2019 “State of the Streets”
Final Report

Prepared for:

Sauk Village, Illinois &
Chicago Metropolitan Agency for Planning

Prepared by:

Gorrondona and Associates, Inc.
Pavement Engineering Division
4201 West Parmer Lane, Building A, Suite 150 | Austin, Texas 78727
(512) 719-9933 | www.ga-inc.net

In association with:

Urban GIS, Inc. (MBE/DBE/8a)
171 North Aberdeen | Suite 10 | Chicago, Illinois 60607
(312) 525-8400 | www.urbangis.com

TABLE OF CONTENTS

1 EXECUTIVE SUMMARY

1.1 History

In May of 2019, the Chicago Metropolitan Agency for Planning (CMAP) retained the services of Gorrondona and Associates, Inc. (G&AI) to implement a pavement management system for the Sauk Village that will enable the Village to manage its roadway network in a more proactive, cost-effective, and sustainable way. To accomplish this objective, G&AI: 1) assessed the condition of the Village's roadways, 2) implemented and customized a pavement management system for the Village, and 3) developed near- and long-term pavement maintenance and rehabilitation (M&R) recommendations for the Village's roadways.

During June of 2019, G&AI's state-of-the-art PathRunner pavement condition data collection system (shown in Figure 1) was deployed to capture continuous, high-resolution pavement cracking, rutting, and roughness data of the Village's roads. Collected data were entered into the PAVER Pavement Management System (PAVER), and baseline pavement condition scores were determined for each roadway.

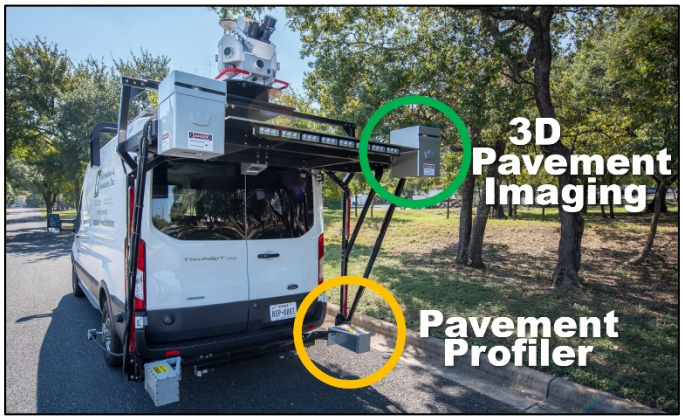


Figure 1. PathRunner pavement condition data collection system.

In September of 2019, preliminary results of the condition survey were presented to the Village. G&AI has since worked with the Village to collect additional pavement M&R records and M&R unit cost data with which to calibrate the PAVER system so that it is specific to the Village.

The collected pavement condition data along with both the historical M&R data and unit prices provided by the Village were used to develop network-level M&R recommendations presented herein for the Village's consideration.

1.2 The PAVER Pavement Management System

PAVER stores two primary "measures" of pavement condition. The most obvious measure of pavement condition is the **International Roughness Index (IRI)**, which describes the rideability (i.e., smoothness) of the roadway as experienced by the driver.

The second measure of pavement condition is the **Pavement Condition Index (PCI)**, which provides an indication of both the structural integrity and surface operational condition of the roadway. PAVER uses PCI values to determine the most cost-effective level of M&R likely needed. PAVER prioritizes funding for life-extending, lower-cost preventive maintenance activities (e.g., crack sealing, slurry seals, and localized patching) above more costly funding of last resort major M&R activities, such as resurfacing and reconstruction. This prioritization in the PAVER algorithm seeks a proactive and cost-effective approach to pavement management with the avoidance of – unless necessary – more costly reactive practices.

In addition to routinely collected IRI and PCI data, PAVER stores pavement inventory information, historical M&R records, and M&R unit cost data. The system uses this information to predict future

pavement conditions and identify network-level deterioration trends and M&R needs over time. It will also allow the Village to evaluate if present M&R methods are performing as expected.

1.3 Purpose and scope

The purpose of this project is to implement a comprehensive pavement management system for the Village's roadways. The scope of this project includes all roadways managed by the Village, which total approximately 28.9 centerline miles. This pavement management system will serve as a primary tool to assist the Village in more efficiently allocating its pavement M&R funding.

To this end, G&AI:

1. Developed an inventory of the Village's roadways in PAVER. The PAVER inventory contains pavement surface type, functional classification, M&R unit costs, and historical M&R data. *Note: Inventory development is a one-time effort that can be used by the Village if the PAVER system is retained, only requiring updates to address changes to the Village's roadway network and changes in M&R unit costs.*
2. Performed a pavement condition survey of the Village's roadways. This survey was used to determine PCI and IRI values for analysis purposes and will serve as an initial baseline of roadway conditions.
3. Used the condition survey with the developed PAVER inventory to determine the impact of different funding levels on the Village's roadways and identify potential network-level pavement M&R needs.

1.4 Results

Pavement Condition Index (PCI) and **International Roughness Index (IRI)** values were determined for each roadway. PCI values provide an indication of both the structural integrity and surface operational condition of a pavement. PCI values range from 0 (a failed pavement) to 100 (a pavement in excellent condition). Table 1 shows the categories chosen to represent the Village's PCI assessment criteria, which includes typical pavement distresses and levels of M&R needed within each category.

Table 1. Village's pavement condition categories.

Category	Typical Distresses and Typical Level of M&R Needed	PCI Range
Good	Longitudinal and transverse cracking and weathering of surface **Preventive maintenance:** *Crack sealing and surface treatments*	86-100
Satisfactory	More extensive longitudinal and transverse cracking and weathering of surface **Preventive maintenance:** *Crack sealing and surface treatments*	71-85
Fair	Extensive longitudinal and transverse cracking, early stage alligator (fatigue) cracking, early stage rutting, and weathering of surface **Global preventive maintenance and localized repairs:** *Localized surface and/or full-depth patching, surface treatments, and thin overlays*	56-70
Poor	More extensive and severe longitudinal and transverse cracking, alligator (fatigue) cracking, rutting, and weathering of surface **Major rehabilitation:** *Localized full-depth patching, mill and overlays, and traditional overlays*	41-55
Very Poor	More extensive and more severe longitudinal and transverse cracking, alligator (fatigue) cracking, rutting, weathering of surface, potholes **Major rehabilitation:** *Full-depth patching, mill and overlays, traditional overlays, and reconstruction*	26-40
Serious	Extensive and severe failure of pavement surface **Major rehabilitation:** *Reconstruction*	11-25
Failed	Complete failure of pavement surface **Major rehabilitation:** *Reconstruction*	0-10

At the time of G&AI's June 2019 inspection, the Village's pavements were found to have an average PCI of 44, indicating that the Village's roadways are in overall "poor" condition.

IRI values measure the roughness (vertical displacement over a fixed interval reported in inches per mile) of a roadway pavement:

- IRI values less than 200 inches/mile indicate "smooth" pavement.
- IRI values between 200 and 400 inches/mile indicate a "marginally rough" pavement.
- IRI values greater than 400 inches/mile indicate "rough" pavement.

The Village's roadways were found to have an average IRI value of 321 inches/mile, which indicates overall "marginally rough" pavement.

Maps 1 and 2, following this executive summary, show PCI and IRI categories for each roadway, respectively.

The causes of pavement deterioration as quantified by the PCI may be divided into three general categories:

- Vehicle load related.
- Climate/durability related.
- Other (construction defects and material issues).

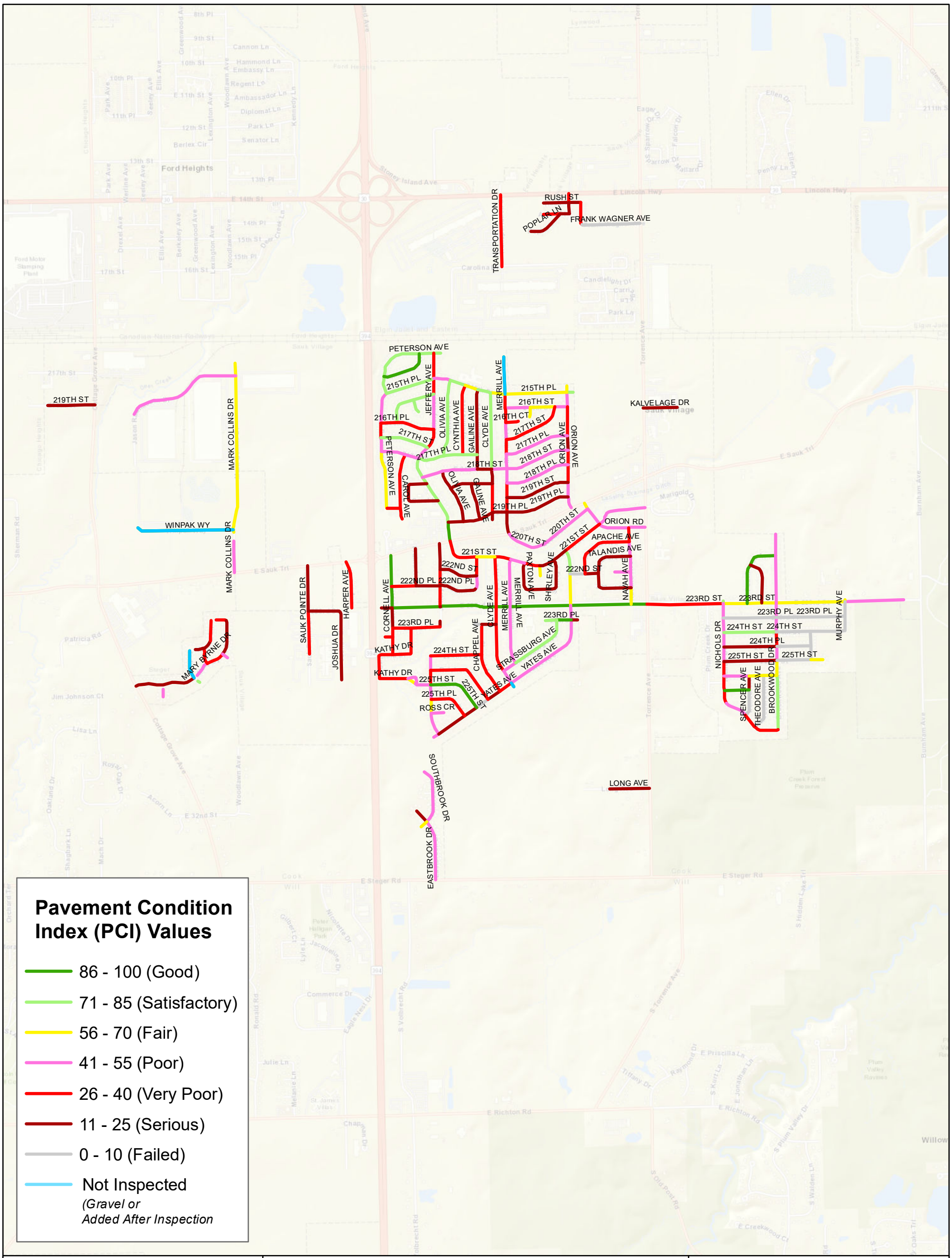
The deterioration observed on the Village's pavements at the time of inspection was caused by a mixture of vehicle load- and climate-related distresses. Vehicle load-related distresses, including alligator cracking and rutting, were pronounced on many of the Village's roadways and contributed most to lower PCI values. Significant climate-related distresses, including block cracking and weathering, were also observed on the Village's roadways.

1.5 Recommendations

For the Village to get the most return on their investment from the PAVER Pavement Management System, the system must be considered a living entity. The Village should:

1. Implement pavement preservation techniques to cost-effectively extend the life of its roadways.
2. Determine when resurfacing is no longer a cost-effective option and reconstruction is needed.
3. Annually update M&R activities performed on Village roadways in the PAVER database.
4. Annually update M&R unit costs (or whenever economic conditions cause changes in unit prices).
5. Commit future funding to the routine collection of pavement condition data (all roadways should be inspected on a two- to three-year cycle).
6. Use collected pavement condition data to assess the performance of the roadways and applied M&R activities.

With such attention, PAVER will become a repository of accurate, up-to-date data and the primary tool that the Village uses for more cost-effectively programming M&R funding.



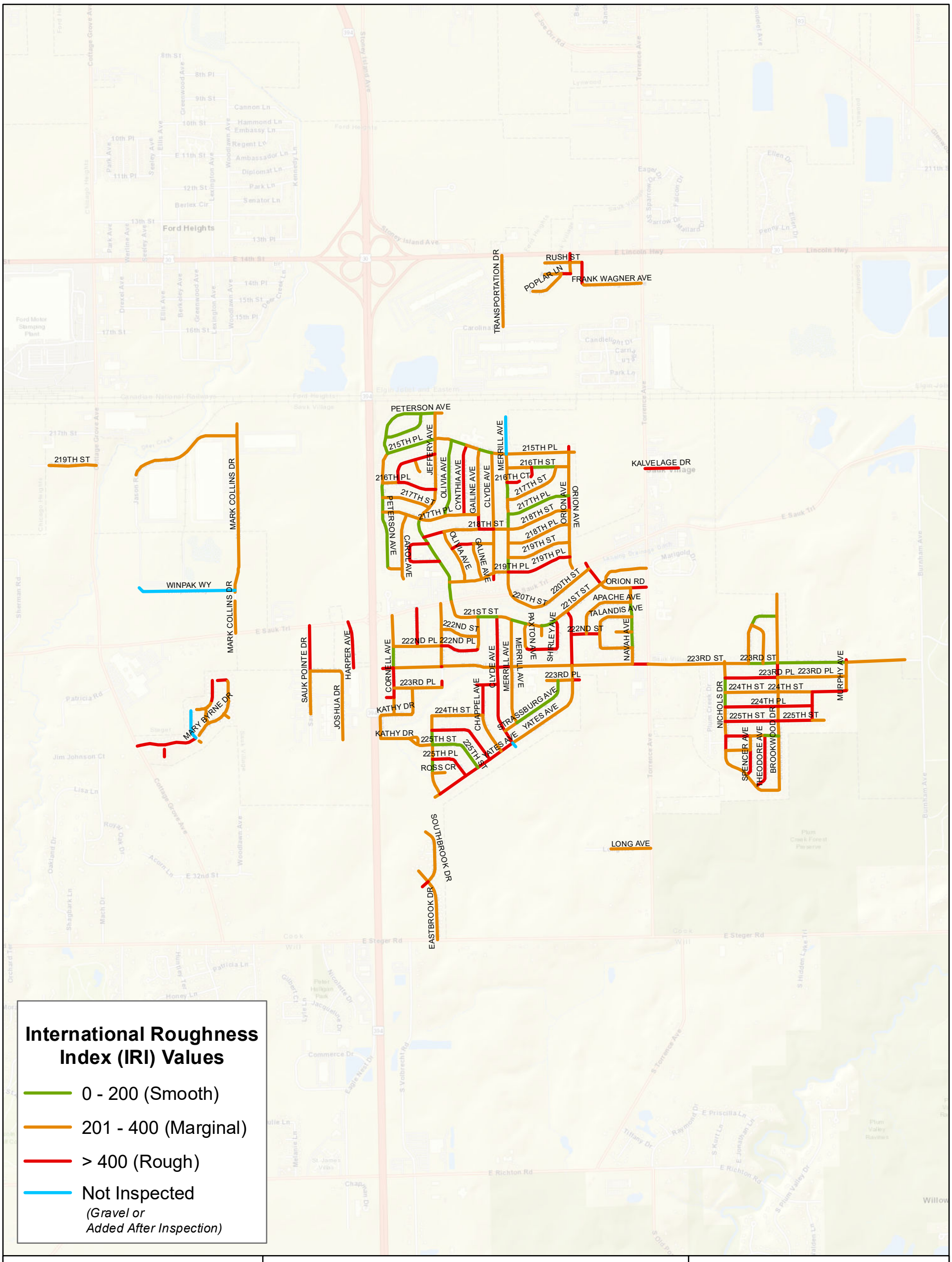
Sauk Village, Illinois

Pavement Management Program

Map 1:
Pavement Condition Index (PCI) Values

Gorrondona & Associates, Inc.

Urban GIS
your world, your way



Map 2:
International Roughness Index (IRI) Values

Sauk Village, Illinois

Pavement Management Program

Gorrondona & Associates, Inc.

Urban GIS
your world, your way

2 INTRODUCTION

2.1 Foreword

This section of the report expands on the Executive Summary and provides the reader with information pertaining to the creation and implementation of this pavement management system for the Village.

At the core of a modern pavement management system is a geocentric database that contains pavement inventory and condition information. Combined with up-to-date M&R unit cost data, calibrated deterioration models, and owner-specific M&R practices, this information is used by analysis tools in the pavement management system to predict future pavement conditions, develop multi-year M&R plans, and forecast anticipated funding needs.

This section provides a conceptual overview of pavement management and follows with the benefits and costs of implementing a pavement management system. Implementation of the Village's pavement management system is detailed in Sections 3, 4 and 5. This section closes with an overview of effective preventive maintenance strategies that should be considered by the Village.

2.2 Background, scope, and objectives

In May of 2019, the Chicago Metropolitan Agency for Planning (CMAP) retained the services of Gorrondona and Associates, Inc. (G&AI) to assess the existing condition of the roadways maintained by the Village. The primary objectives of this project are to implement a comprehensive and Village-wide pavement management system, perform a network-level pavement condition survey, and identify future pavement M&R needs.

The project will provide the Village with a better understanding of the current condition of its roadways and network-level recommendations for future M&R based on the results of the pavement condition survey. Moving forward, the pavement management system will continue to serve as a repository for pavement condition data, historical M&R records, and pavement condition deterioration trends.

The PAVER Pavement Management System was implemented for the Village, and a state-of-the-art PathRunner pavement condition data collection system was deployed to capture continuous, high-resolution pavement cracking, rutting, and roughness data of the Village's roadways in June of 2019.

G&AI has since developed the PAVER inventory database and worked with the Village to collect additional pavement maintenance and rehabilitation (M&R) records and M&R unit cost data with which to calibrate the PAVER database so that it is Village specific. These M&R records and M&R unit costs, along with the collected pavement condition data, have been used to identify present network-level M&R needs.

2.3 Project tasks

To successfully accomplish the objectives of this project, G&AI performed the following tasks, which are covered in greater detail in Sections 3, 4, and 5 of this report, respectively:

1. Pavement management system implementation
   G&AI developed an inventory of the Village's roadway pavements and implemented PAVER.
2. Pavement condition survey
   G&AI performed a network-level pavement condition survey on the roadway pavements using a state-of-the-art pavement imaging and profiling data collection system. The pavement condition survey was performed in June of 2019.
3. M&R analyses
   G&AI reviewed the collected condition data and determined the impact of several funding scenarios on the Village's roadways and identified potential pavement M&R needs using PAVER.

The 3D pavement imaging and profiling technology used to assess the condition of the Village's roadway pavements is the most comprehensive available. This technology has evolved rapidly over the past several years, and it is now used across the United States by more than half of the state DOTs. Unlike the inherently subjective windshield pavement condition surveys of years past, high resolution cracking, rutting, and roughness condition data were captured continuously for each of the Village's roadways surveyed.

The collected data were then analyzed using a hybrid methodology that incorporates both automated crack detection and classification along with manual quality control. This approach yields a complete set of pavement condition data that may be used for both network-level (high-level budgeting) multi-year M&R planning as well as project-level (estimating M&R quantities) analyses. The collected data were then entered into and analyzed using the PAVER Pavement Management System. Continuously developed by the US Army Corps of Engineers, PAVER is a sophisticated, non-proprietary system widely used by municipal agencies across the United States and around the world.

2.4 Conceptual overview of pavement management

The use of a pavement management system is intended to provide municipal agencies with a systematic process for cost-effectively managing their pavement network, which may include roadways, parking lots, and alleys. The American Public Works Association (APWA) defines pavement management in the following way:

> *Pavement management is a systematic method for routinely collecting, storing, and retrieving the kind of decision-making information needed to make maximum use of limited maintenance (and construction) dollars.*

Combined with local knowledge and practical judgment, the recommendations from a pavement management system may be used to help make better pavement M&R decisions.

At the core of a pavement management system is the method for assessing pavement condition. The most widely used method for assessing pavement condition is the Pavement Condition Index (PCI), which is industry standard practice and defined in ASTM D6433. The PCI method outlines a process for more objectively assessing the condition of a pavement based on visual observations and measurements that take place during a field inspection. These observations and measurements are then distilled into a PCI

value that ranges between 0 and 100. A PCI value of 0 indicates a failed pavement, and a PCI value of 100 indicates a pavement in good condition.

PCI values help determine the level of M&R needed to cost-effectively maintain or rehabilitate the pavement. These values may also be used to prioritize roadway improvements for the purpose of developing strategic capital improvement programs. When a pavement is in good condition, preventive maintenance can be applied to extend the life of the pavement. However, once a pavement falls below critical condition, preventive maintenance may no longer be cost effective, and more significant and perhaps more costly rehabilitation strategies should be considered.

The "Critical PCI" value for a pavement is the PCI value below which cost-effective preventive maintenance is no longer a viable option, and more significant rehabilitation and sometimes reconstruction may be necessary. As shown in Figure 2, the primary objective of pavement management is to preserve pavements in good condition above the Critical PCI with less costly preventive M&R rather than allow them to deteriorate below the Critical PCI, resulting in the need for more costly major M&R (rehabilitation or reconstruction).

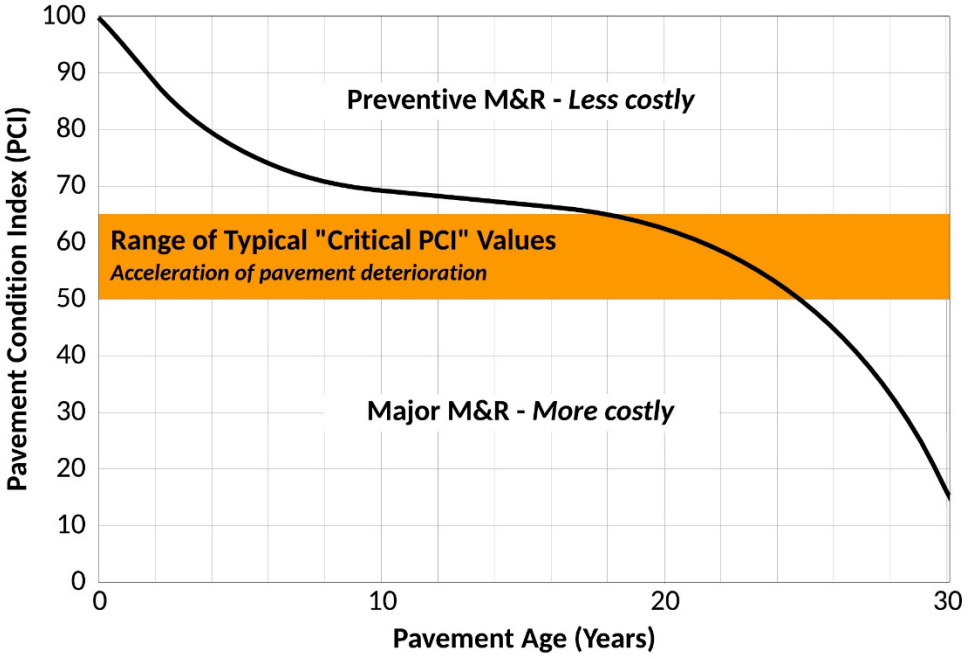


Figure 2. Example of the correct timing of preventive and major M&R relative to the Critical PCI.

The Critical PCI value is determined based on the repeated measurement of pavement condition over time as well as agency-specific M&R policies. Critical PCI values typically range between 50 and 65 (as shown in Figure 2) because the acceleration of pavement deterioration, and subsequent need for more costly M&R, typically occurs then. Setting a higher Critical PCI value simply results in pavements being recommended for major M&R earlier. Some agencies set higher Critical PCI values for their arterial roadways than for their local roadways to ensure that the roadways most heavily traveled (and often at higher speeds) are maintained to a higher standard.

The PAVER system default Critical PCI value of 55 has been used for the Village's roadways. The Village may change this value as more condition data and historical M&R data are captured and the

deterioration rates of the Village's roadways are better understood. Typically, two to three PCI inspections are needed to converge on acceptable Critical PCI values. The Village may choose to set Critical PCI values for each functional classification of roadway based on desired policy goals.

When the appropriate preventive maintenance treatments (e.g., crack sealing, seal coats, and patching) are undertaken at the correct times during a pavement's service life, these relatively inexpensive preventive M&R treatments can extend the service life of the pavement, as shown in Figure 3.

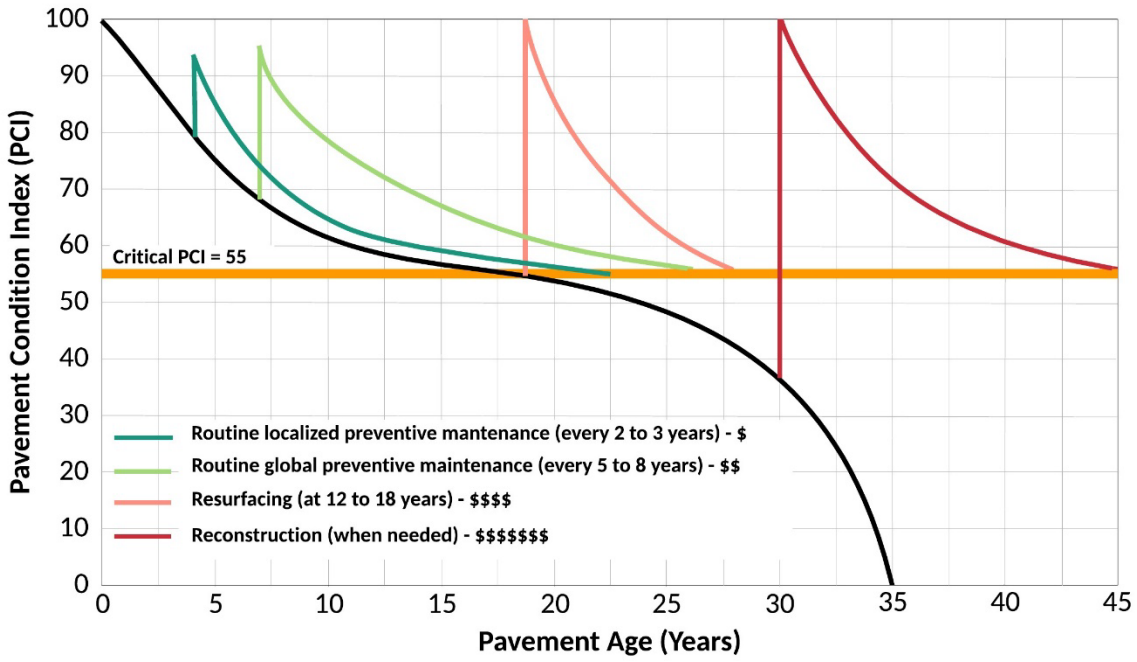


Figure 3. Example of the increasing prices and decreasing benefits of M&R.

It is important to note that the IRI, which provides a useful measure of pavement smoothness, does not correlate well to the level of M&R needed to correct smoothness issues. Consequently, IRI values are not considered when forecasting future M&R needs. Instead, IRI values are used in pavement management systems to identify pavements requiring a special inspection, or they may be used in conjunction with PCI values when prioritizing M&R projects.

As pavement management concepts have gained traction, computer-based pavement management systems have been developed to assist agencies in more optimally managing their pavements. Pavement management systems currently rely on a detailed pavement inventory, routine pavement condition assessments, pavement performance modeling, and sophisticated analysis tools that can forecast future pavement condition and estimate future M&R needs and costs.

2.5 Benefits and costs of implementing a pavement management system

Pavement management systems provide:

- A centralized location for storing pavement condition and inventory data, including construction, maintenance, and rehabilitation records.
- Decision-making support tools for:
  - ✓ Evaluating maintenance and rehabilitation alternatives.
  - ✓ Analyzing the consequences of alternative funding levels on pavement conditions.

