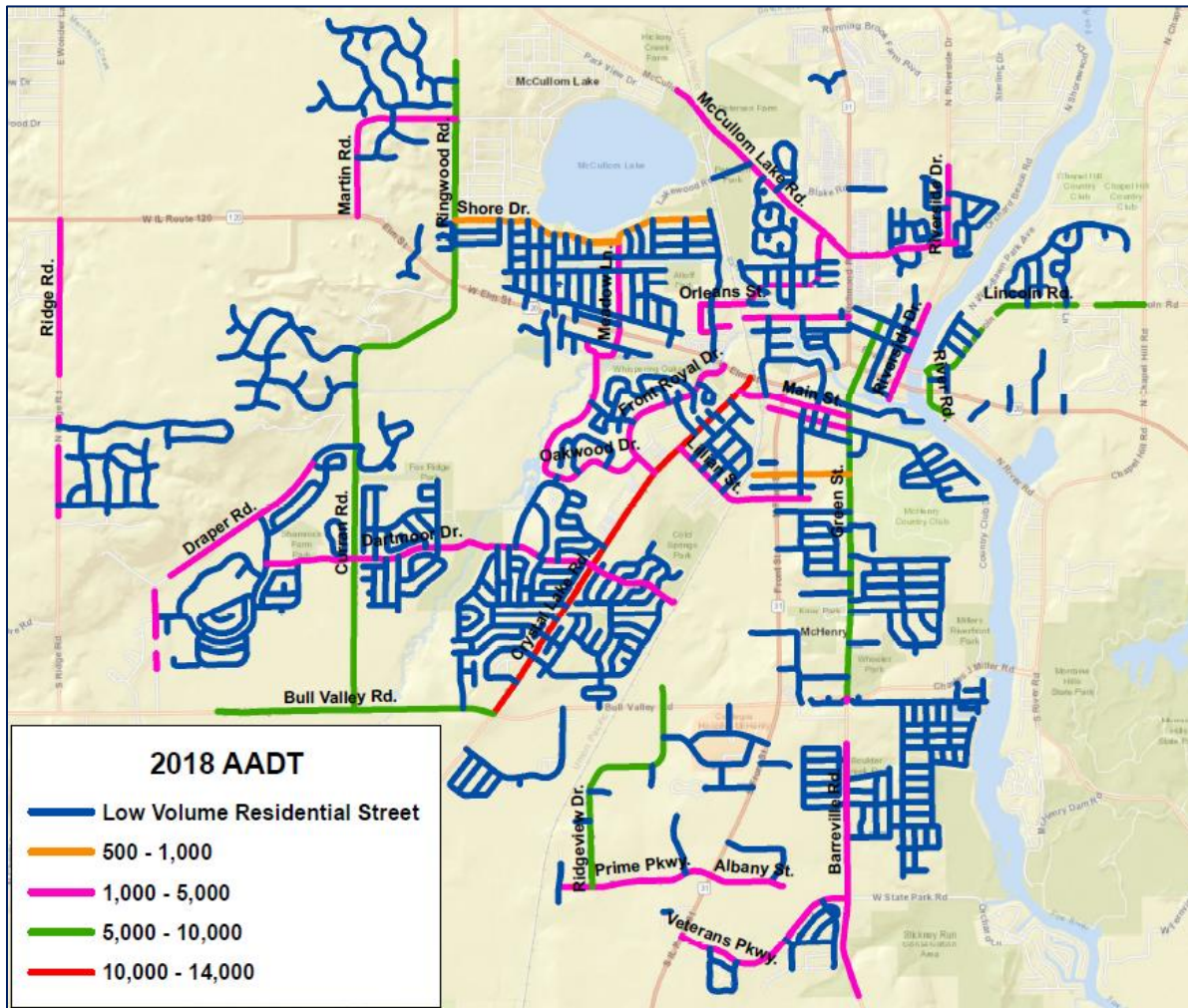


Figure 2. City of McHenry Annual Average Daily Traffic Data.

2. FIELD DATA COLLECTION AND ASSESSMENT

2.1 Digital Survey Vehicle (DSV)

ARA collected geo-referenced images of the entire City of McHenry roadway network using the DSV on October 11-13, 2018. ARA's DSV equipped with the Laser Crack Measurement System (LCMS), shown in Figure 3, captures images at 20-ft intervals. Each image is linearly referenced with the DSV's onboard distance measuring instrument (DMI) and associated global positioning system (GPS) coordinates. For two lane County highways, ARA collected images in a single direction. In four-lane pavement sections, data was collected in the outermost lane in both directions.



Figure 3. ARA's Laser Crack Measurement System.

The LCMS captures enhanced right-of-way images using a 360° camera system. The images were used to assess the surface condition of the pavement using the Pavement Condition Index (PCI) methodology in accordance with ASTM D6433. In addition to the images, sensor data was collected including International Roughness Index (IRI) and rutting for all the segments.

2.2 Pavement Condition Index Procedure

The pavement condition index (PCI) is a measurement of pavement condition which ranges from 0 to 100. This is an industry standard defined in ASTM D6433. The PCI value and corresponding pavement condition rating are shown in Figure 4. A newly constructed pavement will have a PCI of 100 whereas a failed pavement will have a PCI of 20 or less. After the construction of pavements, the condition of pavement starts deteriorating with time due to traffic loads and volumes, climate, construction materials, and age.

PCI Value	Pavement Rating
100	Very Good
80	
60	Good
40	Fair
20	Poor
0	Very Poor

Figure 4. Pavement Condition Category Based on PCI Value.

A PCI survey allows users to compare all pavements on a common scale and provides an index for monitoring pavement deterioration and treatment selection during the PMS analysis. Typically, PCI surveys are conducted foot-on-ground in the field. The modified version allows the use of digital images to perform the survey in an office environment and still provide the highest detail of distress rating.

ARA's LCMS system identifies the pavement distresses and reports the type, severity, and extent of key pavement distresses as shown in Figure 5. Some sample pavement surface images with representative PCI values are shown in Figure 6.

Ten percent of the surveyed sections were subjected to an internal quality assurance survey by an independent surveyor. After completion of the PCI calculation, visual checks were performed to ensure that the PCI values are representative of the surveyed images.

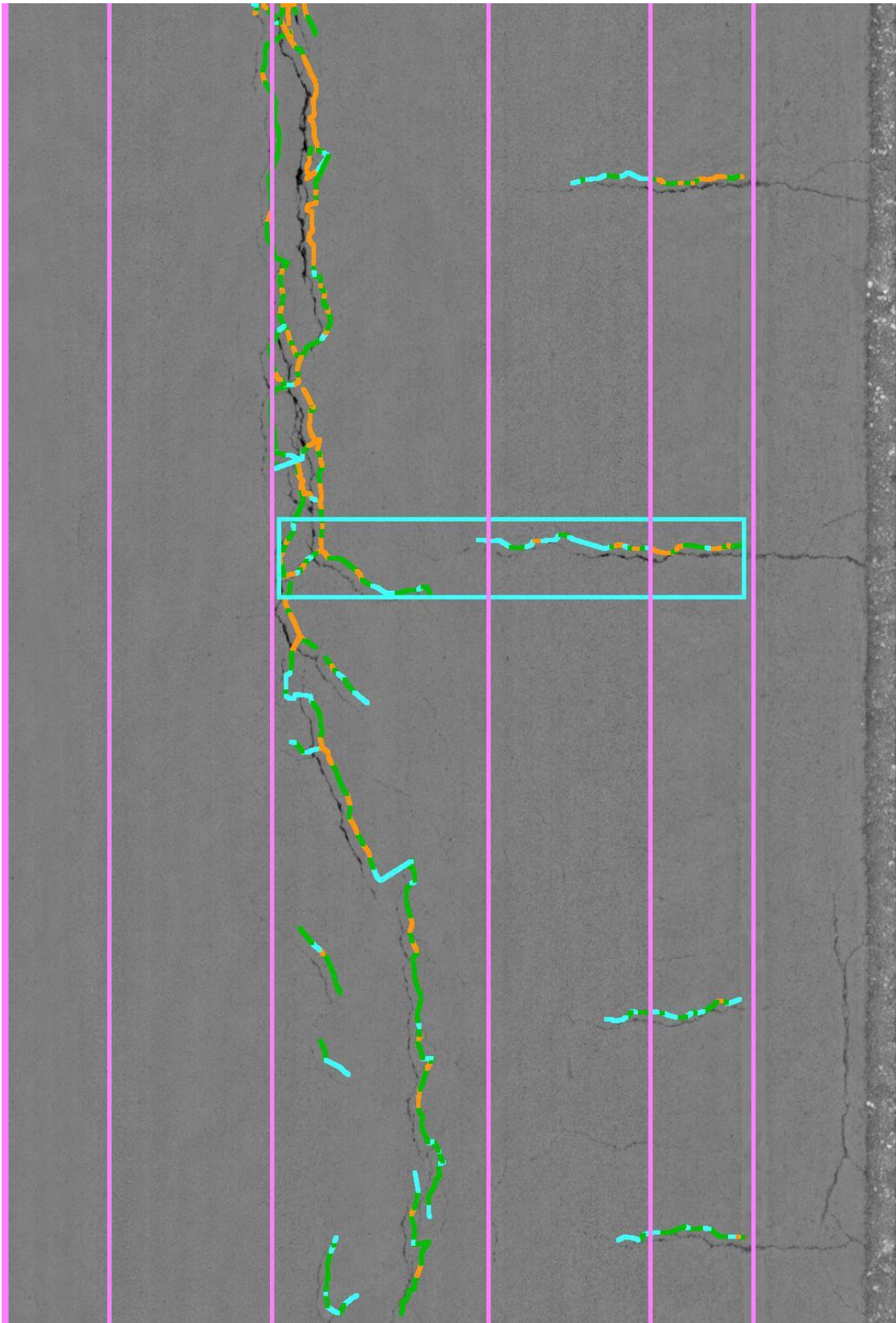


Figure 5. Pavement Distress Detection Using LCMS System.



Figure 6. Sample Pavement Distress Images with Different PCI Values.

2.3 Pavement Network and Current Condition

After performing an automated condition survey with the collected images, the inspection data was imported into the PAVERTM software. The ARA team presented the pavement condition results to the City and CMAP on February 28, 2019. Based on the October 2018 pavement condition survey, the weighted average PCI of the network is 49.5 which represents a pavement network is in fair condition. The arterial pavement sections are in very good condition with an average PCI value of 81.9. The collector pavement sections which comprises 32% of the network are in fair condition with an average

PCI value of 50.4. The industrial pavement sections are in slightly better condition than collector pavements with an average PCI value of 56.1. Major part of the network consists of residential streets with an average PCI value of 46.5. The current pavement condition based on the functional class can be summarized as shown Table 3. Figure 7 displays the current pavement condition distributions based on functional class.

Table 3. Pavement Functional Class and Current PCI

Section Rank	% Pavement Area of the Network	% Area of Network in Poor and Very Poor Condition	Wt. Avg. PCI
Arterials	4.0	4.0	81.9
Collector	32.0	51.0	50.4
Industrial	7.0	42.0	56.1
Residential	57.0	52.0	46.5

Figure 8 shows pavement condition rating for the City of McHenry network. From Figure 8, it can be seen that major roads such as Crystal Lake Rd, Lincoln Rd, and Ringwood Rd are in 'very good' or 'good' condition whereas River Rd is in 'poor' condition.

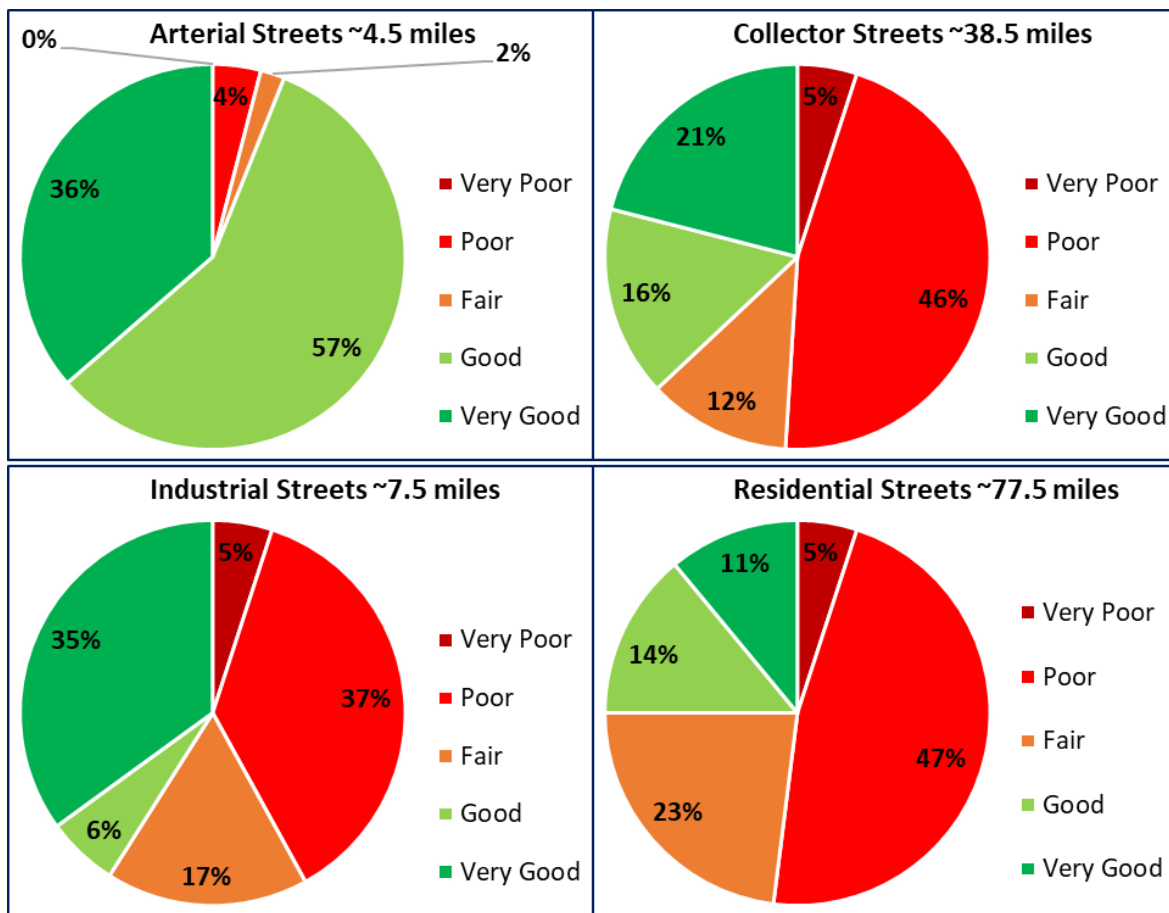


Figure 7. Pavement Condition Distribution Based on Functional Class.

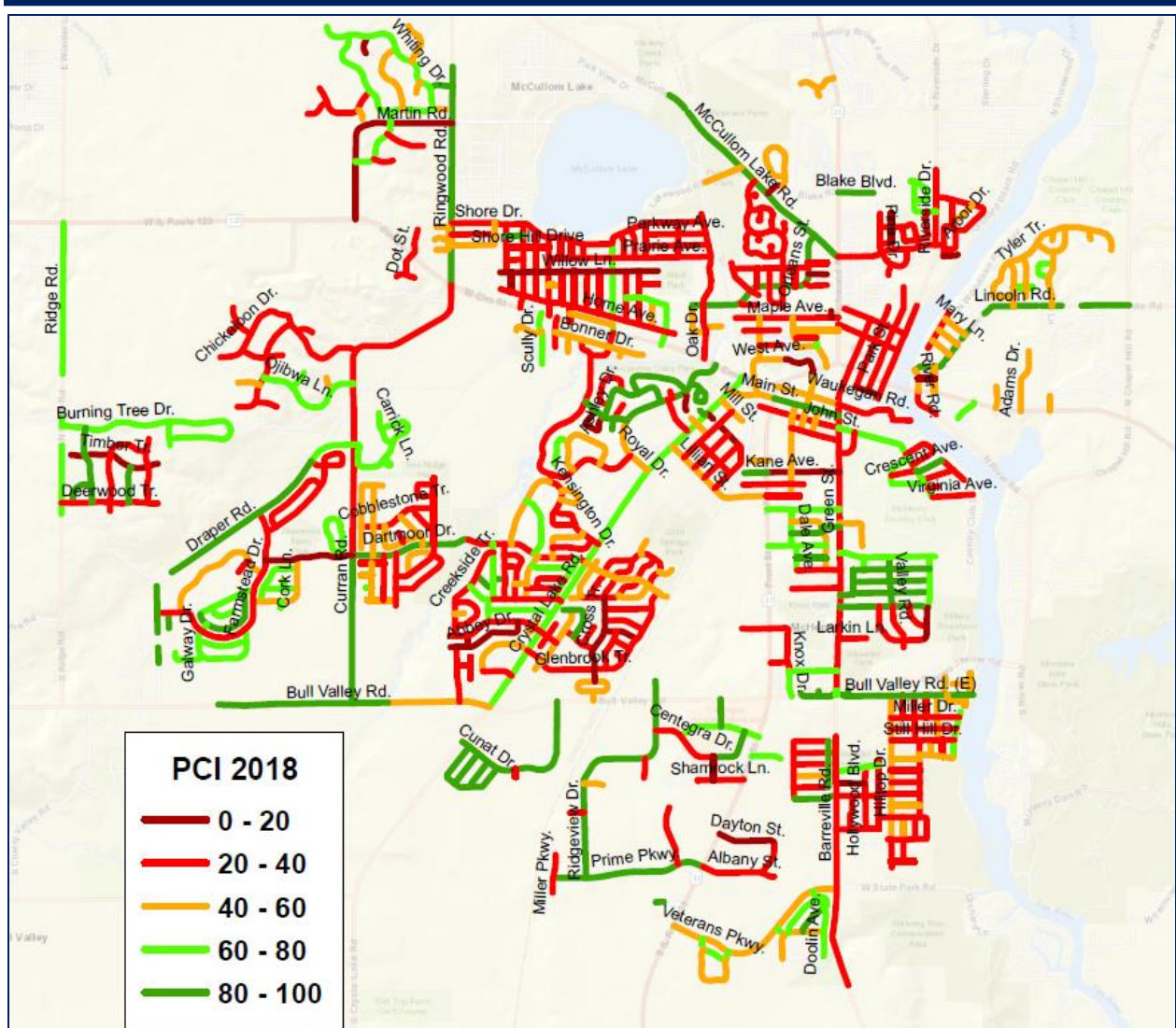


Figure 8. City of McHenry’s Current Pavement Condition Ratings.

Notable collector streets such as Barrenville Rd, Curran Rd, Riverside Dr, part of McCullom Lake Rd, and part of Green St are in ‘poor’ condition. Among the industrial streets, Albany St is in ‘poor’ condition.

