Asset Management Plan for Pavement: City of Ann Arbor, MI 2020 Update

PREPARED FOR
MICHIGAN DEPARTMENT OF TRANSPORTATION

Contents

Introduction

Overview of Pavement Asset Management and Plan Update

The State of Michigan has been actively pursuing Asset Management since 1998 when the Michigan Legislature established the ACT 51 Transportation Funding Committee. Continued support of Asset Management has occurred as the Legislature established the Transportation Asset Management Council (TAMC) in Act 499 of 2002, encouraged the use of Asset Management in decision processes through Act 338 of 2006, and continued to refine Asset Management in Michigan through act 199 of 2007. Asset Management, according to Public Act 199 of 2007, means an "ongoing process of maintaining, upgrading, and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment." To further advance the goals of transportation asset management, the Michigan Legislature enacted Public Act 325 of 2018, requiring that governmental agencies "shall annually submit a report on infrastructure conditions and investments" to the Transportation Asset Management Council (TAMC) and "include a multi-year program developed through the asset management process."

The City of Ann Arbor ("City"), recognizing that a complete asset management program is both a management paradigm and a body of management practices applied to its total capital assets, in 2016 prepared an Asset Management Plan for Pavement that was approved by TAMC on January 3, 2017.

This 2020 Plan Update is designed to update that approved plan with regard to statistical data and to insure inclusion of all elements necessary for compliance with Public Act 325 of 2018.

The overall asset management program is geared to minimizing the total costs of acquiring, operating, maintaining, and renewing all assets within the constraints of limited resources while delivering a level of service that the community desires and regulators require, all at an acceptable level of risk to the organization.

The transportation asset group includes not only pavement but subgrades, edge drains, sidewalks, ramps, curb and gutter, retaining walls, guard rails, bridges, signs, pavement marking, communications, and rights of way. While the initial 2017 document was geared specifically to management of its pavement assets, with related transportation components addressed in other asset documents, this plan is amended to include certain baseline information on the City's systems of culverts and traffic signals. In addition, the City's 2020 Bridge Asset Management Plan is included as Appendix U.

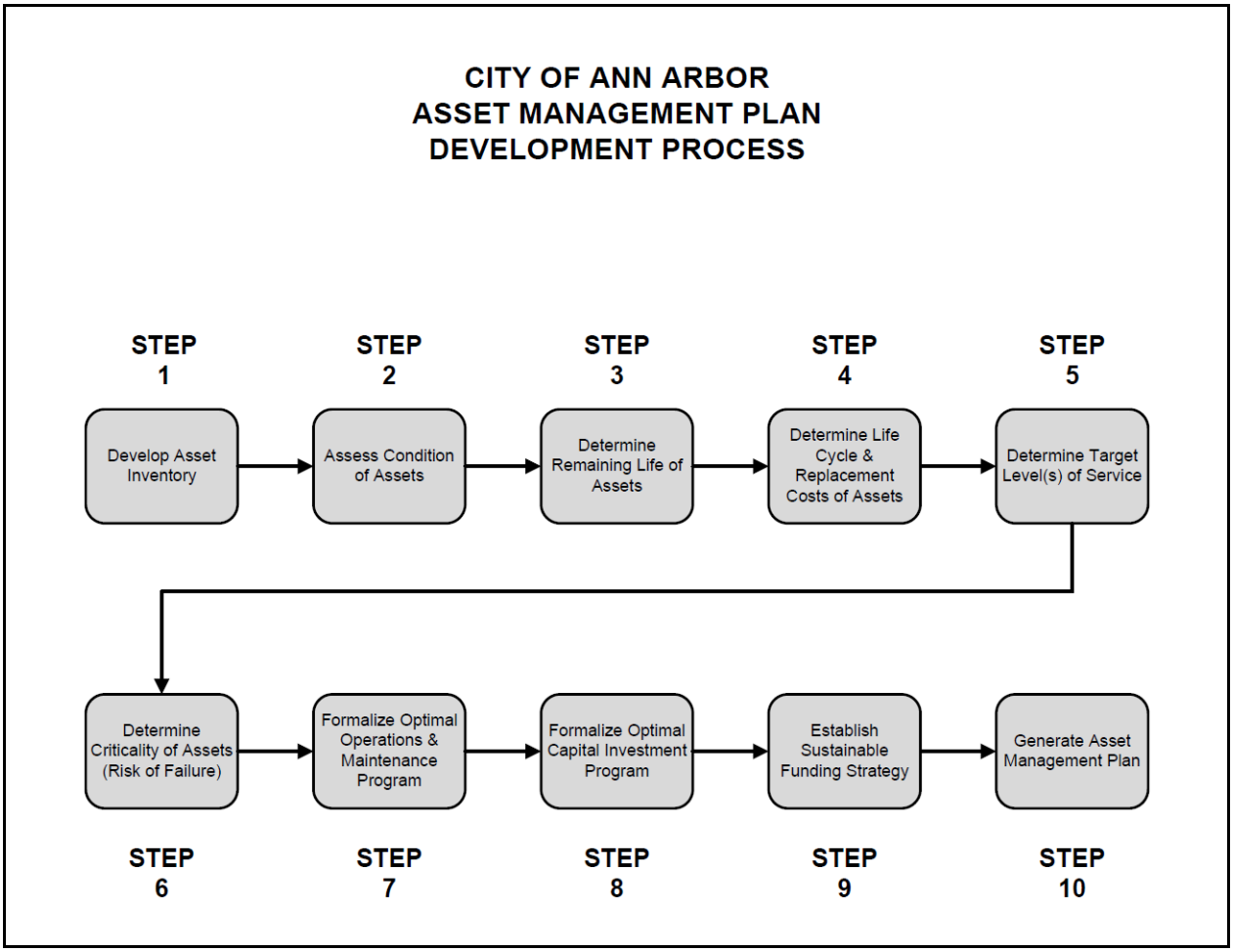
The Ann Arbor City Council has specifically articulated addressing deteriorated street infrastructure as a Council priority goal. Quarterly progress reports on the