  - ✓ Improved scheduling and coordination of pavement M&R projects and other infrastructure projects.
- Analysis tools for evaluating the effectiveness of historical methods of rehabilitation.
- Reporting tools for distilling complex data and justifying funding needs to elected officials.

The benefits of implementing and maintaining a pavement management system improve over time as more data are entered into the system. The costs associated with maintaining a pavement management system include:

- Pavement inventory data collection and routine updates (typically performed annually following the end of the paving season).
- Routine pavement condition data collection (arterials and collectors are typically surveyed every other year and local roadways are surveyed on a three-year cycle).
- Evaluating pavement performance and developing M&R plans (typically performed annually following the end of the paving season – or following a condition survey – to determine candidate roadways for the next paving season).
- Software acquisition, installation, system maintenance, and updates.
- Staff training, as needed.

To ensure the success of a pavement management system, agencies should develop a plan for staffing, maintaining, and funding the system appropriately.

2.6 Incorporating pavement preservation strategies

The implementation of a pavement management system has the added benefit of assisting agencies in determining which pavements may be candidates for preventive maintenance. The use of preventive maintenance early in the life of a pavement, before any significant deterioration, has been demonstrated to be a cost-effective way to extend a pavement's service life.

In the Federal Highway Administration (FHWA) publication, Pavement Preservation, A Road Map to the Future, preventive maintenance is defined as:

> *"…the planned strategy of cost-effective treatments to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity)."*

The FHWA adds that preventive maintenance:

> *"…is typically applied to pavements in good condition having significant remaining service life. As a major component of pavement preservation, preventive maintenance is a strategy of extending the service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements."*

The following preventive maintenance treatments have been demonstrated to be effective when applied at the right time during a pavement's service life:

- Crack sealing, crack filling, and joint sealing of flexible and rigid pavements
- Patching and edge repairs
- Chip seals, fog seals, and slurry seals
- Micro-surfacing
- Thin "functional" and "maintenance" overlay projects

Too frequently these activities are incorrectly applied as "stop-gap" or "cosmetic" treatments for pavements in poor condition rather than as true preservation activities. Preventive maintenance strategies should be applied to pavements that are in relatively good condition, and the activities should be planned and applied systematically following either the resurfacing or reconstruction of a pavement. The following FHWA website provides additional information for pavement preservation: https://www.fhwa.dot.gov/pavement/preservation/.

2.7 Summary

This section provided the reader with background information pertaining to the creation and implementation of the non-proprietary PAVER Pavement Management System for the Village. The section provided a conceptual overview of pavement management and discussed:

1. The benefits the Village will see from the implementation of the pavement management system.
2. The costs expected to be incurred with the maintenance of the system.
3. The additional functionality beyond the obvious support the system can provide by objectively assisting the Village in optimizing the allocation of its M&R funding.

Implementation of the Village's pavement management system is detailed in Sections 3, 4, and 5. This section closed with an overview of effective preventive maintenance strategies that should be considered by the Village moving forward.

3 PAVEMENT MANAGEMENT SYSTEM IMPLEMENTATION

3.1 Foreword

This section discusses the first task of this project: Implementing a pavement management system. One of the CMAP's primary desires was to have a non-proprietary pavement management system for participating agencies. This section provides an overview of the PAVER Pavement Management System, a brief description of the modules available to the Village in PAVER, and insight into the PAVER database development. *(Note: The information presented in the section may be supplemented by the PAVER User Manual, which is available as a navigable PDF file in the PAVER software.)*

3.2 Objective

The objective of this task was to implement a pavement management system for the Village's roadway pavements. G&AI implemented the PAVER Pavement Management System, which is developed and continually updated by the US Army Corps of Engineers. This task required developing an inventory of the Village's roadway pavements and collecting current pavement condition data and entering it in PAVER.

3.3 PAVER Pavement Management System overview

The PAVER pavement management system assists agencies in determining when, where, and what level of pavement M&R is required and approximately how much it will cost. The system provides a suite of pavement management tools, or "modules", that will help the Village with the following tasks:

- Developing and organizing their pavement inventory.
- Assessing the current condition of their pavements.
- Developing models to predict future pavement conditions.
- Reporting on past and future pavement performance.
- Developing scenarios for M&R based on either funding or pavement condition goals.
- Planning M&R projects.

PAVER modules include:

- Inventory
- M&R history
- Inspection
- Prediction modeling
- Condition analysis
- M&R planning
- Project planning
- Reporting

A brief description of these modules is presented in the following sub-sections. The PAVER software and licenses were purchased for the Village from Colorado State University (CSU) and should be renewed annually. Current pricing for PAVER may be found at: www.paver.colostate.edu.

3.3.1 Inventory and maintenance and rehabilitation (M&R) history modules

The PAVER **Inventory** and **M&R History** modules, shown in Figure 4 and Figure 5, are based on a hierarchical structure composed of networks (groups of roadways managed with one source of funding), branches (specific roadways), and sections. Sections are the smallest area for which conditions are reported and M&R activities recommended. Sections typically conform to existing GIS segmentation and are commonly defined from intersection to intersection by default.

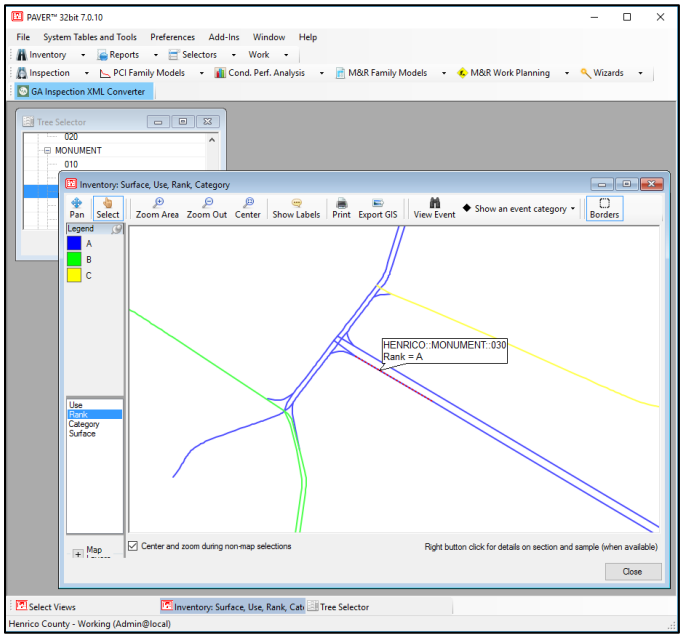


Figure 4. Example roadway functional classifications (ranks) stored in the Inventory module.

One network is defined for the Village and each roadway is a branch. Pavement sections are defined within each branch following the Village's existing GIS segmentation in the Illinois Roadway Information System (IRIS). This structure allows the Village to easily organize their inventory and historical M&R data and provides a simple and efficient way for rolling-up data to higher levels of the pavement hierarchy. The Village provided G&AI with historical M&R records, and this information was entered in PAVER.

3.3.2 Inspection module

PAVER uses the PCI as the primary measure of pavement condition. The **Inspection** module, shown in Figure 6, enables agencies to store raw pavement condition survey data and then calculate PCI values. IRI values are also stored in the **Inspection** module.

3.3.3 Prediction modeling module

The **Prediction Modeling** module in PAVER enables the user to group pavements of similar construction that are subjected to similar traffic, weather, and any other factors affecting pavement performance into "families." Historical pavement condition data are used to build models that can be used to predict future pavement performance. The **Prediction Modeling** module is a hands-on module and prediction models should be

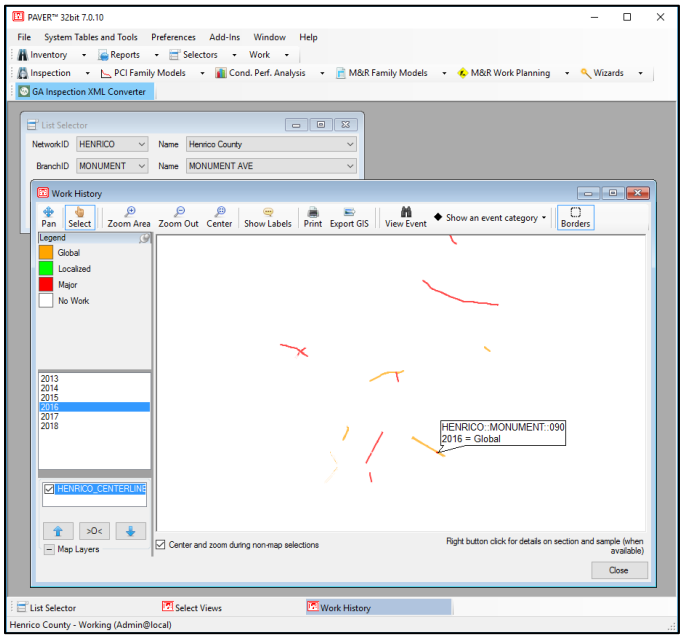


Figure 5. Example historical M&R records stored in the M&R History module.

updated by the Village following each condition survey. If historical pavement condition data are not available, PAVER provides default pavement prediction curves (shown in Figure 7) and allows the user to develop site specific prediction models.

3.3.4 Condition analysis module

The **Condition Analysis** module allows the Village to view the condition of the entire pavement network or any subset of the network over time. The module reports past conditions based on interpolated values between historical condition data, and it reports projected conditions based on the application of prediction models developed using the **Prediction Modeling** module.

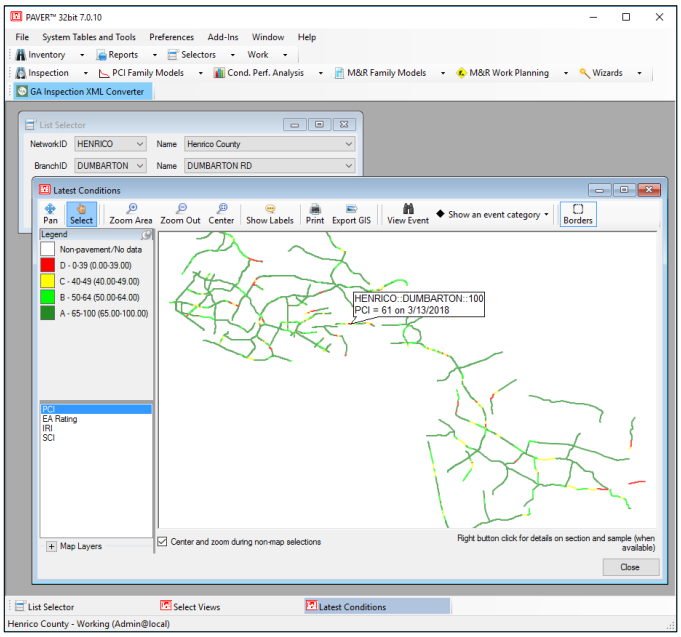


Figure 6. Example PCI values in the Inspection module.

3.3.5 M&R planning module

The **M&R Planning** module can determine the consequence of a predetermined funding level on pavement conditions and estimate the resulting backlog of major work. This information assists in determining funding requirements to meet specific Village pavement condition goals. These capabilities will enable the Village to develop more optimal M&R programs based on available resources and to justify M&R needs.

3.3.6 Reporting module

Each previously described module of PAVER can generate various reports that will assist the Village in analyzing, interpreting, and presenting pavement data. In addition to module-specific reports, PAVER also comes equipped with several "canned" reports, which include:

- GIS reports – *Internal/external reporting of inventory and condition data*
- Summary Charts – *Simple graphs and data tables of inventory and inspection data*
- Inspection Reports – *Summary of collected pavement condition data*
- Work History – *Summary of historical maintenance, repair, and rehabilitation data*
- Branch Listing – *Summary of overall pavement inventory data*
- Branch Condition – *Summary of overall pavement condition data*
- Section Condition – *Summary of individual section data*

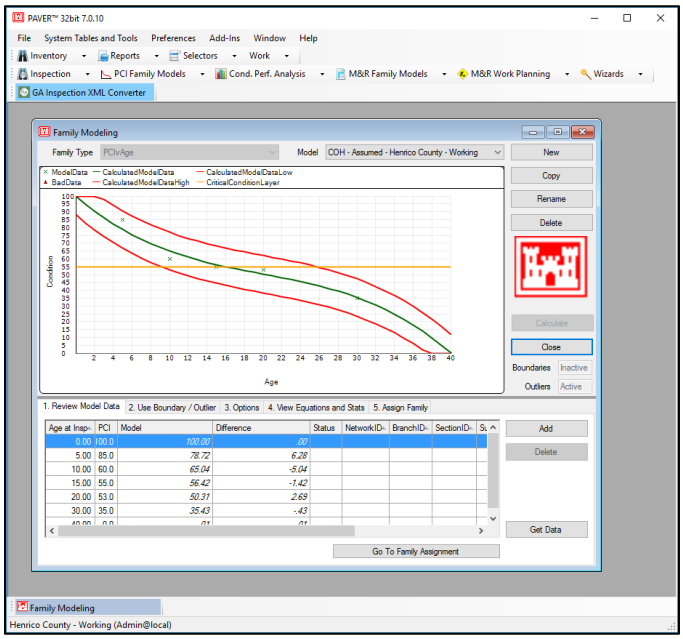


Figure 7. Example deterioration trend developed using the Prediction Modeling module.

PAVER can generate on-the-fly “user-defined” reports, which can be tailored to meet the Village’s specific reporting needs. PAVER’s user-defined reporting capability enables the user to extract any data stored in the system and export it to a GIS shapefile, spreadsheet, or text file.

3.4 Summary

This section discussed the first task of this project: Implementing a pavement management system. This section provided an overview of the non-proprietary PAVER Pavement Management System, a brief description of the modules available to the Village in PAVER, and insight into the PAVER database development. The Village’s PAVER database has been developed to include specific and relevant data pertaining to the Village’s roadway pavement network. PAVER’s suite of analysis and planning tools will enable the Village to more effectively manage its roadway pavement network.

4 PAVEMENT INVENTORY

4.1 Foreword

This section describes the Village's roadway pavement inventory as it exists in the PAVER Pavement Management System. The data sources used in developing the inventory are discussed in this section, and summary data are presented.

4.2 Objective

The objective of this task was to develop a comprehensive inventory of the Village's roadway pavements for inclusion in PAVER. The roadway pavement inventory provides the underlying data on which analysis and reporting is performed with PAVER. In addition, the inventory provides the framework in which all routinely collected pavement condition data and historical work data are stored.

Moving forward, the Village should update the pavement inventory in PAVER to reflect the addition, realignment, widening, and/or removal of roadways managed by the Village. Typically, these types of changes are infrequent and may be done annually or prior to performing any analysis or reporting tasks with PAVER.

4.3 PAVER inventory development

The Village's PAVER inventory was based on the IRIS GIS provided by CMAP. Relevant pavement data available in the IRIS GIS were supplemented with aerial imagery and field observations and entered in the Village's PAVER database. These data included: number of lanes, pavement surface type, approximate roadway width, and from/to intersections for each pavement section.

Roadways were also assigned "ranks" (i.e., priorities) of primary (P), secondary (S), and tertiary (T). Federal aid eligible roads were assigned the rank of primary, since these tend to be the more heavily trafficked roadways. Residential roads were assigned the rank of secondary, and unpaved roadways and roadways in industrial zones were assigned the rank of tertiary.

A shapefile generated from the Village's GIS was linked to the PAVER database. This enables the Village to conveniently navigate the roadways within PAVER and generate a variety of map-based inventory and condition reports in PAVER. Historical M&R records provided by the Village were entered in the PAVER database as well as unit cost data.

4.4 Inventory summary

The Village's roadway network consists of approximately 28.9 centerline miles of predominantly asphalt surfaced, two-lane roadways. Table 2 shows the distribution of the Village's roadway network in mileage and area by pavement rank, and Table 3 shows the distribution by pavement surface type.

Table 2. Roadway summary data by pavement rank.

Rank	Centerline Miles	Lane Miles	Area (SY)
Primary, P	2.11	4.22	41,510
Secondary, S	26.67	52.33	404,976
Tertiary, T	0.15	0.31	2,234
Total	**28.93**	**56.85**	**448,719**

Table 3. Roadway summary data by pavement surface type.

Surface Type	Centerline Miles	Lane Miles	Area (SY)
Asphalt, AC	28.78	56.54	446,485
Gravel, GR	0.15	0.31	2,234
Total	**28.93**	**56.85**	**448,719**

Appendix A maps A-1 and A-2 present pavement rank and surface type data graphically.

5 PAVEMENT CONDITION INSPECTION

5.1 Foreword

This section discusses the second task of this project: Performing a comprehensive pavement condition survey of the Village's roadways. The condition survey included the collection of high-resolution pavement imagery and profile measurements using a state-of-the-art PathRunner pavement condition survey system. The collected data were analyzed and PCI and IRI values were calculated for each of the Village's roadways surveyed. This section describes the pavement condition survey system, the data collection methodology, how the collected data were analyzed, and a discussion of field observations. It concludes with several examples of pavement conditions from the Village's roadways.

5.2 Objective

The objective of the pavement condition survey is to assess the existing structural integrity and surface operational condition of the Village's roadways. The survey provides a comprehensive snapshot of pavement conditions at the time of data collection.

Moving forward, the Village should perform pavement condition surveys on a routine basis to objectively monitor pavement performance, determine near-term M&R needs, evaluate the effectiveness of M&R activities, develop pavement deterioration trends, and forecast near- and long-term pavement M&R needs.

5.3 Pavement condition data acquisition

G&AI deployed a state-of-the-art PathRunner pavement data collection system to capture high-resolution pavement imagery and surface data necessary to assess the condition of the Village's roadways. The PathRunner system is shown in Figure 8.

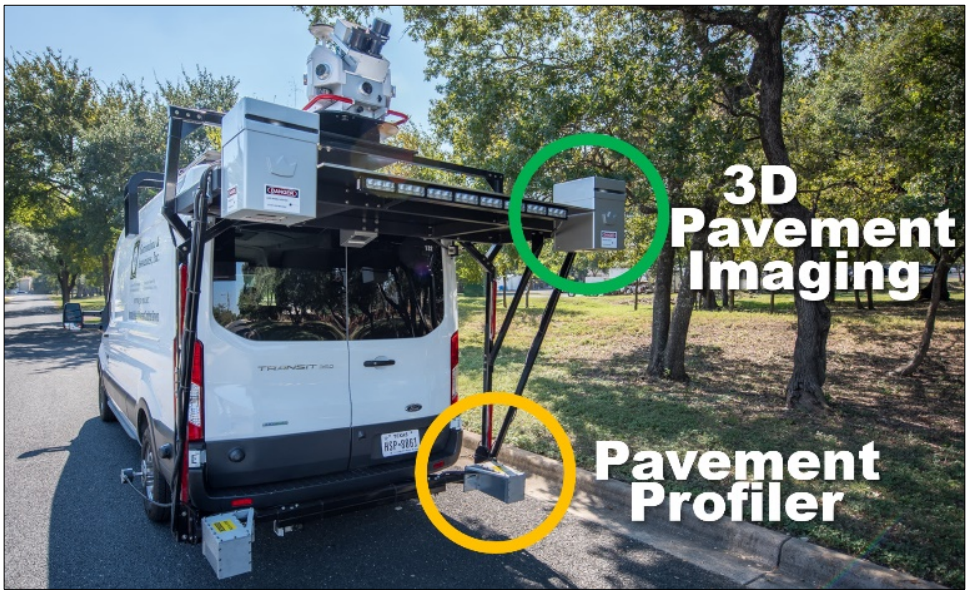


Figure 8. PathRunner pavement condition data collection system.

The PathRunner was driven on all roadways within the Village. By agreement with CMAP, only a single lane of two-lane roadways was collected and only the outmost lanes of four-lane and greater roadways were collected. Based on G&AI's experience, contiguous lanes are usually of similar character, and this

inspection approach was deemed to be cost effective for the Village while still providing sufficiently detailed information to assess existing pavement conditions. The PathRunner system continuously collected the following data for each roadway:

- High-resolution 2D and 3D pavement images for evaluating pavement distresses and determining Pavement Condition Index (PCI) values.
- Transverse profiles to measure rutting.
- Longitudinal profiles to calculate International Roughness Index (IRI) values.
- High-resolution, forward-facing, right-of-way images for manual review of all data.

These data were processed using automated tools verified by manual review to assess pavement conditions, and the results were entered in the Village’s PAVER database.

5.4 Pavement Condition Index (PCI) method

The pavement condition survey was performed following the PCI method. The PCI method is based on a set of definitions and procedures for measuring pavement distress types, severities, and quantities during a field inspection. This information is then distilled into a PCI value, which provides an indication of the structural integrity and surface operational condition (roughness) for a pavement section. The PCI method is widely used and provides a significantly more objective and repeatable method for assessing pavement condition than inherently subjective windshield surveys commonly used in the past.

The Village’s roadway network consists primarily of asphalt pavements with only a few concrete and gravel roadways. During a PCI inspection, several distress types are identified and evaluated for asphalt pavements, as shown in Table 4. The severity and quantity of each observed distress is recorded, and these data are then input into the PCI algorithm to calculate a PCI value, as shown in Figure 9.

Table 4. Asphalt and concrete pavement distress types.

Asphalt Pavement Distresses	
Distress	**Cause**
Alligator Cracking	Load
Bleeding	Other
Block Cracking	Climate/Durability
Bumps and Sags	Other
Corrugation	Other
Depression	Other
Edge Cracking	Load
Joint Reflection Cracking	Climate/Durability
Lane/Shoulder Drop-Off	Other
Longitudinal and Transverse Cracking	Climate/Durability
Patching and Utility Cut Patching	Other
Polished Aggregate	Other
Pothole	Load
Railroad Crossing	Other
Rutting	Load
Shoving	Other
Slippage Cracking	Other
Swell	Other
Raveling	Climate/Durability
Weathering	Climate/Durability

Concrete Pavement Distresses	
Distress	**Cause**
Blowup/Buckling	Climate/Durability
Corner Break	Load
Divided Slab	Load
Durability ("D") Cracking	Climate/Durability
Faulting	Other
Joint Seal Damage	Climate/Durability
Lane/Shoulder Drop-Off	Other
Linear Cracking	Load
Patching, Large and Utility Cuts	Other
Patching, Small	Other
Polished Aggregate	Other
Popouts	Other
Pumping	Other
Punchout	Load
Railroad Crossing	Other
Scaling, Map Cracking, and Crazing	Other
Shrinkage Cracks	Climate/Durability
Spalling, Corner	Climate/Durability
Spalling, Joint	Climate/Durability

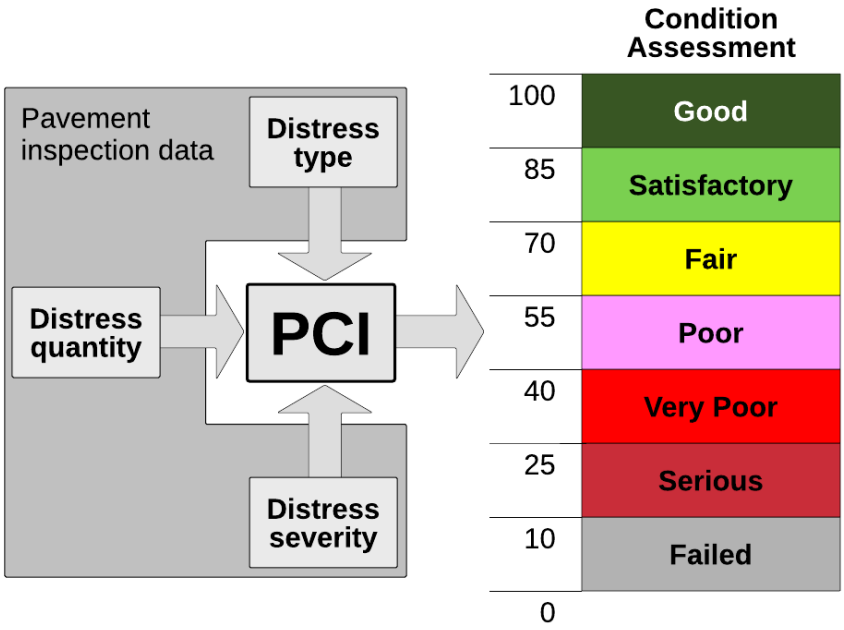


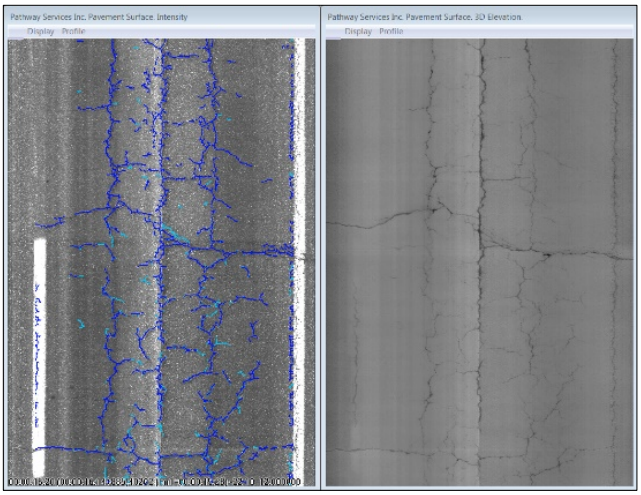
Figure 9. PCI inputs and the Village's assessment scale.

If properly designed and constructed, a new pavement begins its service life with a PCI of 100. Because of distress caused by vehicle loads, environmental factors, and aging, a pavement deteriorates over time. For each combination of distress type, severity level, and quantity observed during the inspection, points

are deducted from the initial value of 100, thereby decreasing the PCI. When multiple distresses are present, the "deduct values" are modified such that the impact of multiple distresses is not unnecessarily compounded. Due to the complexity of the PCI algorithm, PCI values are typically computed using a pavement management software package, such as PAVER. It is important to note that the PCI method does not directly measure the load carrying capacity or the rideability of a pavement. Structural testing combined with coring is needed to determine permissible pavement loadings.

5.5 Pavement Condition Index (PCI) data interpretation

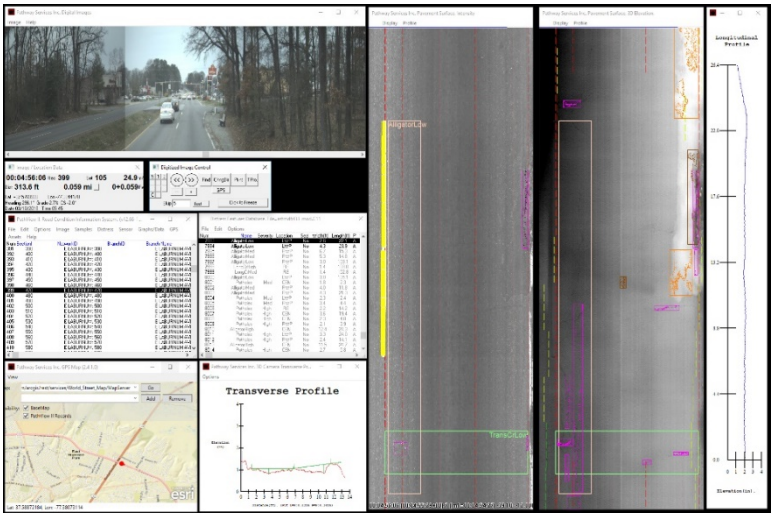
The PathRunner system captures 2D and 3D images of the roadway surface from which pavement surface distresses are evaluated. During the data collection effort, G&AI extracted pavement distress data from georeferenced digital images and rutting measurements from transverse profile measurement to determine PCI values. This process involves four distinct steps:



Steps 1 and 2: ***Initial Automated Crack Detection and Rutting Analyses***

1. **AutoCrack Software** – This software detects cracking in the pavement imagery.
2. **AutoClass Software** – This software classifies the type of cracking detected.
3. **Manual image rating** – G&AI's team of trained and experienced raters review the imagery and identify any distress types that the automated crack detection and classification software did not observe or incorrectly identified. Performing this manual image rating is considered the Quality Control (QC) review assuring detailed accuracy and completeness of the ratings.
4. **Quality Assurance (QA) rating** – An independent team of G&AI's raters and project engineers perform a systematic QA review of the rated data to ensure proper evaluation of the collected imagery prior to import into PAVER.