Figure 9 and Figure 10 show the distribution of network pavement area based on pavement current condition and average pavement condition based on functional class, respectively. In Figure 9, it can be observed that about 49% of the network pavement area is in ‘poor’ and ‘very poor’ condition. It can also be seen that about 18% of the network is in ‘fair’ condition whereas about 33% of the network is in ‘good’ and ‘very good’ condition.

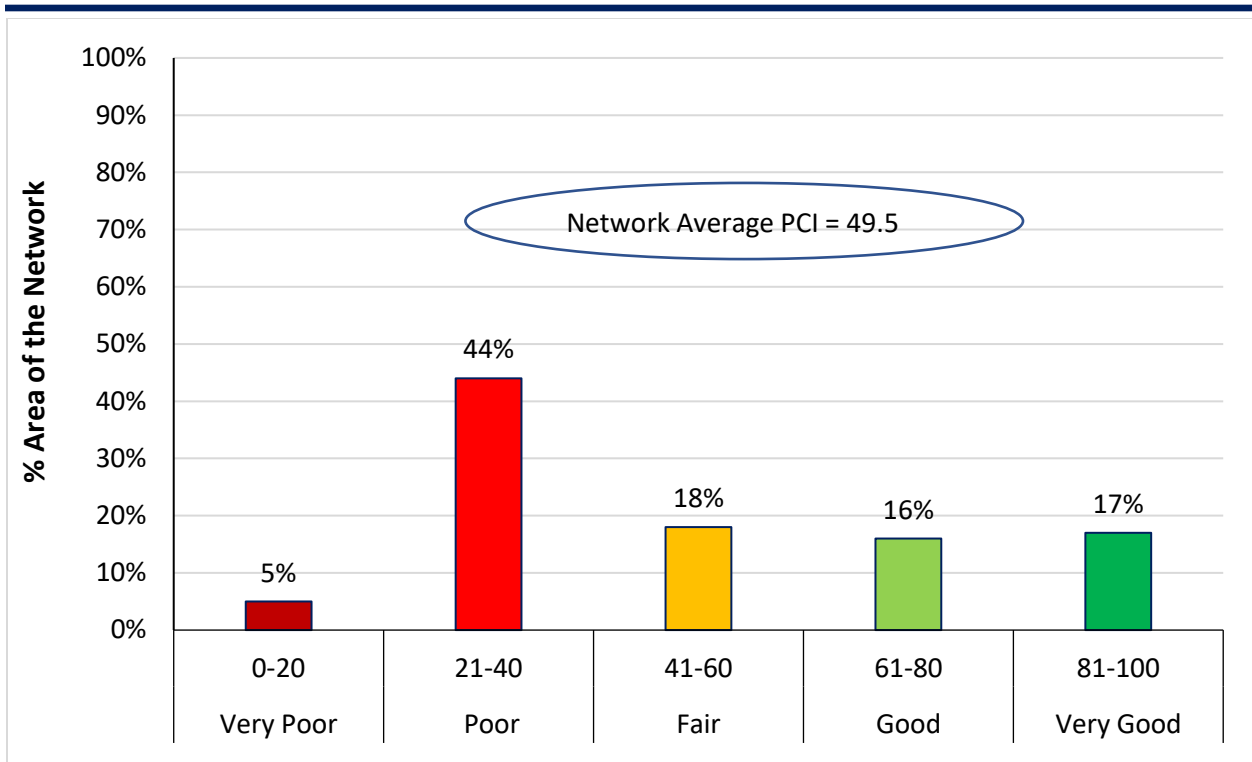


Figure 9. Distribution of Network Pavement Area Based on Pavement Condition.

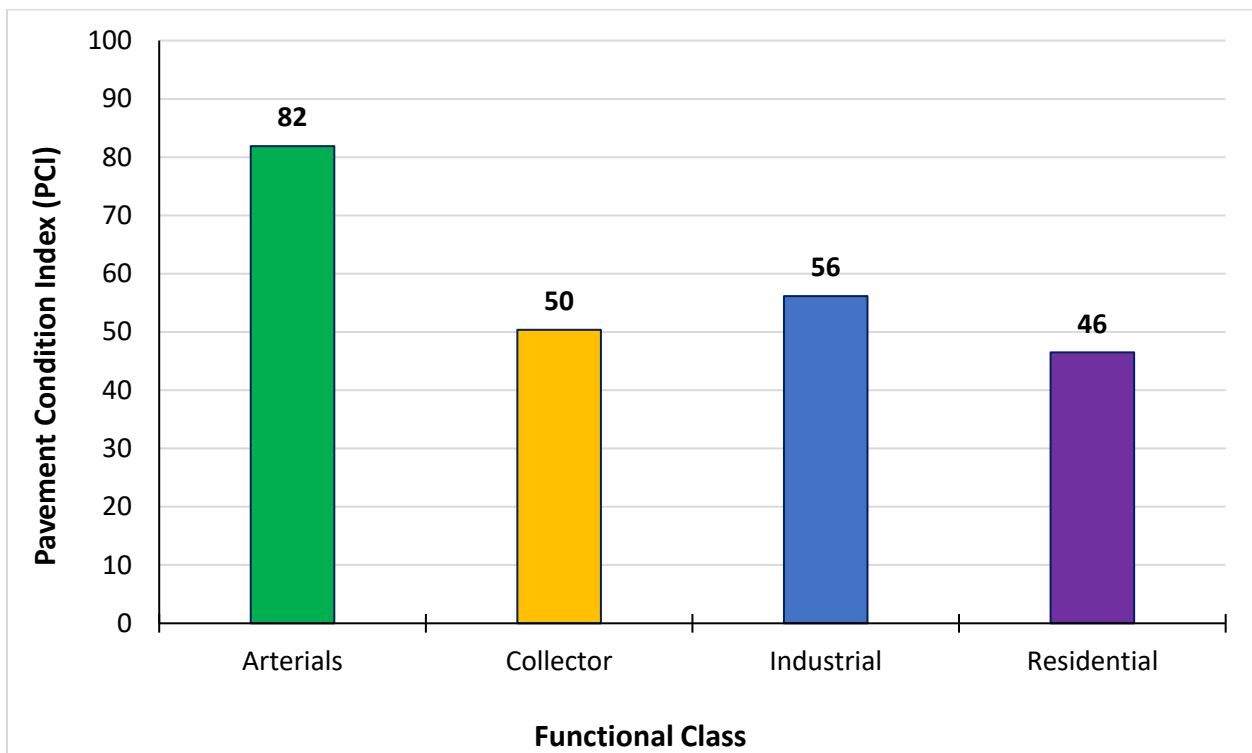


Figure 10. Weighted Average Pavement Condition Index (PCI) Based on Functional Class.

3. PAVEMENT MANAGEMENT SYSTEM IMPLEMENTATION

The ARA team discussed preliminary results of the PMS analysis with the City and CMAP on June 4, 2019. ARA presented pavement performance models, treatment matrix, unit costs, and consequences of several funding scenarios. Based on the City's feedback on PMS analysis, the ARA team updated the PMS analysis and updated results are presented in this section.

ARA used PAVER™ pavement management software to implement a pavement management system (PMS) for the City of McHenry. PAVER™ provides pavement management capabilities to: (a) develop and organize the pavement inventory, (b) assess the current condition of pavements, (c) develop models to predict future conditions, (d) report on past and future pavement performance, (e) develop scenarios for M&R based on budget or condition requirements, and (f) plan projects.

3.1 PAVER™ Pavement Management System Overview

Figure 11 shows the various modules of the PAVER™ software which includes:

- Inventory — The inventory module is designed based on a hierarchical structure including network, branch, and sections where section is the smallest pavement unit managed by the agency. This structure allows users to easily organize their inventory while providing numerous fields and levels for storing pavement data.
- Work History — Similar to the inventory module, work history module also follows the hierarchical structure. To updated a pavement section's attribute or work history, it is required to have the network, branch, and section information.
- Inspection — In the inspection module, pavement can be surveyed manually or the automated survey data can be imported and modified, and finally PCI is being calculated.
- PCI Family Model— The PCI family model module is used to create pavement performance model. Basically, it uses the historical pavement condition and age data.
- Condition Analysis — The condition analysis module is used to analyze or predict the condition of the entire or part of the network. This feature reports past conditions based on prior interpolated values between previous inspections and projected conditions based on prediction models.
- M&R Family Models — M&R Family Models module is used to select treatment, treatment consequences, unit costs, and treatment matrix.
- M&R Working Plans — M&R working plans module allows to create multi-year network and project level M&R planning, scheduling, and budgeting. This module allows the users to create consequence of current funding level and generates funding scenarios for targeted PCI, backlog eliminations, etc.
- Reports — This module facilitates generation of summary charts, latest condition map, and user defined reports. The users can pick and choose the attributes fields to create a report.

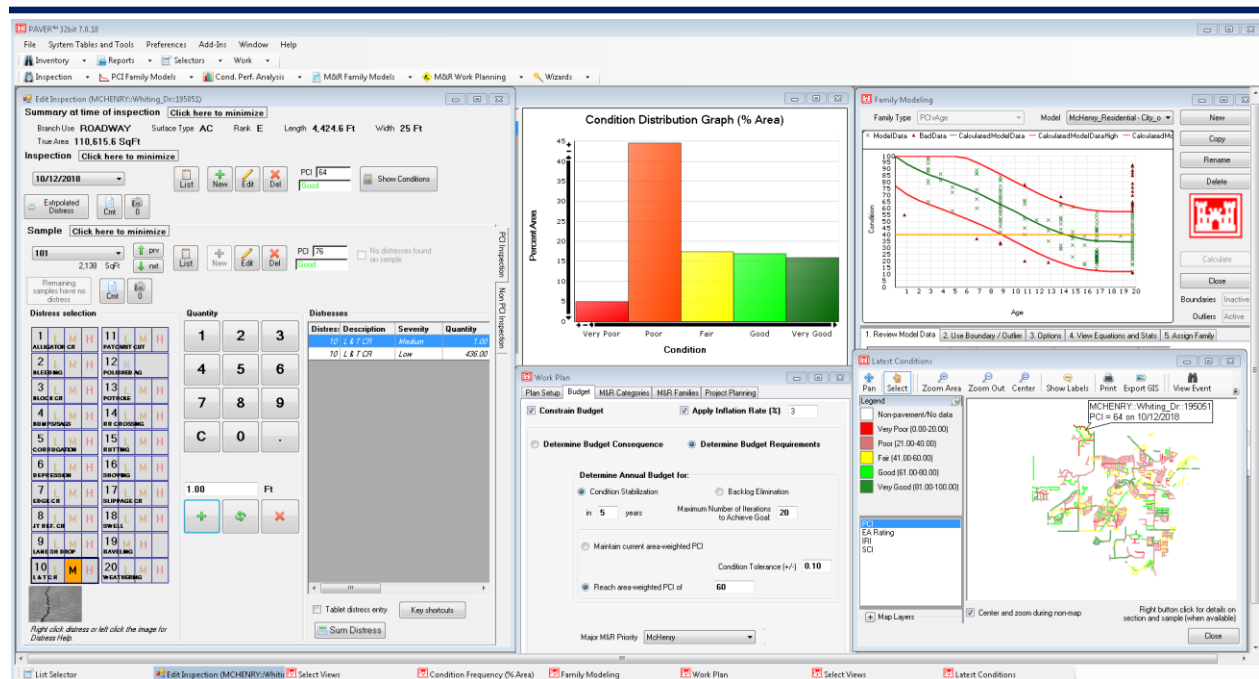


Figure 11. PAVER™ Overview.

3.2 Pavement Performance Model

A PMS is only useful for making decisions if performance models can be established, validated, and relied upon to accurately forecast pavement conditions into the future. A pavement performance model is developed based on the date of construction of a road, the types and thicknesses of pavement materials, the traffic level, and the pavement condition. The pavement performance model becomes more accurate with multiple pavement condition ratings, as the model gets calibrated and adjusted to match the conditions present at the time in a pavement’s life cycle.

Initially, pavement performance models were created based on pavement condition Index (PCI) and City of McHenry’s in-house surface condition ratings, as shown Figure 12. All pavement segments with various functional class and pavement structure were considered in these models. However, based on the discussion with the City, separate pavement performance models were created based on the functional class of the pavement.

The PCI Family Models module in PAVER™ helps to identify and group pavements of similar construction that are subjected to similar traffic, weather, and other factors affecting pavement performance. The pavement condition historical data are used to build a model that can accurately predict the future performance of a group of pavements with similar attributes.

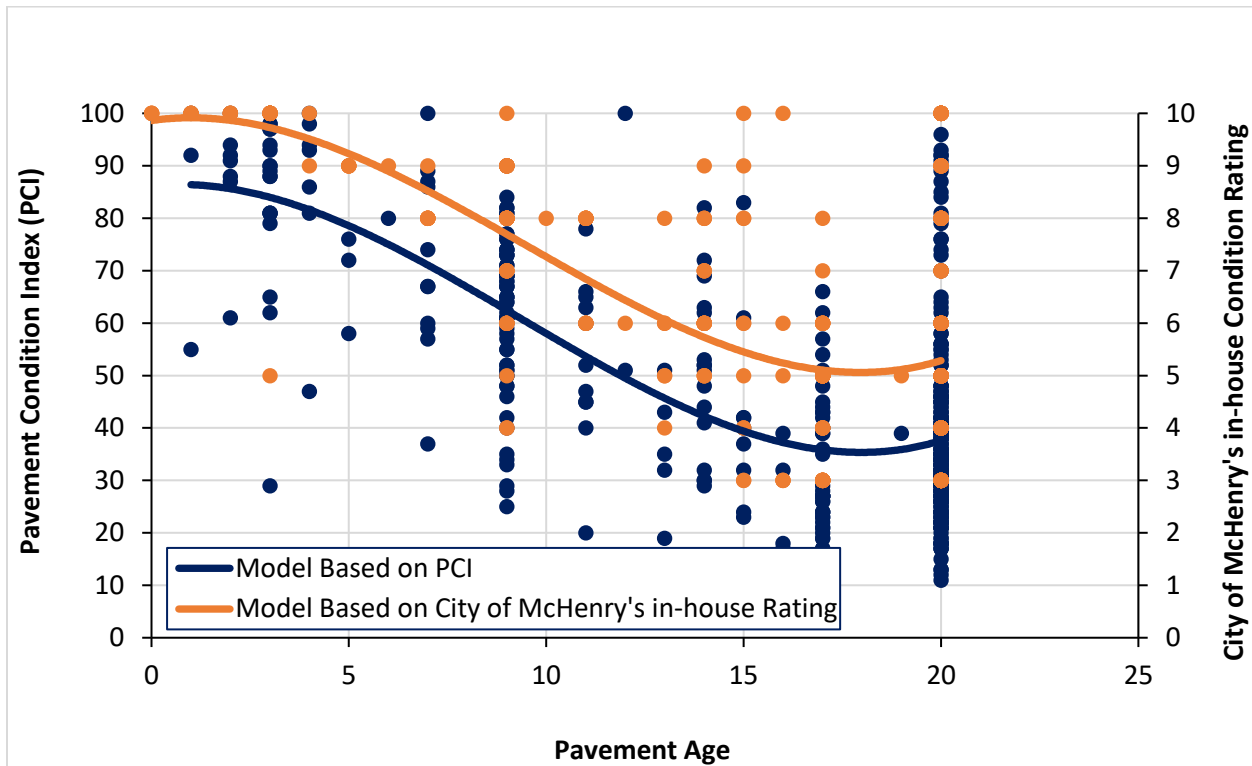


Figure 12. Pavement Performance Model Based on PCI and City of McHenry’s in-house Ratings.

For the City of McHenry, PCI family models are created based on the functional class of the pavement sections. The reliability of the pavement performance models is expected to increase with future pavement inspection and age data. From the traffic data, it was determined that both arterial and collector streets serve higher traffic volume; therefore, historical PCI and age data were used to create a single model for these streets. Figure 13 shows the PCI family model for the arterials and collector streets.

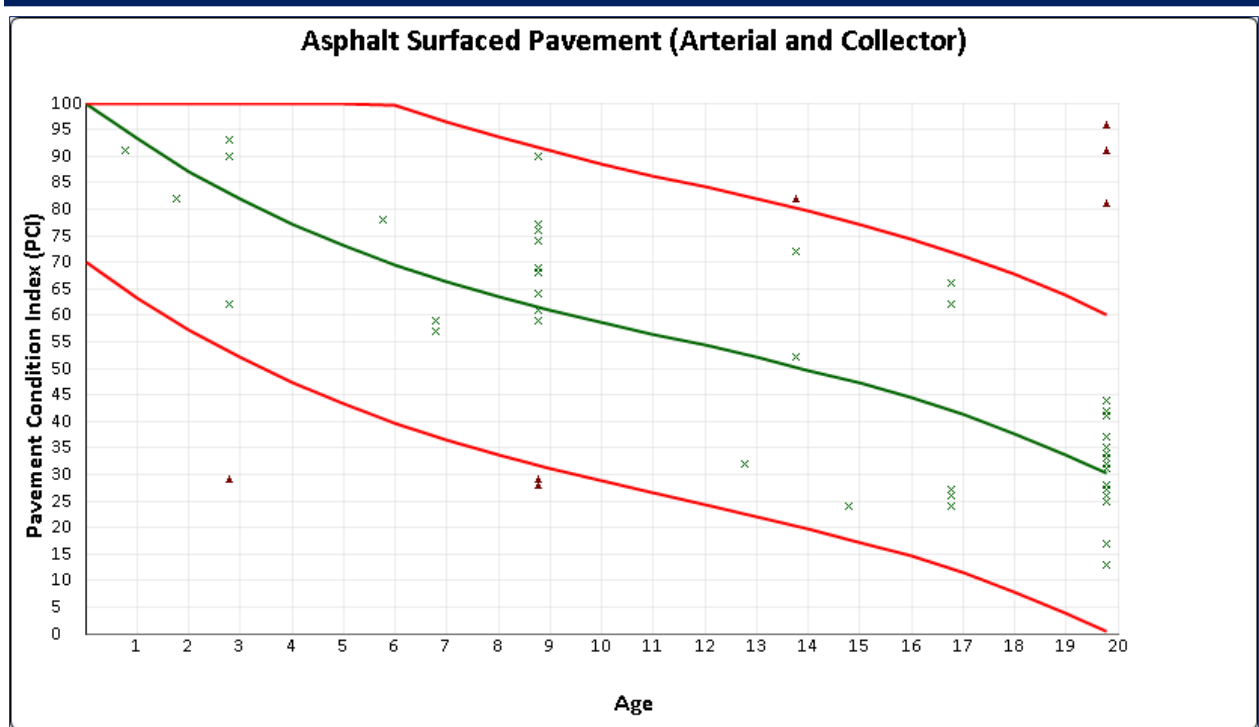


Figure 13. PCI Family Model for Arterials and Collector Streets.