"Fix Our Roads" goal are issued as part of a Citywide Sustainability Framework Report.

The implementation of asset management decision processes enables the City to make the best decisions for its transportation network with the best information available. The process enables good stewardship, transparent decision processes, and measurable performance.

The diagram on the following page provides an overview of the City's asset management process. This ten-step process models that developed by the United States Environmental Protection Agency. The asset management plan ("Plan") described in this document was developed following the steps shown.

This Plan was developed as a multi-disciplinary effort of the City's Systems Planning, Engineering, and Public Works Units of its Public Services Area (the Team) with valuable direction from the Ann Arbor City Council, particularly regarding the Target Level of Service and overall pavement asset management goals. This City Council support is deemed a key element in assuring the ultimate success of this plan.



City Organizational Structure

The City is organized by Areas and then Units within each Area. The three Areas most closely involved with pavement asset management and their roles are as follows:

Financial Services Area:

There are seven Units that fall under the Financial Services Area which oversees the fiscal health and information technology functions of the City. Those areas include Accounting Services, Assessor Services, Financial and Budget Management Services, Information Technology Services, Risk Management Services, Procurement, and Treasury Services.

Examples of this Area's involvement with pavement asset management include overall management of data services such as the City's GIS system and Cityworks databases and preparation of the capital budget which includes paving projects' costs.

Public Services Area:

Units within this Area include Administrative and Fiscal Management, Customer Service/Call Center, Public Works, Fleet and Facility Service, Engineering, Systems Planning, Wastewater Treatment Services, and Water Treatment Services.

This Area plays a central role in pavement asset management. Road-related functions include such diverse responsibilities as Capital Improvement Plan preparation, long-range asset management planning, engineering design and oversight for road resurfacing and reconstruction projects, preparation of annual ACT 51 map certification and fiscal reports, response to customer requests for service, pavement condition rating, and pavement, sign, and signal repair and preventative maintenance. Personnel within the Units are also responsible for pavement related GIS layer creation and maintenance.

Community Services Area:

This Area, particularly the Planning and Development Services Unit, also plays a role in pavement asset management by virtue of the expertise and information it provides to advise and guide the development, redevelopment, construction and preservation of the City of Ann Arbor.