The QC and QA ratings are the most important steps in the project. G&AI uses the PathView software for evaluating distresses using both automated algorithms and manual supplemental rating. All QC/QA is performed by highly trained and experienced engineers and technicians using PathView. The same software system has been used for more than 25 state DOTs and several municipal agency pavement condition survey projects and is a well proven review tool.



Steps 3 and 4: ***Manual Rating and QC/QA of Pavements using PathView***

In addition to capturing 2D and 3D imagery from which pavement surface

distresses are evaluated, the PathRunner system also captures high-resolution longitudinal and transverse profiles of the roadway surface at 2mm intervals. The longitudinal profile data are analyzed to determine the IRI values, or the "roughness" of the roadway, and the transverse profiles are used to measure rutting.

5.6 Existing pavement conditions and field observations

The collected pavement survey data were used to calculate a PCI value for each pavement section in the Village. Table 5 shows the pavement condition assessment criteria used to analyze the pavement network.

Table 5. Village's pavement condition categories.

Category	Typical Distresses and Typical Level of M&R Needed	PCI Range
Good	Longitudinal and transverse cracking and weathering of surface **Preventive maintenance:** *Crack sealing and surface treatments*	86-100
Satisfactory	More extensive longitudinal and transverse cracking and weathering of surface **Preventive maintenance:** *Crack sealing and surface treatments*	71-85
Fair	Extensive longitudinal and transverse cracking, early stage alligator (fatigue) cracking, early stage rutting, and weathering of surface **Global preventive maintenance and localized repairs:** *Localized surface and/or full-depth patching, surface treatments, and thin overlays*	56-70
Poor	More extensive and severe longitudinal and transverse cracking, alligator (fatigue) cracking, rutting, and weathering of surface **Major rehabilitation:** *Localized full-depth patching, mill and overlays, and traditional overlays*	41-55
Very Poor	More extensive and more severe longitudinal and transverse cracking, alligator (fatigue) cracking, rutting, weathering of surface, potholes **Major rehabilitation:** *Full-depth patching, mill and overlays, traditional overlays, and reconstruction*	26-40
Serious	Extensive and severe failure of pavement surface **Major rehabilitation:** *Reconstruction*	11-25
Failed	Complete failure of pavement surface **Major rehabilitation:** *Reconstruction*	0-10

At the time of G&AI's June 2019 inspection, the Village's pavements were found be in overall "poor" condition and have an average PCI of 44. The condition distribution of the Village's pavements at the time of inspection is shown in Figure 10, and detailed condition maps can be found in Appendix A.

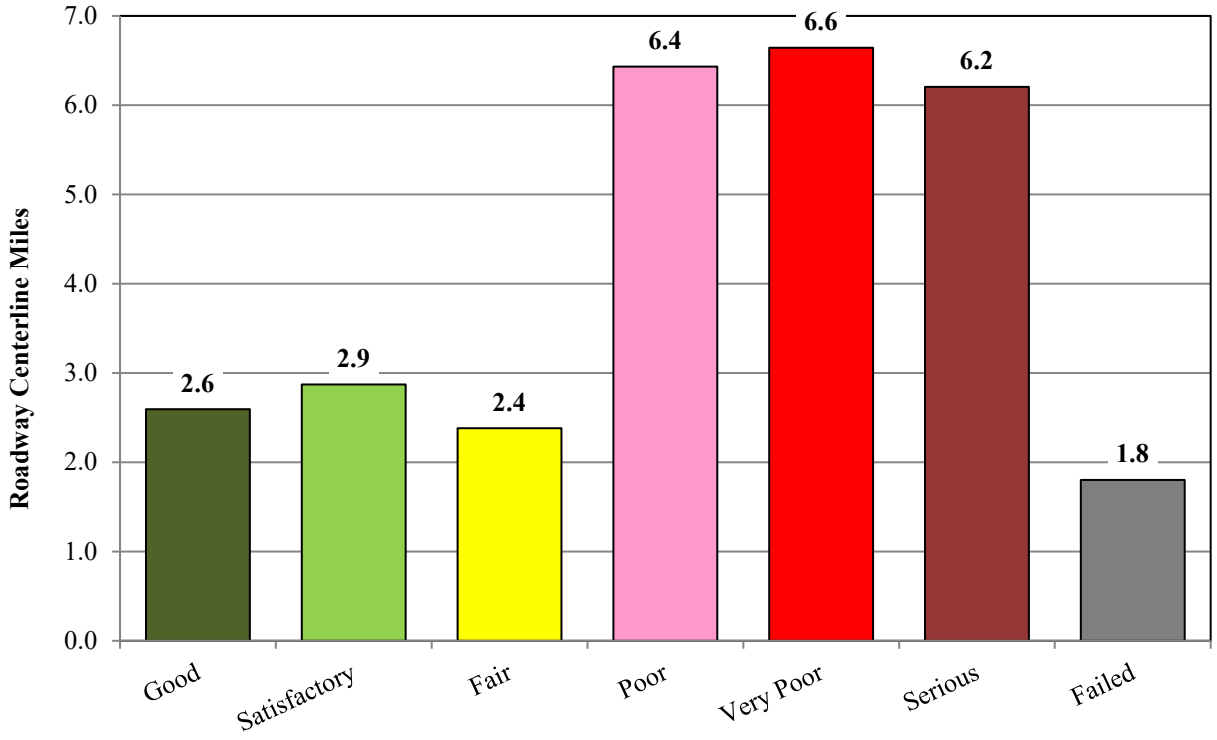


Figure 10. Village's roadway pavement condition distribution by PCI category.
(Note: Excludes gravel roadways.)

Pavement condition data summarized by pavement ranks and surface types are presented in the following two tables, respectively.

Table 6. Roadway summary condition data by pavement rank.

Rank	Centerline Miles	Lane Miles	Area (SY)	PCI	IRI
Primary, P	2.11	4.22	41,510	73	253
Secondary, S	26.67	52.33	404,976	41	328
Tertiary, T	0.15	0.31	2,234	--*	--*
Total	**28.93**	**56.85**	**448,719**	**44**	**321**

**Note: Tertiary roads were gravel and PCI values are not applicable.*

Table 7. Roadway summary condition data by pavement surface type.

Surface Type	Centerline Miles	Lane Miles	Area (SY)	PCI	IRI
Asphalt, AC	28.78	56.54	446,485	44	321
Gravel, GR	0.15	0.31	2,234	--*	--*
Total	**28.93**	**56.85**	**448,719**	**44**	**321**

**Note: PCI values are not applicable to gravel roads.*

The causes of pavement deterioration as quantified by the PCI may be divided into three general categories:

- Vehicle load related.

- Climate/durability related.
- Other (construction defects and material issues).

Pavement deterioration and ultimate failure is a complex process that often involves a combination of several deterioration mechanisms working together. The deterioration observed on the Village's pavements was caused primarily by a mixture of load- and climate-related distresses. Vehicle load-related distresses, including alligator cracking and rutting, were pronounced on many of the Village's roadways and accounted for most of the distress negatively impacting overall roadway conditions. In addition, climate-related distresses, including longitudinal and transverse cracking and block cracking, were found across the Village's pavement inventory.

In practice, visually observed pavement distresses collected during a network-level condition survey are used to determine the likely mechanism(s) contributing to the deterioration of a roadway. However, prior to developing a specific M&R strategy, the root cause of pavement deterioration should be determined. Determining the root cause of pavement deterioration may be accomplished through an appropriate combination of traffic load analyses, drainage investigations, structural testing, coring, and material testing.

For example, vehicle load-related distresses such as alligator cracking may be addressed through load analyses and material testing. Contributing root causes may range from the roadway consistently exposed to loads in excess of its design loading to the pavement section having simply reached the end of its design life. Climate/durability-related distresses, such as transverse cracking, may result from a combination of freeze/thaw cycling and oxidation (embrittlement) of the asphalt layer. The cause(s) of "other" distresses may be determined through a combination of coring, boring, and material testing.

In addition to PCI values, IRI values were determined for each of the Village's roadways. IRI values, reported in inches per mile, describe the amount of roughness in both wheel paths over a given length of pavement. The IRI is a standard measure of roughness used worldwide. The Village's IRI assessment scale is shown in Table 8.

Table 8: Village's IRI assessment criteria.

Category	IRI Value
Smooth	0-200
Marginal	201-400
Rough	>401

At the time of G&AI's June 2019 inspection, the Village's pavements were found to be in overall "marginally rough" condition, with an average IRI of 321 inches/mile. Detailed condition maps can be found in Appendix A.

It is worth noting that IRI and PCI values do not necessarily correlate with one another. A roadway can ride well yet still be structurally deficient and in need of major M&R, and vice versa. For example, asphalt-surfaced roadways supported by structurally adequate base (e.g., crushed rock) and subgrade (e.g., existing soil) layers may exhibit extensive cracking in the asphalt surface layer due to fatigue failure of the asphalt. In situations such as these, removal of the existing asphalt layer and replacement with a thicker layer may be enough to rehabilitate the pavement. Conversely, a roadway that rides poorly may be structurally adequate and may only require minimal rehabilitation. Poor construction practices may unfortunately lead to roughness being "built into" an otherwise structurally adequate roadway at the time

of construction. Roadways exhibiting this type of roughness may require grinding and/or an additional surface course to remedy the issue.

5.7 Example pavement conditions through the Village

Figure 11 illustrates a variety of pavement conditions observed throughout the Village during the June 2019 survey. The figure includes PCI and IRI values for each pavement section along with observed distress types and recommended M&R.

	Location + History	PCI *(IRI)*	Recommended M&R Activity (Typical)
	Constance Ave. *(Section 10)* *Last resurfacing date 2015*	93 *(184)*	Preventive maintenance *Seal joints between pavement and curb and gutter*
	Jeffery Ave. *Near 219th Pl.* *(Section 110)* *Last resurfacing date 2014*	77 *(120)*	Preventive maintenance *Seal cracks as well as joints between pavement and curb and gutter + surface treatment*
	Peterson Ave. *Near 217th Pl.* *(Section 20)* *Last resurfacing date 2005*	61 *(169)*	Preventive maintenance *Seal cracks as well as joints between pavement and curb and gutter + localized patching + surface treatment*
	217th Pl. *Near Orion Ave.* *(Section 60)* *Last resurfacing date unknown*	41 *(198)*	Major M&R *Localized structural patching + cold mill and overlay or reconstruction*

	Carol Ave. *Near Peterson Ave.* *(Section 20)* *Last resurfacing date 2006*	26 *(260)*	Major M&R *Localized structural patching + cold mill and overlay or reconstruction*
	Carol Ln. *(Section 10)* *Last resurfacing date unknown*	13 *(668)*	Major M&R *Reconstruction*
	Theodore Ave. *Near 225th Pl.* *(Section 10)* *Last resurfacing date unknown*	10 *(585)*	Major M&R *Reconstruction*

Figure 11. Pavement conditions observed during PCI inspection.

A distress observed on some of the Village's pavements was unsealed paving lane seams (cracks), as shown in several of the photos above. If left unsealed, paving lane seams can deteriorate rapidly and significantly reduce the life of the pavement. By sealing paving lane seams immediately following paving and routinely resealing them, this type of deterioration may be minimized or prevented.

5.8 Summary

This section presented an overview of the methodology used to perform the 2019 pavement condition survey and the results of the survey. A state-of-the-art PathRunner pavement condition survey system was deployed to collect pavement imagery and profile data on the Village's roadways. The collected data were analyzed, and PCI values and IRI values were determined for each of the roadways surveyed. The Village's roadways were found to be in overall "poor" condition with an average PCI of 44. Furthermore, the Village's roadways were found to be in overall "marginally rough" condition, with an average IRI of 321 inches/mile.

6 MAINTENANCE AND REHABILITATION FUNDING ANALYSES

6.1 Foreword

This section discusses the third task of this project: M&R needs analyses. This section discusses the results of the analyses performed for the Village's consideration, assumptions which shaped the analyses, and results of the analyses. The recommendations of these analyses are provided in this section and in Appendixes A through D.

6.2 Objective

The M&R Planning module in PAVER provides *raw recommendations* of when and where pavement M&R activities are needed and approximately how much they will cost. The Village should use these raw recommendations to develop programmatic M&R plans for the Village's roadway network. These programmatic plans may be generated based on anticipated annual funding or with the goal of maintaining or achieving a desired pavement condition.

For the Village's roadways, two preliminary M&R analyses were performed:

- A series of **five-year analyses** was performed to determine the impact of several funding levels on overall roadway conditions. The analyses included:
    - Assessing the impact of the Village's existing funding level.
    - Determining the annual funding level needed to maintain the Village's existing overall average roadway condition.
    - Determining the annual funding level needed to modestly increase the Village's overall average roadway condition to 65.
    - Determining the annual funding level needed to eliminate the Village's major M&R backlog over a five-year period.
- A **one-year analysis** was performed to identify pavements that may benefit from preventive maintenance activities, such as crack sealing or localized patching. Only pavements with a PCI of 65 or better were considered in this analysis.

The purpose of these analyses is to determine the appropriate funding level needed to manage the Village's roadways and provide general recommendations that will assist the Village in developing and evolving its M&R program. Additional analyses may be performed to assess either the impact of anticipated funding levels or to determine the funding levels needed to achieve a desired overall, network-average condition.

6.3 Assumptions

The M&R analyses were based on the results of the June 2019 Pavement Condition Index (PCI) survey and the pavement inventory and historical work records provided by the Village and stored in the Village's PAVER database. The following assumptions were made in our analyses.

- Pavements considered candidates for preventive maintenance were determined based on their overall PCI values and the distresses observed on the pavement at the time of inspection. Pavements with PCI values of 65 or better were considered candidates for preventive maintenance.
- Recommended preventive maintenance policies for asphalt and concrete pavements are shown in Appendix D Tables D-1 and D-2, respectively. The policy tables show what type of repair activity should be applied to each distress type and severity combination. Table D-3

presents estimated unit costs for the maintenance activities recommended in tables D-1 and D-2.

- A pavement deterioration rate between three and five points per year was assumed based on the performance of the Village's resurfaced roads, which equates to a pavement life between resurfacings of nine and fifteen years. This deterioration rate will be refined as more historical work records are entered in PAVER and more PCI inspection data become available over time.
- A Critical PCI value (the PCI value below which a pavement is considered a candidate for major M&R) of 55 was assumed for all pavement sections. Pavements at or below the Critical PCI during the five-year analysis period triggered major M&R recommendations. *(Note: A PCI value of 55 has been initially chosen for all the Village's roadways as this numerical value straddles the "Fair" to "Poor" condition categories in the Village's PCI scale. Performing major M&R on pavements that are closer to a PCI of 55, rather than waiting for these pavements to deteriorate further is generally more cost effective.)*
- Unit costs used in these analyses were based on bid tabs provided by the Village and by costs reported by nearby villages.
    - ✓ Asphalt resurfacing ranged from approximately $1.50 to more than $5.00 a square foot depending on roadway condition (i.e., lower PCI values may result in more patching and thicker resurfacing). Reconstruction was set at $6.50 a square foot.
    - ✓ Concrete slab replacement costs ranged from $5.00 to $15.00 a square foot depending on roadway condition (i.e., lower PCI values result in more slab replacement). Reconstruction was set at $20.00 a square foot.
- All analyses began on the first of the year, and an inflation rate of 3% was assumed.

6.4 Results

The results of the PAVER M&R analyses are shown in the following two figures. Figure 12 illustrates the estimated five-year change in pavement condition resulting from the analyzed funding scenarios, and Figure 13 depicts the estimated change in the Village's major M&R backlog for each funding scenario.

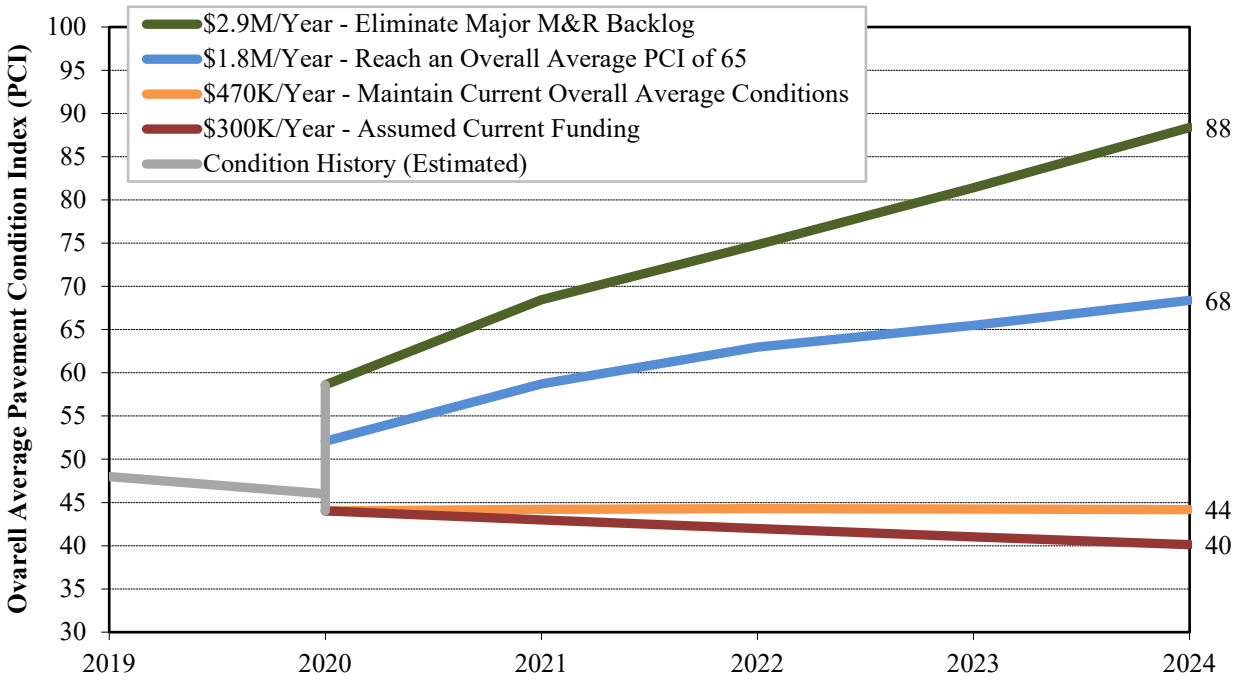


Figure 12: Impact of funding levels on overall pavement conditions by year.

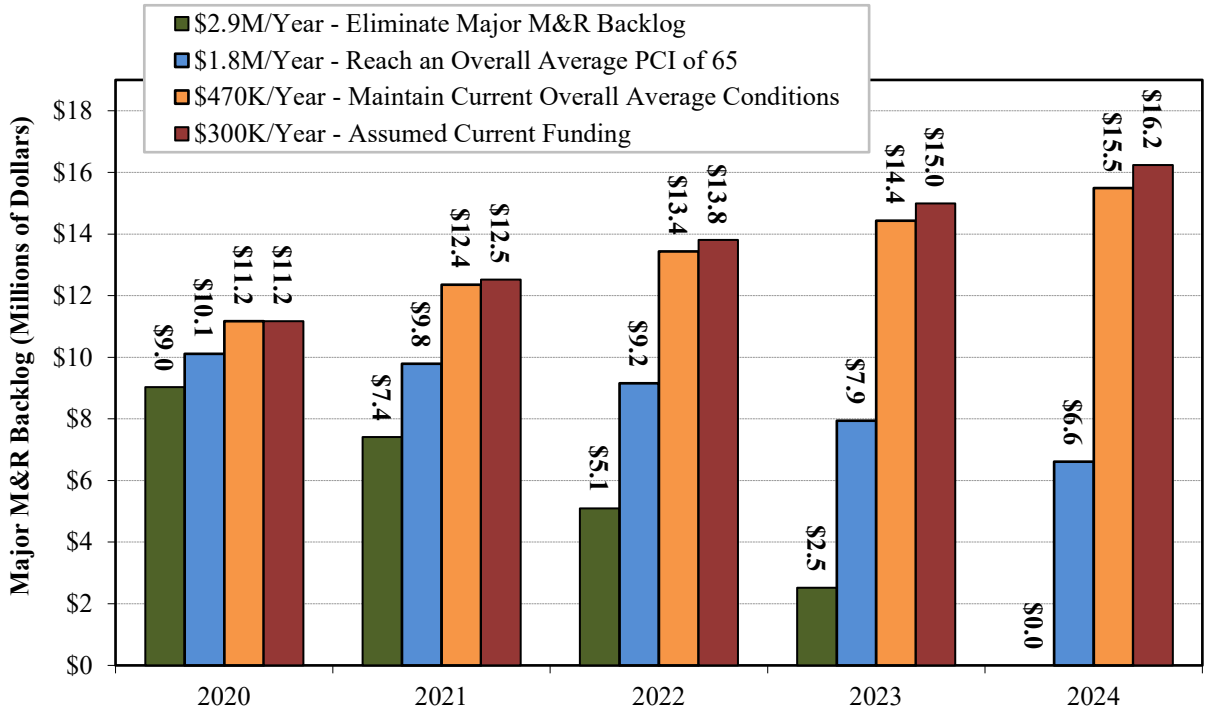


Figure 13: Impact of funding levels on major M&R backlog by year.

The consequences of the annual funding scenarios are shown in Table 9. This table illustrates the concept of "total cost." By treating both the total annual M&R expenditures and the remaining major M&R backlog at the end of the five-year period as costs to the Village, the benefit of increasing annual funding – which results in a smaller major M&R backlog – is clearly illustrated. Consequently, eliminating the major M&R backlog over a five-year period results in the lowest total cost to the Village.

Table 9. Estimated Five-year Pavement M&R Costs

Funding Scenario	Total Five-Year M&R Costs (2020-2024)	Remaining M&R Backlog[1)] (2024)	Total Five-year Cost[2)]	Projected PCI (2024)
$300K/YR (Assumed Current Funding)	$1.5M	$16.3M	$17.8M	40
Maintain Existing Overall Average Conditions ($470K/YR)	$2.35M	$15.4M	$17.8M	44
Increase Overall Average PCI to 65 ($1.8M/YR)	$9.0M	$6.6M	$15.6M	68
Backlog Elimination ($2.9M/YR)	$14.5M	$0M	$14.5M	88

1) "M&R Backlog" equals the lump-sum cost to resurface/reconstruct all pavements at or below their critical PCI value.
2) "Total five-year cost" equals the sum of the five-year major M&R expenditures plus the remaining major M&R backlog at the end of the five-year analysis period.

Appendix A maps A-5 and A-6 present major M&R recommendations. Map A-5 shows all roadways recommended for major M&R over the upcoming five years based on the Village's existing funding level. Map A-6 shows all roadways recommended for major M&R over the upcoming five years given an unlimited budget. The maps show which roadways are recommended each year by PAVER. These recommendations do not consider geographic proximity. Consequently, these recommendations should be grouped into practical projects during the Village's planning process.

Map A-7 shows all roads that are candidates for preventive maintenance, such as crack sealing and localized patching. While crack sealing can be an effective treatment for preserving roadways in good condition, its utility diminishes when applied to roadways that are already in poor condition or are exhibiting signs of structural failure.

Appendix B presents tabular data showing the estimated cost to repair each of the roads recommended for major M&R over the next five years based on the Village's existing funding level. Appendix C presents similar data assuming unlimited funding. *The costs presented in Appendixes B and C should be considered rough estimates only and should not be considered engineering estimates.* These costs are based on a simple relationship between predicted PCI value and typical level of major M&R. Unit costs used in developing these relationships were based on bid tabs provided by the Village and by costs reported by neighboring Villages.

Appendix E presents tabular data showing one-year estimated costs to apply preventive maintenance to each of the candidate roadways (i.e., roadways with PCI values of 65 or better). The total one-year preventive maintenance cost is estimated to be approximately $37,000, as shown in Table 10. *The estimated costs presented in Appendix E should be considered rough estimates based on the assumed unit costs only and should not be considered engineering estimates.*

Table 10. Preventive Maintenance Summary

Maintenance Type	Quantity	Units	Est. Cost
Crack Sealing - AC	22,238	FT	$22,238
Patching - AC Deep	1,270	SF	$13,968
Patching - AC Shallow	159	SF	$876
		Total:	**$37,083**

7 SUMMARY AND RECOMMENDATIONS

7.1 Summary

A pavement condition survey was performed in June 2019 on the Village's roadways. The results of the survey provide a snapshot of roadway conditions at the time of the survey. The PAVER Pavement Management System was implemented for the Village's roadways and was populated with collected pavement condition data and available M&R history data provided by the Village.

For the Village to get the most return on investment out of the PAVER Pavement Management System, the system must be considered a living entity and be updated regularly with M&R activities as they are performed, M&R unit cost data, and routinely collected pavement condition data. With such attention, PAVER becomes a repository of accurate, up-to-date data and can aid the Village in more cost-effectively programming M&R funding and objectively analyzing the true cost-effectiveness of presently employed M&R activities.

Five-year M&R funding analyses were performed on the Village's roadways using PAVER to: 1) evaluate the adequacy of the Village's existing funding level, 2) estimate the funding level needed to maintain the Village's existing roadway conditions, 3) estimate the funding level needed to modestly raise the overall condition of the Village's roadways, and 4) estimate the funding level needed to eliminate the Village's backlog of major M&R.

It was determined that the Village's existing funding level for major M&R is likely inadequate to maintain the current condition of the Village's roadway pavements. To maintain existing conditions, an increase in funding will likely be needed.

Based on this initial set of PCI data collection and analysis on the Village's roadways, G&AI respectfully offers the following broad recommendations.

7.2 Recommendations

7.2.1 Implement pavement preservation techniques

As discussed in Section 2.6, preventive maintenance activities, such as crack sealing, localized patching, and surface treatments, can cost-effectively extend the life of a pavement. The Village should incorporate these strategies into its M&R planning.

The Village does not appear to have an active crack sealing program for its roadways. Moisture penetrates unsealed cracks and compromises the base structure of the pavement. Freeze/thaw cycling exacerbates the damage. Sealing cracks on roadways that are in relatively good condition is a simple, cost-effective method for pavement preservation. Crack sealing is a preventive maintenance activity and should not be applied on roadways that require major M&R.

Furthermore, the Village should focus on applying routine preventive maintenance to newly resurfaced or reconstructed roadways. It was observed that some paving lane seams throughout the Village had not been sealed. Like crack sealing, sealing the paving lane seams is a simple method for pavement preservation, and it may be included in construction specifications.

7.2.2 Determine when pavements should be reconstructed rather than resurfaced

As the Village's asphalt-surfaced pavements age and are resurfaced multiple times, the performance of successive resurfacing projects will diminish. These "diminishing returns" occur because the sublayers of the pavement (the pavement structure below the asphalt surface) continue to deteriorate due to moisture infiltration, freeze-thaw damage, and damage due to vehicular loading. The M&R history and performance of resurfaced roadways should be closely tracked to determine the optimal number of resurfacing projects that may be performed prior to reconstructing the pavement.

7.2.3 Perform regular pavement condition inspections – every three years

To capitalize on the pavement condition survey and better track the condition of its pavements, the Village should continue to perform PCI surveys on a regular, three-year cycle. Doing so will enable the Village to:

1. Better track the deterioration of its pavements over time,
2. Identify pavement deterioration trends and use these trends to better predict future pavement conditions and then strategically apply M&R funding, and
3. Assess and track the effectiveness of its pavement preservation and major M&R activities.

The deterioration trends developed for this project were based on only one set of inspection data. Additional inspection data will help validate these trends and will improve forecasts, which may impact forecasted pavement conditions and recommended future M&R funding needs.

7.2.4 Routinely update the PAVER pavement management system

The PAVER system should be updated annually following the paving season to capture major M&R activities, routine maintenance activities, and pavement inventory changes (new roadways, jurisdictional changes, realignments). PAVER relies on updated inventory and work history data in order to generate meaningful recommendations.