Based on discussion with the City, separate models were developed for the industrial and residential streets due to the differences in traffic and M&R activities. Figure 14 and Figure 15 show PCI family models for the industrial and residential streets, respectively.

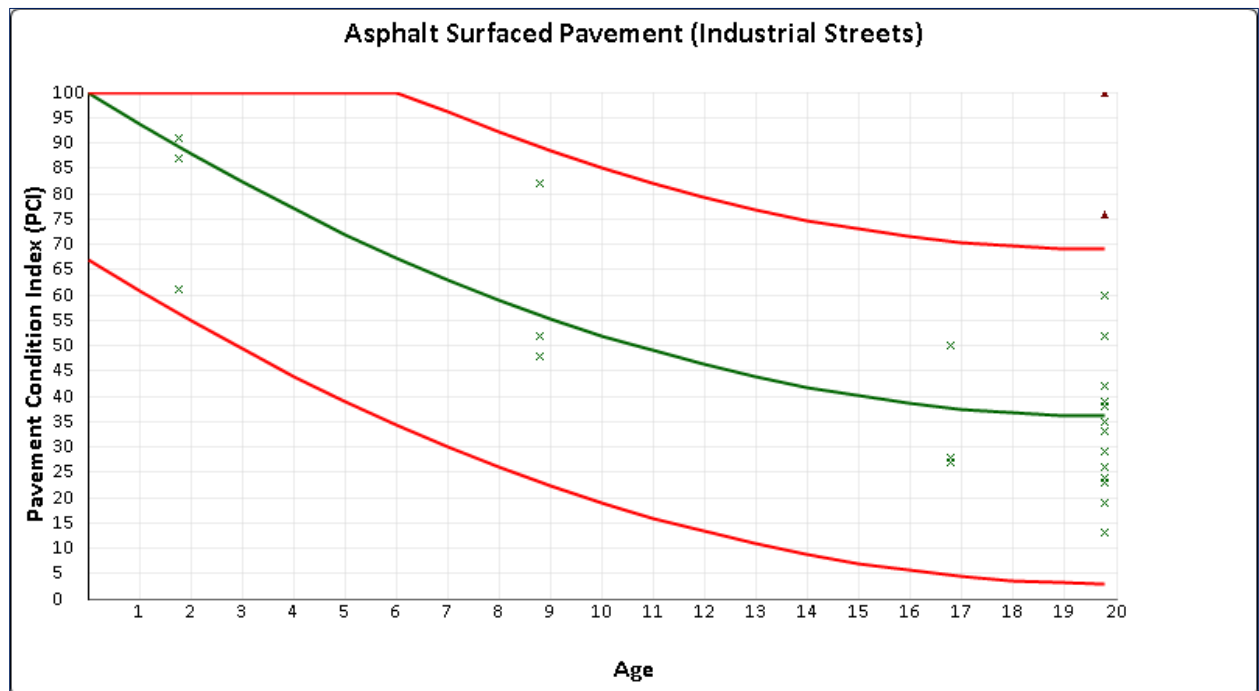


Figure 14. PCI Family Model for Industrial Streets.

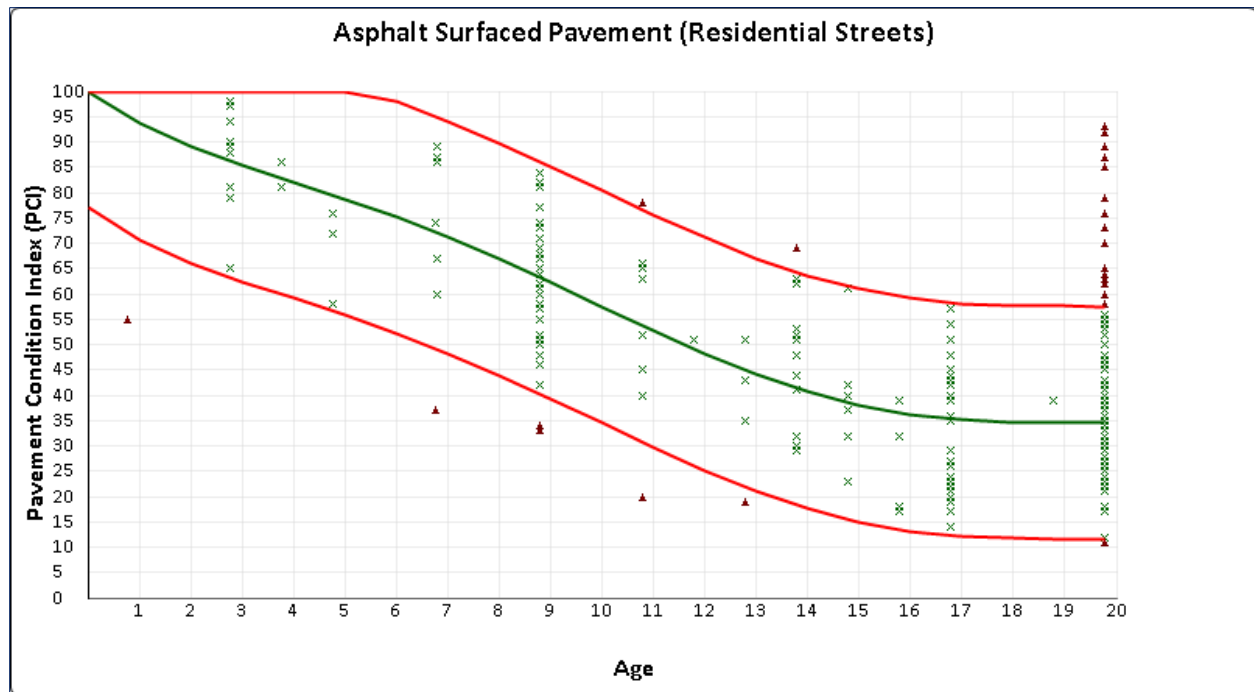


Figure 15. PCI Family Model for the Residential Streets.

3.3 Treatment Matrix

Based on the pavement preservation and rehabilitation techniques currently used in City of McHenry, and discussion with the City, ARA developed a treatment matrix that defines when a treatment will be performed based on PCI values and functional class. In PAVER™, critical PCI is defined as the PCI value at which the rate of PCI loss increases with time and the cost of applying localized preventative maintenance increases significantly. The M&R Family Assignment Tool is used to designate sections to receive specific M&R work, including:

- Localized Stopgap
- Localized Preventative, and
- Major M&R

The *Localized Stopgap* (PCI<Critical) option is used to indicate the use of Safety M&R policies, which allows PAVER™ to plan localized stopgap M&R work (pothole filling, etc.) on areas where the PCI is below the critical level. The *Localized Preventative* M&R (PCI>= Critical) option allows PAVER™ to plan M&R work in localized areas where the PCI is above critical. In this option, life extending credit, in years, can be given to any localized preventative work. Applying any preventative work where the PCI is still above critical will save money and improve the pavements life. The *Major M&R* option allows PAVER™ to plan any overlay or other major work where the resulting pavement has a PCI of 100.

Table 4. Treatment Matrix for Arterial, Collector, and Industrial Streets.

Treatment Matrix for Arterial, Collector, and Industrial Streets			
PCI	Stopgap	Localized Preventive	Major M&R
0	Patching & Repairs	Do Nothing	Reconstruction
10			
20			2" Mill and Overlay
30			
40			
50	Do Nothing	Crack Seal and Patching	Do Nothing
55			
60			
70			
80			
90			
100			

Table 5. Treatment Matrix for the Residential Streets.

Treatment Matrix for Residential Streets			
PCI	Stopgap	Localized Preventive	Major M&R
0	Patching & Repairs	Do Nothing	4" Mill and Overlay
10			
20			2" Mill and Overlay
30			
40			
50	Do Nothing	Crack Seal and Patching	Do Nothing
55			
60			
70			
80			
90			
100			

As observed from Table 4 and Table 5, pavement sections with PCI greater than the critical PCI (50) are selected for localized preventive treatment such as crack sealing or patching. Sections with PCI values less than critical PCI are assigned to stopgap policies related M&R work such as patching and repair. For major M&R, 2-inch mill and overlay and reconstruction are considered for the arterial, collector, and

industrials streets. However, based on the City’s recommendation, 4-inch and 2-inch mill and overlay option were planned for the residential streets.

The City of McHenry is planning to implement a policy of applying Reclamite® rejuvenator one year after new construction or placing an overlay on asphalt pavement. Reclamite® is a maltene-based cationic emulsion that adjusts the rheology of asphalt binder by increasing the penetration values and decreasing the viscosity to restore the asphalt/aggregate bond which results in extended service life of asphalt pavement.

3.4 Unit Costs

Using treatment information discussed with the City of McHenry, ARA determined the typical unit costs for each M&R item, listed in Table 6, based on ARA’s experience with agencies in the Chicagoland area. These costs were discussed with the City during the meeting on June 4, 2019. Costs were determined based on a square foot or linear foot basis. The unit costs used for PAVER™ analysis for 2019, are shown in Table 6. To run the PMS analysis in future, the unit costs can be updated based on the available unit price of materials and construction in the City of McHenry area.

Table 6. Treatment Unit Costs for the City of McHenry.

Treatment Type	Cost	Units
No Localized M & R	\$0.00	SqFt
Crack Sealing - AC	\$1.00	Ft
Patching - AC Shallow	\$4.50	SqFt
Patching - AC Deep	\$7.00	SqFt
2” Mill and Overlay	\$1.66	SqFt
4” Mill and Overlay	\$3.20	SqFt
Reconstruction - AC	\$4.20	SqFt

4. MAINTENANCE AND REHABILITATION ANALYSIS

Maintenance and rehabilitation (M&R) analysis can be performed in PAVER™ to generate an optimized work plan by assuming an annual funding level, or specifying a target PCI.

For the City of McHenry, the M&R funding analyses were based on the roadway inventory approved by the City, unit costs discussed with the City, and the City’s existing Major M&R policies. An inflation rate of 3% was used for all analyses. PCI family curves were developed based on existing pavement age and collected condition data. The critical PCI value was assumed to 55 for the arterial, collector, and industrial streets, whereas a critical PCI of 50 was assumed for the residential streets. The critical PCI value represents the condition at or below which Major M&R is recommended. The following five-year

M&R funding scenarios, in order of highest cost option to lowest cost option, were evaluated on the City’s pavements:

- Eliminate backlogs (unlimited funding)
- Funds to meet potential performance targets (PCI = 60)
- Add moderate funding relative to current levels (\$2.5M/year)
- Keep funding level current (\$2M/year)
- Maintain current condition (PCI =49.5)
- Do nothing (\$0/year)

Based on the City’s recommendation, another funding scenario was analyzed which included 5.0 million dollars funding in year 6 and \$1.7 million from year 7-10.

4.1 Funding Scenario Results

Using the M&R Working Plans module, the funding level scenarios were generated for a five-year period. For the current funding level (\$2M/year), it was assumed that \$0.5M/year would be allocated for stopgap and localized preventive distress maintenance, whereas \$1.5M/year would be spent for major M&R activities. Figure 16 displays the effect of different funding levels on the average pavement condition of the City of McHenry network. From Figure 16, it can be seen that current funding level is slightly better than maintain current condition over five years. Increasing the funding to \$2.5M/year will result in an increase of the average network PCI by about 3 points. Providing budget to eliminate backlogs results in an average PCI value of 82 after five years, while not spending any funds on the M&R program will deteriorate the network to an average PCI of 37 after five years.

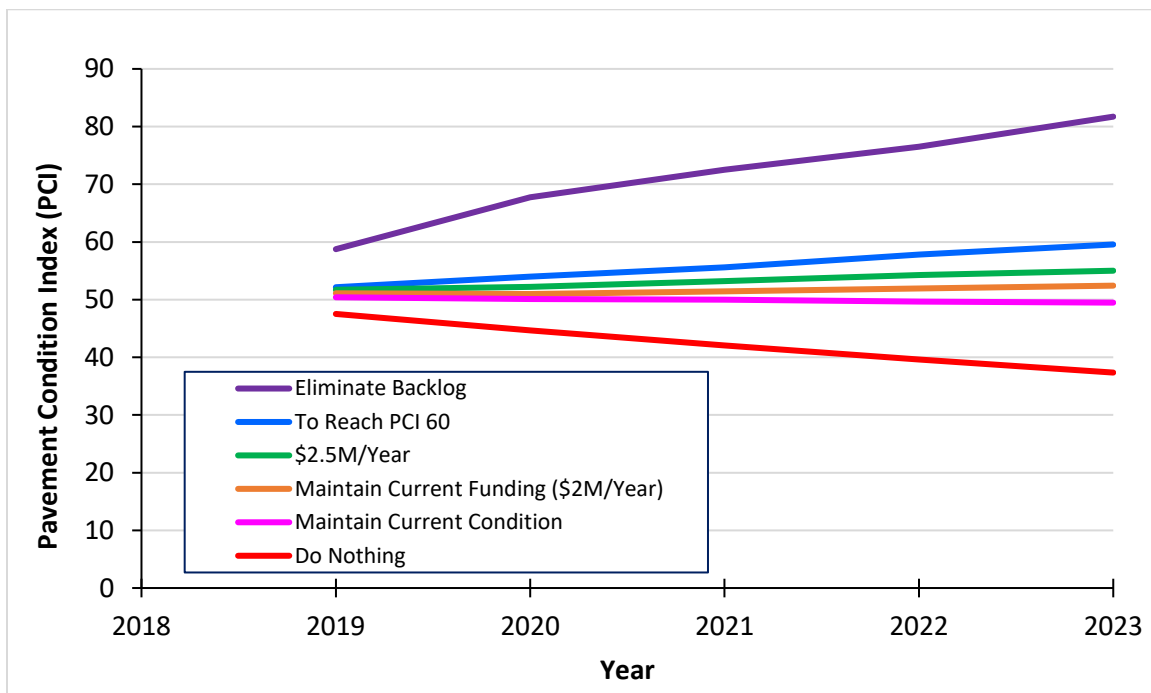


Figure 16. Effect of Funding Level on City’s Pavement Condition.

Figure 17 shows the amount of funding required to maintain target PCI for the various funding scenarios. To eliminate backlogs, it is required to invest about \$9.5M/year for next five years. To achieve average network PCI of 60, the required investment is, approximately, \$7.1M/year for the next five years.

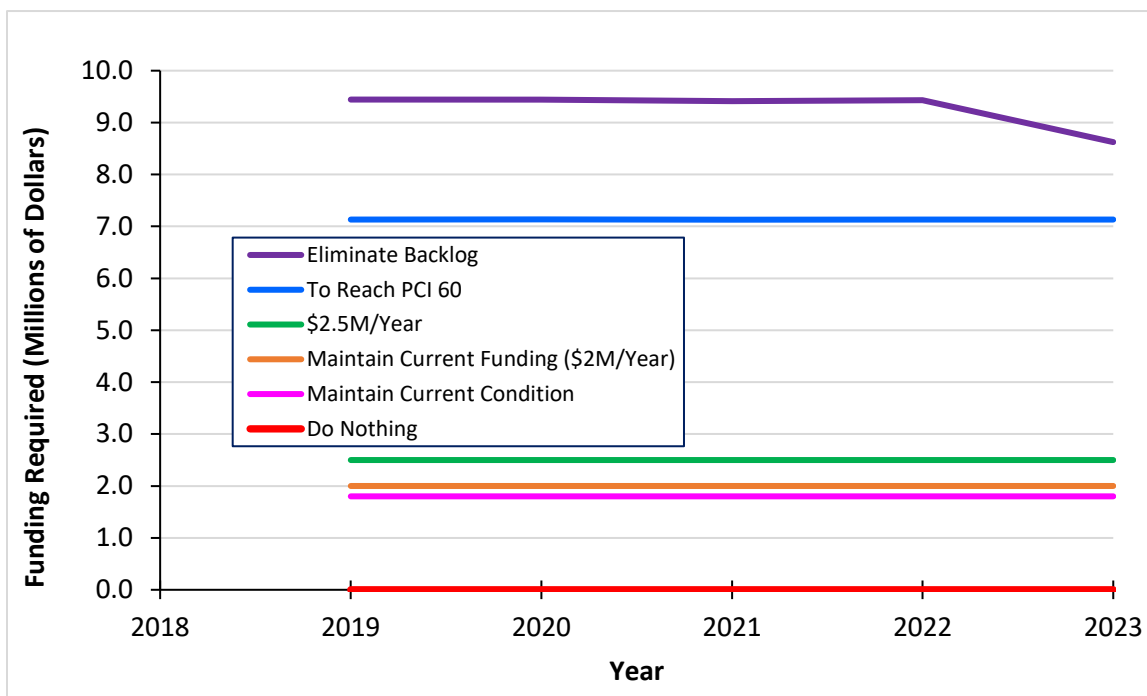


Figure 17. Required Funding Per Year to Achieve Different Condition Target.

The City of McHenry provided the list of projects scheduled in 2019 as shown in Table 7. Based on the City’s recommendation, these segments were committed to the 2019 M&R analysis with current funding level. The attributes of the committed projects are shown in Table 7.

Table 7. Committed Project for Year 2019.

Branch ID	From	To	Length (ft)	Width (ft)	PCI	Section Rank	Construction Date
CHICKAL_DR	Curran Rd.	Dead End	5,115.02	24.00	21.40	Collector	01-01-2002
Curran_Rd	Dartmoor Dr.	Elm St.	9,168.76	24.00	28.27	Collector	01-01-1999
KATMAI_TR	Chickaloon Dr.	North End	436.87	22.00	20.84	Residential	01-01-1999
MATANUS_TR	Chickaloon Dr.	Dead End	3,008.47	25.00	35.27	Residential	01-01-1999

The 2019 M&R plan, 5-Year major M&R plan, and 5-Year localized M&R plan are provided in Appendix A. Figure 18 shows the network condition distribution for the next five years with current funding level. It can be seen that currently about 50% of the pavement network is in ‘poor’ or ‘very poor’ condition. However, the average PCI of the network is expected to be 52.4 in 2023 with the current funding level;

an increase of 2.9 PCI points from the 2018 average PCI. Moreover, with the current funding level, the amount of 'poor' and 'very poor' condition would reduce to 40% by 2023.