Step 1: Develop Asset Inventory

1.1 Overview

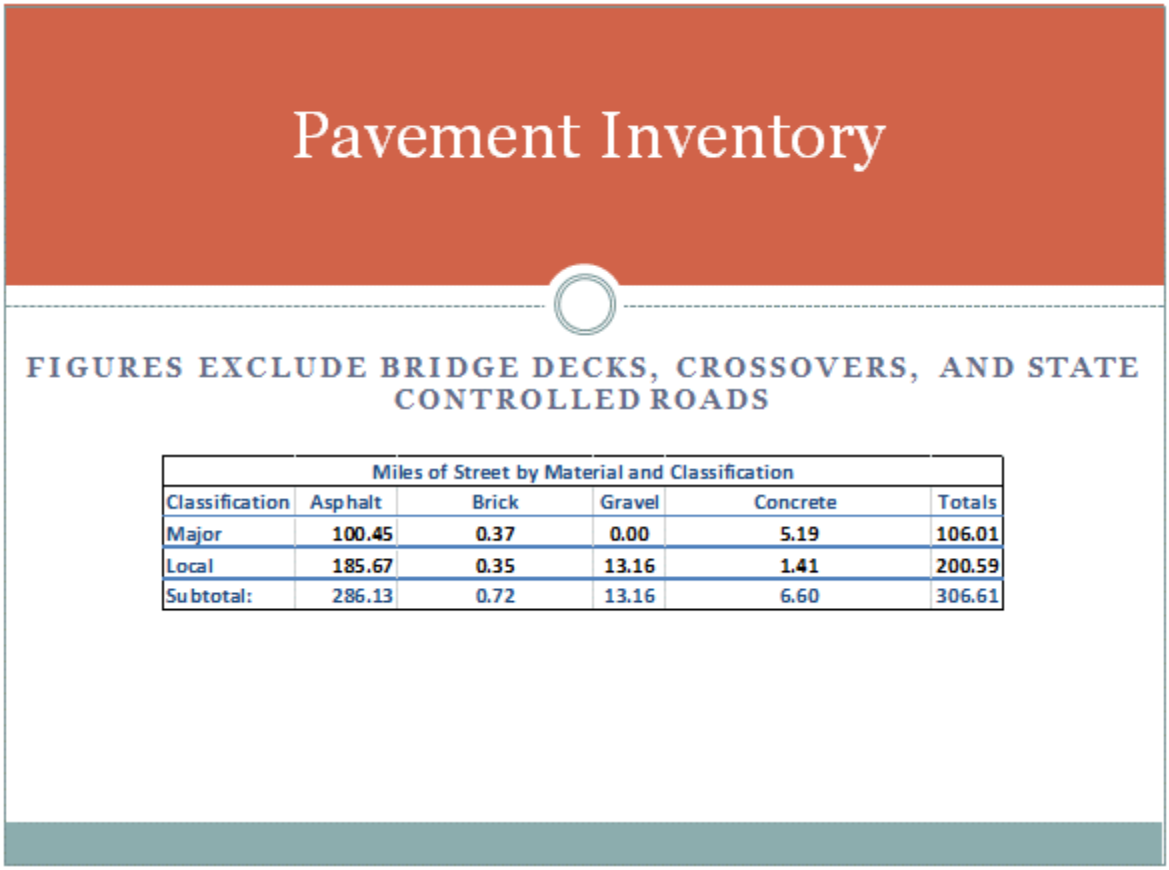
The City of Ann Arbor is the jurisdictional authority over all public streets lying within the City's corporate boundary exclusive of any state trunkline highways or federal interstate highways. For the period June 30, 2019 to June 30, 2020, the City certified 298.23 centerline miles of streets. Of that total, 101.45 miles are certified as Major streets, and 196.78 miles as Local streets. In addition, the City provides sweeping, snow and ice control, vegetation management, roadway drainage maintenance, and pavement maintenance for approximately 8 miles of MDOT trunklines. It is further noted that approximately 27 miles of the City's certified streets are identified on the National Highway System (NHS) map and are deemed critical linkages. The City also maintains culvert and traffic signal systems in support of the street system.

1.2 Pavement Asset Inventory

MDOT annually certifies all public roads within the State of Michigan. Certification maps are maintained by the City of Ann Arbor and are the basis for determining the amount of money received from the Michigan Transportation Fund.

In addition, in the spring of 2014, the City retained an outside consultant (Transmap) to conduct a detailed condition assessment of City controlled streets (see Step 2, Assess Condition of Assets). Condition ratings were imported into the City's Roadsoft database which contains roadway segment length figures. Road ratings were performed by Transmap again in 2017, and by Hennessey Engineers in 2019.