7.2.5 Increase funding for pavement maintenance and rehabilitation

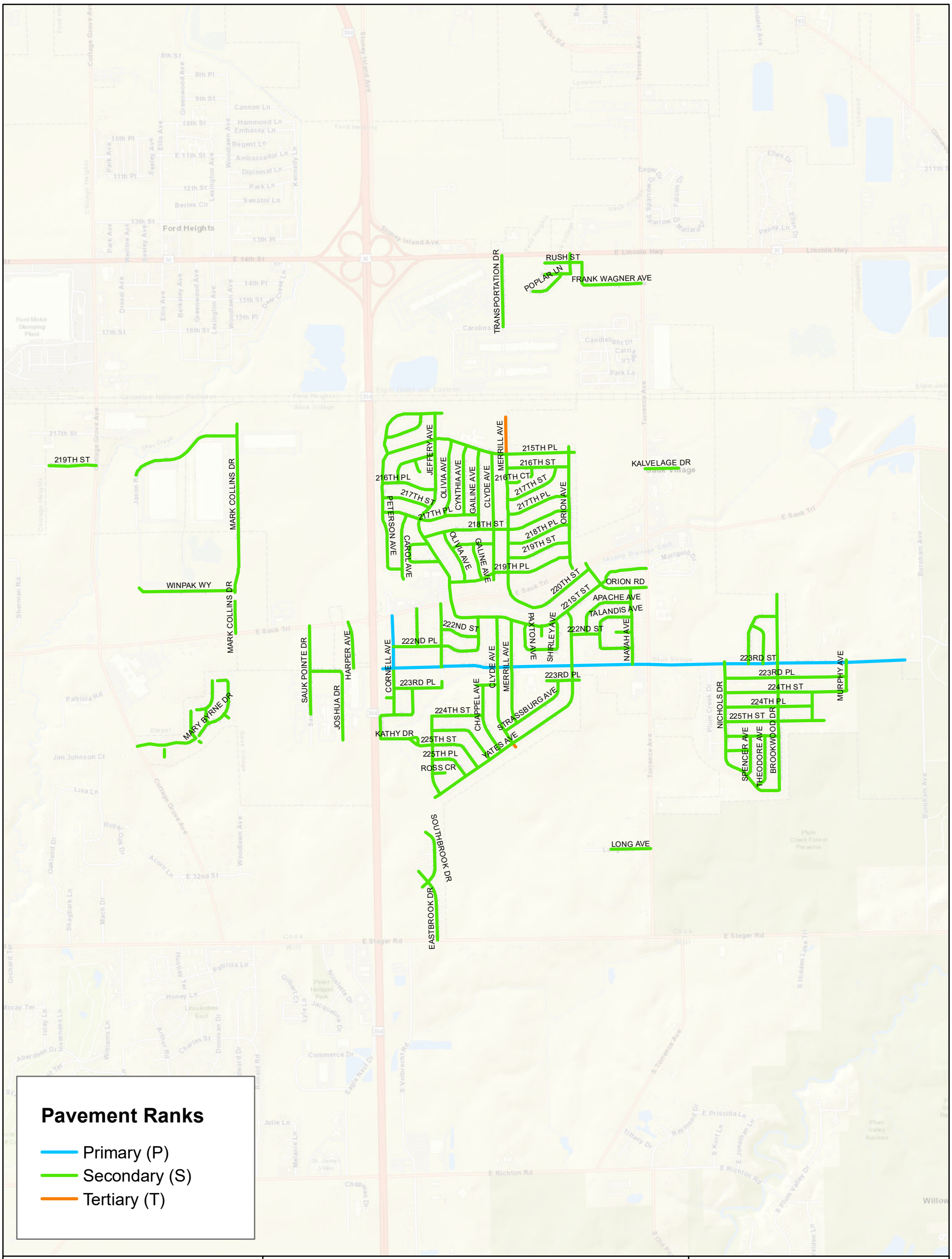
Based on the results of the pavement condition survey and forecasts of future pavement condition, the Village's current level of funding is likely inadequate to maintain the overall current condition of the Village's roadways. Managing a pavement network at an overall average PCI between 70 and 80 is more cost effective since funding is spent on less costly preventive maintenance and preservation activities rather than more expensive major M&R. As the Village moves forward, it is recommended that additional funding be allocated for M&R to improve the overall condition of the roadways so that they may be managed more cost-effectively.

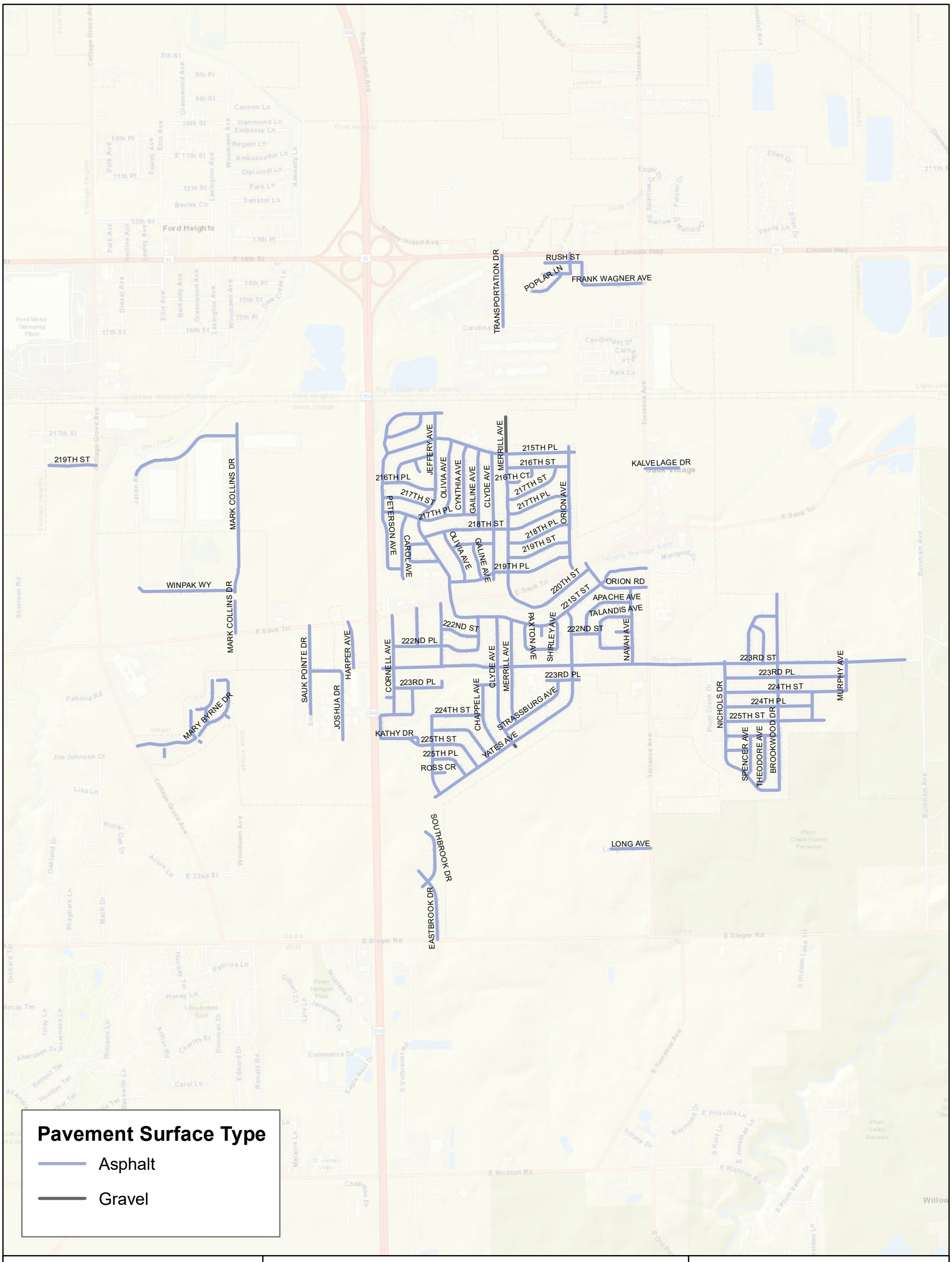
7.2.6 Prioritize existing M&R funding to maximize shared benefit

Currently, the Village's roadway M&R funding needs exceed available funding. The Village should focus major M&R activities on its most trafficked roadways. Doing so will maximize the overall shared benefit of the funds spent.

APPENDIX A – PAVEMENT INVENTORY, CONDITION, AND RECOMMENDED M&R MAPS

Map A-1: Pavement Ranks
Map A-2: Pavement Surface Types
Map A-3: Pavement Condition Index (PCI) values
Map A-4: International Roughness Index (IRI) values
Map A-5: Five-year major M&R recommendations – *Recommendations assuming current funding*
Map A-6: Five-year major M&R recommendations – *Recommendations assuming unlimited funding*
Map A-7: Pavement preservation candidates – *Current recommendations*


TRANSPORTATION DR
RUSH ST
POPLAR LN
FRANK WAGNER AVE
219TH ST
MARK COLLINS DR
WINPAK WY
MARY BYRNE DR
SAUK POINTE DR
HARPER AVE
JOSHUA DR
JEFFERY AVE
OLIVIA AVE
CYNTHIA AVE
GAILINE AVE
CLYDE AVE
MERRILL AVE
215TH PL
216TH ST
216TH CT
216TH PL
217TH ST
217TH PL
218TH ST
218TH PL
219TH ST
219TH PL
ORION AVE
PETERSON AVE
CAROL AVE
KALVELAGE DR
ORION RD
220TH ST
221ST ST
APACHE AVE
TALANDIS AVE
222ND ST
222ND PL
CORNELL AVE
PAXTON AVE
SHIRLEY AVE
NAVAH AVE
223RD ST
223RD PL
224TH ST
224TH PL
225TH ST
225TH PL
CHAPPEL AVE
STRASSBURG AVE
KATHY DR
ROSS CR
YATES AVE
NICHOLS DR
MURPHY AVE
SPENCER AVE
THEODORE AVE
BROOKWOOD DR
SOUTHBROOK DR
EASTBROOK DR
LONG AVE
Pavement Ranks
Primary (P)
Secondary (S)
Tertiary (T)
0
1,500
3,000
Feet
N
Map A-1:
Pavement Ranks
Sauk Village, Illinois
Pavement Management Program
Gorrondona & Associates, Inc.
Urban GIS
your world, your way



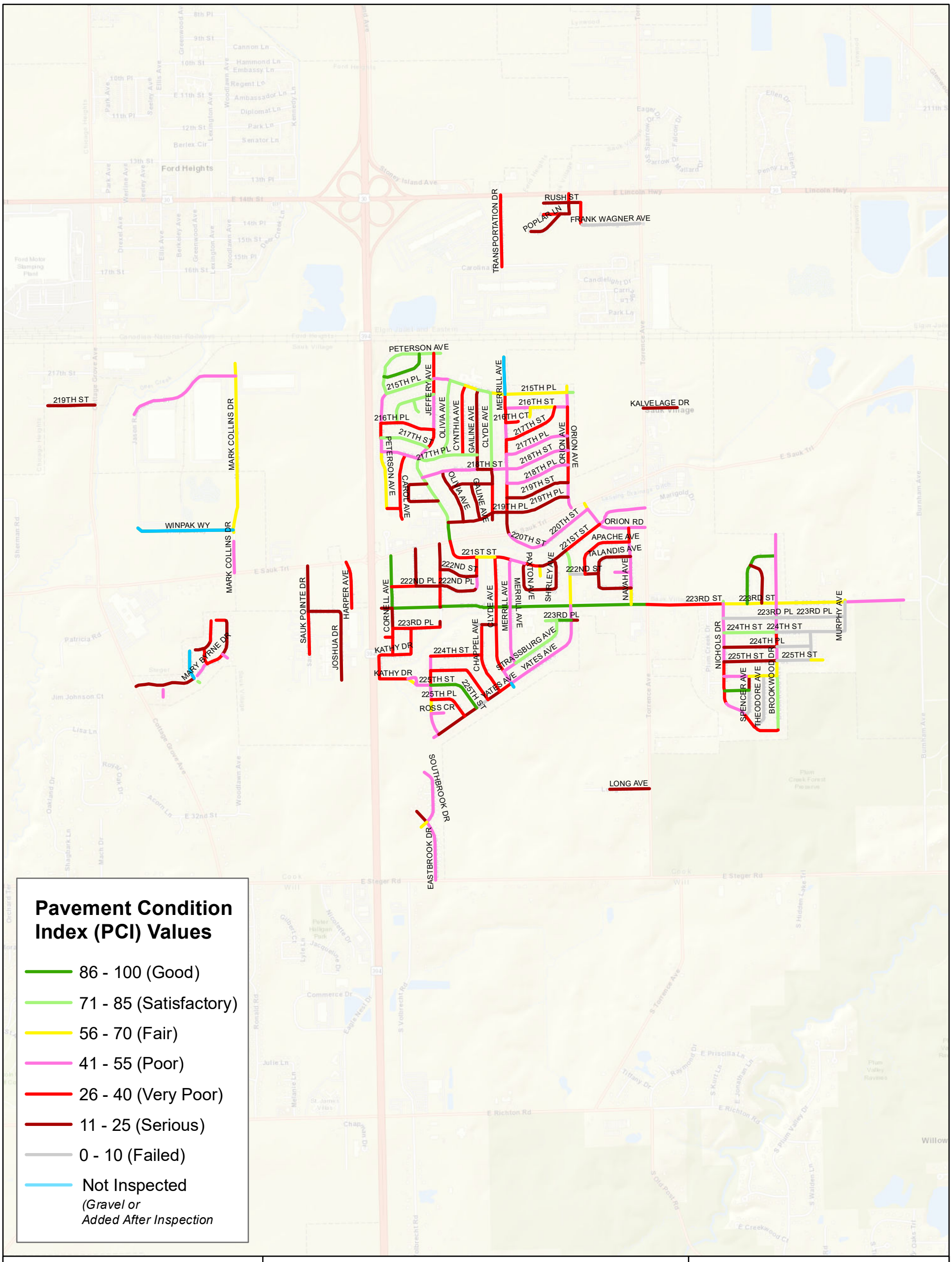
Sauk Village, Illinois

Pavement Management Program

Map A-2:
Pavement Surface Types

Gorrondona & Associates, Inc.

Urban GIS
your world, your way



Pavement Condition Index (PCI) Values

- 86 - 100 (Good)
- 71 - 85 (Satisfactory)
- 56 - 70 (Fair)
- 41 - 55 (Poor)
- 26 - 40 (Very Poor)
- 11 - 25 (Serious)
- 0 - 10 (Failed)
- Not Inspected
  (Gravel or Added After Inspection

N

0 1,500 3,000 Feet

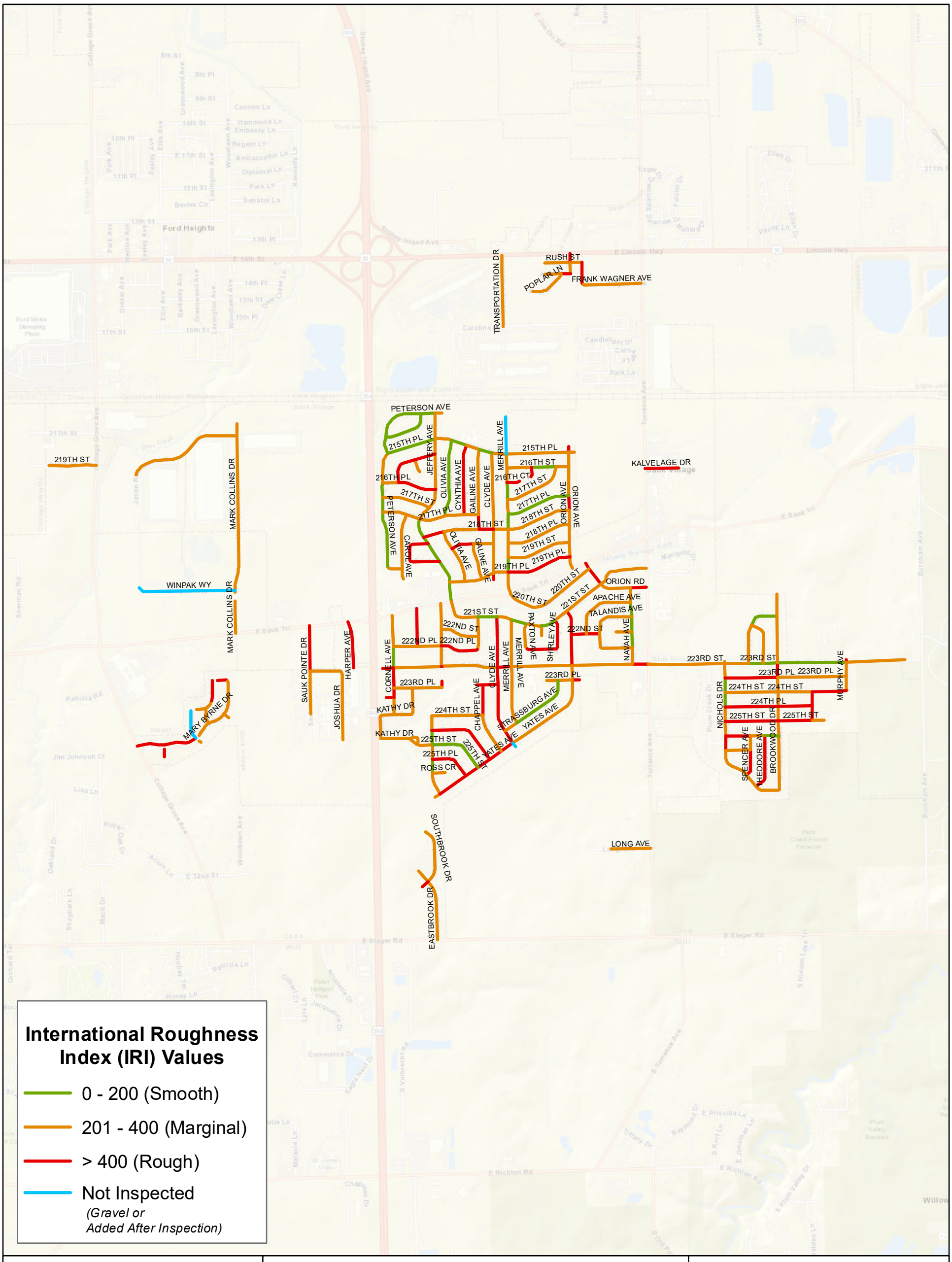
Map A-3:
Pavement Condition Index (PCI) Values

Sauk Village, Illinois

Pavement Management Program

Gorrondona & Associates, Inc.

Urban GIS
your world, your way



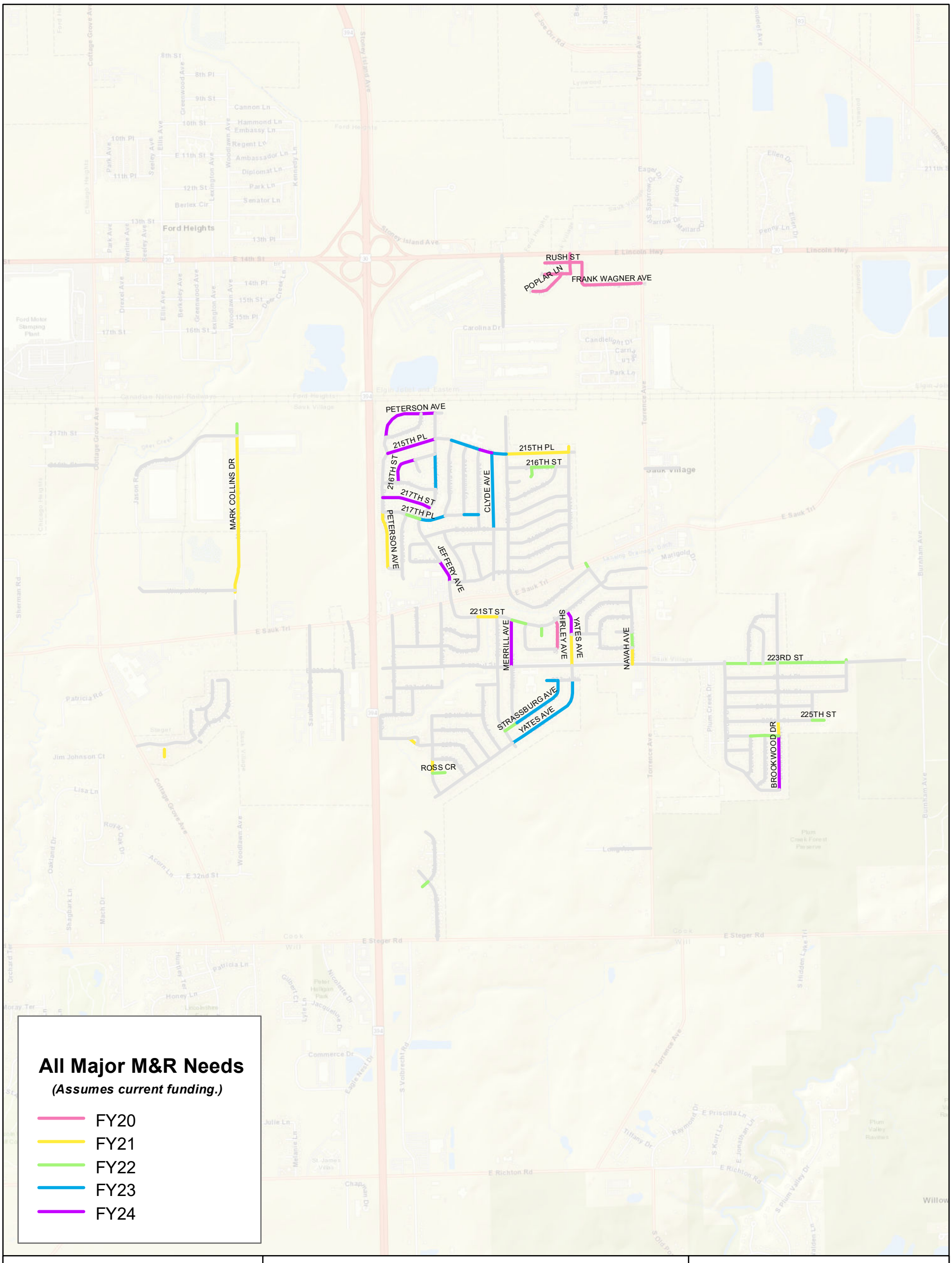
Sauk Village, Illinois

Pavement Management Program

Map A-4:
International Roughness Index (IRI) Values

Gorrondona & Associates, Inc.

Urban GIS
your world, your way



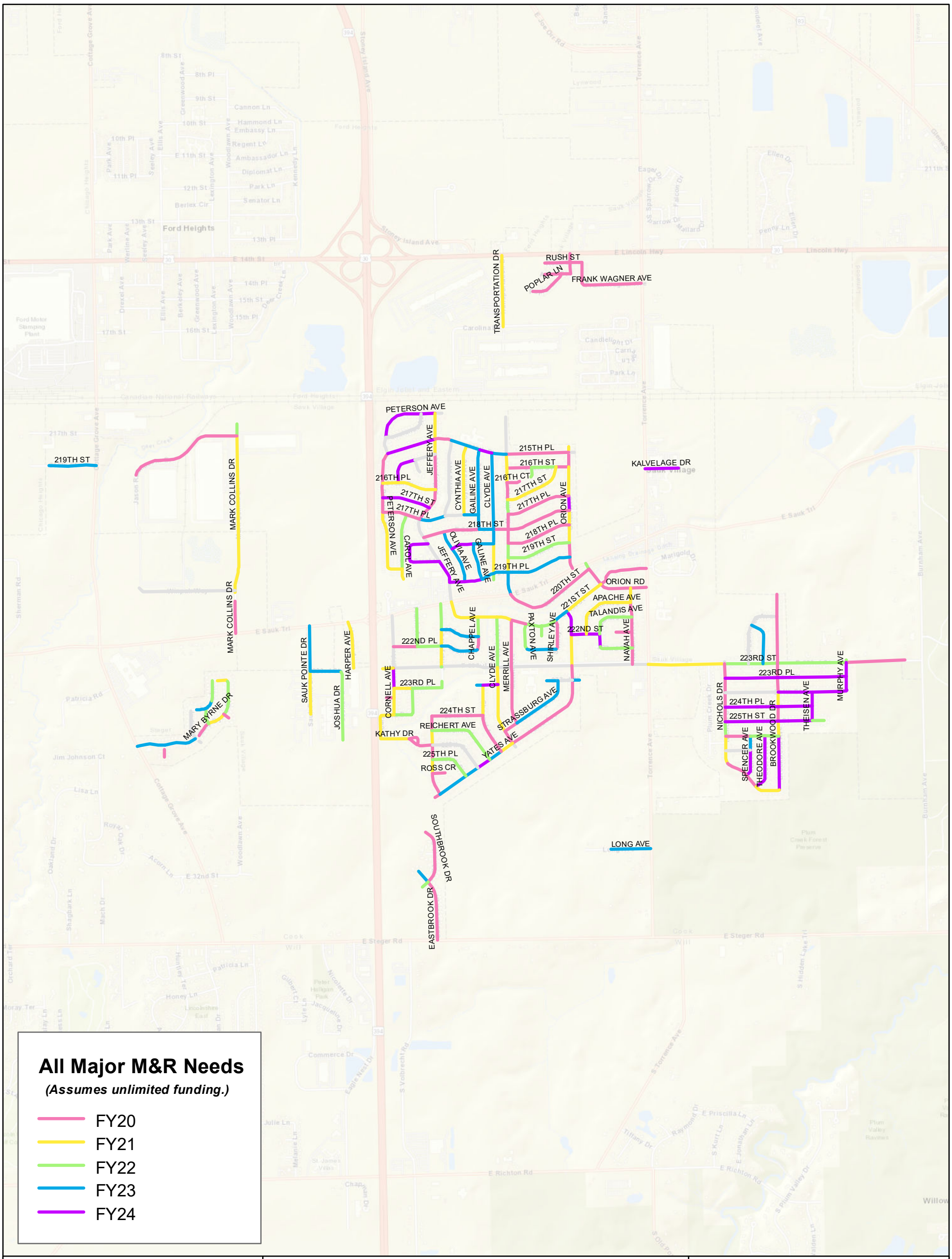
Map A-5:
All Major M&R Needs
(Assumes current funding.)

Sauk Village, Illinois

Pavement Management Program

Gorrondona & Associates, Inc.

Urban GIS
your world, your way



All Major M&R Needs

(Assumes unlimited funding.)