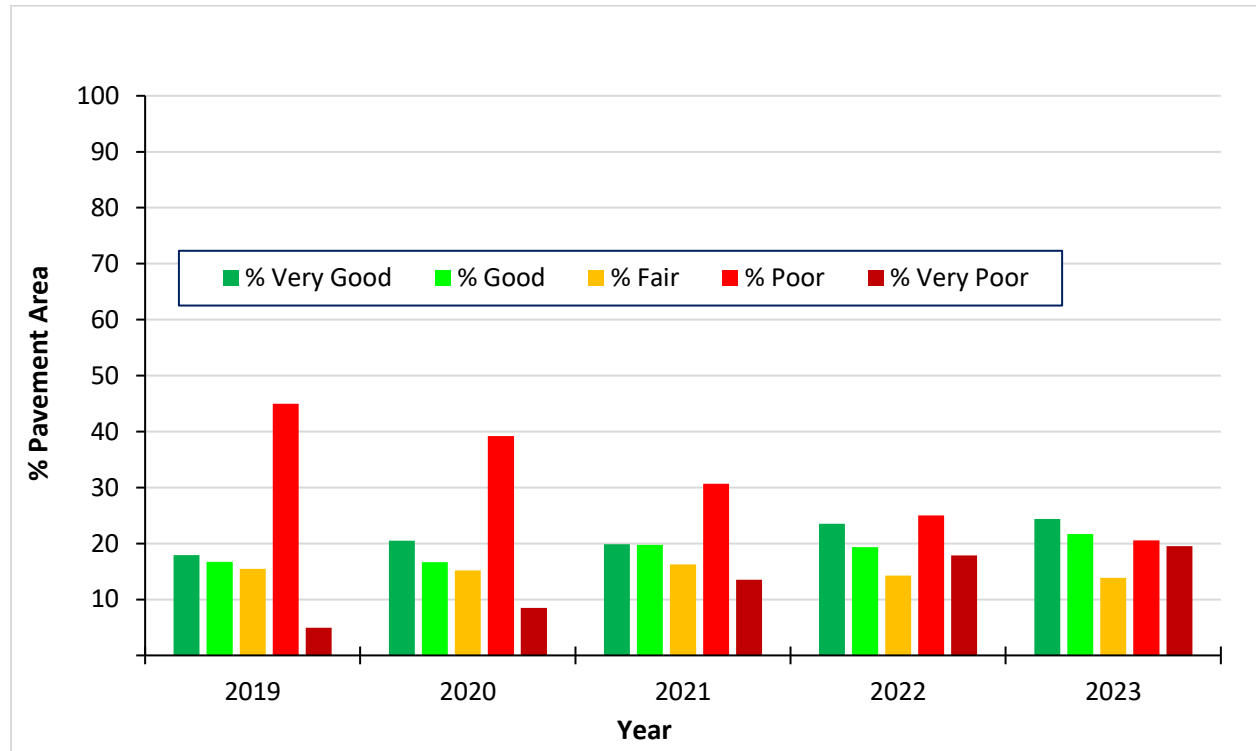


Figure 18. City’s Pavement Condition by Year with Current Funding Level (\$2M/Year).

Figure 19 shows the effect of variable funding levels on the average network PCI. Based on the City’s recommendation, this variable funding level analysis was performed by applying the current funding level (\$2.0M/Year) from Year 1 to 5, \$5.0M for Year 6, and \$1.7M/year from Year 7 to 10. This scenario will simulate the effect of additional funding in Year 6, and the reduction of funding from Year 7 to 10 (from the current \$2M/Year) to accommodate for the bond payments.

Figure 20 shows the condition distribution of the network for the variable funding levels. It can be noticed that the amount of 'poor' and 'very poor' area of the network has reduced to about 50% to 26%. As a result, about 57% of the pavement area of the network would in 'good' and 'very good' condition.

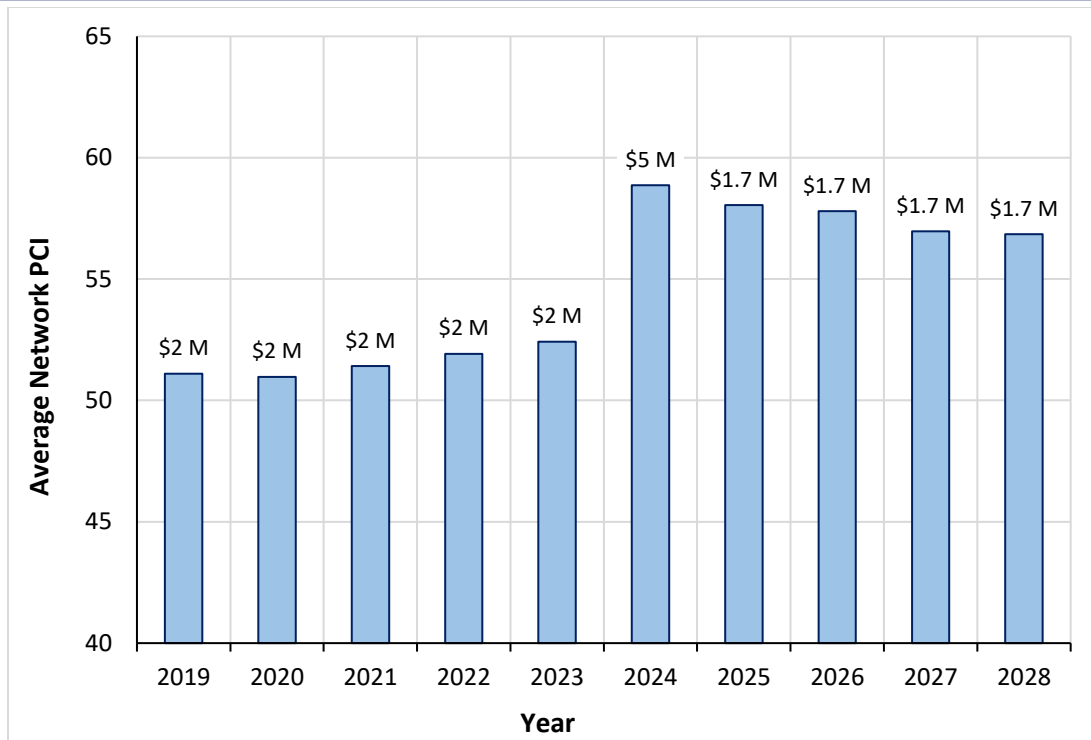


Figure 19. Average Pavement Condition with Proposed Variable Funding from Year 6 to 10.

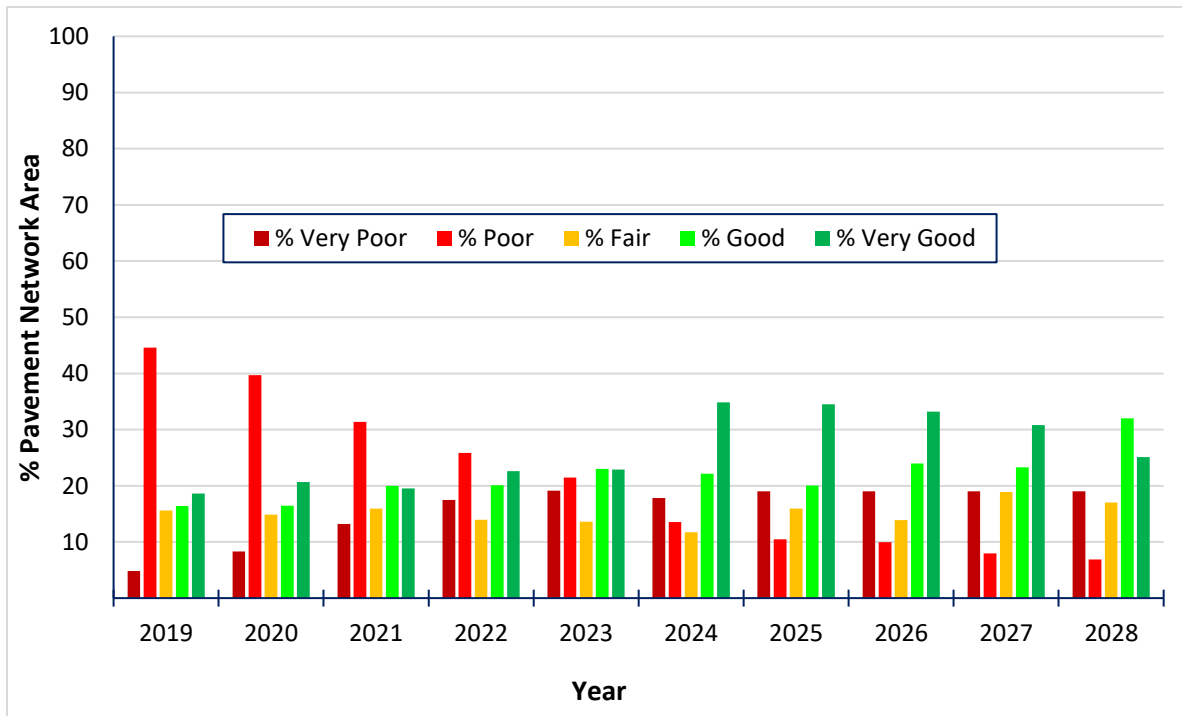


Figure 20. City's Pavement Condition Distribution with Proposed Variable Funding from Year 6 to 10.

4.2 Consequence of Local Distress Maintenance

Consequence of Localized Distress Maintenance plan calculates the cost and resulting condition of immediate implementation of local M&R, for the year of the most recent inspection. Based on the 2018 pavement condition survey, this plan estimated that the PCI of 188 sections would increase by 1.5 points with an investment of about \$116,115. Put another way, the local M&R plan adds approximately an additional 6 months of life (based on the performance models) to about 44% of the network area. The local distress maintenance policy includes crack seals and patching. Details of the localized distress maintenance plan based on the 2018 condition survey can be found in Appendix A. Table 8 shows the cost and pavement condition data of the consequence of local distress maintenance plan.

Table 8. Details of Consequence of Local Distress Maintenance Plan.

Number Sections	Policy Cost	Avg of Start PCI	Avg of End PCI
188	\$116,115	69.6	71.1

5. SUMMARY AND RECOMMENDATION

5.1 Summary

Pavement management can be defined as the systematic process of maintaining the pavements cost-effectively. The investment in pavement management system is rational considering a pavement management not only provides a consistent and rational management method to make decisions but also helps in optimal use of funds and reduces pavement rehabilitation, which results in extended pavement life and increased credibility with stakeholders.

In this effort to implement a pavement management system for the City of McHenry, pavement data was collected with a state-of-the-art digital survey vehicle equipped with laser crack measurement system. Pavement images were used in automated condition survey process to assess the type, severity, and extent of the distresses. The pavement inspection data was imported to the PAVER™ software to determine the pavement condition index (PCI) and analyze the pavement network. This PAVER database provides a comprehensive inventory of pavement sections with all attributes that are required for pavement management.

Based on the October 2018 survey, the average pavement condition index (PCI) value for the City is about 49.5, which indicates the pavement network is in overall 'fair' condition. Based on the City's recommendation several five-year M&R funding analyses were performed using PAVER™ including: (a) do nothing (\$0/year), (b) keep funding level current (\$2M/year), (c) add moderate funding relative to current levels (\$2.5M/year), (d) maintain current condition (PCI =49.5), (e) funds to meet potential performance targets (PCI = 60), and (f) eliminate backlogs. Also, a ten-year M&R funding analysis was performed which included current funding level for the first five-year, 5.0 million dollars funding in year 6 and 1.7 million dollar from year 7-10. It was found that about 50% of the pavement areas are currently in 'poor' and 'very poor' condition with the City's existing funding level.

5.2 Recommendations

5.2.1 Increase funding level

Currently more than 50% of the both collector and residential streets are in 'poor' and 'very poor' condition. This backlog will not be eliminated with the current level of funding. It was determined that an increase of \$0.5M per year would reduce the 'poor' and 'very poor' condition area from about 50% to 37%. It is recommended that the City should focus on applying routine preventive maintenance to pavement sections in 'good' and 'very good' condition. Preventive maintenance activities, such as crack sealing and localized patching, can cost-effectively extend the life of a pavement.

5.2.2 Routine update of PAVER™ pavement management system

ARA recommends updating the PAVER pavement management system annually to record the major M&R, stopgap and localized preventive maintenance activities, and pavement inventory changes (i.e., section split, new roads, jurisdictional changes, etc.). Based on the yearly updates of M&R activities, the City can perform M&R analysis with updated funding level (if available), accounting for previous year(s) actual projects.

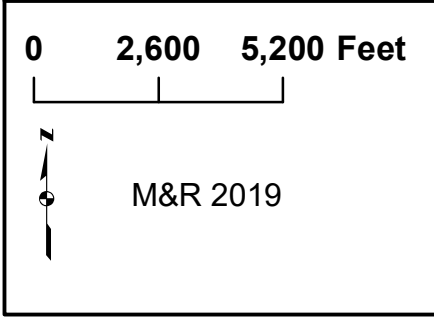
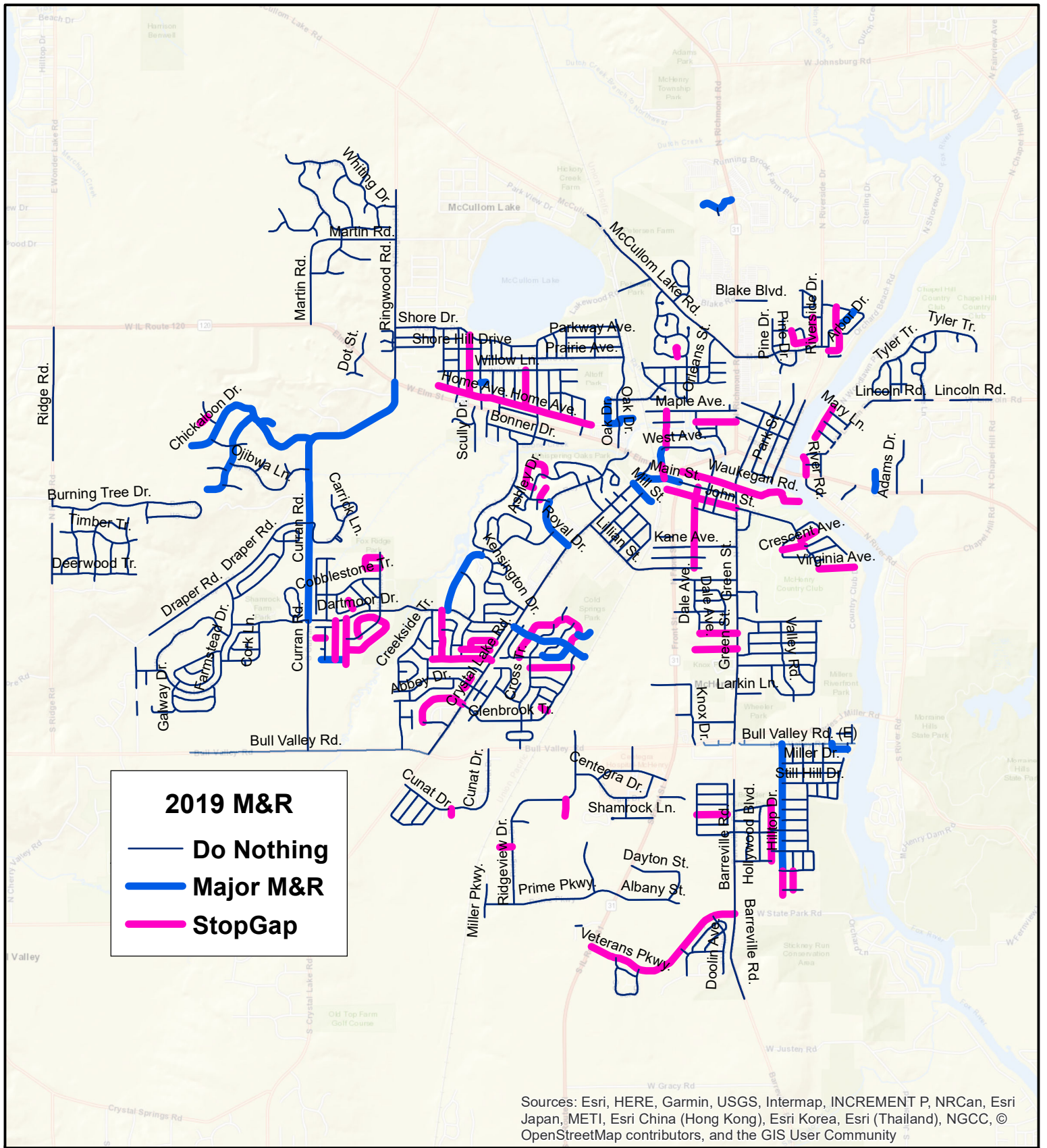
5.2.3 Routine pavement condition survey

For the City of McHenry, it is an excellent initiative to establish a pavement management system with the cooperation of Chicago Metropolitan Agency for Planning (CMAP). To realize the greatest benefit from this holistic effort, it is recommended that the City of McHenry continue to perform pavement condition surveys on a three to four-year cycle. The benefits of performing routine PCI surveys are many folded including:

- (a) A survey provides the current condition of the pavement network and helps determining the effectiveness of completed M&R activities performed in last few years,
- (b) Pavement performance models would be more accurate to predict future condition, and
- (c) Appropriate treatment and optimal funding allocation are possible to repair localized distresses based on the survey