It is noted that road inventory mileages reported in the following figures are based on the centerline mileages utilized in the City's current pavement asset management strategy models. Centerline mileages for Major streets are somewhat higher than Act 51 certified mileage based on differences in how bridge decks and boulevard streets are handled in the different datasets.



Miles of Street by Material and Classification					
Classification	Asphalt	Brick	Gravel	Concrete	Totals
Major	100.45	0.37	0.00	5.19	106.01
Local	185.67	0.35	13.16	1.41	200.59
Subtotal:	286.13	0.72	13.16	6.60	306.61

Figure 1
Street Inventory Overall:
By Centerline Miles, Classification, and Materials

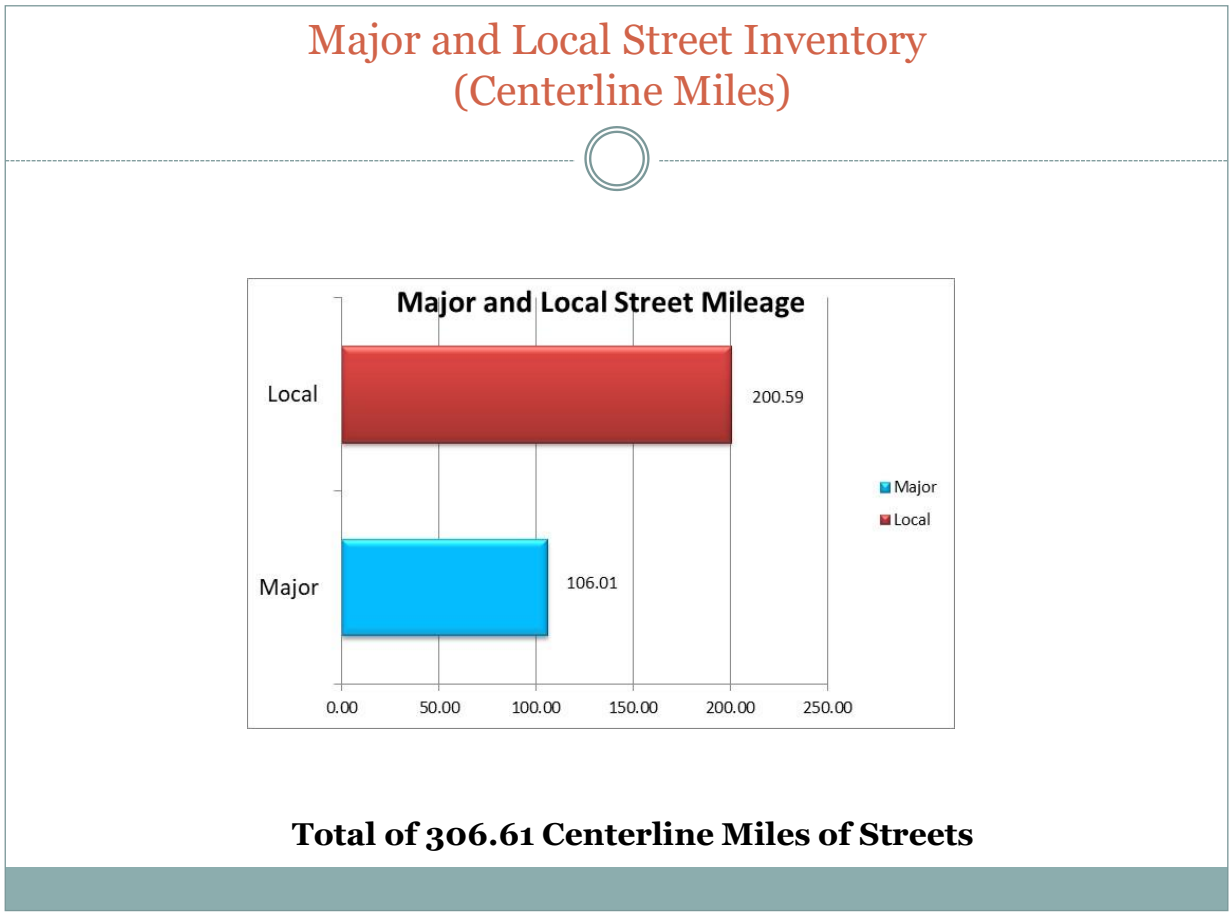


Figure 2
Street Inventory: Local vs. Major Centerline Mileages

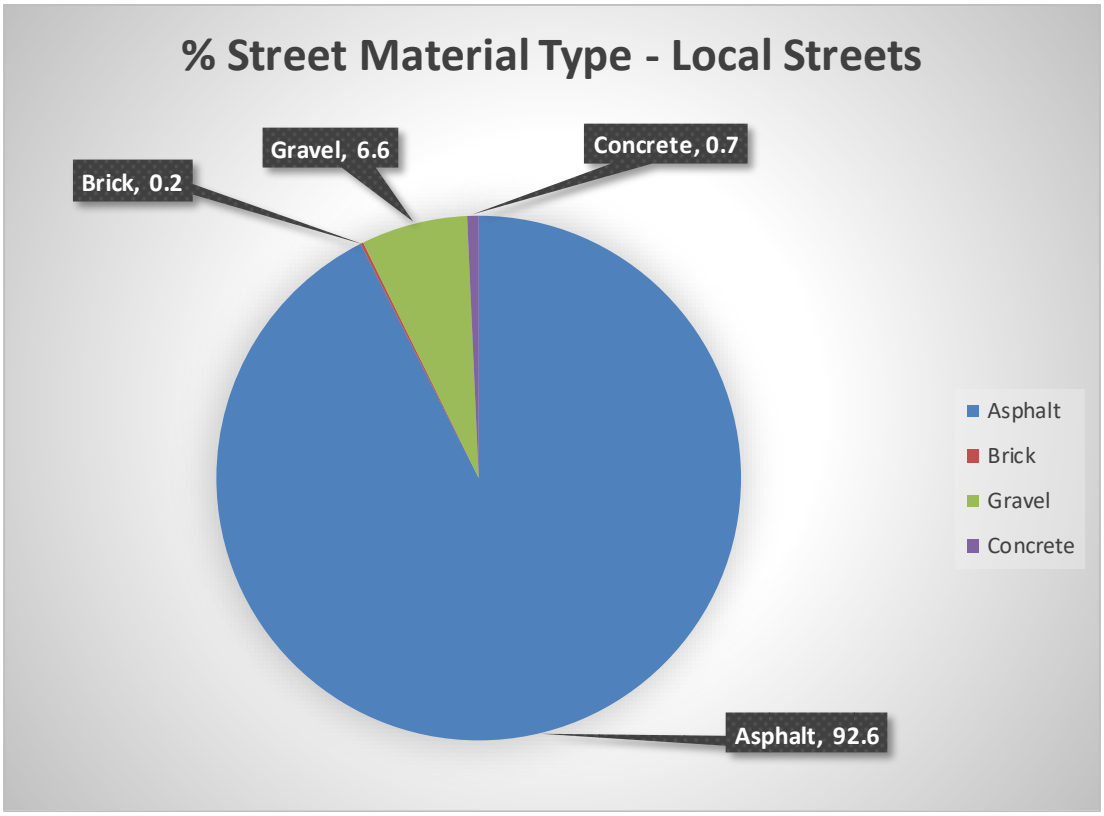


Figure 3
Street Inventory: Local Street Materials by Percentage of Centerline Miles