- FY20
- FY21
- FY22
- FY23
- FY24

N

0 1,500 3,000 Feet

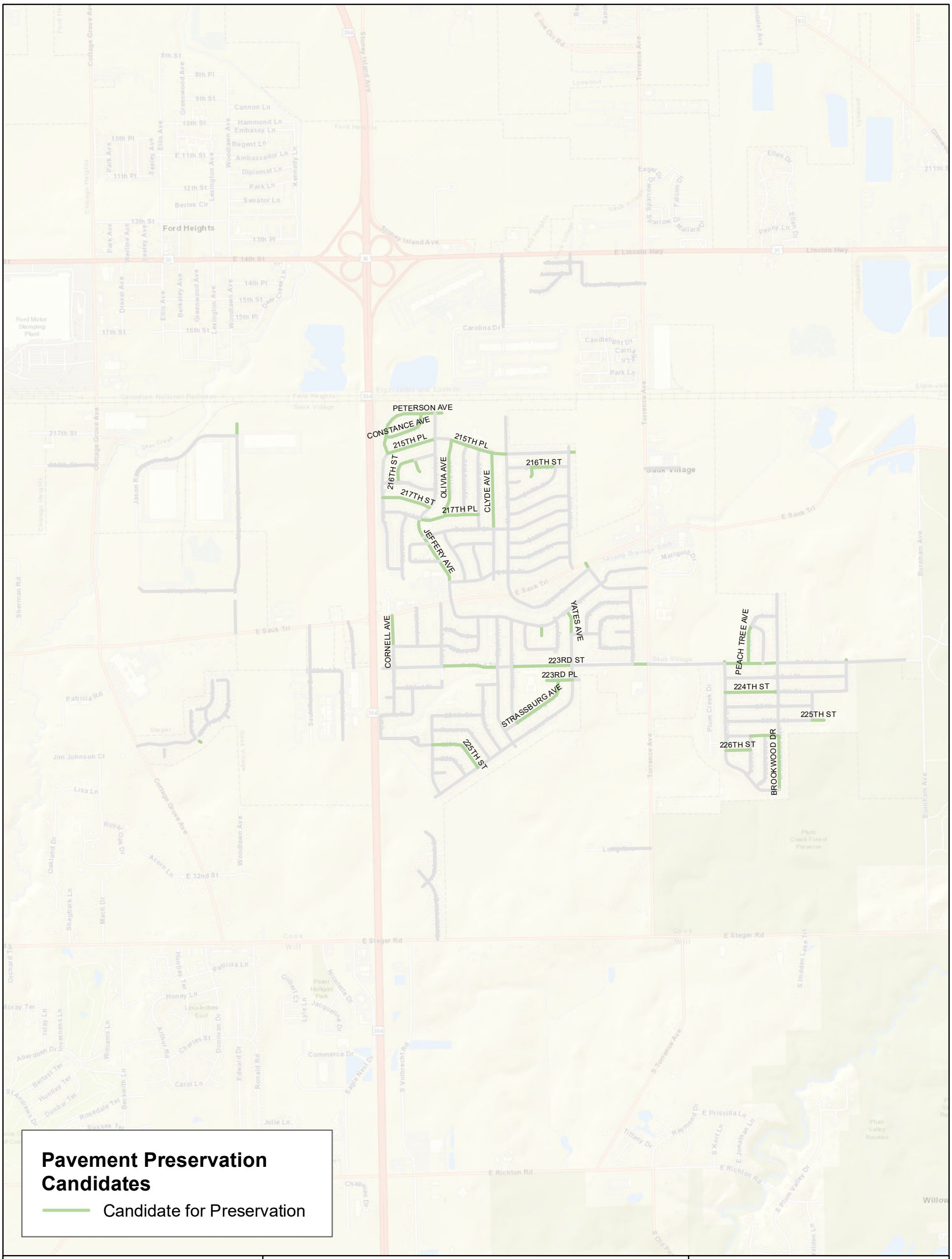
Map A-6:
All Major M&R Needs
(Assumes unlimited funding.)

Sauk Village, Illinois

Pavement Management Program

Gorrondona & Associates, Inc.

Urban GIS
your world, your way


PETERSON AVE
CONSTANCE AVE
215TH PL
215TH PL
216TH ST
216TH ST
OLIVIA AVE
CLYDE AVE
217TH ST
217TH PL
JEFFERY AVE
CORNELL AVE
YATES AVE
223RD ST
223RD PL
STRASSBURG AVE
225TH ST
PEACH TREE AVE
224TH ST
225TH ST
226TH ST
BROOKWOOD DR
Ford Heights
Sauk Village
Stoney Island Ave
E Lincoln Hwy
E Sauk Trl
E Steger Rd
E Richton Rd
Pavement Preservation Candidates
Candidate for Preservation
0
1,500
3,000
Feet
Map A-7:
Pavement Preservation Candidates
Sauk Village, Illinois
Pavement Management Program
Gorrondona & Associates, Inc.
Urban GIS
your world, your way

APPENDIX B – TABULATED 5-YEAR MAJOR M&R RECOMMENDATIONS AND ESTIMATED COSTS – *ASSUMING CURRENT FUNDING*

Pavement ID	Road Name	From	To	Area	PCI	Year	Cost
SKVIL::BRRY LN::10	BARRY LANE	RUSH STREET	FRANK WAGNER AVENUE	11,789	29	2020	$ 76,626
SKVIL::FRK WR AVE::10	FRANK WAGNER AVENUE	BARRY LANE	TORRENCE AVENUE	24,894	7	2020	$ 161,814
SKVIL::PPLR LN::10	POPLAR LANE	ASTOR STREET	END	18,893	13	2020	$ 122,804
SKVIL::RSH ST::10	RUSH STREET	STONE LANE	END	13,261	10	2020	$ 86,193
SKVIL::RSH ST::20	RUSH STREET	STONE LANE	BARRY LANE	6,083	14	2020	$ 39,538
SKVIL::SHRLY AVE::10	SHIRLEY AVENUE	222ND PLACE	221ST STREET	13,693	14	2020	$ 89,004
SKVIL::STN LN::10	STONE LANE	RUSH STREET	ASTOR STREET	5,782	14	2020	$ 37,580
SKVIL::STN LN::20	STONE LANE	E LINCOLN HIGHWAY	RUSH STREET	7,826	37	2020	$ 50,870
SKVIL::STR ST::10	ASTOR STREET	POPLAR LANE	END	8,640	28	2020	$ 56,157
SKVIL::STR ST::20	ASTOR STREET	STONE LANE	POPLAR LANE	4,761	18	2020	$ 30,945
SKVIL::215TH PL::70	215TH PLACE	MERRILL AVENUE	ORION AVENUE	28,926	49	2021	$ 46,728
SKVIL::221ST ST::20	221ST STREET	CHAPPEL AVENUE	CLYDE AVENUE	8,633	51	2021	$ 12,834
SKVIL::225TH ST::10	225TH STREET	225TH STREET C	225TH STREET C	4,459	50	2021	$ 6,881
SKVIL::BRKWD DR::20	BROOKWOOD DRIVE	225TH PLACE	225TH STREET	9,078	55	2021	$ 10,745
SKVIL::DBR CT::10	DEBRA COURT	MARY BYRNE DRIVE	END	3,852	44	2021	$ 8,526
SKVIL::JFFRY AVE::20	JEFFERY AVENUE	ROSS CIRCLE	225TH PLACE	6,546	52	2021	$ 8,963
SKVIL::MRKCLNS DR::20	MARK COLLINS DRIVE	WINPAK WAY	JASON RASMUSSEN DRIVE	112,344	55	2021	$ 132,965
SKVIL::NVH AVE::10	NAVAH AVENUE	223RD STREET	222ND PLACE	7,688	49	2021	$ 12,419
SKVIL::PTRSN AVE::20	PETERSON AVENUE	PETERSON AVENUE	217TH PLACE	26,529	53	2021	$ 34,721
SKVIL::RN AVE::80	ORION AVENUE	215TH PLACE	END	2,793	53	2021	$ 3,655
SKVIL::YTS AVE::90	YATES AVENUE	223RD STREET	222ND STREET	14,561	52	2021	$ 20,803
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	11,289	52	2022	$ 16,441
SKVIL::217TH PL::20	217TH PLACE	CAROL AVENUE	JEFFERY AVENUE	6,609	46	2022	$ 13,401
SKVIL::221ST ST::40	221ST STREET	MERRILL AVENUE	PAXTON AVENUE	6,692	46	2022	$ 13,568
SKVIL::223RD ST::100	223RD STREET	NICHOLS DRIVE	PEACH TREE AVENUE	20,225	52	2022	$ 28,296
SKVIL::223RD ST::110	223RD STREET	PEACH TREE AVENUE	WILLOW TREE LANE	12,533	52	2022	$ 17,535
SKVIL::223RD ST::120	223RD STREET	WILLOW TREE LANE	BROOKWOOD DRIVE	12,191	53	2022	$ 16,347
SKVIL::223RD ST::130	223RD STREET	BROOKWOOD DRIVE	MURPHY AVENUE	58,526	51	2022	$ 88,451
SKVIL::225TH PL::30	225TH PLACE	SPENCER AVENUE	THEODORE AVENUE	6,796	52	2022	$ 9,507
SKVIL::225TH PL::40	225TH PLACE	THEODORE AVENUE	BROOKWOOD DRIVE	6,325	52	2022	$ 8,849
SKVIL::225TH ST::60	225TH STREET	THEISEN AVENUE	END	5,592	54	2022	$ 7,160
SKVIL::LLL CT::10	LUELLA COURT	221ST STREET	END	4,729	52	2022	$ 6,888
SKVIL::MRKCLNS DR::30	MARK COLLINS DRIVE	JASON RASMUSSEN DRIVE	END	8,419	53	2022	$ 11,289
SKVIL::MRPHY AVE::30	MURPHY AVENUE	223RD STREET	END	1,986	53	2022	$ 2,662
SKVIL::MRRLL CT::10	MERRILL COURT	216TH STREET	END	4,343	53	2022	$ 5,824
SKVIL::NVH AVE::20	NAVAH AVENUE	222ND PLACE	POMO COURT	7,323	46	2022	$ 14,847
SKVIL::RN RD::10	ORION ROAD	E SAUK TRAIL	220TH STREET	3,371	53	2022	$ 4,520
SKVIL::RSS CR::10	ROSS CIRCLE	JEFFERY AVENUE	END	5,840	46	2022	$ 11,841
SKVIL::STHBRK DR::10	SOUTHBROOK DRIVE	EASTBROOK DRIVE	END	3,883	51	2022	$ 5,869
SKVIL::STRSBR AVE::10	STRASSBURG AVENUE	CLYDE AVENUE	MERRILL AVENUE	6,796	46	2022	$ 13,780
SKVIL::215TH PL::30	215TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	7,308	52	2023	$ 10,987
SKVIL::215TH PL::40	215TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,397	51	2023	$ 9,969
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,752	51	2023	$ 10,521
SKVIL::217TH PL::30	217TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	11,972	52	2023	$ 17,311
SKVIL::217TH PL::50	217TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,864	55	2023	$ 8,647
SKVIL::223RD PL::50	223RD PLACE	STRASSBURG AVENUE	END	5,285	54	2023	$ 6,996
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	35,473	54	2023	$ 46,956
SKVIL::JFFRY AVE::170	JEFFERY AVENUE	216TH PLACE	216TH STREET	16,330	44	2023	$ 38,351
SKVIL::STRSBR AVE::20	STRASSBURG AVENUE	MERRILL AVENUE	223RD PLACE	29,425	52	2023	$ 44,237
SKVIL::YTS AVE::70	YATES AVENUE	CLYDE AVENUE	223RD PLACE	43,291	44	2023	$ 101,051
SKVIL::215TH PL::10	215TH PLACE	PETERSON AVENUE	JEFFERY AVENUE	22,968	52	2024	$ 34,186
SKVIL::215TH PL::50	215TH PLACE	GALINE AVENUE	CLYDE AVENUE	5,898	51	2024	$ 9,487
SKVIL::216TH ST::10	216TH STREET	216TH PLACE	CHARLOTTE COURT	15,542	51	2024	$ 24,999
SKVIL::217TH ST::10	217TH STREET	PETERSON AVENUE	JEFFERY AVENUE	22,503	53	2024	$ 32,050
SKVIL::BRKWD DR::10	BROOKWOOD DRIVE	NICHOLS DRIVE	225TH PLACE	32,451	51	2024	$ 52,195
SKVIL::JFFRY AVE::110	JEFFERY AVENUE	219TH PLACE	CAROL LANE	16,655	52	2024	$ 25,817
SKVIL::MRRLL AVE::20	MERRILL AVENUE	223RD STREET	221ST STREET	21,904	44	2024	$ 52,984
SKVIL::PTRSN AVE::70	PETERSON AVENUE	CONSTANCE AVENUE	CONSTANCE AVENUE	22,852	53	2024	$ 32,546
SKVIL::PTRSN AVE::80	PETERSON AVENUE	CONSTANCE AVENUE	JEFFERY AVENUE	6,585	51	2024	$ 10,592
SKVIL::YTS AVE::100	YATES AVENUE	222ND STREET	221ST STREET	11,244	51	2024	$ 18,085

APPENDIX C – TABULATED 5-YEAR MAJOR M&R RECOMMENDATIONS AND ESTIMATED COSTS – *ASSUMING UNLIMITED FUNDING*

Pavement ID	Road Name	From	To	Area	PCI	Year	Cost
SKVIL::215TH PL::20	215TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	7,735	46	2020	$ 14,923
SKVIL::215TH PL::70	215TH PLACE	MERRILL AVENUE	ORION AVENUE	28,926	53	2020	$ 36,039
SKVIL::216TH CT::10	216TH COURT	MERRILL AVENUE	END	5,796	37	2020	$ 16,078
SKVIL::216TH ST::30	216TH STREET	MERRILL AVENUE	MERRILL COURT	11,640	48	2020	$ 19,629
SKVIL::216TH ST::50	216TH STREET	217TH STREET	ORION AVENUE	5,890	44	2020	$ 12,565
SKVIL::217TH PL::10	217TH PLACE	PETERSON AVENUE	CAROL AVENUE	11,229	50	2020	$ 17,028
SKVIL::217TH PL::20	217TH PLACE	CAROL AVENUE	JEFFERY AVENUE	6,609	52	2020	$ 8,681
SKVIL::217TH PL::60	217TH PLACE	MERRILL AVENUE	ORION AVENUE	30,081	39	2020	$ 78,842
SKVIL::218TH PL::30	218TH PLACE	MERRILL AVENUE	ORION AVENUE	31,516	46	2020	$ 60,801
SKVIL::218TH ST::10	218TH STREET	JEFFERY AVENUE	OLIVIA AVENUE	12,448	48	2020	$ 20,991
SKVIL::218TH ST::20	218TH STREET	OLIVIA AVENUE	GALINE AVENUE	21,209	39	2020	$ 55,589
SKVIL::218TH ST::40	218TH STREET	CLYDE AVENUE	MERRILL AVENUE	6,802	44	2020	$ 14,108
SKVIL::218TH ST::50	218TH STREET	MERRILL AVENUE	ORION AVENUE	30,240	42	2020	$ 69,010
SKVIL::220TH ST::10	220TH STREET	E SAUK TRAIL	ORION ROAD	44,275	45	2020	$ 88,735
SKVIL::221ST ST::40	221ST STREET	MERRILL AVENUE	PAXTON AVENUE	6,692	52	2020	$ 8,789
SKVIL::221ST ST::90	221ST STREET	ORION ROAD	TORRENCE AVENUE	24,319	47	2020	$ 44,996
SKVIL::222ND PL::10	222ND PLACE	CORNELL AVENUE	PRAIRIE AVENUE	11,673	37	2020	$ 32,379
SKVIL::223RD ST::140	223RD STREET	MURPHY AVENUE	END	21,621	47	2020	$ 40,005
SKVIL::224TH CT::10	224TH COURT	CORNELL AVENUE	END	3,580	33	2020	$ 11,562
SKVIL::224TH ST::10	224TH STREET	JEFFERY AVENUE	CHAPPEL AVENUE	23,806	36	2020	$ 69,583
SKVIL::225TH PL::20	225TH PLACE	NICHOLS DRIVE	SPENCER AVENUE	11,552	42	2020	$ 26,362
SKVIL::225TH ST::10	225TH STREET	225TH STREET C	225TH STREET C	4,459	54	2020	$ 5,251
SKVIL::225TH ST::20	225TH STREET	225TH STREET C	JEFFERY AVENUE	7,289	50	2020	$ 11,053
SKVIL::225TH ST C::10	225TH STREET C	225TH STREET	225TH STREET	7,073	50	2020	$ 10,725
SKVIL::BRKWD DR::30	BROOKWOOD DRIVE	225TH STREET	224TH PLACE	8,557	42	2020	$ 19,527
SKVIL::BRKWD DR::50	BROOKWOOD DRIVE	224TH STREET	223RD PLACE	8,766	45	2020	$ 17,569
SKVIL::BRKWD DR::60	BROOKWOOD DRIVE	223RD PLACE	223RD STREET	8,602	44	2020	$ 17,842
SKVIL::BRKWD DR::70	BROOKWOOD DRIVE	223RD STREET	PEACH TREE AVENUE	28,302	42	2020	$ 64,588
SKVIL::BRKWD DR::80	BROOKWOOD DRIVE	PEACH TREE AVENUE	END	13,084	44	2020	$ 27,910
SKVIL::BRRY LN::10	BARRY LANE	RUSH STREET	FRANK WAGNER AVENUE	11,789	29	2020	$ 76,626
SKVIL::CHPPL AVE::10	CHAPPEL AVENUE	YATES AVENUE	224TH STREET	19,214	37	2020	$ 53,297
SKVIL::CHPPL AVE::30	CHAPPEL AVENUE	222ND PLACE	222ND STREET	6,374	40	2020	$ 15,681
SKVIL::CLYD AVE::20	CLYDE AVENUE	YATES AVENUE	STRASSBURG AVENUE	8,367	44	2020	$ 17,354
SKVIL::DBR CT::10	DEBRA COURT	MARY BYRNE DRIVE	END	3,852	44	2020	$ 8,216
SKVIL::ESTBRK DR::10	EASTBROOK DRIVE	STEGER ROAD	SOUTHBROOK DRIVE	31,441	40	2020	$ 77,347
SKVIL::FRK WR AVE::10	FRANK WAGNER AVENUE	BARRY LANE	TORRENCE AVENUE	24,894	7	2020	$ 161,814
SKVIL::J RSMSN DR::10	JASON RASMUSSEN DRIVE	MARK COLLINS DRIVE	END	80,738	40	2020	$ 198,618
SKVIL::JFFRY AVE::10	JEFFERY AVENUE	YATES AVENUE	ROSS CIRCLE	10,537	44	2020	$ 22,477
SKVIL::JFFRY AVE::150	JEFFERY AVENUE	217TH PLACE	217TH STREET	6,654	47	2020	$ 11,773
SKVIL::JFFRY AVE::160	JEFFERY AVENUE	217TH STREET	216TH PLACE	9,334	36	2020	$ 27,283
SKVIL::JFFRY AVE::170	JEFFERY AVENUE	216TH PLACE	216TH STREET	16,330	47	2020	$ 30,215
SKVIL::JFFRY AVE::30	JEFFERY AVENUE	225TH PLACE	225TH STREET	6,599	51	2020	$ 9,549
SKVIL::JFFRY AVE::50	JEFFERY AVENUE	REICHERT AVENUE	224TH STREET	6,733	51	2020	$ 9,744
SKVIL::MRKCLNS DR::10	MARK COLLINS DRIVE	E SAUK TRAIL	END	22,814	44	2020	$ 47,320
SKVIL::MRRLL AVE::10	MERRILL AVENUE	STRASSBURG AVENUE	223RD STREET	26,515	39	2020	$ 69,496
SKVIL::MRRLL AVE::20	MERRILL AVENUE	223RD STREET	221ST STREET	21,904	50	2020	$ 33,215
SKVIL::MRRLL AVE::60	MERRILL AVENUE	218TH PLACE	218TH STREET	6,624	44	2020	$ 14,130
SKVIL::MRRLL AVE::70	MERRILL AVENUE	218TH STREET	217TH PLACE	6,878	47	2020	$ 12,726
SKVIL::MRRLL AVE::90	MERRILL AVENUE	217TH STREET	216TH COURT	7,924	42	2020	$ 18,083
SKVIL::MRY BYR DR::10	MARY BYRNE DRIVE	INDIE LANE	HELEN DRIVE	8,114	39	2020	$ 21,266
SKVIL::MRY CT::10	MARY COURT	MARY BYRNE DRIVE	END	3,182	39	2020	$ 8,341
SKVIL::NCHLS DR::100	NICHOLS DRIVE	223RD PLACE	223RD STREET	8,480	51	2020	$ 12,271
SKVIL::NCHLS DR::20	NICHOLS DRIVE	THEODORE AVENUE	SPENCER AVENUE	8,725	36	2020	$ 25,503
SKVIL::NCHLS DR::30	NICHOLS DRIVE	SPENCER AVENUE	NICHOLS DRIVE	13,682	47	2020	$ 24,207
SKVIL::NCHLS DR::70	NICHOLS DRIVE	225TH STREET	224TH PLACE	8,847	46	2020	$ 17,068
SKVIL::NCHLS DR::80	NICHOLS DRIVE	224TH PLACE	224TH STREET	8,559	44	2020	$ 17,752
SKVIL::NCHLS DR::90	NICHOLS DRIVE	224TH STREET	223RD PLACE	8,899	47	2020	$ 16,466
SKVIL::NVH AVE::10	NAVAH AVENUE	223RD STREET	222ND PLACE	7,688	53	2020	$ 9,579
SKVIL::NVH AVE::20	NAVAH AVENUE	222ND PLACE	POMO COURT	7,323	52	2020	$ 9,618
SKVIL::NVH AVE::30	NAVAH AVENUE	POMO COURT	TALANDIS AVENUE	7,178	40	2020	$ 17,658

Pavement ID	Road Name	From	To	Area	PCI	Year	Cost
SKVIL::NVH AVE::40	NAVAH AVENUE	TALANDIS AVENUE	APACHE AVENUE	6,811	44	2020	$ 14,529
SKVIL::PM CT::10	POMO COURT	NAVAH AVENUE	END	7,414	51	2020	$ 10,729
SKVIL::PPLR LN::10	POPLAR LANE	ASTOR STREET	END	18,893	13	2020	$ 122,804
SKVIL::PTRSN AVE::30	PETERSON AVENUE	217TH PLACE	217TH STREET	6,583	48	2020	$ 11,101
SKVIL::PTRSN AVE::40	PETERSON AVENUE	217TH STREET	216TH PLACE	6,806	36	2020	$ 19,893
SKVIL::PTRSN AVE::50	PETERSON AVENUE	216TH PLACE	215TH PLACE	14,426	46	2020	$ 27,832
SKVIL::RN AVE::10	ORION AVENUE	E SAUK TRAIL	219TH PLACE	5,452	49	2020	$ 8,736
SKVIL::RN AVE::20	ORION AVENUE	219TH PLACE	219TH STREET	6,718	47	2020	$ 11,887
SKVIL::RN AVE::70	ORION AVENUE	216TH STREET	215TH PLACE	6,725	47	2020	$ 12,444
SKVIL::RN RD::20	ORION ROAD	220TH STREET	221ST STREET	9,237	47	2020	$ 17,091
SKVIL::RN RD::30	ORION ROAD	221ST STREET	NAVAH AVENUE	14,239	47	2020	$ 26,346
SKVIL::RN RD::40	ORION ROAD	NAVAH AVENUE	TORRENCE AVENUE	7,562	45	2020	$ 15,155
SKVIL::RSH ST::10	RUSH STREET	STONE LANE	END	13,261	10	2020	$ 86,193
SKVIL::RSH ST::20	RUSH STREET	STONE LANE	BARRY LANE	6,083	14	2020	$ 39,538
SKVIL::RSS CR::10	ROSS CIRCLE	JEFFERY AVENUE	END	5,840	52	2020	$ 7,671
SKVIL::SHRLY AVE::10	SHIRLEY AVENUE	222ND PLACE	221ST STREET	13,693	14	2020	$ 89,004
SKVIL::STHBRK DR::20	SOUTHBROOK DRIVE	EASTBROOK DRIVE	END	29,046	40	2020	$ 71,453
SKVIL::STN LN::10	STONE LANE	RUSH STREET	ASTOR STREET	5,782	14	2020	$ 37,580
SKVIL::STN LN::20	STONE LANE	E LINCOLN HIGHWAY	RUSH STREET	7,826	37	2020	$ 50,870
SKVIL::STR ST::10	ASTOR STREET	POPLAR LANE	END	8,640	28	2020	$ 56,157
SKVIL::STR ST::20	ASTOR STREET	STONE LANE	POPLAR LANE	4,761	18	2020	$ 30,945
SKVIL::STRSBR AVE::10	STRASSBURG AVENUE	CLYDE AVENUE	MERRILL AVENUE	6,796	52	2020	$ 8,927
SKVIL::YTS AVE::10	YATES AVENUE	JEFFERY AVENUE	END	7,665	44	2020	$ 16,352
SKVIL::YTS AVE::70	YATES AVENUE	CLYDE AVENUE	223RD PLACE	43,291	49	2020	$ 69,366
SKVIL::YTS AVE::80	YATES AVENUE	223RD PLACE	223RD STREET	6,709	51	2020	$ 9,709
SKVIL::216TH PL::10	216TH PLACE	PETERSON AVENUE	216TH STREET	7,404	31	2021	$ 25,942
SKVIL::216TH PL::20	216TH PLACE	216TH STREET	JEFFERY AVENUE	17,730	25	2021	$ 90,487
SKVIL::217TH ST::20	217TH STREET	MERRILL AVENUE	216TH STREET	29,032	30	2021	$ 103,306
SKVIL::221ST ST::10	221ST STREET	E SAUK TRAIL	CHAPPEL AVENUE	17,345	30	2021	$ 61,717
SKVIL::221ST ST::20	221ST STREET	CHAPPEL AVENUE	CLYDE AVENUE	8,633	51	2021	$ 12,834
SKVIL::221ST ST::30	221ST STREET	CLYDE AVENUE	MERRILL AVENUE	7,367	31	2021	$ 25,811
SKVIL::221ST ST::80	221ST STREET	YATES AVENUE	ORION ROAD	20,107	26	2021	$ 96,407
SKVIL::223RD PL::10	223RD PLACE	CORNELL AVENUE	KATHY DRIVE	8,554	30	2021	$ 30,438
SKVIL::223RD ST::20	223RD STREET	CORNELL AVENUE	END	3,966	19	2021	$ 26,553
SKVIL::223RD ST::90	223RD STREET	TORRENCE AVENUE	NICHOLS DRIVE	65,105	30	2021	$ 243,737
SKVIL::BRKWD DR::20	BROOKWOOD DRIVE	225TH PLACE	225TH STREET	9,078	55	2021	$ 10,745
SKVIL::BRKWD DR::40	BROOKWOOD DRIVE	224TH PLACE	224TH STREET	8,632	27	2021	$ 38,721
SKVIL::CHPPL AVE::20	CHAPPEL AVENUE	224TH STREET	223RD PLACE	14,080	28	2021	$ 58,805
SKVIL::CLYD AVE::30	CLYDE AVENUE	STRASSBURG AVENUE	223RD PLACE	27,977	28	2021	$ 116,845
SKVIL::CLYD AVE::40	CLYDE AVENUE	223RD PLACE	223RD STREET	10,159	26	2021	$ 48,710
SKVIL::CLYD AVE::70	CLYDE AVENUE	219TH PLACE	218TH PLACE	13,667	30	2021	$ 49,348
SKVIL::CRL AVE::10	CAROL AVENUE	PETERSON AVENUE	END	4,956	28	2021	$ 20,697
SKVIL::CRNLL AVE::10	CORNELL AVENUE	KATHY DRIVE	224TH COURT	8,130	26	2021	$ 38,981
SKVIL::CRNLL AVE::20	CORNELL AVENUE	224TH COURT	223RD PLACE	4,195	29	2021	$ 16,225
SKVIL::CYNTH AVE::10	CYNTHIA AVENUE	217TH PLACE	215TH PLACE	32,597	27	2021	$ 146,216
SKVIL::HRPR AVE::10	HARPER AVENUE	E SAUK TRAIL	END	19,939	23	2021	$ 114,085
SKVIL::JFFRY AVE::180	JEFFERY AVENUE	216TH STREET	215TH PLACE	7,220	30	2021	$ 27,029
SKVIL::JFFRY AVE::190	JEFFERY AVENUE	215TH PLACE	PETERSON AVENUE	11,822	31	2021	$ 41,420
SKVIL::JFFRY AVE::20	JEFFERY AVENUE	ROSS CIRCLE	225TH PLACE	6,546	52	2021	$ 8,963
SKVIL::JFFRY AVE::40	JEFFERY AVENUE	225TH STREET	REICHERT AVENUE	6,760	30	2021	$ 24,408
SKVIL::JFFRY AVE::70	JEFFERY AVENUE	223RD STREET	222ND PLACE	9,697	24	2021	$ 52,487
SKVIL::JFFRY AVE::80	JEFFERY AVENUE	222ND PLACE	222ND STREET	7,540	26	2021	$ 36,153
SKVIL::JNC DR::10	JANICE DRIVE	START	MARY BYRNE DRIVE	5,451	30	2021	$ 19,683
SKVIL::KTHY DR::10	KATHY DRIVE	CORNELL AVENUE	225TH STREET C	30,244	31	2021	$ 105,967
SKVIL::MRKCLNS DR::20	MARK COLLINS DRIVE	WINPAK WAY	JASON RASMUSSEN DRIVE	112,344	55	2021	$ 132,965
SKVIL::MRRLL AVE::100	MERRILL AVENUE	216TH COURT	216TH STREET	6,613	30	2021	$ 23,880
SKVIL::MRRLL AVE::110	MERRILL AVENUE	216TH STREET	215TH PLACE	6,523	28	2021	$ 27,242
SKVIL::MRRLL AVE::40	MERRILL AVENUE	219TH PLACE	219TH STREET	6,776	32	2021	$ 23,323
SKVIL::MRY BYR DR::20	MARY BYRNE DRIVE	HELEN DRIVE	MARY COURT	9,610	31	2021	$ 33,671
SKVIL::NCHLS DR::10	NICHOLS DRIVE	BROOKWOOD DRIVE	THEODORE AVENUE	14,963	29	2021	$ 57,867