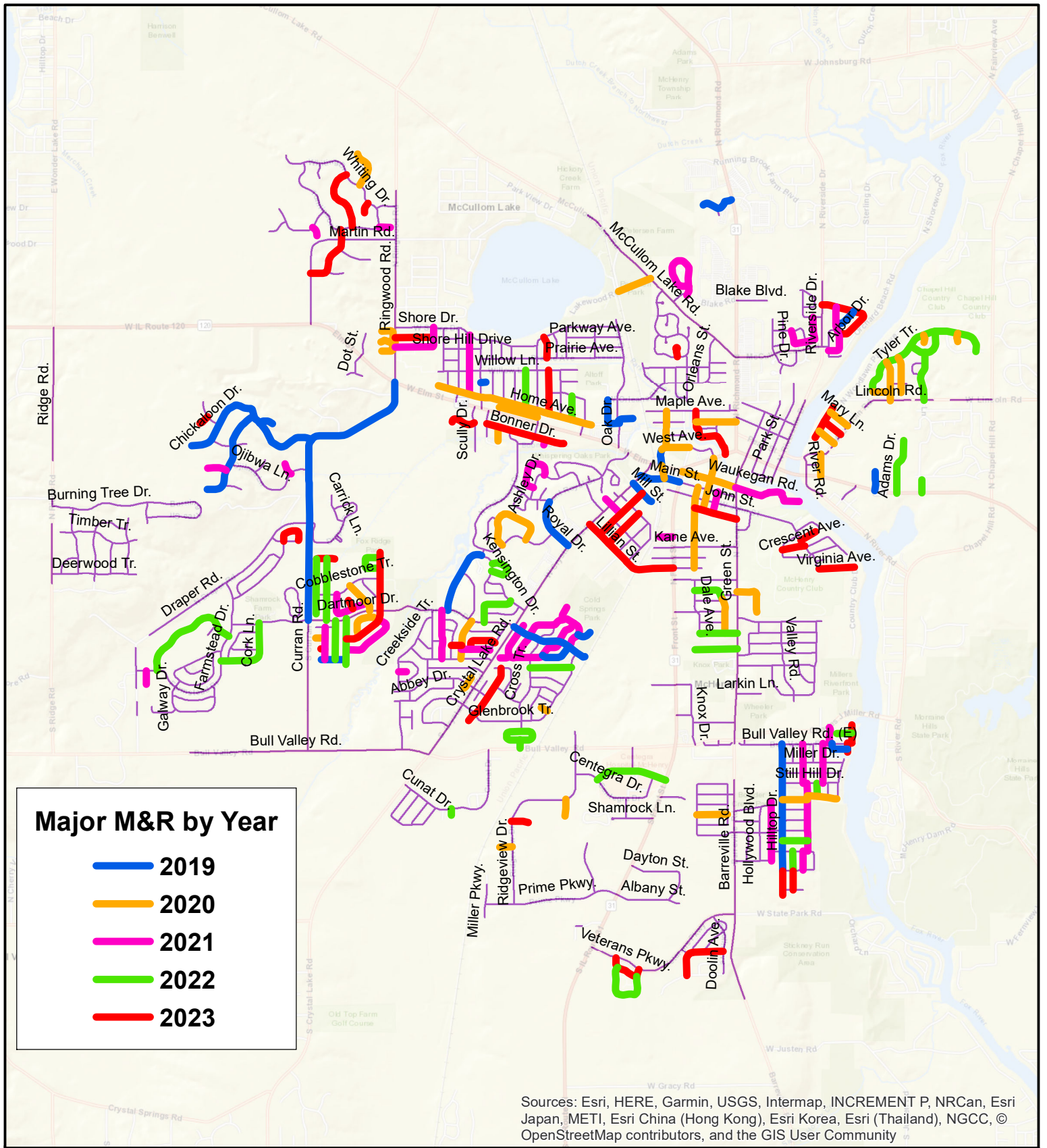
Appendix — A

1. 2019 M&R Plan
2. 2019-2023 Major M&R Plan
3. 2019-2023 Stopgap and Localized Preventive Maintenance M&R Plan
4. Local Distress Maintenance Plan 2019
5. List of Sections Selected for 2019-2023 Major M&R Plan
6. List of Pavement Sections with PCI



City of McHenry, Illinois





Major M&R by Year

- 2019
- 2020
- 2021
- 2022
- 2023

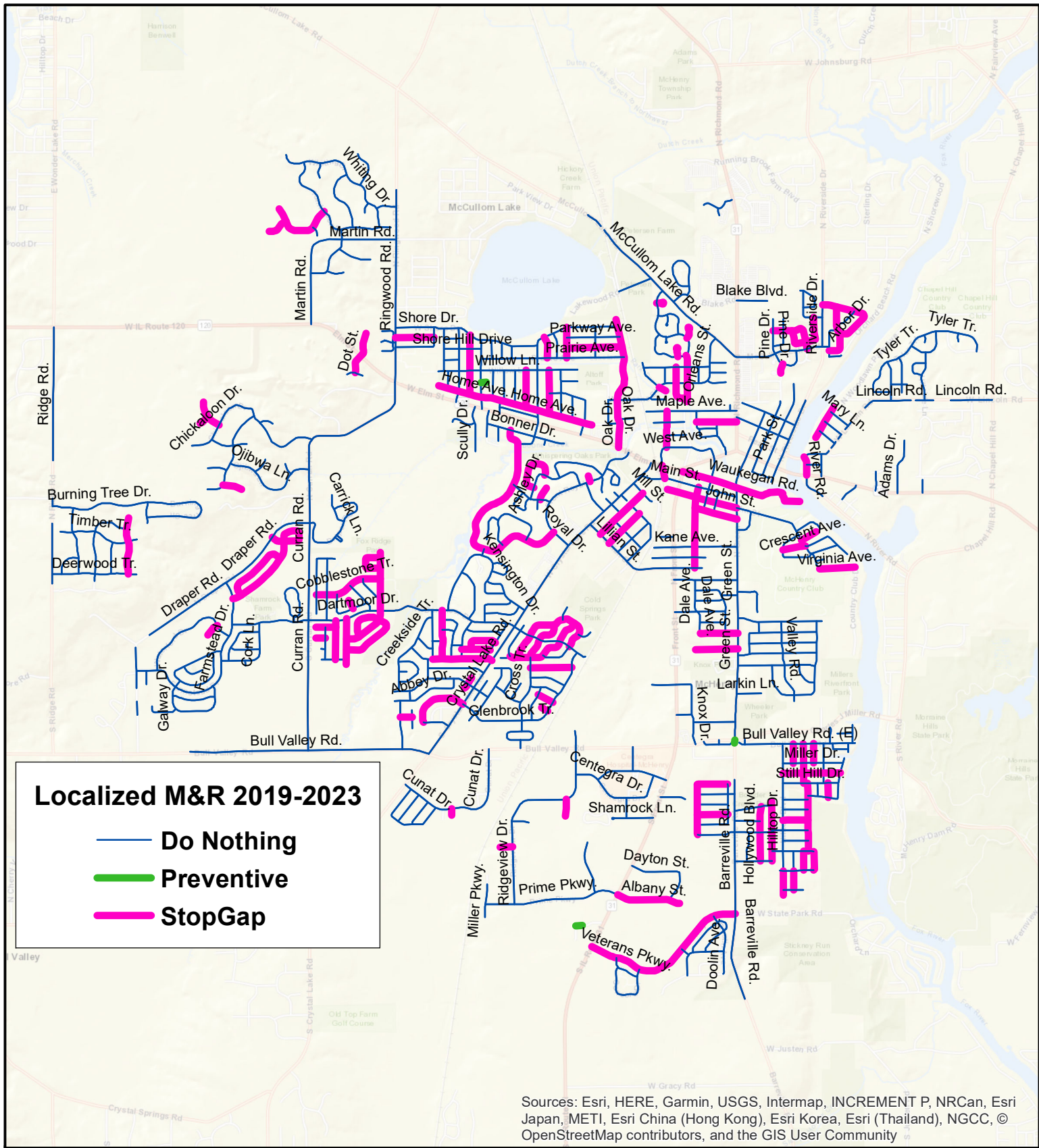
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

0 2,600 5,200 Feet

Major M&R by Year

City of McHenry, Illinois





Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

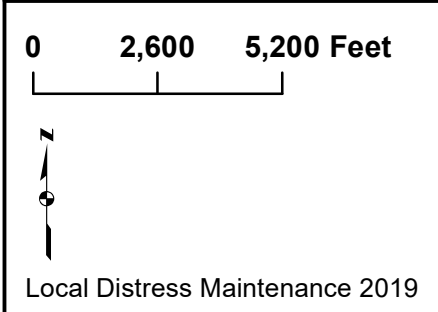
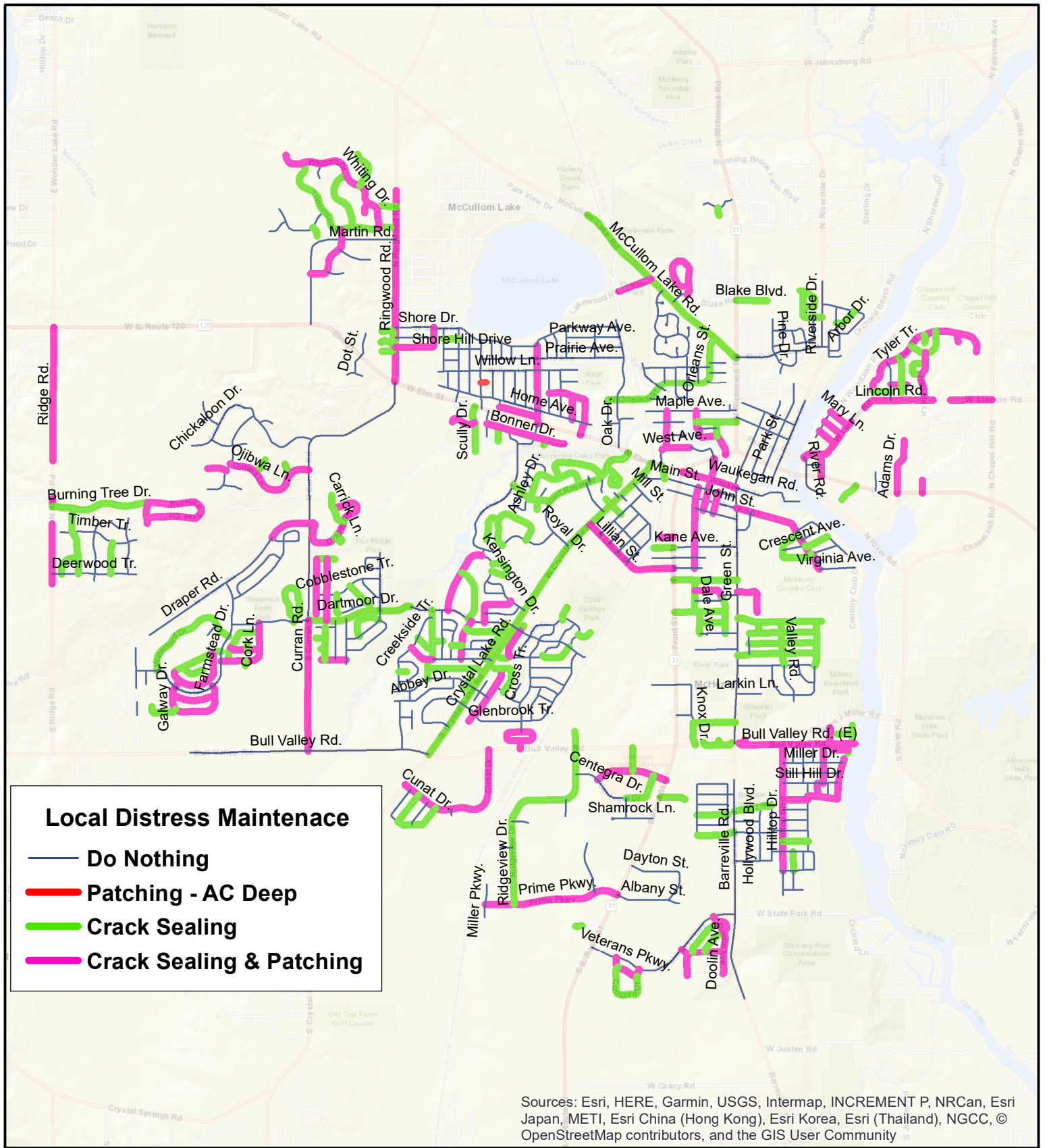
Localized M&R 2019-2023

- Do Nothing
- Preventive
- StopGap

0 2,600 5,200 Feet

5 Year Localized M&R

City of McHenry, Illinois



City of McHenry, Illinois



List of Selected Pavement Section for 2019-2023 Major M&R Plan

Year	Branch ID	Section ID	From	To	Length (ft)	Width (ft)	Rank	Pave_Type	Const_Date
2019	Bank_Dr	193282	Adams Dr.	Cul-De-Sac	587	33	Industrial	AC	N/A
2019	Beach_Rd	1001	Beach Rd.	Dead End	166	19	Residential	AC	01-01-2002
2019	Borden_St	199135	Elm St.	West Ave.	504	24	Industrial	AC	01-01-2010
2019	CHICKAL_DR	201451	Curran Rd.	Dead End	5,115	24	Collector	AC	01-01-2002
2019	Curran_Rd	20086	Dartmoor Dr.	Elm St.	9,169	24	Collector	AC	N/A
2019	DARTMOO_DR	202273	Crystal Lake Rd.	Union Pacific Railroad	2,452	40	Collector	AC	N/A
2019	Diamond_Dr	1003	IL Rte 31	East End	1,043	25	Industrial	AC	N/A
2019	Eaglewo_rl	196097	Newport Tr.	West End	772	25	Residential	AC	01-01-2002
2019	Greendl_Ct	196344	Loyola Dr.	Dead End	424	25	Residential	AC	N/A
2019	GREGG_DR	202081	Bull Valley Rd.	Bally Rd.	646	22	Residential	AC	N/A
2019	HILLTOP_DR	199340	Bull Valley Rd.	Pleasant View Dr.	3,921	22	Residential	AC	01-01-2002
2019	Indust_Dr	20339	Oak Dr.	Althoff Park Entrance	1,515	30	Industrial	AC	N/A
2019	KATMAI_TR	201456	Chickaloon Dr.	North End	437	22	Residential	AC	N/A
2019	Main_St	20149	Crystal Lake Rd.	Front St.	1,232	42	Collector	AC	01-01-2015
2019	MATANUS_TR	199960	Chickaloon Dr.	Dead End	3,008	25	Residential	AC	N/A
2019	MILL_ST	199057	Crystal Lake Rd.	Dead End	799	23	Industrial	AC	01-01-2010
2019	Norman_Dr	196377	Joyce Ln.	Dartmoor Dr.	982	25	Residential	AC	01-01-2006
2019	Plumros_Ln	193944	Hemlock Dr.	Arbor Dr.	703	25	Residential	AC	N/A
2019	Royal_Dr	26502	Crystal Lake Rd.	Chesterfield Dr.	1,640	39	Collector	AC	N/A
2019	WATERS_DR	200090	Dartmoor Dr.	Kensington Dr.	2,181	31	Residential	AC	01-01-2004
2020	3rd_St	199226	Elm St.	James St.	1,654	25	Residential	AC	N/A
2020	Albert_Dr	195081	Whiting Dr.	North End	1,173	26	Residential	AC	01-01-2002
2020	Bank_Dr	196028	Highbridge Tr.	Cul-De-Sac	293	25	Residential	AC	N/A
2020	BEACH_DR	202153	Riverside Dr. (S)	Hilltop Blvd.	1,686	21	Residential	AC	N/A
2020	Bolger_Ct	196954	Ridgeview Dr.	Cul-De-Sac	389	32	Industrial	AC	N/A
2020	Borden_St	199141	Elm St.	Main St.	398	24	Residential	AC	01-01-2004
2020	Bush_Trl	193622	Regan Blvd.	Tyler Tr.	539	25	Residential	AC	N/A
2020	Cart_Wr_rl	196261	Cobblestone Tr.	Dartmoor Dr.	1,024	25	Residential	AC	N/A
2020	Carter_Ct	193879	Tyler Tr.	Cul-De-Sac	262	27	Residential	AC	N/A
2020	CENTER_ST	199201	Main St.	Grove Ave.	2,518	21	Residential	AC	N/A
2020	Century_Ct	196988	Ridgeview Dr.	Dead End	532	25	Industrial	AC	N/A

Year	Branch ID	Section ID	From	To	Length (ft)	Width (ft)	Rank	Pave_Type	Const_Date
2020	Charles_St	203358	Lincoln Rd.	Elm St.	696	25	Residential	AC	N/A
2020	Chesape_Dr	198497	Chesapeake Dr	Chesapeake Dr	1,726	24	Residential	AC	N/A
2020	Clinton_Ct	193791	Tyler Tr.	Cul-De-Sac	243	25	Residential	AC	01-01-2002
2020	Colony_Ct	196486	Glenbrook Tr.	Dead End	220	25	Residential	AC	01-01-2002
2020	Commerc_ve	201371	Highview Ave.	Meadow Ln.	1,209	21	Residential	AC	01-01-2010
2020	Emily_Ln	203357	Lincoln Rd.	River Ln.	609	18	Residential	AC	01-01-2008
2020	Geneva_Pl	197240	Amberwood Pl.	Donnelly Pl.	950	25	Residential	AC	N/A
2020	GLEN_DR	200020	Bonner Dr.	South End	437	22	Residential	AC	N/A
2020	Grand_Ave	201203	Freund Ave.	Richmond Rd.	1,234	24	Residential	AC	01-01-2010
2020	HOME_AVE	201356	East End	Sunset Dr.	4,890	24	Residential	AC	N/A
2020	Hoover_rl	193708	Tyler Tr.	Cul-De-Sac	1,101	25	Residential	AC	N/A
2020	Mary_Ln	203355	Lincoln Rd.	River Ln.	689	18	Residential	AC	01-01-2005
2020	NORTH_DR	199120	West Ave.	Maple Ave.	1,019	28	Residential	AC	N/A
2020	Peterse_Rd	199006	McCullom Lake Rd.	Lakewood Rd.	1,060	21	Residential	AC	N/A
2020	Reagan_vd	193661	Lincoln Rd.	Tyler Tr.	1,221	25	Collector	AC	01-01-2005
2020	Shepher_Ln	201945	Green St.	Cul-De-Sac	1,208	24	Residential	AC	N/A
2020	SPRINGB_CT	200169	South End	North End	401	24	Residential	AC	01-01-2005
2020	Stonebr_rl	195987	Whitmore Tr.	Whitmore Tr.	1,169	25	Residential	AC	N/A
2020	TIMOTHY_LN	199410	Clover	Young St.	1,071	28	Residential	AC	N/A
2020	Waukega_Rd	201233	Front St.	Green St.	1,731	35	Residential	AC	N/A
2020	WEST_AVE	201214	Millstream Dr.	North Dr.	880	35	Residential	AC	N/A
2020	WILTSHI_DR	200200	Oakwood Dr.	Oakwood Dr.	2,493	24	Residential	AC	01-01-2008
2020	WINDRID_DR	200121	Greenbrier Dr.	Dartmoor Dr.	1,254	24	Residential	AC	N/A
2021	AUGUSTA_DR	200139	Dartmoor Dr.	Greenbrier Dr.	1,507	24	Residential	AC	01-01-2002
2021	BONITA_NE	199280	Forrest Rd.	Beach Dr.	1,849	21	Residential	AC	N/A
2021	BROADWAY	199357	Bull Valley Rd.	Sunrise View St.	3,908	21	Residential	AC	N/A
2021	CAMBRID_DR	202310	Abbingdon Dr.	Windridge Dr.	885	24	Residential	AC	01-01-2002
2021	Castlew_rl	195968	London Tr.	Cartwright Tr.	957	25	Residential	AC	01-01-2006
2021	CREEKSI_CT	202336	Creekside Tr.	East End	242	24	Residential	AC	01-01-2005
2021	CUMBERL_IR	200053	Ashley Dr.	Ashley Dr.	1,596	24	Residential	AC	N/A
2021	Depaul_Ct	196708	Loyola Dr.	North End	418	25	Residential	AC	01-01-2007
2021	Evergre_ir	194802	Blake Ave.	Evergreen Cir.	2,495	25	Residential	AC	01-01-2005
2021	Farmste_Ct	195665	Farmstead Dr	Cul-De-Sac	424	24	Residential	AAC	01-01-2007