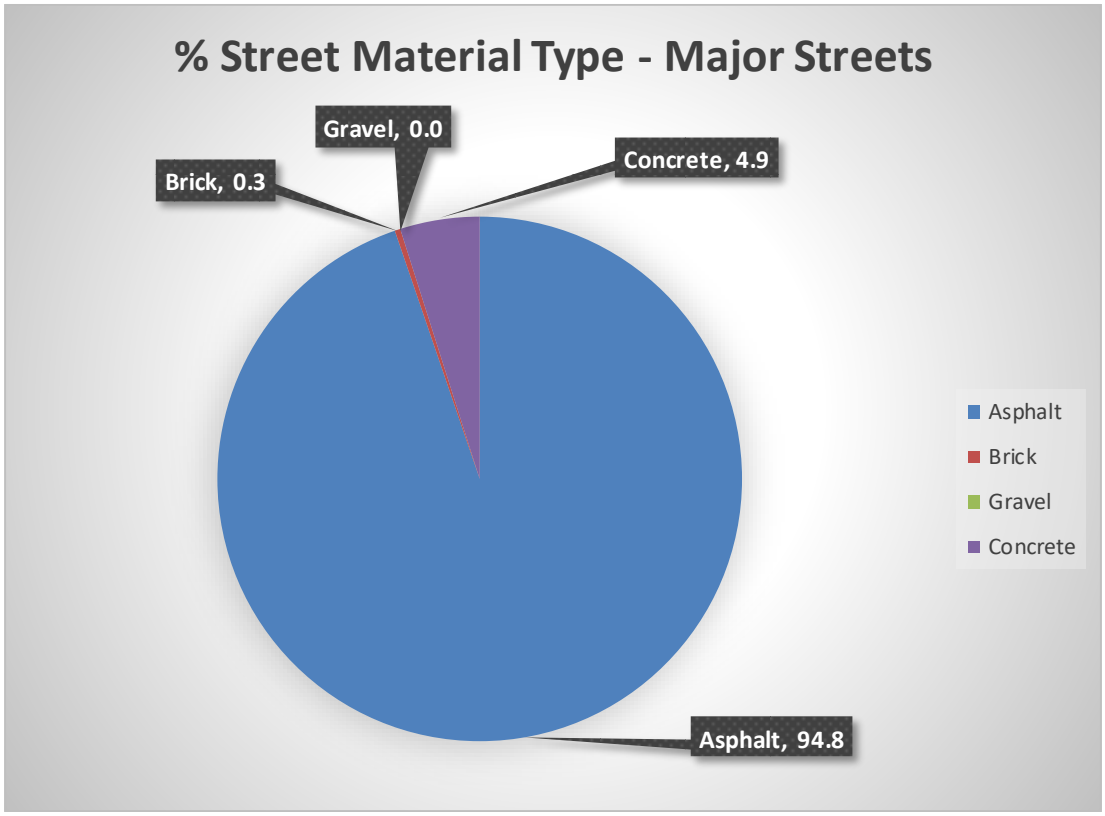


Figure 4
Street Inventory: Major Street Materials by Percentage of Centerline Miles

1.3 Componentized Asset Inventory

As can be seen in Figures 1 and 3-4 above, a significant majority of streets under the City's jurisdiction are asphalt. Approximately 94.8% of major roads and 92.6 % of local streets are asphalt. Because asphalt roads constitute the predominant surface type, asset management planning focuses heavily on treatments and practices related to this type.

The City also maintains approximately 13.2 miles of gravel roads and .72 miles of brick roads. The latter are located in the City's DDA district and are anticipated to remain brick due to their historical significance. By policy, gravel roads will be paved only upon petition by abutting property owners to create a Special Assessment District.

1.4 Culvert and Traffic Signal Inventories

The City maintains inventories of its culverts, traffic signals, and rectangular rapid flashing beacons. A map of culvert locations is included in the Appendix, Exhibit A and tabular inventory data for those culverts in the Appendix, Exhibit B. A map of the locations of the City's traffic signals, and rectangular rapid flashing beacons is included in the Appendix, Exhibit C.

1.5 Current Data and Software Tools for Asset Inventory and Other Plan Components

The City uses various types of software to manage current asset data and cost information. The following Table 1 lists specific software packages utilized by the City and descriptions of the functions these software packages perform.

Historically, the City utilized MicroPAVER (developed by the Army Corps of Engineers) as its principal pavement asset management software tool. The pavement segments in the City's GIS system reflected the branches and sections integral to the backbone of that software and together provided an inventory of the City's roadway system.

However, with the advent of new mandatory pavement treatment reporting to the TAMC in a specified format, the City made a decision to utilize MDOT preferred Roadsoft software as its core tool for managing all key components of this Plan. This changeover was made effective with the City's fiscal year 2015 reporting.

Another component in the City's pavement data system is tracking of pavement related routine work orders utilizing Cityworks.

Locational records of which street have been resurfaced or reconstructed in the past twenty years have also been entered into the City's GIS system.