Pavement ID	Road Name	From	To	Area	PCI	Year	Cost
SKVIL::NCHLS DR::40	NICHOLS DRIVE	NICHOLS DRIVE	226TH STREET	7,788	25	2021	$ 39,747
SKVIL::NCHLS DR::50	NICHOLS DRIVE	226TH STREET	225TH PLACE	8,634	29	2021	$ 33,392
SKVIL::NVH AVE::50	NAVAH AVENUE	APACHE AVENUE	ORION ROAD	6,677	32	2021	$ 22,982
SKVIL::PCH AVE::10	APACHE AVENUE	222ND STREET	NAVAH AVENUE	31,255	27	2021	$ 140,195
SKVIL::PTRSN AVE::10	PETERSON AVENUE	CAROL AVENUE	PETERSON AVENUE	6,223	30	2021	$ 22,469
SKVIL::PTRSN AVE::20	PETERSON AVENUE	PETERSON AVENUE	217TH PLACE	26,529	53	2021	$ 34,721
SKVIL::RN AVE::30	ORION AVENUE	219TH STREET	218TH PLACE	8,182	29	2021	$ 31,644
SKVIL::RN AVE::40	ORION AVENUE	218TH PLACE	218TH STREET	6,762	25	2021	$ 34,511
SKVIL::RN AVE::60	ORION AVENUE	217TH PLACE	217TH STREET	13,453	27	2021	$ 60,342
SKVIL::RN AVE::80	ORION AVENUE	215TH PLACE	END	2,793	53	2021	$ 3,655
SKVIL::SK PNT DR::10	SAUK POINTE DRIVE	223RD STREET	END	25,629	26	2021	$ 122,881
SKVIL::TRNSPT DR::10	TRANSPORTATION DRIVE	E LINCOLN HIGHWAY	END	54,241	24	2021	$ 293,593
SKVIL::YTS AVE::60	YATES AVENUE	CHAPPEL AVENUE	CLYDE AVENUE	6,489	29	2021	$ 25,094
SKVIL::YTS AVE::90	YATES AVENUE	223RD STREET	222ND STREET	14,561	52	2021	$ 20,803
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	11,289	52	2022	$ 16,441
SKVIL::219TH ST::20	219TH STREET	MERRILL AVENUE	ORION AVENUE	29,942	17	2022	$ 206,491
SKVIL::221ST ST::50	221ST STREET	PAXTON AVENUE	LUELLA COURT	7,253	18	2022	$ 50,017
SKVIL::221ST ST::60	221ST STREET	LUELLA COURT	SHIRLEY AVENUE	6,770	15	2022	$ 46,685
SKVIL::222ND PL::20	222ND PLACE	PRAIRIE AVENUE	JEFFERY AVENUE	11,738	16	2022	$ 80,952
SKVIL::222ND PL::50	222ND PLACE	NAVAH AVENUE	TALANDIS AVENUE	15,160	16	2022	$ 104,549
SKVIL::223RD PL::20	223RD PLACE	KATHY DRIVE	JEFFERY AVENUE	13,687	20	2022	$ 94,343
SKVIL::223RD ST::100	223RD STREET	NICHOLS DRIVE	PEACH TREE AVENUE	20,225	52	2022	$ 28,296
SKVIL::223RD ST::110	223RD STREET	PEACH TREE AVENUE	WILLOW TREE LANE	12,533	52	2022	$ 17,535
SKVIL::223RD ST::120	223RD STREET	WILLOW TREE LANE	BROOKWOOD DRIVE	12,191	53	2022	$ 16,347
SKVIL::223RD ST::130	223RD STREET	BROOKWOOD DRIVE	MURPHY AVENUE	58,526	51	2022	$ 88,451
SKVIL::225TH PL::10	225TH PLACE	JEFFERY AVENUE	YATES AVENUE	19,387	19	2022	$ 133,697
SKVIL::225TH PL::30	225TH PLACE	SPENCER AVENUE	THEODORE AVENUE	6,796	52	2022	$ 9,507
SKVIL::225TH PL::40	225TH PLACE	THEODORE AVENUE	BROOKWOOD DRIVE	6,325	52	2022	$ 8,849
SKVIL::225TH ST::60	225TH STREET	THEISEN AVENUE	END	5,592	54	2022	$ 7,160
SKVIL::CHPPL AVE::40	CHAPPEL AVENUE	222ND STREET	221ST STREET	8,906	20	2022	$ 61,392
SKVIL::CLYD AVE::50	CLYDE AVENUE	223RD STREET	221ST STREET	23,240	18	2022	$ 160,267
SKVIL::CLYD AVE::60	CLYDE AVENUE	219TH PLACE	END	3,073	16	2022	$ 21,191
SKVIL::CRL AVE::20	CAROL AVENUE	PETERSON AVENUE	217TH PLACE	25,559	18	2022	$ 176,260
SKVIL::HLN DR::10	HELEN DRIVE	MARY BYRNE DRIVE	LAURA LANE	8,159	19	2022	$ 56,264
SKVIL::JFFRY AVE::60	JEFFERY AVENUE	223RD PLACE	END	2,429	14	2022	$ 16,748
SKVIL::JFFRY AVE::90	JEFFERY AVENUE	222ND STREET	E SAUK TRAIL	11,989	16	2022	$ 82,681
SKVIL::JSH DR::10	JOSHUA DRIVE	223RD STREET	END	41,159	17	2022	$ 283,848
SKVIL::KTHY DR::20	KATHY DRIVE	CORNELL AVENUE	223RD PLACE	20,494	19	2022	$ 141,330
SKVIL::LLL CT::10	LUELLA COURT	221ST STREET	END	4,729	52	2022	$ 6,888
SKVIL::LR LN::30	LAURA LANE	LAURA LANE	JANICE DRIVE	11,745	20	2022	$ 80,960
SKVIL::MRKCLNS DR::30	MARK COLLINS DRIVE	JASON RASMUSSEN DRIVE	END	8,419	53	2022	$ 11,289
SKVIL::MRPHY AVE::30	MURPHY AVENUE	223RD STREET	END	1,986	53	2022	$ 2,662
SKVIL::MRRLL AVE::50	MERRILL AVENUE	219TH STREET	218TH PLACE	6,667	19	2022	$ 45,974
SKVIL::MRRLL AVE::80	MERRILL AVENUE	217TH PLACE	217TH STREET	6,860	19	2022	$ 47,307
SKVIL::MRRLL CT::10	MERRILL COURT	216TH STREET	END	4,343	53	2022	$ 5,824
SKVIL::MRY BYR DR::30	MARY BYRNE DRIVE	MARY COURT	JANICE DRIVE	17,938	17	2022	$ 123,703
SKVIL::NCHLS DR::60	NICHOLS DRIVE	225TH PLACE	225TH STREET	8,746	20	2022	$ 60,289
SKVIL::PRR AVE::10	PRAIRIE AVENUE	222ND PLACE	E SAUK TRAIL	18,141	16	2022	$ 125,107
SKVIL::PXTN AVE::10	PAXTON AVENUE	221ST STREET	222ND PLACE	12,185	13	2022	$ 84,034
SKVIL::RCHRT AVE::10	REICHERT AVENUE	JEFFERY AVENUE	YATES AVENUE	33,625	18	2022	$ 231,891
SKVIL::RN RD::10	ORION ROAD	E SAUK TRAIL	220TH STREET	3,371	53	2022	$ 4,520
SKVIL::STHBRK DR::10	SOUTHBROOK DRIVE	EASTBROOK DRIVE	END	3,883	51	2022	$ 5,869
SKVIL::TLNDS AVE::20	TALANDIS AVENUE	222ND STREET	NAVAH AVENUE	20,723	17	2022	$ 142,912
SKVIL::215TH PL::30	215TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	7,308	52	2023	$ 10,987
SKVIL::215TH PL::40	215TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,397	51	2023	$ 9,969
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,752	51	2023	$ 10,521
SKVIL::217TH PL::30	217TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	11,972	52	2023	$ 17,311
SKVIL::217TH PL::50	217TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,864	55	2023	$ 8,647
SKVIL::218TH PL::20	218TH PLACE	GALINE AVENUE	CLYDE AVENUE	9,446	4	2023	$ 67,095
SKVIL::218TH ST::30	218TH STREET	GALINE AVENUE	CLYDE AVENUE	8,730	7	2023	$ 62,013

Pavement ID	Road Name	From	To	Area	PCI	Year	Cost
SKVIL::219TH PL::30	219TH PLACE	GALINE AVENUE	CLYDE AVENUE	6,347	7	2023	$ 45,081
SKVIL::219TH PL::40	219TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,799	7	2023	$ 48,293
SKVIL::219TH PL::50	219TH PLACE	MERRILL AVENUE	ORION AVENUE	30,033	8	2023	$ 213,332
SKVIL::219TH ST::10	219TH STREET	COTTAGE GROVE AVENUE	END	14,580	6	2023	$ 103,567
SKVIL::221ST ST::70	221ST STREET	SHIRLEY AVENUE	YATES AVENUE	7,325	8	2023	$ 52,032
SKVIL::222ND PL::30	222ND PLACE	JEFFERY AVENUE	CHAPPEL AVENUE	17,198	11	2023	$ 122,163
SKVIL::222ND PL::40	222ND PLACE	PAXTON AVENUE	SHIRLEY AVENUE	13,396	5	2023	$ 95,155
SKVIL::222ND ST::10	222ND STREET	JEFFERY AVENUE	CHAPPEL AVENUE	17,917	9	2023	$ 127,267
SKVIL::223RD PL::30	223RD PLACE	CHAPPEL AVENUE	END	3,036	0	2023	$ 21,567
SKVIL::223RD PL::50	223RD PLACE	STRASSBURG AVENUE	END	5,285	54	2023	$ 6,996
SKVIL::223RD PL::70	223RD PLACE	YATES AVENUE	END	3,169	8	2023	$ 22,508
SKVIL::223RD ST::10	223RD STREET	SAUK POINTE DRIVE	JOSHUA DRIVE	18,910	7	2023	$ 134,322
SKVIL::CLYD AVE::80	CLYDE AVENUE	218TH PLACE	218TH STREET	6,733	4	2023	$ 47,826
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	35,473	54	2023	$ 46,956
SKVIL::ESTBRK CT::10	EASTBROOK COURT	SOUTHBROOK DRIVE	END	7,538	8	2023	$ 53,547
SKVIL::GLN AVE::10	GALINE AVENUE	219TH PLACE	218TH PLACE	16,925	10	2023	$ 120,219
SKVIL::GLN AVE::20	GALINE AVENUE	218TH STREET	217TH PLACE	6,811	6	2023	$ 48,379
SKVIL::GLN AVE::30	GALINE AVENUE	217TH PLACE	215TH PLACE	30,267	10	2023	$ 214,989
SKVIL::LNG AVE::10	LONG AVENUE	TORRENCE AVENUE	END	13,139	9	2023	$ 93,332
SKVIL::LR LN::10	LAURA LANE	START	HELEN DRIVE	4,610	9	2023	$ 32,745
SKVIL::LR LN::20	LAURA LANE	HELEN DRIVE	END	5,375	9	2023	$ 38,178
SKVIL::LV AVE::10	OLIVIA AVENUE	219TH PLACE	218TH PLACE	16,696	8	2023	$ 118,597
SKVIL::LV AVE::20	OLIVIA AVENUE	218TH PLACE	218TH STREET	9,003	6	2023	$ 63,948
SKVIL::MRRLL AVE::30	MERRILL AVENUE	E SAUK TRAIL	219TH PLACE	10,450	10	2023	$ 74,231
SKVIL::MRY BYR DR::40	MARY BYRNE DRIVE	COTTAGE GROVE AVE	DEBRA COURT	8,114	10	2023	$ 57,634
SKVIL::MRY BYR DR::50	MARY BYRNE DRIVE	DEBRA COURT	INDIE LANE	8,114	7	2023	$ 57,634
SKVIL::SK PNT DR::20	SAUK POINTE DRIVE	E SAUK TRAIL	223RD STREET	27,232	8	2023	$ 193,431
SKVIL::SPNCR AVE::20	SPENCER AVENUE	226TH STREET	225TH PLACE	6,607	5	2023	$ 46,928
SKVIL::STRSBR AVE::20	STRASSBURG AVENUE	MERRILL AVENUE	223RD PLACE	29,425	52	2023	$ 44,237
SKVIL::WLLW TR LN::10	WILLOW TREE LANE	223RD STREET	PEACH TREE AVENUE	20,847	4	2023	$ 148,082
SKVIL::YTS AVE::20	YATES AVENUE	JEFFERY AVENUE	225TH PLACE	14,674	4	2023	$ 104,235
SKVIL::YTS AVE::30	YATES AVENUE	225TH PLACE	225TH STREET	6,704	7	2023	$ 47,617
SKVIL::YTS AVE::50	YATES AVENUE	REICHERT AVENUE	CHAPPEL AVENUE	6,692	10	2023	$ 47,532
SKVIL::215TH PL::10	215TH PLACE	PETERSON AVENUE	JEFFERY AVENUE	22,968	52	2024	$ 34,186
SKVIL::215TH PL::50	215TH PLACE	GALINE AVENUE	CLYDE AVENUE	5,898	51	2024	$ 9,487
SKVIL::216TH ST::10	216TH STREET	216TH PLACE	CHARLOTTE COURT	15,542	51	2024	$ 24,999
SKVIL::217TH ST::10	217TH STREET	PETERSON AVENUE	JEFFERY AVENUE	22,503	53	2024	$ 32,050
SKVIL::218TH PL::10	218TH PLACE	OLIVIA AVENUE	GALINE AVENUE	10,253	0	2024	$ 75,012
SKVIL::219TH PL::10	219TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	7,163	0	2024	$ 52,404
SKVIL::219TH PL::20	219TH PLACE	OLIVIA AVENUE	GALINE AVENUE	7,955	0	2024	$ 58,199
SKVIL::222ND ST::20	222ND STREET	YATES AVENUE	APACHE AVENUE	7,046	0	2024	$ 51,553
SKVIL::222ND ST::30	222ND STREET	APACHE AVENUE	TALANDIS AVENUE	6,239	0	2024	$ 45,648
SKVIL::223RD PL::40	223RD PLACE	CHAPPEL AVENUE	CLYDE AVENUE	6,900	0	2024	$ 50,485
SKVIL::223RD PL::80	223RD PLACE	NICHOLS DRIVE	BROOKWOOD DRIVE	24,555	0	2024	$ 179,653
SKVIL::223RD PL::90	223RD PLACE	BROOKWOOD DRIVE	MURPHY AVENUE	31,928	0	2024	$ 233,592
SKVIL::224TH PL::10	224TH PLACE	NICHOLS DRIVE	BROOKWOOD DRIVE	24,611	0	2024	$ 180,059
SKVIL::224TH PL::20	224TH PLACE	BROOKWOOD DRIVE	THEISEN AVENUE	15,781	0	2024	$ 115,459
SKVIL::224TH ST::30	224TH STREET	BROOKWOOD DRIVE	THEISEN AVENUE	15,831	0	2024	$ 115,823
SKVIL::224TH ST::40	224TH STREET	THEISEN AVENUE	MURPHY AVENUE	15,831	0	2024	$ 115,823
SKVIL::225TH ST::40	225TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	24,639	0	2024	$ 180,268
SKVIL::225TH ST::50	225TH STREET	BROOKWOOD DRIVE	THEISEN AVENUE	15,731	0	2024	$ 115,096
SKVIL::BRKWD DR::10	BROOKWOOD DRIVE	NICHOLS DRIVE	225TH PLACE	32,451	51	2024	$ 52,195
SKVIL::CRL LN::10	CAROL LANE	JEFFERY AVENUE	JEFFERY AVENUE	29,314	0	2024	$ 214,467
SKVIL::CRNLL AVE::30	CORNELL AVENUE	223RD PLACE	223RD STREET	9,419	0	2024	$ 68,913
SKVIL::JFFRY AVE::110	JEFFERY AVENUE	219TH PLACE	CAROL LANE	16,655	52	2024	$ 25,817
SKVIL::KLVLG DR::10	KALVELAGE DRIVE	TORRENCE AVENUE	END	17,666	0	2024	$ 129,249
SKVIL::MRPHY AVE::10	MURPHY AVENUE	224TH STREET	223RD PLACE	7,040	0	2024	$ 51,507
SKVIL::MRPHY AVE::20	MURPHY AVENUE	223RD PLACE	223RD STREET	6,467	0	2024	$ 47,318
SKVIL::PTRSN AVE::70	PETERSON AVENUE	CONSTANCE AVENUE	CONSTANCE AVENUE	22,852	53	2024	$ 32,546
SKVIL::PTRSN AVE::80	PETERSON AVENUE	CONSTANCE AVENUE	JEFFERY AVENUE	6,585	51	2024	$ 10,592

Pavement ID	Road Name	From	To	Area	PCI	Year	Cost
SKVIL::RN AVE::50	ORION AVENUE	218TH STREET	217TH PLACE	6,847	0	2024	$ 50,093
SKVIL::SPNCR AVE::10	SPENCER AVENUE	NICHOLS DRIVE	226TH STREET	12,322	0	2024	$ 90,155
SKVIL::THDR AVE::10	THEODORE AVENUE	NICHOLS DRIVE	225TH PLACE	25,651	0	2024	$ 187,673
SKVIL::THSN AVE::10	THEISEN AVENUE	225TH STREET	224TH PLACE	6,600	0	2024	$ 48,290
SKVIL::THSN AVE::20	THEISEN AVENUE	224TH PLACE	224TH STREET	6,600	0	2024	$ 48,290
SKVIL::TLNDS AVE::10	TALANDIS AVENUE	222ND PLACE	222ND STREET	5,969	1	2024	$ 43,671
SKVIL::YTS AVE::100	YATES AVENUE	222ND STREET	221ST STREET	11,244	51	2024	$ 18,085
SKVIL::YTS AVE::40	YATES AVENUE	225TH STREET	REICHERT AVENUE	6,773	0	2024	$ 49,555

APPENDIX D – PAVEMENT MAINTENANCE POLICIES AND UNIT COSTS

Table D-1. Recommended Asphalt Pavement Maintenance Policy.

Pavement Distress	Severity	Recommended Maintenance Type	Units
Alligator Cracking	Medium	Patching - AC Deep	SF
Alligator Cracking	High	Patching - AC Deep	SF
Block Cracking	Low	Crack Sealing - AC	FT
Block Cracking	Medium	Crack Sealing - AC	FT
Block Cracking	High	Patching - AC Shallow	SF
Bumps and Sags	Medium	Patching - AC Shallow	SF
Bumps and Sags	High	Patching - AC Deep	SF
Corrugation	Medium	Patching - AC Shallow	SF
Corrugation	High	Patching - AC Deep	SF
Depressions	Medium	Patching - AC Deep	SF
Depressions	High	Patching - AC Deep	SF
Edge Cracking	Low	Crack Sealing - AC	FT
Edge Cracking	Medium	Crack Sealing - AC	FT
Edge Cracking	High	Patching - AC Shallow	SF
Joint Reflection Cracking	Low	Crack Sealing - AC	FT
Joint Reflection Cracking	Medium	Crack Sealing - AC	FT
Joint Reflection Cracking	High	Patching - AC Shallow	SF
Lane/Shoulder Dropoff	Medium	Shoulder leveling	FT
Lane/Shoulder Dropoff	High	Shoulder leveling	FT
Long. and Trans. Cracking	Low	Crack Sealing - AC	FT
Long. and Trans. Cracking	Medium	Crack Sealing - AC	FT
Long. and Trans. Cracking	High	Patching - AC Shallow	SF
Patching and Utility Cuts	High	Patching - AC Deep	SF
Potholes	Low	Patching - AC Deep	SF
Potholes	Medium	Patching - AC Deep	SF
Potholes	High	Patching - AC Deep	SF
Rutting	Medium	Patching - AC Shallow	SF
Rutting	High	Patching - AC Deep	SF
Shoving	Medium	Grinding (Localized)	FT
Shoving	High	Grinding (Localized)	FT
Slippage Cracking	Low	Crack Sealing - AC	FT
Slippage Cracking	Medium	Patching - AC Shallow	SF
Slippage Cracking	High	Patching - AC Shallow	SF
Blow ups	Medium	Patching - PCC Full Depth	SF
Blow ups	High	Patching - PCC Full Depth	SF

Table D-2. Recommended Concrete Pavement Maintenance Policy.

Pavement Distress	Severity	Recommended Maintenance Type	Units
Corner Breaks	Low	Crack Sealing - PCC	FT
Corner Breaks	Medium	Patching - PCC Full Depth	FT
Corner Breaks	High	Patching - PCC Full Depth	SF
Divided (Shattered) Slabs	Low	Crack Sealing - PCC	FT
Divided (Shattered) Slabs	Medium	Slab Replacement - PCC	SF
Divided (Shattered) Slabs	High	Slab Replacement - PCC	SF
Durability (D) Cracking	Medium	Patching - PCC Full Depth	SF
Durability (D) Cracking	High	Slab Replacement - PCC	SF
Faulting	Medium	Grinding (Localized)	FT
Faulting	High	Grinding (Localized)	FT
Joint Seal Damage	Medium	Joint Seal (Localized)	FT
Joint Seal Damage	High	Joint Seal (Localized)	FT
Lane/Shoulder Dropoff	Medium	Shoulder leveling	FT
Lane/Shoulder Dropoff	High	Shoulder leveling	FT
Linear Cracking	Low	Crack Sealing - PCC	FT
Linear Cracking	Medium	Crack Sealing - PCC	FT
Linear Cracking	High	Patching - PCC Partial Depth	SF
Patches, Large	High	Patching - PCC Full Depth	SF
Patches, Small	High	Patching - PCC Partial Depth	SF
Punchouts	Medium	Patching - PCC Full Depth	SF
Punchouts	High	Slab Replacement - PCC	SF
Scaling	High	Slab Replacement - PCC	SF
Corner Spalls	Medium	Patching - PCC Partial Depth	SF
Corner Spalls	High	Patching - PCC Partial Depth	SF
Joint Spalls	Medium	Patching - PCC Partial Depth	SF
Joint Spalls	High	Patching - PCC Partial Depth	SF

Table D-3. Estimate Unit Cost for Maintenance Activities.

Maintenance Type	Est. Unit Cost	Units
Crack Sealing - AC	$1.00	FT
Joint Seal - Silicon	$2.75	FT
Crack Sealing - PCC	$1.50	FT
Grinding (Localized)	$4.00	FT
Joint Seal (Localized)	$1.50	FT
Patching - AC Deep	$11.00	SF
Patching - AC Leveling	$1.20	SF
Patching - AC Shallow	$5.50	SF
Patching - PCC Full Depth	$30.00	SF
Patching - PCC Partial Depth	$7.00	SF
Shoulder leveling	$1.20	FT
Slab Replacement - PCC	$20.00	SF

APPENDIX E – TABULATED PREVENTIVE MAINTENANCE RECOMMENDATIONS

Pavement ID	Road Name	From	To	Area	Distress Type	Density	Maint. Activity	Cost
SKVIL::215TH PL::30	215TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	7,308	ALLIGATOR CR	2.4%	Crack Sealing - AC	$70
SKVIL::215TH PL::30	215TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	7,308	L & T CR	7.7%	Crack Sealing - AC	$560
SKVIL::215TH PL::30	215TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	7,308	L & T CR	0.7%	Crack Sealing - AC	$49
SKVIL::215TH PL::40	215TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,397	ALLIGATOR CR	0.7%	Crack Sealing - AC	$24
SKVIL::215TH PL::40	215TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,397	L & T CR	3.8%	Crack Sealing - AC	$244
SKVIL::215TH PL::40	215TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,397	L & T CR	3.8%	Crack Sealing - AC	$244
SKVIL::215TH PL::50	215TH PLACE	GALINE AVENUE	CLYDE AVENUE	5,898	L & T CR	1.7%	Crack Sealing - AC	$98
SKVIL::215TH PL::50	215TH PLACE	GALINE AVENUE	CLYDE AVENUE	5,898	L & T CR	5.0%	Crack Sealing - AC	$293
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,752	L & T CR	2.9%	Crack Sealing - AC	$195
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,752	L & T CR	3.6%	Crack Sealing - AC	$245
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,752	BLOCK CR	3.8%	Crack Sealing - AC	$78
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	6,752	BLOCK CR	9.1%	Crack Sealing - AC	$187
SKVIL::215TH PL::80	215TH PLACE	ORION AVENUE	END	2,791	L & T CR	3.0%	Crack Sealing - AC	$85
SKVIL::216TH ST::10	216TH STREET	216TH PLACE	CHARLOTTE COURT	15,542	L & T CR	0.6%	Crack Sealing - AC	$98
SKVIL::215TH PL::10	215TH PLACE	PETERSON AVENUE	JEFFERY AVENUE	22,968	L & T CR	0.6%	Crack Sealing - AC	$147
SKVIL::215TH PL::10	215TH PLACE	PETERSON AVENUE	JEFFERY AVENUE	22,968	L & T CR	2.1%	Crack Sealing - AC	$489
SKVIL::215TH PL::10	215TH PLACE	PETERSON AVENUE	JEFFERY AVENUE	22,968	BLOCK CR	5.0%	Crack Sealing - AC	$351
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	11,289	BLOCK CR	39.0%	Crack Sealing - AC	$1,340
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	11,289	ALLIGATOR CR	0.3%	Crack Sealing - AC	$17
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	11,289	L & T CR	3.0%	Crack Sealing - AC	$340
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	11,289	L & T CR	3.9%	Crack Sealing - AC	$439
SKVIL::217TH PL::30	217TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	11,972	L & T CR	2.0%	Crack Sealing - AC	$245
SKVIL::217TH PL::30	217TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	11,972	L & T CR	2.5%	Crack Sealing - AC	$294
SKVIL::217TH PL::40	217TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	8,766	L & T CR	1.7%	Crack Sealing - AC	$147
SKVIL::217TH PL::50	217TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	6,864	BLOCK CR	16.7%	Crack Sealing - AC	$349
SKVIL::217TH ST::10	217TH STREET	PETERSON AVENUE	JEFFERY AVENUE	22,503	BLOCK CR	4.1%	Crack Sealing - AC	$280
SKVIL::217TH ST::10	217TH STREET	PETERSON AVENUE	JEFFERY AVENUE	22,503	L & T CR	0.4%	Crack Sealing - AC	$100
SKVIL::223RD PL::50	223RD PLACE	STRASSBURG AVENUE	END	5,285	L & T CR	2.8%	Crack Sealing - AC	$147
SKVIL::223RD PL::50	223RD PLACE	STRASSBURG AVENUE	END	5,285	L & T CR	1.9%	Crack Sealing - AC	$98
SKVIL::223RD PL::60	223RD PLACE	STRASSBURG AVENUE	YATES AVENUE	6,571	L & T CR	0.7%	Crack Sealing - AC	$49
SKVIL::223RD PL::60	223RD PLACE	STRASSBURG AVENUE	YATES AVENUE	6,571	L & T CR	1.5%	Crack Sealing - AC	$98
SKVIL::223RD ST::80	223RD STREET	NAVAH AVENUE	TORRENCE AVENUE	10,756	L & T CR	0.7%	Crack Sealing - AC	$71
SKVIL::223RD ST::80	223RD STREET	NAVAH AVENUE	TORRENCE AVENUE	10,756	L & T CR	0.3%	Crack Sealing - AC	$35
SKVIL::223RD ST::80	223RD STREET	NAVAH AVENUE	TORRENCE AVENUE	10,756	BLOCK CR	0.4%	Crack Sealing - AC	$14
SKVIL::224TH ST::20	224TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	24,583	L & T CR	0.6%	Crack Sealing - AC	$147
SKVIL::224TH ST::20	224TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	24,583	L & T CR	0.1%	Crack Sealing - AC	$24
SKVIL::CHRLTT CT::10	CHARLOTTE COURT	216TH STREET	END	6,215	L & T CR	0.4%	Crack Sealing - AC	$24
SKVIL::CRNLL AVE::50	CORNELL AVENUE	222ND PLACE	E SAUK TRAIL	14,525	L & T CR	0.2%	Crack Sealing - AC	$24
SKVIL::JFFRY AVE::110	JEFFERY AVENUE	219TH PLACE	CAROL LANE	16,655	L & T CR	0.4%	Crack Sealing - AC	$72
SKVIL::JFFRY AVE::110	JEFFERY AVENUE	219TH PLACE	CAROL LANE	16,655	L & T CR	2.0%	Crack Sealing - AC	$330
SKVIL::JFFRY AVE::120	JEFFERY AVENUE	CAROL LANE	CAROL LANE	14,350	L & T CR	0.3%	Crack Sealing - AC	$36
SKVIL::JFFRY AVE::120	JEFFERY AVENUE	CAROL LANE	CAROL LANE	14,350	L & T CR	0.5%	Crack Sealing - AC	$73
SKVIL::JFFRY AVE::130	JEFFERY AVENUE	CAROL LANE	218TH STREET	5,553	L & T CR	2.0%	Crack Sealing - AC	$113
SKVIL::JFFRY AVE::140	JEFFERY AVENUE	218TH STREET	217TH PLACE	13,973	L & T CR	1.1%	Crack Sealing - AC	$147
SKVIL::223RD ST::100	223RD STREET	NICHOLS DRIVE	PEACH TREE AVENUE	20,225	ALLIGATOR CR	0.6%	Crack Sealing - AC	$52