Year	Branch ID	Section ID	From	To	Length (ft)	Width (ft)	Rank	Pave_Type	Const_Date
2021	Fieldst_rl	196061	Newport Tr.	Dead End	1,865	25	Residential	AC	01-01-2002
2021	FOURTH_ST	199241	Main St.	James St.	673	22	Residential	AC	N/A
2021	HAYWARD_CT	201478	Matanuska Tr.	West End	596	32	Residential	AC	N/A
2021	Hemlock_Dr	194490	Arbor Dr.	Kennedy Dr.	1,660	25	Residential	AC	N/A
2021	Highbri_rl	196138	Jordan Ct.	Eaglewood Tr.	1,003	25	Residential	AC	01-01-2002
2021	Joyce_Ct	196355	Joyce Ln.	Cul-De-Sac	309	25	Residential	AC	N/A
2021	Joyce_Ln	196356	Oakton St.	Loyola Dr.	2,542	25	Residential	AC	01-01-2004
2021	LAKEWOO_VE	199877	Home Ave.	Shore Dr.	1,828	22	Residential	AC	N/A
2021	LAWN_CT	199408	Bonner Dr.	Cul-De-Sac	171	21	Residential	AC	01-01-2002
2021	London_rl	195970	Cobblestone Tr.	Castlewood Tr.	594	25	Residential	AC	01-01-2010
2021	Loyola_Dr	196310	Dead End	Dartmoor Dr.	3,342	25	Residential	AC	N/A
2021	MCHENRY_VE	199390	Bull Valley Rd.	Stillhill Dr.	1,725	23	Residential	AC	N/A
2021	Meadow_ve	201213	Front St.	Dead End	397	24	Residential	AC	01-01-2010
2021	Oakton_Ct	196631	Dartmoor Dr.	Dead End	190	25	Residential	AC	N/A
2021	Oakton_St	196632	Joyce Ct.	Dartmoor Dr.	907	25	Residential	AC	N/A
2021	PIN_OAK_CT	199993	Ojibwa Ln.	Cul-De-Sac	368	27	Residential	AC	01-01-2010
2021	Redwood_Ln	194420	Chestnut Dr.	Dead End	1,734	25	Residential	AC	N/A
2021	SHERMAN_DR	201284	Ringwood Rd.	Shore Dr.	1,766	24	Residential	AC	N/A
2021	Tomlins_Ct	194945	Whiting Dr.	Cul-De-Sac	350	25	Residential	AC	01-01-2010
2021	Waukega_Rd	201234	Green St.	East End	2,236	37	Residential	AC	01-01-2010
2021	Whiteoa_Ct	194969	Whiteoak Dr.	South End	301	27	Residential	AC	N/A
2021	WOOD_ST	199070	Crestwood Dr.	West End	652	23	Residential	AC	01-01-2010
2022	Adams_Dr	193339	Elm St.	North End	1,700	33	Industrial	AC	N/A
2022	BONNIE_AE	199355	Pleasant View Dr.	Sunrise View St.	610	21	Residential	AC	01-01-2002
2022	BROMLEY_DR	202257	Kensington Dr.	Pyndale Dr.	1,381	24	Residential	AC	N/A
2022	Camden_St	196880	Cunat Dr.	York Town St.	199	24	Residential	AC	N/A
2022	Concord_Dr	197136	Veterans Pkwy.	Veterans Pkwy.	1,984	24	Residential	AC	01-01-2005
2022	Cork_Ln	195504	Farmstead Dr.	Dartmoor Dr.	2,252	24	Residential	AC	N/A
2022	Eisenho_vd	193451	Tyler Tr.	Tyler Tr.	1,366	25	Residential	AC	N/A
2022	Hillsid_Ln	193835	Lincoln Rd.	Eisenhower Blvd.	1,924	32	Collector	AC	01-01-2012
2022	HUNTER_TH	202184	Broadway St.	Hilltop Blvd.	778	21	Residential	AC	N/A
2022	Inverne_rl	196194	Edgewood Tr.	Dartmoor Dr.	1,209	25	Residential	AC	01-01-2000
2022	Kresswo_Dr	196549	Bull Valley Rd.	Bull Valley Rd.	2,173	28	Residential	AC	N/A

Year	Branch ID	Section ID	From	To	Length (ft)	Width (ft)	Rank	Pave_Type	Const_Date
2022	LAKELAN_VE	198708	Home Ave.	Ramble Rd.	743	19	Residential	AC	01-01-2010
2022	Landcas_ir	195926	Whitmore Tr.	Whitmore Tr.	1,190	25	Residential	AC	N/A
2022	Medical_Dr	196895	IL Rte 31	460' W of Med Ctr Dr.	2,246	24	Industrial	AC	01-01-2017
2022	Newport_rl	196231	Dead End	Dartmoor Dr.	1,412	25	Residential	AC	N/A
2022	Oregon_rl	196391	Cross Tr.	Glenbrook Tr.	1,287	25	Residential	AC	N/A
2022	PEARL_AVE	199386	Stillhill Dr.	Beach Dr.	412	21	Residential	AC	N/A
2022	PLEASAN_VE	199785	Home Ave.	Willow Ln.	1,147	21	Residential	AC	N/A
2022	Prairie_St	201812	Bally Rd.	Dead End	474	21	Residential	AC	01-01-2010
2022	SILBURY_CT	202238	Kensington Dr.	Kensington Dr.	1,139	24	Residential	AC	01-01-2010
2022	St_Paul_ve	202056	Green St.	West End	1,308	27	Residential	AC	01-01-2004
2022	TIMOTHY_LN	199409	Dale Ave.	Clover	1,020	28	Residential	AC	01-01-2018
2022	Tyler_Tr	193393	Bush Tr.	Truman Tr.	4,573	25	Residential	AC	01-01-2005
2022	Waterfo_Dr	195399	Farmstead Dr.	Farmstead Dr.	3,390	28	Residential	AC	N/A
2022	Wedgewo_rl	196167	Dartmoor Dr.	Blue Grass Tr.	1,916	25	Residential	AC	01-01-2008
2022	Wimblet_rl	196118	Blue Grass Tr.	Cul-De-Sac	1,705	25	Residential	AC	N/A
2022	Young_St	202014	Dale Ave.	Green St.	1,172	30	Residential	AC	N/A
2023	Arbor_Dr	193912	Riverside Dr.	Hemlock Dr.	2,388	30	Residential	AC	01-01-2006
2023	ASHLAND_DR	202307	Abbington Dr.	Cambridge Dr.	988	24	Residential	AC	N/A
2023	Bally_Rd	199403	Gregg St.	Prairie St.	840	23	Residential	AC	01-01-2010
2023	BENNING_LN	199771	Martin Rd.	Tomlinson Dr.	1,979	28	Residential	AC	01-01-2010
2023	Bluegra_rl	195908	Wimbleton Tr.	Cul-De-Sac	557	25	Residential	AC	01-01-2010
2023	BONNER_DR	201372	Beach Rd.	Dead End	2,460	21	Residential	AC	N/A
2023	BONNIE_AE	199356	Foxview Highland Dr.	Pleasant View Dr.	593	25	Residential	AC	N/A
2023	BRITTAN_DR	201283	Sherman	Ringwood Rd.	1,181	24	Residential	AC	N/A
2023	CRESCEN_VE	201090	John St.	Golfview Ave.	702	22	Residential	AC	01-01-2012
2023	CRESTWO_DR	201413	Mill St.	Lillian St.	1,830	22	Residential	AC	N/A
2023	Driftwo_rl	196612	Barnwood	South End	1,959	31	Residential	AC	01-01-2002
2023	Farring_ON	202312	Windridge Dr.	Canterbury Dr.	312	24	Residential	AC	N/A
2023	Freund_ve	199197	Maple Ave.	Elm St.	2,000	21	Collector	AC	01-01-2010
2023	HILLTOP_DR	199342	Pleasant View Dr.	Foxview Highlands Dr.	751	22	Residential	AC	N/A
2023	ILLIAMN_TR	201450	Denali Tr.	West End	318	24	Residential	AC	N/A
2023	Indepen_Ct	196077	Highbridge Tr.	Cul-De-Sac	127	25	Residential	AC	01-01-2010
2023	James_St	201251	Center St.	Green St.	1,341	24	Residential	AC	N/A

Year	Branch ID	Section ID	From	To	Length (ft)	Width (ft)	Rank	Pave_Type	Const_Date
2023	JUDY_LN	201076	John St.	Riverstream Dr.	535	30	Residential	AC	N/A
2023	Lillian_St	20079	Front St.	Crystal Lake Rd.	3,163	25	Collector	AC	01-01-2012
2023	Limeric_Ln	195349	Shannon Dr.	Shannon Dr.	959	24	Residential	AC	N/A
2023	Metalma_ay	196920	Ridgeview Dr.	Dead End	529	25	Industrial	AC	01-01-2002
2023	Mourine_Ln	203356	Lincoln Rd.	River Ln.	645	18	Residential	AC	N/A
2023	Murphy_Dr	197081	Doolin Ln.	Flynn St.	1,763	24	Residential	AC	01-01-2014
2023	NORTH_AVE	198621	Home Ave.	Shore Dr.	2,020	17	Residential	AC	N/A
2023	River_Ln	203352	North End	South End	1,081	19	Residential	AC	01-01-2003
2023	Rose_Ave	195030	Whiting Dr.	Tomlinson Dr.	2,039	25	Residential	AC	01-01-2012
2023	Savoy_Ln	197105	Concord Dr.	Concord Dr.	1,216	24	Residential	AC	01-01-2004
2023	SOUTH_ST	201417	Lillian St.	Logan St.	1,312	21	Residential	AC	N/A
2023	SPRINGD_LN	201377	Scully Dr.	West End	788	31	Residential	AC	N/A
2023	Steeple_Ct	196246	Castlewood Tr.	Cul-De-Sac	285	25	Residential	AC	01-01-2008
2023	Trapper_Ct	194770	Boone Creek Dr.	North End	397	25	Residential	AC	N/A
2023	VIRGINA_VE	201899	John St.	Country Club Dr.	1,099	19	Residential	AC	N/A
2023	Whiting_Ct	195106	Whiting Dr.	South End	323	25	Residential	AC	01-01-2010
2023	Whitmor_rl	196292	Dartmoor Dr.	North End	1,797	25	Residential	AC	N/A
2023	Whitmor_rl	196293	Dartmoor Dr.	Newport Tr.	1,504	25	Residential	AC	01-01-2010

List of Pavement Sections

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
3rd_St	199226	Elm St.	James St.	1,654	25	Residential	N/A	45
ABBEY_DR	202368	Winding Creek Dr.	Brookwood Tr.	2,221	24	Residential	N/A	18
ABBINGT_DR	200111	Dartmoor Dr.	Greenbrier Dr.	1,262	24	Residential	2010	62
Adams_Dr	193339	Elm St.	North End	1,700	33	Industrial	N/A	60
Albany_St	202221	IL Rte 31	East End	1,980	26	Industrial	N/A	33
Albert_Dr	195081	Whiting Dr.	North End	1,173	26	Residential	2002	44
Allen_Ave	199271	Green St.	John St.	869	24	Residential	N/A	22
Almond_Ln	194390	Hazelwood Dr.	Hazelwood Dr.	1,129	25	Residential	N/A	70
Amberwo_Pl	197257	Dorchester Pl.	Biscayne Rd.	1,558	25	Residential	N/A	31
AMHERST_CT	201445	Bennington Dr.	Cul-De-Sac	1,046	24	Residential	2002	24
Anne_St	201934	Green St.	Front St.	1,967	25	Collector	N/A	69
April_Ave	194911	Whiteoak Dr.	Dead End	645	32	Residential	2003	32
Arbor_Dr	193912	Riverside Dr.	Hemlock Dr.	2,388	30	Residential	2006	35
ASHLAND_DR	202307	Abbington Dr.	Cambridge Dr.	988	24	Residential	N/A	35
ASHLEY_DR	201398	Sussex Dr.	Front Royal Dr.	2,393	31	Residential	2016	94
AUGUSTA_DR	200139	Dartmoor Dr.	Greenbrier Dr.	1,507	24	Residential	2002	39
Ayre_Dr	195563	Homestead Dr.	Homestead Dr.	2,157	24	Residential	2010	82
Bally_Rd	199403	Gregg St.	Prairie St.	840	23	Residential	N/A	58
Bank_Dr	197319	IL Rte 31	Knox Dr.	467	30	Industrial	N/A	28
Bank_Dr	196028	Highbridge Tr.	Cul-De-Sac	293	25	Residential	N/A	41
Bank_Dr	193282	Adams Dr.	Cul-De-Sac	587	33	Industrial	N/A	52
Barnwoo_rl	196646	Courtland Tr.	Cul-De-Sac	1,294	25	Residential	2016	90
Barrevi_Rd	20094	Charles Miller Rd.	South City Limit	6,849	24	Collector	N/A	31
Bauer_Rd	197418	Skyway Dr.	Bretons Dr.	637	24	Residential	2016	98
Beach_Dr	202156	Barreville Rd.	Bonita Ln.	1,164	19	Residential	N/A	71
BEACH_DR	202153	Riverside Dr. (S)	Hilltop Blvd.	1,686	21	Residential	N/A	45
Beach_Rd	1001	Beach Rd.	Dead End	166	19	Residential	2002	43
Beach_Rd	199854	Shore Dr.	South End	2,933	21	Collector	2002	27
BELDEN_ST	199152	Dayton St.	Albany St.	959	25	Industrial	2002	27
BENNING_LN	199771	Martin Rd.	Tomlinson Dr.	1,979	28	Residential	N/A	61
Birch_Ln	194243	Walnut Ln.	Dead End	786	25	Residential	N/A	18
Biscayn_Rd	202174	Green St.	Broadway St.	2,392	22	Collector	N/A	29
Biscayn_Rd	202173	Green St.	Amberwood Pl.	1,161	25	Collector	N/A	90
Blake_B_vd	194536	Richmond Rd.	East End	950	40	Industrial	N/A	98
Blake_B_vd	194535	McCullom Lake Rd.	E. of Evergreen Cir.	519	38	Industrial	N/A	13
Bluegra_rl	195908	Wimbleton Tr.	Cul-De-Sac	557	25	Residential	2010	60
Bolger_Ct	196954	Ridgeview Dr.	Cul-De-Sac	389	32	Industrial	N/A	39
BONITA__NE	199280	Forrest Rd.	Beach Dr.	1,849	21	Residential	N/A	39
BONNER_DR	201372	Beach Rd.	Dead End	2,460	21	Residential	N/A	58
BONNIE__AE	199355	Pleasant View Dr.	Sunrise View St.	610	21	Residential	2002	54
BONNIE__AE	199356	Foxview Highland Dr.	Pleasant View Dr.	593	25	Residential	N/A	38
Boone_C_ir	194632	Olde Mill Ln.	Leonard St.	1,583	25	Residential	N/A	28
Borden_St	199135	Elm St.	West Ave.	504	24	Industrial	2005	48
Borden_St	199141	Elm St.	Main St.	398	24	Residential	2004	42
BRADLEY_CT	201141	Orleans St.	Cul-De-Sac	591	24	Residential	2002	22
Bretons_Dr	197360	Green St.	Ronda Rd.	2,439	34	Residential	2014	81
Brighto_Pl	197247	Donnelly Pl.	Amberwood Pl.	939	25	Residential	N/A	24

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
BRITTAN_DR	201283	Sherman	Ringwood Rd.	1,181	24	Residential	N/A	35
Broad_St	200997	Richmond Rd.	Riverside Dr.	1,761	24	Collector	N/A	34
BROADWAY	199357	Bull Valley Rd.	Sunrise View St.	3,908	21	Residential	N/A	37
BROMLEY_DR	202257	Kensington Dr.	Pyndale Dr.	1,381	24	Residential	N/A	56
Brookwo_Tr	200175	Abbey Dr.	Bull Valley Rd.	1,497	25	Residential	N/A	24
BROWN_ST	199195	Orleans St.	Prestwick St.	496	24	Residential	N/A	30
Bull_Va_Rd	1006	Curran Rd.	City Limit	3,642	20	Collector	N/A	100
Bull_Va_Rd	202062	East End	Charles Miller Rd.	1,098	23	Residential	2010	84
Bull_Va_Rd	202066	Bally Rd.	West End	3,753	22	Residential	2016	88
Bull_Va_Rd	20338	Crystal Lake Rd.	Curran Rd.	3,760	24	Collector	2008	47
Burning_Dr	195124	Ridge Rd.	Eagle Pt.	3,016	28	Collector	2009	68
Burning_ir	195123	Eagle Pt.	Eagle Pt.	3,621	27	Collector	2010	61
Bush_Trl	193622	Regan Blvd.	Tyler Tr.	539	25	Residential	N/A	45
CALLIST_ST	199084	Crestwood Dr.	Sioux Ln.	1,183	20	Residential	N/A	27
CAMBRID_DR	202310	Abbingdon Dr.	Windridge Dr.	885	24	Residential	2002	40
Camden_St	196880	Cunat Dr.	York Town St.	199	24	Residential	N/A	39
CANTERB_DR	200136	Greenbrier Dr.	Augusta Dr.	1,624	24	Residential	N/A	29
CAPRI_TER	199382	Sunrise View St.	Pleasant View Dr.	589	20	Residential	N/A	34
CAREY_DR	199272	Forrest Rd.	Biscayne Rd.	908	22	Residential	N/A	26
CAROL_AVE	199395	Beach Dr.	Stillhill Dr.	448	21	Residential	N/A	34
Carriag_rl	196588	Winding Creek.	Cul-De-Sac	325	24	Residential	N/A	25
Carriag_rl	196587	Winding Creek.	Cul-De-Sac	405	24	Residential	N/A	27
Carrick_Ln	195885	Draper Rd.	Draper Rd.	983	24	Residential	2008	78
Cart_Wr_rl	196261	Cobblestone Tr.	Dartmoor Dr.	1,024	25	Residential	N/A	46
Carter_Ct	193879	Tyler Tr.	Cul-De-Sac	262	27	Residential	N/A	47
Cashel_Ln	197145	Doolin Ln.	Murphy Rd.	1,247	24	Residential	2014	76
Castlew_rl	195968	London Tr.	Cartwright Tr.	957	25	Residential	2006	51
Centegr_Dr	196908	Medical Center Dr.	285' W of Gladstone Dr.	1,309	24	Residential	2017	94
Centegr_Dr	196907	Gladstone Dr.	Ridgeview Dr.	1,876	24	Residential	2005	30
CENTER_ST	199201	Main St.	Grove Ave.	2,518	21	Residential	N/A	42
CENTRAL_ST	198862	Shore Dr.	Prairie St.	951	20	Residential	N/A	29
Century_Ct	196988	Ridgeview Dr.	Dead End	532	25	Industrial	N/A	38
Charles_St	203358	Lincoln Rd.	Elm St.	696	25	Residential	N/A	47
CHARLOT_VE	201843	John St.	Country Club Dr.	867	18	Residential	N/A	27
Charmar_Ln	197068	Veterans Pkwy.	Murphy Rd.	284	28	Residential	N/A	76
CHASEFI_IR	202334	Creekside Tr.	Creekside Tr.	1,511	24	Residential	N/A	24
Cherryh_Ct	194998	Whiting Dr.	South End	476	25	Residential	2002	20
Chesape_Dr	198497	Chesapeake Dr	Chesapeake Dr	1,726	24	Residential	N/A	47
CHESTER_CT	200064	Chesterfield Dr.	Dead End	422	24	Residential	N/A	37
CHESTER_DR	201402	Front Royal Dr.	Oakwood Dr.	1,306	24	Residential	N/A	87
Chestnu_Dr	193971	Pine Dr.	Dead End	1,542	25	Residential	N/A	32
CHICKAL_DR	201451	Curran Rd.	Dead End	5,115	24	Collector	2002	24
CHURCH	199234	Freund Ave.	Grand Ave.	440	21	Residential	N/A	63
CLEARBR_OK	201211	North Dr.	Millstream Dr	599	22	Residential	N/A	24
CLEARVI_DR	201272	Oak Dr.	Eastern Ave.	1,710	20	Residential	N/A	34
Clinton_Ct	193791	Tyler Tr.	Cul-De-Sac	243	25	Residential	2002	45
Clover_ve	201986	Green St.	Dale Ave.	1,375	25	Residential	2018	100
Cobbles_rl	195940	Wimbleton Tr.	Whitmore Tr.	2,142	25	Residential	N/A	34
Colony_rl	195267	Deerwood Tr.	Timber Tr.	981	26	Residential	N/A	87