Pavement ID	Road Name	From	To	Area	Distress Type	Density	Maint. Activity	Cost
SKVIL::223RD ST::100	223RD STREET	NICHOLS DRIVE	PEACH TREE AVENUE	20,225	L & T CR	7.3%	Crack Sealing - AC	$1,477
SKVIL::223RD ST::100	223RD STREET	NICHOLS DRIVE	PEACH TREE AVENUE	20,225	L & T CR	4.0%	Crack Sealing - AC	$806
SKVIL::223RD ST::110	223RD STREET	PEACH TREE AVENUE	WILLOW TREE LANE	12,533	L & T CR	7.3%	Crack Sealing - AC	$918
SKVIL::223RD ST::110	223RD STREET	PEACH TREE AVENUE	WILLOW TREE LANE	12,533	L & T CR	0.7%	Crack Sealing - AC	$89
SKVIL::223RD ST::120	223RD STREET	WILLOW TREE LANE	BROOKWOOD DRIVE	12,191	L & T CR	7.9%	Crack Sealing - AC	$963
SKVIL::223RD ST::120	223RD STREET	WILLOW TREE LANE	BROOKWOOD DRIVE	12,191	L & T CR	0.7%	Crack Sealing - AC	$90
SKVIL::223RD ST::40	223RD STREET	JEFFERY AVENUE	CLYDE AVENUE	30,474	L & T CR	0.2%	Crack Sealing - AC	$56
SKVIL::223RD ST::60	223RD STREET	MERRILL AVENUE	YATES AVENUE	41,059	L & T CR	0.1%	Crack Sealing - AC	$35
SKVIL::225TH PL::30	225TH PLACE	SPENCER AVENUE	THEODORE AVENUE	6,796	L & T CR	7.9%	Crack Sealing - AC	$538
SKVIL::225TH PL::30	225TH PLACE	SPENCER AVENUE	THEODORE AVENUE	6,796	L & T CR	2.5%	Crack Sealing - AC	$171
SKVIL::225TH PL::30	225TH PLACE	SPENCER AVENUE	THEODORE AVENUE	6,796	ALLIGATOR CR	0.5%	Crack Sealing - AC	$19
SKVIL::225TH PL::40	225TH PLACE	THEODORE AVENUE	BROOKWOOD DRIVE	6,325	L & T CR	8.7%	Crack Sealing - AC	$550
SKVIL::225TH PL::40	225TH PLACE	THEODORE AVENUE	BROOKWOOD DRIVE	6,325	L & T CR	3.0%	Crack Sealing - AC	$193
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	26,416	ALLIGATOR CR	0.2%	Crack Sealing - AC	$24
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	26,416	L & T CR	0.6%	Crack Sealing - AC	$155
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	26,416	BLOCK CR	1.5%	Crack Sealing - AC	$123
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	26,416	L & T CR	0.2%	Crack Sealing - AC	$51
SKVIL::225TH ST::60	225TH STREET	THEISEN AVENUE	END	5,592	L & T CR	6.1%	Crack Sealing - AC	$343
SKVIL::225TH ST::60	225TH STREET	THEISEN AVENUE	END	5,592	L & T CR	0.9%	Crack Sealing - AC	$49
SKVIL::226TH ST::10	226TH STREET	NICHOLS DRIVE	SPENCER AVENUE	11,476	L & T CR	0.2%	Crack Sealing - AC	$28
SKVIL::BRKWD DR::10	BROOKWOOD DRIVE	NICHOLS DRIVE	225TH PLACE	32,451	L & T CR	3.2%	Crack Sealing - AC	$1,029
SKVIL::BRKWD DR::10	BROOKWOOD DRIVE	NICHOLS DRIVE	225TH PLACE	32,451	L & T CR	0.5%	Crack Sealing - AC	$157
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	35,473	BLOCK CR	1.5%	Crack Sealing - AC	$161
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	35,473	L & T CR	1.5%	Crack Sealing - AC	$546
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	35,473	L & T CR	2.3%	Crack Sealing - AC	$818
SKVIL::CNSTNC AVE::10	CONSTANCE AVENUE	PETERSON AVENUE	PETERSON AVENUE	22,344	L & T CR	0.1%	Crack Sealing - AC	$24
SKVIL::MRPHY AVE::30	MURPHY AVENUE	223RD STREET	END	1,986	L & T CR	0.5%	Crack Sealing - AC	$10
SKVIL::ND LN::10	INDIE LANE	MARY BYRNE DRIVE	END	1,243	BLOCK CR	3.7%	Crack Sealing - AC	$14
SKVIL::PCH TR AVE::10	PEACH TREE AVENUE	223RD STREET	WILLOW TREE LANE	18,182	L & T CR	1.0%	Crack Sealing - AC	$180
SKVIL::RN RD::10	ORION ROAD	E SAUK TRAIL	220TH STREET	3,371	L & T CR	2.0%	Crack Sealing - AC	$68
SKVIL::RN RD::10	ORION ROAD	E SAUK TRAIL	220TH STREET	3,371	ALLIGATOR CR	5.8%	Crack Sealing - AC	$78
SKVIL::RN RD::10	ORION ROAD	E SAUK TRAIL	220TH STREET	3,371	L & T CR	1.0%	Crack Sealing - AC	$34
SKVIL::STRSBR AVE::20	STRASSBURG AVENUE	MERRILL AVENUE	223RD PLACE	29,425	L & T CR	5.1%	Crack Sealing - AC	$1,501
SKVIL::STRSBR AVE::20	STRASSBURG AVENUE	MERRILL AVENUE	223RD PLACE	29,425	L & T CR	1.6%	Crack Sealing - AC	$475
SKVIL::LLL CT::10	LUELLA COURT	221ST STREET	END	4,729	L & T CR	1.0%	Crack Sealing - AC	$48
SKVIL::LLL CT::10	LUELLA COURT	221ST STREET	END	4,729	L & T CR	1.5%	Crack Sealing - AC	$72
SKVIL::LV AVE::30	OLIVIA AVENUE	217TH PLACE	215TH PLACE	35,481	L & T CR	0.1%	Crack Sealing - AC	$24
SKVIL::MRKCLNS DR::30	MARK COLLINS DRIVE	JASON RASMUSSEN DRIV	END	8,419	L & T CR	4.3%	Crack Sealing - AC	$366
SKVIL::MRKCLNS DR::30	MARK COLLINS DRIVE	JASON RASMUSSEN DRIV	END	8,419	L & T CR	3.5%	Crack Sealing - AC	$292
SKVIL::MRRLL CT::10	MERRILL COURT	216TH STREET	END	4,343	L & T CR	1.0%	Crack Sealing - AC	$44
SKVIL::MRRLL CT::10	MERRILL COURT	216TH STREET	END	4,343	BLOCK CR	27.7%	Crack Sealing - AC	$366
SKVIL::MRRLL CT::10	MERRILL COURT	216TH STREET	END	4,343	L & T CR	1.0%	Crack Sealing - AC	$43
SKVIL::NCHLS DR::110	NICHOLS DRIVE	223RD STREET	END	3,020	L & T CR	1.0%	Crack Sealing - AC	$31
SKVIL::PTRSN AVE::60	PETERSON AVENUE	215TH PLACE	CONSTANCE AVENUE	8,044	L & T CR	1.3%	Crack Sealing - AC	$106
SKVIL::PTRSN AVE::70	PETERSON AVENUE	CONSTANCE AVENUE	CONSTANCE AVENUE	22,852	L & T CR	1.5%	Crack Sealing - AC	$342

Pavement ID	Road Name	From	To	Area	Distress Type	Density	Maint. Activity	Cost
SKVIL::PTRSN AVE::80	PETERSON AVENUE	CONSTANCE AVENUE	JEFFERY AVENUE	6,585	L & T CR	2.2%	Crack Sealing - AC	$147
SKVIL::PTRSN AVE::90	PETERSON AVENUE	JEFFERY AVENUE	END	3,181	L & T CR	0.6%	Crack Sealing - AC	$19
SKVIL::216TH ST::10	216TH STREET	216TH PLACE	CHARLOTTE COURT	15,542	ALLIGATOR CR	1.3%	Patching - AC Deep	$2,879
SKVIL::216TH ST::10	216TH STREET	216TH PLACE	CHARLOTTE COURT	15,542	RUTTING	0.1%	Patching - AC Deep	$85
SKVIL::217TH ST::10	217TH STREET	PETERSON AVENUE	JEFFERY AVENUE	22,503	ALLIGATOR CR	0.5%	Patching - AC Deep	$1,715
SKVIL::224TH ST::20	224TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	24,583	ALLIGATOR CR	0.5%	Patching - AC Deep	$1,892
SKVIL::224TH ST::20	224TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	24,583	POTHOLE	0.0%	Patching - AC Deep	$124
SKVIL::223RD ST::110	223RD STREET	PEACH TREE AVENUE	WILLOW TREE LANE	12,533	ALLIGATOR CR	2.1%	Patching - AC Deep	$3,593
SKVIL::223RD ST::120	223RD STREET	WILLOW TREE LANE	BROOKWOOD DRIVE	12,191	ALLIGATOR CR	0.8%	Patching - AC Deep	$1,556
SKVIL::223RD ST::40	223RD STREET	JEFFERY AVENUE	CLYDE AVENUE	30,474	RUTTING	0.0%	Patching - AC Deep	$78
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	26,416	ALLIGATOR CR	0.2%	Patching - AC Deep	$759
SKVIL::MRPHY AVE::30	MURPHY AVENUE	223RD STREET	END	1,986	ALLIGATOR CR	2.3%	Patching - AC Deep	$853
SKVIL::ND LN::10	INDIE LANE	MARY BYRNE DRIVE	END	1,243	ALLIGATOR CR	0.9%	Patching - AC Deep	$313
SKVIL::YTS AVE::100	YATES AVENUE	222ND STREET	221ST STREET	11,244	RUTTING	0.1%	Patching - AC Deep	$122
SKVIL::217TH PL::30	217TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	11,972	RUTTING	0.1%	Patching - AC Shallow	$43
SKVIL::224TH ST::20	224TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	24,583	RUTTING	0.1%	Patching - AC Shallow	$81
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	26,416	RUTTING	0.0%	Patching - AC Shallow	$45
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	35,473	SLIPPAGE CR	0.1%	Patching - AC Shallow	$302
SKVIL::STRSBR AVE::20	STRASSBURG AVENUE	MERRILL AVENUE	223RD PLACE	29,425	RUTTING	0.0%	Patching - AC Shallow	$42
SKVIL::YTS AVE::100	YATES AVENUE	222ND STREET	221ST STREET	11,244	RUTTING	0.1%	Patching - AC Shallow	$43
SKVIL::MRKCLNS DR::30	MARK COLLINS DRIVE	JASON RASMUSSEN DRIV	END	8,419	RUTTING	0.3%	Patching - AC Shallow	$119
SKVIL::PTRSN AVE::70	PETERSON AVENUE	CONSTANCE AVENUE	CONSTANCE AVENUE	22,852	RUTTING	0.2%	Patching - AC Shallow	$202

APPENDIX F – PAVEMENT INVENTORY AND CONDITION TABULAR DATA

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::215TH PL::10	215TH PLACE	PETERSON AVENUE	JEFFERY AVENUE	Asphalt	S	957	24	22,968	78	183
SKVIL::215TH PL::20	215TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	Asphalt	S	322	24	7,735	47	310
SKVIL::215TH PL::30	215TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	Asphalt	S	305	24	7,308	71	130
SKVIL::215TH PL::40	215TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	Asphalt	S	267	24	6,397	70	229
SKVIL::215TH PL::50	215TH PLACE	GALINE AVENUE	CLYDE AVENUE	Asphalt	S	246	24	5,898	76	171
SKVIL::215TH PL::60	215TH PLACE	CLYDE AVENUE	MERRILL AVENUE	Asphalt	S	281	24	6,752	70	255
SKVIL::215TH PL::70	215TH PLACE	MERRILL AVENUE	ORION AVENUE	Asphalt	S	1,205	24	28,926	56	205
SKVIL::215TH PL::80	215TH PLACE	ORION AVENUE	END	Asphalt	S	116	24	2,791	83	332
SKVIL::216TH CT::10	216TH COURT	MERRILL AVENUE	END	Asphalt	S	242	24	5,796	40	598
SKVIL::216TH PL::10	216TH PLACE	PETERSON AVENUE	216TH STREET	Asphalt	S	308	24	7,404	38	290
SKVIL::216TH PL::20	216TH PLACE	216TH STREET	JEFFERY AVENUE	Asphalt	S	739	24	17,730	30	483
SKVIL::216TH ST::10	216TH STREET	216TH PLACE	CHARLOTTE COURT	Asphalt	S	648	24	15,542	76	521
SKVIL::216TH ST::20	216TH STREET	CHARLOTTE COURT	JEFFERY AVENUE	Asphalt	S	411	24	9,865	85	814
SKVIL::216TH ST::30	216TH STREET	MERRILL AVENUE	MERRILL COURT	Asphalt	S	485	24	11,640	50	238
SKVIL::216TH ST::40	216TH STREET	MERRILL COURT	217TH STREET	Asphalt	S	470	24	11,289	65	192
SKVIL::216TH ST::50	216TH STREET	217TH STREET	ORION AVENUE	Asphalt	S	245	24	5,890	44	295
SKVIL::217TH PL::10	217TH PLACE	PETERSON AVENUE	CAROL AVENUE	Asphalt	S	468	24	11,229	52	204
SKVIL::217TH PL::20	217TH PLACE	CAROL AVENUE	JEFFERY AVENUE	Asphalt	S	275	24	6,609	55	346
SKVIL::217TH PL::30	217TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	Asphalt	S	499	24	11,972	72	212
SKVIL::217TH PL::40	217TH PLACE	OLIVIA AVENUE	CYNTHIA AVENUE	Asphalt	S	365	24	8,766	82	221
SKVIL::217TH PL::50	217TH PLACE	CYNTHIA AVENUE	GAILINE AVENUE	Asphalt	S	286	24	6,864	75	284
SKVIL::217TH PL::60	217TH PLACE	MERRILL AVENUE	ORION AVENUE	Asphalt	S	1,253	24	30,081	41	198
SKVIL::217TH ST::10	217TH STREET	PETERSON AVENUE	JEFFERY AVENUE	Asphalt	S	938	24	22,503	79	246
SKVIL::217TH ST::20	217TH STREET	MERRILL AVENUE	216TH STREET	Asphalt	S	1,210	24	29,032	37	202
SKVIL::218TH PL::10	218TH PLACE	OLIVIA AVENUE	GALINE AVENUE	Asphalt	S	427	24	10,253	12	444
SKVIL::218TH PL::20	218TH PLACE	GALINE AVENUE	CLYDE AVENUE	Asphalt	S	394	24	9,446	15	247
SKVIL::218TH PL::30	218TH PLACE	MERRILL AVENUE	ORION AVENUE	Asphalt	S	1,261	25	31,516	47	304
SKVIL::218TH ST::10	218TH STREET	JEFFERY AVENUE	OLIVIA AVENUE	Asphalt	S	402	31	12,448	50	400
SKVIL::218TH ST::20	218TH STREET	OLIVIA AVENUE	GALINE AVENUE	Asphalt	S	684	31	21,209	41	369
SKVIL::218TH ST::30	218TH STREET	GALINE AVENUE	CLYDE AVENUE	Asphalt	S	282	31	8,730	18	782
SKVIL::218TH ST::40	218TH STREET	CLYDE AVENUE	MERRILL AVENUE	Asphalt	S	283	24	6,802	45	362
SKVIL::218TH ST::50	218TH STREET	MERRILL AVENUE	ORION AVENUE	Asphalt	S	1,260	24	30,240	43	230
SKVIL::219TH PL::10	219TH PLACE	JEFFERY AVENUE	OLIVIA AVENUE	Asphalt	S	298	24	7,163	14	398
SKVIL::219TH PL::20	219TH PLACE	OLIVIA AVENUE	GALINE AVENUE	Asphalt	S	331	24	7,955	14	291
SKVIL::219TH PL::30	219TH PLACE	GALINE AVENUE	CLYDE AVENUE	Asphalt	S	264	24	6,347	18	268
SKVIL::219TH PL::40	219TH PLACE	CLYDE AVENUE	MERRILL AVENUE	Asphalt	S	283	24	6,799	18	388
SKVIL::219TH PL::50	219TH PLACE	MERRILL AVENUE	ORION AVENUE	Asphalt	S	1,251	24	30,033	19	554
SKVIL::219TH ST::10	219TH STREET	COTTAGE GROVE AVENUE	END	Asphalt	S	911	16	14,580	17	384
SKVIL::219TH ST::20	219TH STREET	MERRILL AVENUE	ORION AVENUE	Asphalt	S	1,248	24	29,942	25	387
SKVIL::220TH ST::10	220TH STREET	E SAUK TRAIL	ORION ROAD	Asphalt	S	1,845	24	44,275	46	220
SKVIL::221ST ST::10	221ST STREET	E SAUK TRAIL	CHAPPEL AVENUE	Asphalt	S	723	24	17,345	37	252
SKVIL::221ST ST::20	221ST STREET	CHAPPEL AVENUE	CLYDE AVENUE	Asphalt	S	360	24	8,633	58	183

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::221ST ST::30	221ST STREET	CLYDE AVENUE	MERRILL AVENUE	Asphalt	S	307	24	7,367	38	378
SKVIL::221ST ST::40	221ST STREET	MERRILL AVENUE	PAXTON AVENUE	Asphalt	S	279	24	6,692	55	188
SKVIL::221ST ST::50	221ST STREET	PAXTON AVENUE	LUELLA COURT	Asphalt	S	302	24	7,253	26	201
SKVIL::221ST ST::60	221ST STREET	LUELLA COURT	SHIRLEY AVENUE	Asphalt	S	282	24	6,770	23	189
SKVIL::221ST ST::70	221ST STREET	SHIRLEY AVENUE	YATES AVENUE	Asphalt	S	305	24	7,325	19	275
SKVIL::221ST ST::80	221ST STREET	YATES AVENUE	ORION ROAD	Asphalt	S	838	24	20,107	31	398
SKVIL::221ST ST::90	221ST STREET	ORION ROAD	TORRENCE AVENUE	Asphalt	S	1,013	24	24,319	48	355
SKVIL::222ND PL::10	222ND PLACE	CORNELL AVENUE	PRAIRIE AVENUE	Asphalt	S	467	25	11,673	40	278
SKVIL::222ND PL::20	222ND PLACE	PRAIRIE AVENUE	JEFFERY AVENUE	Asphalt	S	470	25	11,738	24	345
SKVIL::222ND PL::30	222ND PLACE	JEFFERY AVENUE	CHAPPEL AVENUE	Asphalt	S	717	24	17,198	22	460
SKVIL::222ND PL::40	222ND PLACE	PAXTON AVENUE	SHIRLEY AVENUE	Asphalt	S	558	24	13,396	16	507
SKVIL::222ND PL::50	222ND PLACE	NAVAH AVENUE	TALANDIS AVENUE	Asphalt	S	632	24	15,160	24	286
SKVIL::222ND ST::10	222ND STREET	JEFFERY AVENUE	CHAPPEL AVENUE	Asphalt	S	747	24	17,917	20	377
SKVIL::222ND ST::20	222ND STREET	YATES AVENUE	APACHE AVENUE	Asphalt	S	294	24	7,046	10	473
SKVIL::222ND ST::30	222ND STREET	APACHE AVENUE	TALANDIS AVENUE	Asphalt	S	260	24	6,239	11	526
SKVIL::223RD PL::10	223RD PLACE	CORNELL AVENUE	KATHY DRIVE	Asphalt	S	356	24	8,554	37	237
SKVIL::223RD PL::20	223RD PLACE	KATHY DRIVE	JEFFERY AVENUE	Asphalt	S	570	24	13,687	28	359
SKVIL::223RD PL::30	223RD PLACE	CHAPPEL AVENUE	END	Asphalt	S	127	24	3,036	6	472
SKVIL::223RD PL::40	223RD PLACE	CHAPPEL AVENUE	CLYDE AVENUE	Asphalt	S	288	24	6,900	14	584
SKVIL::223RD PL::50	223RD PLACE	STRASSBURG AVENUE	END	Asphalt	S	220	24	5,285	74	275
SKVIL::223RD PL::60	223RD PLACE	STRASSBURG AVENUE	YATES AVENUE	Asphalt	S	274	24	6,571	86	220
SKVIL::223RD PL::70	223RD PLACE	YATES AVENUE	END	Asphalt	S	132	24	3,169	19	642
SKVIL::223RD PL::80	223RD PLACE	NICHOLS DRIVE	BROOKWOOD DRIVE	Asphalt	S	1,023	24	24,555	9	527
SKVIL::223RD PL::90	223RD PLACE	BROOKWOOD DRIVE	MURPHY AVENUE	Asphalt	S	1,330	24	31,928	10	343
SKVIL::223RD ST::10	223RD STREET	SAUK POINTE DRIVE	JOSHUA DRIVE	Asphalt	S	610	31	18,910	18	324
SKVIL::223RD ST::100	223RD STREET	NICHOLS DRIVE	PEACH TREE AVENUE	Asphalt	P	460	44	20,225	66	272
SKVIL::223RD ST::110	223RD STREET	PEACH TREE AVENUE	WILLOW TREE LANE	Asphalt	P	285	44	12,533	66	140
SKVIL::223RD ST::120	223RD STREET	WILLOW TREE LANE	BROOKWOOD DRIVE	Asphalt	P	277	44	12,191	67	165
SKVIL::223RD ST::130	223RD STREET	BROOKWOOD DRIVE	MURPHY AVENUE	Asphalt	P	1,330	44	58,526	64	169
SKVIL::223RD ST::140	223RD STREET	MURPHY AVENUE	END	Asphalt	P	1,138	19	21,621	48	211
SKVIL::223RD ST::20	223RD STREET	CORNELL AVENUE	END	Asphalt	P	209	19	3,966	24	482
SKVIL::223RD ST::30	223RD STREET	CORNELL AVENUE	JEFFERY AVENUE	Asphalt	P	931	24	22,345	95	216
SKVIL::223RD ST::40	223RD STREET	JEFFERY AVENUE	CLYDE AVENUE	Asphalt	P	1,088	28	30,474	93	315
SKVIL::223RD ST::50	223RD STREET	CLYDE AVENUE	MERRILL AVENUE	Asphalt	P	269	35	9,422	95	611
SKVIL::223RD ST::60	223RD STREET	MERRILL AVENUE	YATES AVENUE	Asphalt	P	1,173	35	41,059	95	270
SKVIL::223RD ST::70	223RD STREET	YATES AVENUE	NAVAH AVENUE	Asphalt	P	1,170	35	40,938	95	228
SKVIL::223RD ST::80	223RD STREET	NAVAH AVENUE	TORRENCE AVENUE	Asphalt	P	307	35	10,756	92	416
SKVIL::223RD ST::90	223RD STREET	TORRENCE AVENUE	NICHOLS DRIVE	Asphalt	P	1,480	44	65,105	35	260
SKVIL::224TH CT::10	224TH COURT	CORNELL AVENUE	END	Asphalt	S	149	24	3,580	35	408
SKVIL::224TH PL::10	224TH PLACE	NICHOLS DRIVE	BROOKWOOD DRIVE	Asphalt	S	1,025	24	24,611	12	484
SKVIL::224TH PL::20	224TH PLACE	BROOKWOOD DRIVE	THEISEN AVENUE	Asphalt	S	658	24	15,781	10	731
SKVIL::224TH ST::10	224TH STREET	JEFFERY AVENUE	CHAPPEL AVENUE	Asphalt	S	992	24	23,806	39	205

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::224TH ST::20	224TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	Asphalt	S	1,024	24	24,583	84	252
SKVIL::224TH ST::30	224TH STREET	BROOKWOOD DRIVE	THEISEN AVENUE	Asphalt	S	660	24	15,831	8	315
SKVIL::224TH ST::40	224TH STREET	THEISEN AVENUE	MURPHY AVENUE	Asphalt	S	660	24	15,831	8	448
SKVIL::225TH PL::10	225TH PLACE	JEFFERY AVENUE	YATES AVENUE	Asphalt	S	808	24	19,387	27	492
SKVIL::225TH PL::20	225TH PLACE	NICHOLS DRIVE	SPENCER AVENUE	Asphalt	S	481	24	11,552	43	414
SKVIL::225TH PL::30	225TH PLACE	SPENCER AVENUE	THEODORE AVENUE	Asphalt	S	283	24	6,796	66	244
SKVIL::225TH PL::40	225TH PLACE	THEODORE AVENUE	BROOKWOOD DRIVE	Asphalt	S	264	24	6,325	66	185
SKVIL::225TH ST C::10	225TH STREET C	225TH STREET	225TH STREET	Asphalt	S	295	24	7,073	52	327
SKVIL::225TH ST::10	225TH STREET	225TH STREET C	225TH STREET C	Asphalt	S	186	24	4,459	57	320
SKVIL::225TH ST::20	225TH STREET	225TH STREET C	JEFFERY AVENUE	Asphalt	S	304	24	7,289	52	302
SKVIL::225TH ST::30	225TH STREET	JEFFERY AVENUE	YATES AVENUE	Asphalt	S	1,101	24	26,416	88	171
SKVIL::225TH ST::40	225TH STREET	NICHOLS DRIVE	BROOKWOOD DRIVE	Asphalt	S	1,027	24	24,639	14	437
SKVIL::225TH ST::50	225TH STREET	BROOKWOOD DRIVE	THEISEN AVENUE	Asphalt	S	655	24	15,731	10	636
SKVIL::225TH ST::60	225TH STREET	THEISEN AVENUE	END	Asphalt	S	233	24	5,592	68	333
SKVIL::226TH ST::10	226TH STREET	NICHOLS DRIVE	SPENCER AVENUE	Asphalt	S	478	24	11,476	94	221
SKVIL::BRKWD DR::10	BROOKWOOD DRIVE	NICHOLS DRIVE	225TH PLACE	Asphalt	S	1,047	31	32,451	76	227
SKVIL::BRKWD DR::20	BROOKWOOD DRIVE	225TH PLACE	225TH STREET	Asphalt	S	293	31	9,078	63	265
SKVIL::BRKWD DR::30	BROOKWOOD DRIVE	225TH STREET	224TH PLACE	Asphalt	S	276	31	8,557	43	276
SKVIL::BRKWD DR::40	BROOKWOOD DRIVE	224TH PLACE	224TH STREET	Asphalt	S	278	31	8,632	32	241
SKVIL::BRKWD DR::50	BROOKWOOD DRIVE	224TH STREET	223RD PLACE	Asphalt	S	283	31	8,766	46	235
SKVIL::BRKWD DR::60	BROOKWOOD DRIVE	223RD PLACE	223RD STREET	Asphalt	S	277	31	8,602	45	529
SKVIL::BRKWD DR::70	BROOKWOOD DRIVE	223RD STREET	PEACH TREE AVENUE	Asphalt	S	913	31	28,302	43	295
SKVIL::BRKWD DR::80	BROOKWOOD DRIVE	PEACH TREE AVENUE	END	Asphalt	S	422	31	13,084	44	279
SKVIL::BRRY LN::10	BARRY LANE	RUSH STREET	FRANK WAGNER AVENUE	Asphalt	S	437	27	11,789	31	600
SKVIL::CHPPL AVE::10	CHAPPEL AVENUE	YATES AVENUE	224TH STREET	Asphalt	S	801	24	19,214	40	224
SKVIL::CHPPL AVE::20	CHAPPEL AVENUE	224TH STREET	223RD PLACE	Asphalt	S	587	24	14,080	33	432
SKVIL::CHPPL AVE::30	CHAPPEL AVENUE	222ND PLACE	222ND STREET	Asphalt	S	266	24	6,374	42	336
SKVIL::CHPPL AVE::40	CHAPPEL AVENUE	222ND STREET	221ST STREET	Asphalt	S	371	24	8,906	28	377
SKVIL::CHRLTT CT::10	CHARLOTTE COURT	216TH STREET	END	Asphalt	S	259	24	6,215	84	218
SKVIL::CLYD AVE::10	CLYDE AVENUE	YATES AVENUE	END	Gravel	T	92	30	2,749	Gravel	Gravel
SKVIL::CLYD AVE::20	CLYDE AVENUE	YATES AVENUE	STRASSBURG AVENUE	Asphalt	S	279	30	8,367	45	534
SKVIL::CLYD AVE::30	CLYDE AVENUE	STRASSBURG AVENUE	223RD PLACE	Asphalt	S	933	30	27,977	33	441
SKVIL::CLYD AVE::40	CLYDE AVENUE	223RD PLACE	223RD STREET	Asphalt	S	339	30	10,159	31	792
SKVIL::CLYD AVE::50	CLYDE AVENUE	223RD STREET	221ST STREET	Asphalt	S	968	24	23,240	26	565
SKVIL::CLYD AVE::60	CLYDE AVENUE	219TH PLACE	END	Asphalt	S	128	24	3,073	24	601
SKVIL::CLYD AVE::70	CLYDE AVENUE	219TH PLACE	218TH PLACE	Asphalt	S	569	24	13,667	36	244
SKVIL::CLYD AVE::80	CLYDE AVENUE	218TH PLACE	218TH STREET	Asphalt	S	281	24	6,733	15	316
SKVIL::CLYD AVE::90	CLYDE AVENUE	218TH STREET	215TH PLACE	Asphalt	S	1,478	24	35,473	74	210
SKVIL::CNSTNC AVE::10	CONSTANCE AVENUE	PETERSON AVENUE	PETERSON AVENUE	Asphalt	S	931	24	22,344	93	184
SKVIL::CRL AVE::10	CAROL AVENUE	PETERSON AVENUE	END	Asphalt	S	206	24	4,956	33	323
SKVIL::CRL AVE::20	CAROL AVENUE	PETERSON AVENUE	217TH PLACE	Asphalt	S	1,065	24	25,559	26	260
SKVIL::CRL LN::10	CAROL LANE	JEFFERY AVENUE	JEFFERY AVENUE	Asphalt	S	1,221	24	29,314	13	668

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::CRNLL AVE::10	CORNELL AVENUE	KATHY DRIVE	224TH COURT	Asphalt	S	339	24	8,130	31	257
SKVIL::CRNLL AVE::20	CORNELL AVENUE	224TH COURT	223RD PLACE	Asphalt	S	175	24	4,195	34	475
SKVIL::CRNLL AVE::30	CORNELL AVENUE	223RD PLACE	223RD STREET	Asphalt	S	392	24	9,419	14	495
SKVIL::CRNLL AVE::40	CORNELL AVENUE	223RD STREET	222ND PLACE	Asphalt	P	413	24	9,901	95	169
SKVIL::CRNLL AVE::50	CORNELL AVENUE	222ND PLACE	E SAUK TRAIL	Asphalt	P	605	24	14,525	95	351
SKVIL::CYNTH AVE::10	CYNTHIA AVENUE	217TH PLACE	215TH PLACE	Asphalt	S	1,358	24	32,597	32	407
SKVIL::DBR CT::10	DEBRA COURT	MARY BYRNE DRIVE	END	Asphalt	S	143	27	3,852	44	595
SKVIL::ESTBRK CT::10	EASTBROOK COURT	SOUTHBROOK DRIVE	END	Asphalt	S	279	27	7,538	19	380
SKVIL::ESTBRK DR::10	EASTBROOK DRIVE	STEGER ROAD	SOUTHBROOK DRIVE	Asphalt	S	1,164	27	31,441	42	247
SKVIL::FRK WR AVE::10	FRANK WAGNER AVENUE	BARRY LANE	TORRENCE AVENUE	Asphalt	S	1,132	22	24,894	9	329
SKVIL::GLN AVE::10	GALINE AVENUE	219TH PLACE	218TH PLACE	Asphalt	S	705	24	16,925	21	393
SKVIL::GLN AVE::20	GALINE AVENUE	218TH STREET	217TH PLACE	Asphalt	S	284	24	6,811	17	518
SKVIL::GLN AVE::30	GALINE AVENUE	217TH PLACE	215TH PLACE	Asphalt	S	1,261	24	30,267	21	391
SKVIL::HLN DR::10	HELEN DRIVE	MARY BYRNE DRIVE	LAURA LANE	Asphalt	S	302	27	8,159	27	305
SKVIL::HRPR AVE::10	HARPER AVENUE	E SAUK TRAIL	END	Asphalt	S	906	22	19,939	28	469
SKVIL::J RSMSN DR::10	JASON RASMUSSEN DRIVE	MARK COLLINS DRIVE	END	Asphalt	S	2,243	36	80,738	42	362
SKVIL::JFFRY AVE::10	JEFFERY AVENUE	YATES AVENUE	ROSS CIRCLE	Asphalt	S	439	24	10,537	44	225
SKVIL::JFFRY AVE::100	JEFFERY AVENUE	E SAUK TRAIL	219TH PLACE	Asphalt	S	376	41	15,430	94	194
SKVIL::JFFRY AVE::110	JEFFERY AVENUE	219TH PLACE	CAROL LANE	Asphalt	S	463	36	16,655	77	120
SKVIL::JFFRY AVE::120	JEFFERY AVENUE	CAROL LANE	CAROL LANE	Asphalt	S	399	36	14,350	83	129
SKVIL::JFFRY AVE::130	JEFFERY AVENUE	CAROL LANE	218TH STREET	Asphalt	S	154	36	5,553	83	142
SKVIL::JFFRY AVE::140	JEFFERY AVENUE	218TH STREET	217TH PLACE	Asphalt	S	388	36	13,973	83	190
SKVIL::JFFRY AVE::150	JEFFERY AVENUE	217TH PLACE	217TH STREET	Asphalt	S	277	24	6,654	49	311
SKVIL::JFFRY AVE::160	JEFFERY AVENUE	217TH STREET	216TH PLACE	Asphalt	S	389	24	9,334	39	206
SKVIL::JFFRY AVE::170	JEFFERY AVENUE	216TH PLACE	216TH STREET	Asphalt	S	680	24	16,330	48	213
SKVIL::JFFRY AVE::180	JEFFERY AVENUE	216TH STREET	215TH PLACE	Asphalt	S	301	24	7,220	35	310
SKVIL::JFFRY AVE::190	JEFFERY AVENUE	215TH PLACE	PETERSON AVENUE	Asphalt	S	493	24	11,822	38	398
SKVIL::JFFRY AVE::20	JEFFERY AVENUE	ROSS CIRCLE	225TH PLACE	Asphalt	S	273	24	6,546	60	188
SKVIL::JFFRY AVE::30	JEFFERY AVENUE	225TH PLACE	225TH STREET	Asphalt	S	275	24	6,599	53	228
SKVIL::JFFRY AVE::40	JEFFERY AVENUE	225TH STREET	REICHERT AVENUE	Asphalt	S	282	24	6,760	36	189
SKVIL::JFFRY AVE::50	JEFFERY AVENUE	REICHERT AVENUE	224TH STREET	Asphalt	S	281	24	6,733	53	200
SKVIL::JFFRY AVE::60	JEFFERY AVENUE	223RD PLACE	END	Asphalt	S	121	20	2,429	22	578
SKVIL::JFFRY AVE::70	JEFFERY AVENUE	223RD STREET	222ND PLACE	Asphalt	S	404	24	9,697	29	305
SKVIL::JFFRY AVE::80	JEFFERY AVENUE	222ND PLACE	222ND STREET	Asphalt	S	314	24	7,540	31	253
SKVIL::JFFRY AVE::90	JEFFERY AVENUE	222ND STREET	E SAUK TRAIL	Asphalt	S	500	24	11,989	24	244
SKVIL::JNC DR::10	JANICE DRIVE	START	MARY BYRNE DRIVE	Asphalt	S	202	27	5,451	36	433
SKVIL::JSH DR::10	JOSHUA DRIVE	223RD STREET	END	Asphalt	S	1,328	31	41,159	25	276
SKVIL::KLVLG DR::10	KALVELAGE DRIVE	TORRENCE AVENUE	END	Asphalt	S	654	27	17,666	14	415
SKVIL::KTHY DR::10	KATHY DRIVE	CORNELL AVENUE	225TH STREET C	Asphalt	S	1,260	24	30,244	38	271
SKVIL::KTHY DR::20	KATHY DRIVE	CORNELL AVENUE	223RD PLACE	Asphalt	S	854	24	20,494	27	266
SKVIL::LLL CT::10	LUELLA COURT	221ST STREET	END	Asphalt	S	189	25	4,729	65	390
SKVIL::LNG AVE::10	LONG AVENUE	TORRENCE AVENUE	END	Asphalt	S	773	17	13,139	20	384

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::LR LN::10	LAURA LANE	START	HELEN DRIVE	Asphalt	S	171	27	4,610	20	281
SKVIL::LR LN::20	LAURA LANE	HELEN DRIVE	END	Asphalt	S	199	27	5,375	20	217
SKVIL::LR LN::30	LAURA LANE	LAURA LANE	JANICE DRIVE	Asphalt	S	435	27	11,745	28	-
SKVIL::LV AVE::10	OLIVIA AVENUE	219TH PLACE	218TH PLACE	Asphalt	S	696	24	16,696	19	307
SKVIL::LV AVE::20	OLIVIA AVENUE	218TH PLACE	218TH STREET	Asphalt	S	375	24	9,003	17	362
SKVIL::LV AVE::30	OLIVIA AVENUE	217TH PLACE	215TH PLACE	Asphalt	S	1,478	24	35,481	82	177
SKVIL::MRKCLNS DR::10	MARK COLLINS DRIVE	E SAUK TRAIL	END	Asphalt	S	617	37	22,814	45	366
SKVIL::MRKCLNS DR::20	MARK COLLINS DRIVE	WINPAK WAY	JASON RASMUSSEN DRIVE	Asphalt	S	3,036	37	112,344	63	282
SKVIL::MRKCLNS DR::30	MARK COLLINS DRIVE	JASON RASMUSSEN DRIVE	END	Asphalt	S	234	36	8,419	67	233
SKVIL::MRPHY AVE::10	MURPHY AVENUE	224TH STREET	223RD PLACE	Asphalt	S	293	24	7,040	9	311
SKVIL::MRPHY AVE::20	MURPHY AVENUE	223RD PLACE	223RD STREET	Asphalt	S	269	24	6,467	9	398
SKVIL::MRPHY AVE::30	MURPHY AVENUE	223RD STREET	END	Asphalt	S	40	50	1,986	67	753
SKVIL::MRRLL AVE::10	MERRILL AVENUE	STRASSBURG AVENUE	223RD STREET	Asphalt	S	1,105	24	26,515	41	223
SKVIL::MRRLL AVE::100	MERRILL AVENUE	216TH COURT	216TH STREET	Asphalt	S	276	24	6,613	36	272
SKVIL::MRRLL AVE::110	MERRILL AVENUE	216TH STREET	215TH PLACE	Asphalt	S	272	24	6,523	33	393
SKVIL::MRRLL AVE::120	MERRILL AVENUE	215TH PLACE	END	Gravel	T	723	24	17,354	Gravel	Gravel
SKVIL::MRRLL AVE::20	MERRILL AVENUE	223RD STREET	221ST STREET	Asphalt	S	913	24	21,904	52	287
SKVIL::MRRLL AVE::30	MERRILL AVENUE	E SAUK TRAIL	219TH PLACE	Asphalt	S	435	24	10,450	21	354
SKVIL::MRRLL AVE::40	MERRILL AVENUE	219TH PLACE	219TH STREET	Asphalt	S	282	24	6,776	39	188
SKVIL::MRRLL AVE::50	MERRILL AVENUE	219TH STREET	218TH PLACE	Asphalt	S	278	24	6,667	27	218
SKVIL::MRRLL AVE::60	MERRILL AVENUE	218TH PLACE	218TH STREET	Asphalt	S	276	24	6,624	44	397
SKVIL::MRRLL AVE::70	MERRILL AVENUE	218TH STREET	217TH PLACE	Asphalt	S	287	24	6,878	48	165
SKVIL::MRRLL AVE::80	MERRILL AVENUE	217TH PLACE	217TH STREET	Asphalt	S	286	24	6,860	27	204
SKVIL::MRRLL AVE::90	MERRILL AVENUE	217TH STREET	216TH COURT	Asphalt	S	330	24	7,924	43	153
SKVIL::MRRLL CT::10	MERRILL COURT	216TH STREET	END	Asphalt	S	181	24	4,343	67	400
SKVIL::MRY BYR DR::10	MARY BYRNE DRIVE	INDIE LANE	HELEN DRIVE	Asphalt	S	301	27	8,114	41	286
SKVIL::MRY BYR DR::20	MARY BYRNE DRIVE	HELEN DRIVE	MARY COURT	Asphalt	S	356	27	9,610	38	234
SKVIL::MRY BYR DR::30	MARY BYRNE DRIVE	MARY COURT	JANICE DRIVE	Asphalt	S	664	27	17,938	25	289
SKVIL::MRY BYR DR::40	MARY BYRNE DRIVE	COTTAGE GROVE AVE	DEBRA COURT	Asphalt	S	515	27	13,905	21	-
SKVIL::MRY BYR DR::50	MARY BYRNE DRIVE	DEBRA COURT	INDIE LANE	Asphalt	S	630	27	17,010	18	-
SKVIL::MRY CT::10	MARY COURT	MARY BYRNE DRIVE	END	Asphalt	S	118	27	3,182	41	214
SKVIL::NCHLS DR::10	NICHOLS DRIVE	BROOKWOOD DRIVE	THEODORE AVENUE	Asphalt	S	483	31	14,963	34	281
SKVIL::NCHLS DR::100	NICHOLS DRIVE	223RD PLACE	223RD STREET	Asphalt	S	274	31	8,480	53	268
SKVIL::NCHLS DR::110	NICHOLS DRIVE	223RD STREET	END	Asphalt	S	46	65	3,020	83	375
SKVIL::NCHLS DR::20	NICHOLS DRIVE	THEODORE AVENUE	SPENCER AVENUE	Asphalt	S	281	31	8,725	39	292
SKVIL::NCHLS DR::30	NICHOLS DRIVE	SPENCER AVENUE	NICHOLS DRIVE	Asphalt	S	441	31	13,682	49	218
SKVIL::NCHLS DR::40	NICHOLS DRIVE	NICHOLS DRIVE	226TH STREET	Asphalt	S	251	31	7,788	30	265
SKVIL::NCHLS DR::50	NICHOLS DRIVE	226TH STREET	225TH PLACE	Asphalt	S	279	31	8,634	34	490
SKVIL::NCHLS DR::60	NICHOLS DRIVE	225TH PLACE	225TH STREET	Asphalt	S	282	31	8,746	28	302
SKVIL::NCHLS DR::70	NICHOLS DRIVE	225TH STREET	224TH PLACE	Asphalt	S	285	31	8,847	47	214
SKVIL::NCHLS DR::80	NICHOLS DRIVE	224TH PLACE	224TH STREET	Asphalt	S	276	31	8,559	45	190
SKVIL::NCHLS DR::90	NICHOLS DRIVE	224TH STREET	223RD PLACE	Asphalt	S	287	31	8,899	48	195

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::ND LN::10	INDIE LANE	MARY BYRNE DRIVE	END	Asphalt	S	46	27	1,243	82	368
SKVIL::ND LN::20	INDIE LANE	MARY BYRNE DRIVE	LAURA LANE	Asphalt	S	585	27	15,795	New section.	New section.
SKVIL::NVH AVE::10	NAVAH AVENUE	223RD STREET	222ND PLACE	Asphalt	S	320	24	7,688	56	363
SKVIL::NVH AVE::20	NAVAH AVENUE	222ND PLACE	POMO COURT	Asphalt	S	305	24	7,323	55	188
SKVIL::NVH AVE::30	NAVAH AVENUE	POMO COURT	TALANDIS AVENUE	Asphalt	S	299	24	7,178	42	191
SKVIL::NVH AVE::40	NAVAH AVENUE	TALANDIS AVENUE	APACHE AVENUE	Asphalt	S	284	24	6,811	44	167
SKVIL::NVH AVE::50	NAVAH AVENUE	APACHE AVENUE	ORION ROAD	Asphalt	S	278	24	6,677	39	297
SKVIL::PCH AVE::10	APACHE AVENUE	222ND STREET	NAVAH AVENUE	Asphalt	S	1,302	24	31,255	32	299
SKVIL::PCH TR AVE::10	PEACH TREE AVENUE	223RD STREET	WILLOW TREE LANE	Asphalt	S	758	24	18,182	93	257
SKVIL::PCH TR AVE::20	PEACH TREE AVENUE	WILLOW TREE LANE	BROOKWOOD DRIVE	Asphalt	S	585	24	14,038	95	184
SKVIL::PM CT::10	POMO COURT	NAVAH AVENUE	END	Asphalt	S	309	24	7,414	53	357
SKVIL::PPLR LN::10	POPLAR LANE	ASTOR STREET	END	Asphalt	S	700	27	18,893	15	289
SKVIL::PRR AVE::10	PRAIRIE AVENUE	222ND PLACE	E SAUK TRAIL	Asphalt	S	726	25	18,141	24	432
SKVIL::PTRSN AVE::10	PETERSON AVENUE	CAROL AVENUE	PETERSON AVENUE	Asphalt	S	259	24	6,223	36	334
SKVIL::PTRSN AVE::20	PETERSON AVENUE	PETERSON AVENUE	217TH PLACE	Asphalt	S	1,105	24	26,529	61	169
SKVIL::PTRSN AVE::30	PETERSON AVENUE	217TH PLACE	217TH STREET	Asphalt	S	274	24	6,583	50	106
SKVIL::PTRSN AVE::40	PETERSON AVENUE	217TH STREET	216TH PLACE	Asphalt	S	284	24	6,806	39	146
SKVIL::PTRSN AVE::50	PETERSON AVENUE	216TH PLACE	215TH PLACE	Asphalt	S	601	24	14,426	47	235
SKVIL::PTRSN AVE::60	PETERSON AVENUE	215TH PLACE	CONSTANCE AVENUE	Asphalt	S	335	24	8,044	84	137
SKVIL::PTRSN AVE::70	PETERSON AVENUE	CONSTANCE AVENUE	CONSTANCE AVENUE	Asphalt	S	952	24	22,852	79	143
SKVIL::PTRSN AVE::80	PETERSON AVENUE	CONSTANCE AVENUE	JEFFERY AVENUE	Asphalt	S	274	24	6,585	76	136
SKVIL::PTRSN AVE::90	PETERSON AVENUE	JEFFERY AVENUE	END	Asphalt	S	133	24	3,181	84	205
SKVIL::PXTN AVE::10	PAXTON AVENUE	221ST STREET	222ND PLACE	Asphalt	S	508	24	12,185	21	351
SKVIL::RCHRT AVE::10	REICHERT AVENUE	JEFFERY AVENUE	YATES AVENUE	Asphalt	S	1,401	24	33,625	26	503
SKVIL::RN AVE::10	ORION AVENUE	E SAUK TRAIL	219TH PLACE	Asphalt	S	227	24	5,452	51	316
SKVIL::RN AVE::20	ORION AVENUE	219TH PLACE	219TH STREET	Asphalt	S	280	24	6,718	49	204
SKVIL::RN AVE::30	ORION AVENUE	219TH STREET	218TH PLACE	Asphalt	S	341	24	8,182	34	204
SKVIL::RN AVE::40	ORION AVENUE	218TH PLACE	218TH STREET	Asphalt	S	282	24	6,762	30	389
SKVIL::RN AVE::50	ORION AVENUE	218TH STREET	217TH PLACE	Asphalt	S	285	24	6,847	13	530
SKVIL::RN AVE::60	ORION AVENUE	217TH PLACE	217TH STREET	Asphalt	S	561	24	13,453	32	249
SKVIL::RN AVE::70	ORION AVENUE	216TH STREET	215TH PLACE	Asphalt	S	280	24	6,725	48	284
SKVIL::RN AVE::80	ORION AVENUE	215TH PLACE	END	Asphalt	S	116	24	2,793	61	422
SKVIL::RN RD::10	ORION ROAD	E SAUK TRAIL	220TH STREET	Asphalt	S	135	25	3,371	67	602
SKVIL::RN RD::20	ORION ROAD	220TH STREET	221ST STREET	Asphalt	S	369	25	9,237	48	426
SKVIL::RN RD::30	ORION ROAD	221ST STREET	NAVAH AVENUE	Asphalt	S	593	24	14,239	48	282
SKVIL::RN RD::40	ORION ROAD	NAVAH AVENUE	TORRENCE AVENUE	Asphalt	S	315	24	7,562	46	515
SKVIL::RSH ST::10	RUSH STREET	STONE LANE	END	Asphalt	S	491	27	13,261	12	266
SKVIL::RSH ST::20	RUSH STREET	STONE LANE	BARRY LANE	Asphalt	S	225	27	6,083	16	305
SKVIL::RSS CR::10	ROSS CIRCLE	JEFFERY AVENUE	END	Asphalt	S	243	24	5,840	55	371
SKVIL::SHRLY AVE::10	SHIRLEY AVENUE	222ND PLACE	221ST STREET	Asphalt	S	571	24	13,693	16	508
SKVIL::SK PNT DR::10	SAUK POINTE DRIVE	223RD STREET	END	Asphalt	S	827	31	25,629	31	383
SKVIL::SK PNT DR::20	SAUK POINTE DRIVE	E SAUK TRAIL	223RD STREET	Asphalt	S	878	31	27,232	19	408

Pavement ID	Road Name	From	To	Surface	Rank	Length (FT)	Width (FT)	Area (SF)	PCI	IRI
SKVIL::SPNCR AVE::10	SPENCER AVENUE	NICHOLS DRIVE	226TH STREET	Asphalt	S	513	24	12,322	9	410
SKVIL::SPNCR AVE::20	SPENCER AVENUE	226TH STREET	225TH PLACE	Asphalt	S	275	24	6,607	16	399
SKVIL::STHBRK DR::10	SOUTHBROOK DRIVE	EASTBROOK DRIVE	END	Asphalt	S	144	27	3,883	64	526
SKVIL::STHBRK DR::20	SOUTHBROOK DRIVE	EASTBROOK DRIVE	END	Asphalt	S	1,076	27	29,046	42	290
SKVIL::STN LN::10	STONE LANE	RUSH STREET	ASTOR STREET	Asphalt	S	214	27	5,782	16	358
SKVIL::STN LN::20	STONE LANE	E LINCOLN HIGHWAY	RUSH STREET	Asphalt	S	178	44	7,826	40	788
SKVIL::STR ST::10	ASTOR STREET	POPLAR LANE	END	Asphalt	S	320	27	8,640	30	283
SKVIL::STR ST::20	ASTOR STREET	STONE LANE	POPLAR LANE	Asphalt	S	176	27	4,761	20	401
SKVIL::STRSBR AVE::10	STRASSBURG AVENUE	CLYDE AVENUE	MERRILL AVENUE	Asphalt	S	283	24	6,796	55	250
SKVIL::STRSBR AVE::20	STRASSBURG AVENUE	MERRILL AVENUE	223RD PLACE	Asphalt	S	1,226	24	29,425	71	143
SKVIL::THDR AVE::10	THEODORE AVENUE	NICHOLS DRIVE	225TH PLACE	Asphalt	S	1,069	24	25,651	10	612
SKVIL::THSN AVE::10	THEISEN AVENUE	225TH STREET	224TH PLACE	Asphalt	S	275	24	6,600	5	618
SKVIL::THSN AVE::20	THEISEN AVENUE	224TH PLACE	224TH STREET	Asphalt	S	275	24	6,600	8	674
SKVIL::TLNDS AVE::10	TALANDIS AVENUE	222ND PLACE	222ND STREET	Asphalt	S	249	24	5,969	15	319
SKVIL::TLNDS AVE::20	TALANDIS AVENUE	222ND STREET	NAVAH AVENUE	Asphalt	S	863	24	20,723	25	255
SKVIL::TRNSPT DR::10	TRANSPORTATION DRIVE	E LINCOLN HIGHWAY	END	Asphalt	S	1,391	39	54,241	29	234
SKVIL::WLLW TR LN::10	WILLOW TREE LANE	223RD STREET	PEACH TREE AVENUE	Asphalt	S	869	24	20,847	15	396
SKVIL::WNPK WY::10	WINPAK WAY	MRKCLNS DR	END	Asphalt	S	1,840	36	66,240	New section.	New section.
SKVIL::YTS AVE::10	YATES AVENUE	JEFFERY AVENUE	END	Asphalt	S	118	65	7,665	44	384
SKVIL::YTS AVE::100	YATES AVENUE	222ND STREET	221ST STREET	Asphalt	S	468	24	11,244	76	516
SKVIL::YTS AVE::20	YATES AVENUE	JEFFERY AVENUE	225TH PLACE	Asphalt	S	611	24	14,674	15	415
SKVIL::YTS AVE::30	YATES AVENUE	225TH PLACE	225TH STREET	Asphalt	S	279	24	6,704	18	566
SKVIL::YTS AVE::40	YATES AVENUE	225TH STREET	REICHERT AVENUE	Asphalt	S	282	24	6,773	10	451
SKVIL::YTS AVE::50	YATES AVENUE	REICHERT AVENUE	CHAPPEL AVENUE	Asphalt	S	279	24	6,692	21	408
SKVIL::YTS AVE::60	YATES AVENUE	CHAPPEL AVENUE	CLYDE AVENUE	Asphalt	S	270	24	6,489	34	548
SKVIL::YTS AVE::70	YATES AVENUE	CLYDE AVENUE	223RD PLACE	Asphalt	S	1,804	24	43,291	51	258
SKVIL::YTS AVE::80	YATES AVENUE	223RD PLACE	223RD STREET	Asphalt	S	280	24	6,709	53	380
SKVIL::YTS AVE::90	YATES AVENUE	223RD STREET	222ND STREET	Asphalt	S	607	24	14,561	59	691