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
Colony_Ct	196486	Glenbrook Tr.	Dead End	220	25	Residential	2002	39
Commerc_ve	201371	Highview Ave.	Meadow Ln.	1,209	21	Residential	2010	46
Concord_Dr	197136	Veterans Pkwy.	Veterans Pkwy.	1,984	24	Residential	2005	53
Conway__ir	197183	Doolin Ln.	Doolin Ln.	546	24	Residential	2014	72
Cork_Ln	195504	Farmstead Dr.	Dartmoor Dr.	2,252	24	Residential	N/A	56
CORNELL_CT	201129	Orleans St.	East End	495	24	Residential	N/A	28
Corpora_Dr	196996	Prime Pkwy.	Dead End	1,616	31	Industrial	N/A	24
COUNTRY_DR	199406	Charlotte Ave.	City Limit	833	20	Residential	N/A	29
Court_St	199312	Venice Ave.	IL Rte 120	404	50	Residential	N/A	22
Court_St	194282	Pine Dr.	City Limit	304	25	Residential	N/A	29
Court_St	199308	IL Rte 120	First Ave.	1,945	25	Residential	N/A	26
Courtlar_l	196429	Cross Tr.	Driftwood Tr.	953	24	Residential	N/A	21
CREEKSI_CT	202336	Creekside Tr.	East End	242	24	Residential	2005	48
CREEKSI_TR	200159	Huntington Dr.	Winding Creek Dr.	2,709	24	Residential	N/A	24
CRESCEN_VE	201091	Country Club Dr.	John St.	750	20	Residential	2004	83
CRESCEN_VE	201090	John St.	Golfview Ave.	702	22	Residential	2012	37
CRESTWO_DR	201413	Mill St.	Lillian St.	1,830	22	Residential	N/A	35
Crooked_Ct	194827	Olde Mill Ln.	North End	462	25	Residential	2004	32
Cross_Trl	196672	Kensington Dr.	Joyce Ln.	2,398	31	Residential	N/A	15
Cross_Trl	196670	Joyce Ln.	Loyola Dr.	1,390	25	Residential	N/A	32
Crystal_Rd	6088	IL Rte 120	Bull Valley Rd.	11,382	40	Arterial	2013	80
Crystal_rl	196403	Glenbrook Tr.	Cross Tr.	1,108	25	Residential	N/A	31
CUMBERL_IR	200053	Ashley Dr.	Ashley Dr.	1,596	24	Residential	N/A	38
Cunat_Dr	196729	Crystal Lake Rd.	Bull Valley Rd.	4,486	30	Collector	N/A	91
Curran_Rd	20086	Dartmoor Dr.	Elm St.	9,169	24	Collector	N/A	31
Curran_Rd	20091	Dartmoor Dr.	South End	4,027	24	Collector	2017	92
DALE_AVE	199207	Anne St.	High St.	999	23	Residential	N/A	71
DALE_AVE	199208	High St.	Young St.	694	30	Residential	2005	76
DARTMOO_DR	19866	Curran Rd.	Dartmoor Drive Bridge	3,242	32	Collector	2017	88
DARTMOO_DR	202280	Farmstead Dr.	Curran Rd.	2,394	31	Collector	N/A	19
DARTMOO_DR	19871	Dartmoor Drive Bridge	Crystal Lake Rd.	3,352	32	Collector	N/A	32
Dartmoor_Dr	197303	IL Route 31	Railroad Tracks	749	36	Collector	N/A	32
DARTMOO_DR	202273	Crystal Lake Rd.	Union Pacific Railroad	2,452	40	Collector	N/A	45
Dayton_St	202219	IL Rte 31	Belden Dr.	1,502	25	Industrial	N/A	19
Deer_Ru_rl	195174	Deerwood Tr.	Silver Glen Dr.	871	28	Residential	N/A	81
Deerwoo_rl	195195	Ridge Rd.	Dead End	2,619	33	Collector	N/A	26
DENALI_TR	199954	Chickaloon Dr.	Dead End	921	22	Residential	N/A	33
Depaul_Ct	196708	Loyola Dr.	North End	418	25	Residential	2007	51
Diamond_Dr	1004	Diamond Dr.	Cul-De-Sac	231	26	Industrial	2008	60
Diamond_Dr	1003	IL Rte 31	East End	1,043	25	Industrial	N/A	46
Donegal_Ct	195789	Donegal Dr.	Cul-De-Sac	192	26	Residential	2008	66
Donegal_Ln	195461	Cork Ln.	Tralee Ln.	911	24	Residential	2008	63
Donnell_Pl	197289	Dorchester Pl.	Brighton Pl.	1,240	25	Residential	2016	97
Donov_Ct	199111	Orleans St.	East End	231	24	Residential	2002	36
DONOVAN	199107	Orleans St.	Prestwick St.	957	31	Residential	N/A	31
Doolin__ve	197169	No Final Lift	No Final lift	1,896	24	Residential	2010	74
Dorches_Pl	197193	Amberwood Pl.	Donnelly Pl.	935	25	Residential	N/A	33
Dot_St	198506	Elm St.	Hill St.	1,326	35	Industrial	N/A	35
DRAKE_CT	201134	Orleans St.	East End	489	24	Residential	N/A	18

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
Draper_Rd	195847	Curran Rd.	Shannon Dr.	4,740	37	Collector	2002	62
Draper_Rd	195851	Farmstead Dr.	Shannon Dr.	6,635	22	Collector	2014	100
Driftwo_rl	196612	Barnwood	South End	1,959	31	Residential	2002	57
Dublin_Ct	195863	Draper Rd.	Draper Rd.	507	25	Residential	2010	73
Dundalk_Ln	197152	Murphy Dr.	Doolin Ln.	893	24	Residential	N/A	85
Eagle_P_Dr	195322	Dead End	Burning Tree Cir.	649	25	Residential	2010	65
Eaglewo_rl	196097	Newport Tr.	West End	772	25	Residential	2002	42
EASTERN_VE	198696	Prairie Ave.	Shore Dr.	940	21	Residential	N/A	33
Eisenho_vd	193451	Tyler Tr.	Tyler Tr.	1,366	25	Residential	N/A	52
Emily_Ln	203357	Lincoln Rd.	River Ln.	609	18	Residential	2008	45
ESSEX_CT	200070	Chesterfield Dr.	South End	290	20	Residential	2016	81
Evergre_ir	194802	Blake Ave.	Evergreen Cir.	2,495	25	Residential	2005	51
FAIRFAX_DR	200171	Winding Creek Dr.	Abbey Dr.	302	24	Residential	2002	17
Fairway_Dr	202026	Dead End	Green St.	2,609	22	Residential	2010	77
Farmste_Ct	195665	Farmstead Dr	Cul-De-Sac	424	24	Residential	N/A	100
Farmste_Dr	195719	Draper Rd.	Draper Rd.	6,139	31	Collector	N/A	37
Farring_ON	202312	Windridge Dr.	Canterbury Dr.	312	24	Residential	N/A	60
Fieldst_rl	196061	Newport Tr.	Dead End	1,865	25	Residential	2002	40
Florenc_vd	194855	Whiting Dr.	Ringwood Rd.	629	24	Residential	N/A	89
FLOWER_ST	198660	Willow Ln.	Prairie Ave.	2,238	21	Residential	N/A	29
Forest_Rd	202192	Green St.	Hollywood Blvd.	1,150	20	Residential	N/A	28
FOURTH_ST	199241	Main St.	James St.	673	22	Residential	N/A	48
Foxview_Dr	202232	Hilltop Blvd.	East End	609	225	Residential	N/A	30
Freund_ve	199197	Maple Ave.	Elm St.	2,000	21	Collector	2004	59
FRONT_R_CT	198743	Front Royal Dr.	Cul-De-Sac	179	20	Residential	N/A	29
Front_R_Dr	26498	IL Rte 120	Chesterfield Dr.	3,034	36	Collector	2016	93
Galway_Dr	195609	Ayre Dr.	Farmstead Dr.	2,850	25	Residential	2008	65
Geneva_Pl	197240	Amberwood Pl.	Donnelly Pl.	950	25	Residential	N/A	42
Gladsto_Dr	197031	W. Medical Center Dr.	W. Shamrock Ln.	632	24	Residential	2008	20
GLEN_DR	200020	Bonner Dr.	South End	437	22	Residential	N/A	46
Glenbro_rl	196508	Crystal Lake Rd.	Remington Tr.	1,802	25	Collector	N/A	42
Glenbro_rl	196509	Crystal Lake Rd.	Dartmoor Dr.	5,030	28	Collector	N/A	30
Glenmoo_Ct	195536	Homestead Dr.	Cul-De-Sac	706	24	Residential	2005	69
GOLF_VI_RD	201061	Golfview Terr.	John St.	945	19	Residential	N/A	67
GOLFRVIE_RR	201873	John St.	Golfview Ave.	886	20	Residential	2010	74
Grand_Ave	201203	Freund Ave.	Richmond Rd.	1,234	24	Residential	2010	42
GRAND_AVE	201201	Millstream Dr.	Cul-De-Sac	946	23	Residential	N/A	30
Graue_M_Ct	194705	Spring Creek Ln.	Cul-De-Sac	461	25	Residential	2002	27
Green_St	20105	Elm St.	Waukegan Ave.	1,066	52	Collector	N/A	30
Green_St	20096	Charles Miller Rd.	City Limit	106	23	Collector	2016	62
Green_St	20102	Washington St.	Elm St.	1,450	30	Collector	2010	25
Green_St	20103	Waukegan Ave.	Charles Miller Rd.	7,809	29	Collector	N/A	35
GREENBR_DR	202328	Huntington Dr.	Crystal Lake Rd.	1,855	30	Collector	N/A	40
GREENBR_DR	202327	Creekside Tr.	Huntington Dr.	791	30	Collector	2012	64
Greendl_Ct	196344	Loyola Dr.	Dead End	424	25	Residential	N/A	43
GREGG_DR	202081	Bull Valley Rd.	Bally Rd.	646	22	Residential	N/A	43
Grove_Ave	201926	Front St.	East End	875	20	Residential	N/A	22
HAMPTON_CT	200063	Chesterfield Dr.	Chesterfield Dr.	1,265	24	Residential	N/A	18
HANLEY_VE	198791	Crystal Lake Rd.	Front Royal Dr.	1,052	30	Residential	2002	21

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
Hanson_ve	196825	Cunat Dr.	Monroe Ave.	1,030	24	Residential	N/A	92
Hartlan_rl	196465	Glenbrook Tr.	Village Tr.	500	25	Residential	N/A	32
HAYWARD_CT	201478	Matanuska Tr.	West End	596	32	Residential	N/A	50
Hazelwo_Dr	194350	Almond Ln.	Riverside Dr.	1,383	25	Residential	N/A	65
Hemlock_Dr	194490	Arbor Dr.	Kennedy Dr.	1,660	25	Residential	N/A	39
HERITAG_DR	200166	Greenbrier Dr.	Winding Creek Dr.	608	24	Residential	N/A	69
Hi_Poin_Rd	203425	IL Rte 31	Cul-De-Sac	206	23	Industrial	N/A	100
High_St	201993	Timothy Ln.	Front St.	1,575	30	Collector	2010	74
Highbri_rl	196138	Jordan Ct.	Eaglewood Tr.	1,003	25	Residential	2002	48
HIGHVIE_VE	199825	Prairie Ave.	Home Ave.	1,862	20	Residential	2002	27
Hill_St	198507	West End	Cul-De-Sac	513	27	Industrial	N/A	23
Hillsid_Ln	193835	Lincoln Rd.	Eisenhower Blvd.	1,924	32	Collector	2012	57
HILLTOP_DR	199342	Pleasant View Dr.	Foxview Highlands Dr.	751	22	Residential	N/A	38
HILLTOP_DR	199340	Bull Valley Rd.	Pleasant View Dr.	3,921	22	Residential	2002	43
HOLLYWO_VD	199273	Beach Dr.	Forest Rd.	1,698	21	Residential	N/A	32
HOME_AVE	201356	East End	Sunset Dr.	4,890	24	Residential	N/A	40
Homeste_Dr	195482	Farmstead Dr.	Ayre Dr.	1,620	24	Residential	N/A	79
Hoover_rl	193708	Tyler Tr.	Cul-De-Sac	1,101	25	Residential	N/A	45
HUNTER_TH	202184	Broadway St.	Hilltop Blvd.	778	21	Residential	N/A	54
HUNTER_DR	201329	Parklane Ave.	Sunset Dr.	462	20	Residential	2002	27
HUNTING_DR	200145	Greenbrier Dr.	Dartmoor Dr.	1,511	24	Residential	N/A	73
ILLIAMN_TR	201450	Denali Tr.	West End	318	24	Residential	N/A	38
Indepen_Ct	196077	Highbridge Tr.	Cul-De-Sac	127	25	Residential	2010	61
Indust_Dr	20339	Oak Dr.	Althoff Park Entrance	1,515	30	Industrial	N/A	42
Inverne_rl	196194	Edgewood Tr.	Dartmoor Dr.	1,209	25	Residential	2000	39
James_St	201251	Center St.	Green St.	1,341	24	Residential	N/A	35
Jeffers_ve	196845	Cunat Dr.	Monroe Ave.	855	24	Residential	N/A	92
JENNIFER	199158	Prestwick St.	Leonard Ave.	1,242	24	Residential	N/A	34
John_St	199144	Green St.	Virginia St.	3,451	24	Collector	2010	77
John_St	20145	Front St.	Green St.	2,222	25	Collector	N/A	40
Jordan_Ct	196007	Inverness Tr.	Cul-De-Sac	618	25	Residential	N/A	32
Joyce_Ct	196355	Joyce Ln.	Cul-De-Sac	309	25	Residential	N/A	48
Joyce_Ln	196356	Oakton St.	Loyola Dr.	2,542	25	Residential	2004	37
JUDY_LN	201076	John St.	Riverstream Dr.	535	30	Residential	N/A	38
Kane_Ave	26464	Green St.	Front St.	1,974	34	Collector	N/A	18
Kane_Ave	201255	Front St.	West End	597	26	Collector	N/A	81
Katie_Ln	197426	Ronda Rd.	Turnberry Dr.	820	25	Residential	N/A	26
KATMAI_TR	201456	Chickaloon Dr.	North End	437	22	Residential	N/A	21
Kennedy_Dr	194458	Hemlock Dr.	Orchard Beach	1,047	28	Residential	N/A	31
KENSING_DR	200075	Waters Edge Dr.	Crystal Lake Rd.	2,842	31	Collector	N/A	32
Killala_Ln	195585	Galway Dr.	Galway Dr.	1,334	24	Residential	2012	67
Kinley_vd	202108	Hilltop Blvd.	Riverside Dr.	1,779	21	Residential	N/A	34
KNOLL_AVE	199798	Shore Dr.	Home Ave.	1,434	21	Residential	N/A	31
Knox_Dr	197325	Park Pl.	Municipal Dr.	1,180	25	Residential	2005	30
Knox_Dr	197326	Municipal Dr.	Charles Miller Rd.	698	25	Residential	N/A	74
Kresswo_Dr	196549	Bull Valley Rd.	Bull Valley Rd.	2,173	28	Residential	N/A	56
Lake_St	203359	River Rd.	City Limit	452	22	Residential	2003	17
LAKELAN_VE	198708	Home Ave.	Ramble Rd.	743	19	Residential	2010	55
LAKEWOO_VE	199877	Home Ave.	Shore Dr.	1,828	22	Residential	N/A	39

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
Landcas_ir	195926	Whitmore Tr.	Whitmore Tr.	1,190	25	Residential	N/A	38
Landing_Ct	194558	Olde Mill Ln.	East End	338	25	Residential	N/A	32
Larkin_Ln	197388	Green St.	Cul-De-Sac	764	27	Residential	N/A	26
LAUREN_CT	203182	Orleans St.	Cul-De-Sac	482	24	Residential	N/A	22
LAWN_CT	199408	Bonner Dr.	Cul-De-Sac	171	21	Residential	2002	51
Lawrenc_wy	197047	Medical Center Dr.	Bull Valley Rd.	741	24	Industrial	2003	87
LEE_ST	202006	Dale Ave.	Timothy Ln.	792	30	Residential	N/A	86
Legend_Ln	195821	Dartmoor Dr.	Dartmoor Dr.	2,391	24	Residential	2005	63
LEONARD_VE	199179	Dead End	Olde Mill Ln.	1,440	24	Residential	N/A	32
Liam_Ln	195641	Galway Dr.	Cul-De-Sac	922	24	Residential	2010	67
Lillian_St	20079	Front St.	Crystal Lake Rd.	3,163	25	Collector	2012	59
Limeric_Ln	195349	Shannon Dr.	Shannon Dr.	959	24	Residential	N/A	36
Lincoln_Rd	6092	River Rd.	Chapel Hill Rd.	4,940	32	Arterial	2018	92
LINCOLN_VE	201209	Freund Ave.	Church St.	549	16	Residential	N/A	24
LINDA_RD	199260	Fairway Dr.	Skyway Dr.	338	21	Residential	N/A	65
Loch_Gl_Ln	197402	Turnberry Dr.	Ronda Rd.	1,960	25	Residential	N/A	23
LOGAN_ST	199062	Sioux Ln.	Crestwood Ln.	1,030	21	Residential	N/A	11
London_rl	195970	Cobblestone Tr.	Castlewood Tr.	594	25	Residential	2010	51
Longfor_Dr	195768	Shannon Dr.	Farmstead Dr.	2,515	24	Residential	N/A	32
Lorient_Dr	197337	Ronda Rd.	Bauer Rd.	2,086	24	Residential	2016	98
Loyola_Dr	196310	Dead End	Dartmoor Dr.	3,342	25	Residential	N/A	39
Madison_ve	196792	Cunat Dr.	Monroe Ave.	1,295	24	Residential	N/A	89
Main_St	201247	Front St.	Green St.	1,804	28	Collector	2016	90
Main_St	20149	Crystal Lake Rd.	Front St.	1,232	42	Collector	2015	47
MALIBU_CT	202348	Crystal Lake Rd.	Heritage Dr.	1,764	24	Residential	2010	69
MANCHES_LL	199036	Front Royal Dr.	Manchester Dr.	1,283	23	Residential	2016	88
Maple_Ave	20139	Richmond Rd.	West End	2,791	29	Collector	N/A	35
Maple_Ct	199238	Maple Ave.	Dead End	175	20	Residential	2002	14
Martin_Rd	26369	Ringwood Rd.	IL Rte 120	5,062	25	Collector	N/A	17
Mary_Ln	203355	Lincoln Rd.	River Ln.	689	18	Residential	2005	44
MATANUS_TR	199960	Chickaloon Dr.	Dead End	3,008	25	Residential	N/A	36
McCullo_Rd	20772	Blake Ave.	City Limit	3,635	32	Collector	N/A	94
McCullo_Rd	200895	Riverside Dr.	Richmond Rd.	2,913	40	Collector	2002	26
McCullo_Rd	20774	Richmond Rd.	Blake Ave.	2,596	58	Collector	N/A	84
MCHENRY_VE	199390	Bull Valley Rd.	Stillhill Dr.	1,725	23	Residential	N/A	50
Mead_St	1005	Crystal Lake Rd.	West End	213	24	Residential	N/A	93
Meadow_ve	201213	Front St.	Dead End	397	24	Residential	2002	51
Meadow_Ln	26466	Shore Dr.	IL Rte 120	2,431	28	Collector	N/A	73
Meadow_Ln	200001	IL Rte 120	Oakwood Dr.	1,058	26	Collector	N/A	27
MEADOW_RD	199354	Bull Valley Rd.	Miller Dr.	597	20	Residential	2002	35
Medical_Dr	196895	IL Rte 31	460' W of Med Ctr Dr.	2,246	24	Industrial	2017	61
MELROSE_CT	200074	Wiltshire Dr.	South End	942	24	Residential	N/A	62
Mercy_Dr	203457	IL Rte 31	Dead End	786	25	Industrial	N/A	76
Metalma_ay	196920	Ridgeview Dr.	Dead End	529	25	Industrial	2002	50
Middlet_Ln	195751	Longford Dr.	Longford Dr.	2,081	24	Residential	2005	32
MILL_ST	199057	Crystal Lake Rd.	Dead End	799	23	Industrial	N/A	52
Miller_wy	196967	North End	Dead End	1,020	32	Industrial	N/A	29
MILLER_DR	202089	Riverside Dr. (S)	Hilltop Blvd.	1,861	22	Residential	N/A	26
Millstr_Dr	201217	IL Rte 120	Front St.	978	25	Collector	N/A	13

BranchID	SectionID	From	To	Length (ft)	Width (ft)	Rank	YEAR_RESUR	PCI
Monroe__ve	196793	Cunat Dr.	Madison Ave.	1,441	25	Residential	N/A	93
Mourine_Ln	203356	Lincoln Rd.	River Ln.	645	18	Residential	N/A	60
Municip_Dr	197311	Green St.	Knox Dr.	1,295	38	Collector	2005	72
Murphy_Dr	197081	Doolin Ln.	Flynn St.	1,763	24	Residential	2014	58
Newport_rl	196231	Dead End	Dartmoor Dr.	1,412	25	Residential	N/A	40
Norman_Dr	196377	Joyce Ln.	Dartmoor Dr.	982	25	Residential	2006	43
NORTH_AVE	198621	Home Ave.	Shore Dr.	2,020	17	Residential	N/A	35
NORTH_DR	199120	West Ave.	Maple Ave.	1,019	28	Residential	N/A	42
Northsi_ve	203360	IL Rte 120	Plymouth Ave.	613	25	Residential	2010	65
Oak_Ave	201914	Front St.	East End	1,641	25	Residential	2002	29
OAK_DR	199020	Elm St.	Dead End	4,060	32	Industrial	N/A	35
Oakton_Ct	196631	Dartmoor Dr.	Dead End	190	25	Residential	N/A	48
Oakton_St	196632	Joyce Ct.	Dartmoor Dr.	907	25	Residential	N/A	50
OAKWOOD_CT	200014	Bonner Dr.	Meadow Ln.	555	23	Residential	N/A	33
OAKWOOD_DR	200015	Meadow Ln.	Front Royal Dr.	6,552	31	Residential	N/A	34
OJIBWA_LN	201461	Matanuska Tr.	Draper Rd.	3,080	28	Residential	2010	73
Olde_Mi_Ln	194668	Leonard Ave.	McCullom Lake Rd.	2,950	25	Collector	N/A	28
Orchard_Rd	203350	McCullom Lake Rd.	East End	387	21	Residential	2002	19
ORCHID__TH	199371	Bull Valley Rd.	Miller Dr.	600	21	Residential	N/A	34
Oregon__rl	196391	Cross Tr.	Glenbrook Tr.	1,287	25	Residential	N/A	39
Orleans_St	20341	McCullom Lake Rd.	Industrial Dr.	4,663	35	Collector	2005	82
Overlan_rl	196449	Glenbrook Tr.	Cross Tr.	932	25	Residential	2003	18
Park_La_ve	199885	Elm St.	Shore Dr.	2,296	22	Collector	N/A	27
Park_Pl	197320	Front St.	Knox Park	468	30	Industrial	N/A	26
Park_St	199317	Venice Ave.	City Limit	3,025	24	Collector	N/A	29
PARKWAY_VE	201265	Eastern Ave.	Oak Dr.	1,639	21	Residential	N/A	28
PEARL_AVE	199386	Stillhill Dr.	Beach Dr.	412	21	Residential	N/A	55
Pebble__ek	197205	Green St.	Amberwood Pl.	1,151	25	Collector	N/A	29
Peterse_Rd	199006	McCullom Lake Rd.	Lakewood Rd.	1,060	21	Residential	N/A	46
PIN_OAK_CT	199993	Ojibwa Ln.	Cul-De-Sac	368	27	Residential	2010	48
Pine_Dr	194183	North End	McCullom Lake Rd.	1,086	25	Residential	N/A	22
Pine_St	194186	McCullom Lake Rd.	McCullom Lake Rd.	1,217	23	Residential	N/A	24
PLEASAN_DR	202209	Capri Terr.	Hilltop Blvd.	1,042	24	Residential	N/A	23
PLEASAN_VE	199785	Home Ave.	Willow Ln.	1,147	21	Residential	N/A	40
Plumros_Ln	193944	Hemlock Dr.	Arbor Dr.	703	25	Residential	N/A	43
Polk_Trl	193581	Regan Blvd.	East End	496	25	Residential	2010	68
PONCA_ST	201419	Logan St.	Lillian St.	1,310	22	Residential	N/A	27
Prairie_St	201812	Bally Rd.	Dead End	474	21	Residential	N/A	55
PRAIRIE_VE	201274	Beach Rd.	Oak Dr.	4,417	23	Residential	N/A	21
PRESTWI_ST	201147	Donovan St.	Orleans St.	2,053	24	Residential	2002	21
Prime_P_wy	19808	IL Rte 31	Miller Pkwy.	4,176	31	Industrial	N/A	82
PYNDALE_DR	202260	Bromley Dr.	Kensington Dr.	1,191	24	Residential	N/A	21
RADCLIF_CT	201446	Bennington Dr.	East End	526	32	Residential	N/A	27
Ramble_Rd	201350	North Ave.	Elm St.	2,244	22	Collector	2010	76
Reagan__vd	193661	Lincoln Rd.	Tyler Tr.	1,221	25	Collector	2005	52
Redwood_Ln	194420	Chestnut Dr.	Dead End	1,734	25	Residential	N/A	40
Remming_rl	196518	Crystal Lake Rd.	Glenbrook Tr.	803	26	Residential	N/A	30
Ridge_Rd	20787	IL Rte 120	City Limit	6,227	22	Collector	2002	66
Ridgevi_Dr	19810	Bull Valley Rd.	Prime Pkwy.	6,863	32	Industrial	2017	91

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Ridgewa_rl	195287	Deerwood Tr.	North End	1,774	28	Residential	N/A	31
Ringwoo_Rd	6167	IL Rte 120	Florence Blvd.	5,954	22	Arterial	N/A	96
River_Ln	203352	North End	South End	1,081	19	Residential	2003	39
River_Rd	6110	Elm St.	South St.	912	37	Arterial	2010	28
River_Rd	6111	Elm St.	Lincoln Rd.	587	32	Arterial	N/A	41
Riversi_Dr	20269	Broad St.	Venice Ave.	1,419	62	Collector	N/A	36
RIVERSI_DR	193753	Beach Rd.	Dead End	1,285	22	Residential	N/A	64
Riversi_Dr	20268	City Limit	Broad St.	3,359	28	Collector	N/A	33
RIVERST_DR	201046	Judy Ln.	John St.	905	30	Residential	N/A	21
ROGERS__VE	199836	Shore Dr.	Home Ave.	1,423	20	Residential	N/A	30
RONDA_RD	199334	Turnberry Dr.	Loch Glen Ln.	860	24	Residential	N/A	20
RONDA_RD	199332	Fairway Dr.	Turnberry Dr.	1,400	24	Residential	2016	79
Rose_Ave	195030	Whiting Dr.	Tomlinson Dr.	2,039	25	Residential	N/A	60
Royal_Dr	26502	Crystal Lake Rd.	Chesterfield Dr.	1,640	39	Collector	N/A	44
RYAN	199113	Prestwick St.	Orleans St	498	24	Residential	N/A	28
SANDBUR_DR	202294	Windridge Dr.	Abbingtion Dr.	1,106	24	Residential	2012	67
SARASOT_DR	199291	Augusta Dr.	Creekside Tr.	912	24	Residential	2016	81
Savoy_Ln	197105	Concord Dr.	Concord Dr.	1,216	24	Residential	2004	61
Scully_Dr	200036	Elm St.	South End	1,392	39	Collector	2010	61
Settler_Ct	194733	Olde Mill Ln.	Cul-De-Sac	292	25	Residential	N/A	26
Shamroc_Ln	196940	Front St.	West End	1,359	24	Industrial	2002	28
Shannon_Dr	195371	Draper Rd.	Limerick Ln.	855	24	Residential	2010	33
Shepher_Ln	201945	Green St.	Cul-De-Sac	1,208	24	Residential	N/A	46
SHERMAN_DR	201284	Ringwood Rd.	Shore Dr.	1,766	24	Residential	N/A	48
SHORE_DR	26471	Oak Dr.	Ringwood Rd.	7,241	25	Collector	N/A	25
SHORE_H_DR	201326	Sunset Ave.	Beach Rd.	1,154	20	Residential	N/A	22
SILBURY_CT	202238	Kensington Dr.	Kensington Dr.	1,139	24	Residential	2010	52
Silver__Rd	195229	Burning Tree Dr.	Deerwood Tr.	2,070	32	Residential	N/A	86
SIOUX_LN	201436	Lillian St.	Logan St.	1,521	22	Residential	N/A	27
SKYWAY_DR	202046	Bauer Rd.	Ronda Rd.	2,085	22	Residential	N/A	97
SOMERSE_LL	198892	Front Royal Dr.	Cul-De-Sac	500	20	Residential	2002	19
SOUTH_ST	201417	Lillian St.	Logan St.	1,312	21	Residential	N/A	36
Spring__Ln	194598	Olde Mill Ln.	Olde Mill Ln.	1,188	25	Residential	N/A	27
SPRINGB_CT	200169	South End	North End	401	24	Residential	2005	41
SPRINGD_LN	201377	Scully Dr.	West End	788	31	Residential	N/A	58
SPRUCE_LN	201343	Flower St.	East End	514	21	Residential	2002	26
St_Paul_ve	202056	Green St.	West End	1,308	27	Residential	2004	40
Steeple_Ct	196246	Castlewood Tr.	Cul-De-Sac	285	25	Residential	2008	40
STILL_H_DR	202138	Hilltop Blvd.	Riverside Dr.	1,716	21	Residential	2002	23
Stonebr_rl	195987	Whitmore Tr.	Whitmore Tr.	1,169	25	Residential	N/A	41
STRATFO_CT	202240	Kensington Dr.	Kensington Dr.	984	24	Residential	N/A	30
SUNRISE_EW	202186	Bonita Ln.	Capri Terr.	1,286	22	Residential	N/A	30
SUNSET__DR	200000	Willow Ln.	Home Ave.	529	21	Residential	2002	17
SUNSET__VE	199996	Shore Dr.	Willow Ln.	1,320	22	Residential	N/A	25
SUSSEX_DR	201397	Front Royal Dr.	Ashley Dr.	2,030	24	Residential	2016	89
SYCAMOR_CT	201480	Matanuska Tr.	East End	596	32	Residential	N/A	34
TAMARAC_CT	199973	Ojibwa Ln.	North End	513	32	Residential	2005	62
Tanglew_rl	196275	Cobblestone Tr.	Whitmore Tr.	836	25	Residential	2005	29
TERRACE_DR	202171	Broadway St.	Hilltop Blvd.	776	21	Residential	2010	34

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THORNWO_DR	200095	Dartmoor Dr.	Waters Edge Dr.	1,673	24	Residential	2010	74
Timber_rl	195149	Dead End	West End	2,488	27	Residential	N/A	17
TIMOTHY_LN	199410	Clover	Young St.	1,071	28	Residential	N/A	44
TIMOTHY_LN	199409	Dale Ave.	Clover	1,020	28	Residential	2018	55
Tomlins_Ct	194945	Whiting Dr.	Cul-De-Sac	350	25	Residential	2010	50
Tomlins_Dr	194942	Whiting Dr.	Whiting Dr.	3,972	25	Residential	2010	69
Tralee_Ln	195433	Cork Ln.	Cork Ln.	1,569	24	Residential	2010	65
Trapper_Ct	194770	Boone Creek Dr.	North End	397	25	Residential	N/A	40
Turnber_Dr	197374	Green St.	Ronda Rd.	2,389	32	Residential	N/A	100
TUSTAME_TR	201459	Chickaloon Dr.	East End	1,140	23	Residential	2002	23
Tyler_Trl	193393	Bush Tr.	Truman Tr.	4,573	25	Residential	2005	52
VALLEY_RD	199326	Fairway Dr.	Turnberry Dr.	1,360	25	Residential	2016	81
VALLEY_RD	199329	Turnberry Dr.	South End	1,202	25	Residential	N/A	23
VENICE_AV	201018	Court St.	East End	571	20	Residential	N/A	12
Veretta_Ct	196659	Courtland Tr.	North End	566	25	Residential	N/A	29
Veteran_wy	26286	IL Rte 31	East End	4,523	18	Collector	N/A	41
VICTOR_DR	201319	Sunset Ave.	Parklane Ave.	462	18	Residential	2010	81
VICTORI_VE	201893	Country Club Dr.	John St.	263	20	Residential	N/A	28
Village_rl	196690	Overland Tr.	Glenbrook Tr.	1,100	25	Residential	N/A	30
Vine_St	202169	Green St.	Hollywood Blvd.	787	20	Residential	2006	19
VIRGINA_VE	201899	John St.	Country Club Dr.	1,099	19	Residential	N/A	40
VISTA_TER	202162	Hilltop Blvd.	Broadway St.	774	22	Residential	N/A	24
Wall_St	193535	Hillside Ln.	Hillside Ln.	926	28	Residential	2010	67
Walnut_Ln	194011	Pine Dr.	Birch Ln.	312	25	Residential	2002	24
Washing_St	200978	Riverside Dr.	Richmond Rd.	1,775	31	Collector	2004	24
Waterfo_Ct	195707	Waterford Dr.	Cul-De-Sac	423	24	Residential	N/A	32
Waterfo_Dr	195399	Farmstead Dr.	Farmstead Dr.	3,390	28	Residential	N/A	55
WATERS_DR	200090	Dartmoor Dr.	Kensington Dr.	2,181	31	Residential	2004	42
Waukega_Rd	201233	Front St.	Green St.	1,731	35	Residential	N/A	42
Waukega_Rd	201234	Green St.	East End	2,236	37	Residential	2010	40
Wedgewo_rl	196167	Dartmoor Dr.	Blue Grass Tr.	1,916	25	Residential	2008	52
WELLING_ON	202305	Canterbury Dr.	Augusta Dr.	383	24	Residential	N/A	22
WEST_AVE	201214	Millstream Dr.	North Dr.	880	35	Residential	N/A	45
Westmin_Pl	197230	Donnelly Pl.	Amberwood Pl.	951	25	Residential	N/A	22
Whiteco_Dr	194878	Tomlinson Dr.	West End	2,057	28	Residential	N/A	32
Whiteoa_Ct	194969	Whiteoak Dr.	South End	301	27	Residential	N/A	50
Whiting_Ct	195106	Whiting Dr.	South End	323	25	Residential	2016	57
Whiting_Dr	195051	Tomlinson Dr.	Dead End	4,425	25	Residential	2010	64
Whitmor_rl	196293	Dartmoor Dr.	Newport Tr.	1,504	25	Residential	2010	35
Whitmor_rl	196292	Dartmoor Dr.	North End	1,797	25	Residential	N/A	35
WickLo_Dr	195805	Cork Ln.	Dead End	157	27	Residential	N/A	70
WILLOW_LN	201330	Sunset Ave.	Flower St.	4,296	22	Residential	N/A	17
WILTSHI_DR	200200	Oakwood Dr.	Oakwood Dr.	2,493	24	Residential	2008	45
Wimblet_rl	196118	Blue Grass Tr.	Cul-De-Sac	1,705	25	Residential	N/A	53
WINDHAV_CT	200684	South End	North End	556	24	Residential	N/A	30
WINDHAV_TR	202375	Brookwood Tr.	Dead End	366	24	Residential	N/A	36
WINDING_D	202356	Driftwood Tr.	Creekside Tr.	3,182	31	Collector	2006	32
WINDRID_DR	200121	Greenbrier Dr.	Dartmoor Dr.	1,254	24	Residential	N/A	46
WOOD_ST	199070	Crestwood Dr.	West End	652	23	Residential	2010	50

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Woodrid_Tr	195252	Deerwood Tr.	Ridgeway Tr.	2,734	27	Residential	2004	23
Young_St	202014	Dale Ave.	Green St.	1,172	30	Residential	N/A	39