In 2014, the City began tracking pavement treatments in greater detail using Roadsoft. The GIS data primarily focused on location of treatment with a basic notation of whether the treatment was resurfacing or reconstruction. Using the Roadsoft Projects function, each treatment is now tracked for:

- Specific segments treated
- Treatment type as defined by the City
- Beginning and completion dates of the treatment
- Reset rating following treatment
- Total cost of the treatment
- Notation on fund source utilized

	Current Software and Data Tools	
Name	Function/Purpose/Data	Location
Roadsoft	Roadway Asset Mgt. System	Server
	PASER Asset Condition Rating Data	
	Asset Inventory for Act 51	
	Projects for TAMC Reporting	
	Treatment Design Data	
	Pavement Asset Mgmt. Modeling	
MicroPAVER	Historic Asset Condition Data Roadway Asset Mgt. System	Server
ArcGIS	Asset Inventory Mapping	Server
	CIP Project Mapping	
	Maintenance Work Order Mapping	
Cityworks	Maintenance Work Orders and History	Server
MS Excel	Cost Estimating	Server/Desktops
Allovance	Capital Improvement Program Database (in transition)	Server/Desktops
SQL Database	Capital Improvement Program Data Storage (in transition to Allovance)	Server
LOGOS	Accounting software	Server
	Project Financial Cost Data	
	Budgeting and Reporting	

Table 1
Software and Data Tools

1.6 Data Management of Inventory and Inventory Security

Utilizing secure servers, the City maintains rigorous protection of its key asset management data while sharing with the public those informational elements which are of benefit to its citizens.

The City completed an updated Information Technology Policy Manual that clearly established a set of policies that are binding upon all City employees, third-party providers, consultants, volunteers, and temporary employees. The policy goals are designed to ensure that all users are aware of their roles, responsibilities, and appropriate use of City technology resources as well as to guard against cyber-attacks and other threats to the data system's integrity. The overarching goal is to minimize risk and to protect individuals as well as the City.

Supervisors and managers monitor their work areas for compliance with the policy and address any incidents of non-compliance.

Step 2: Assess Condition of Assets

2.1 Historic Approach to Condition Rating

The City is and has been committed to continually reevaluating the current conditions of its pavement system.

Historically, the City's Public Works Unit utilized MicroPAVER to evaluate condition via detailed methods set forth in that program. A combination of permanent and temporary summer staff did on-the-ground inspections of the distresses observed in pavement sample sections and created a Pavement Condition Index (PCI) rating utilizing the program's 1-100 scale. Streets were evaluated in a rotation such that all streets were rated approximately once every five years.

In addition to the MicroPAVER condition ratings completed by Public Works, the Engineering Unit, with assistance from the Systems Planning Unit, also conducted an annual street rating tour of selected streets utilizing an in-house rating system similar to the PASER system. A team of engineering staff members independently rated the roads by considering, among other criteria, rideability, cracking, rutting, and edge failures.

Incorporating citizen requests, Engineering then generated a list using PCI ratings of Local streets and another of Major streets that warranted consideration for inclusion in the following year's paving program.

Records of which street have been resurfaced or reconstructed in the past twenty years have also been entered into the City's GIS system.

2.2 Present Approach to Condition Rating

In 2014, the City made a decision to retain the services of an outside consultant to perform a detailed evaluation of the condition of the City's pavement assets.

In the spring of that year, utilizing a specially equipped van, consultant Transmap drove every street in the City's then 297-mile street system and gathered data on all sample sections in the City's backbone MicroPAVER network.

Utilizing the evaluation system developed by the Army Core of Engineers, each sample section was analyzed for a large range of distresses including block cracking, alligatoring, raveling, rutting, transverse cracking, patches, potholes, etc. Severity of the distresses was also rated as low, medium, or high.

A custom viewer was created by the consultant to allow staff to view the detailed distress data on each section. In addition, a Pavement Condition Index rating was generated for each sample. This distress data provided valuable direction to the City's routine pavement maintenance operations and also provides

input to selection of roads for capital preventive maintenance treatments such as crack sealing.

After completion of this global rating, the City made a decision to switch to Roadsoft software for management of most of its pavement asset management functions including the recording of pavement condition information.

Working with the consultant, the MicroPAVER network/branch/section system backbone was rebuilt to match Roadsoft segments which are based on a center-line-of-intersection to centerline-of-intersection system. This resulted in a system with more numerous and discrete rating segments. Additional sample sections were created and evaluated as needed to assure that all segments were rated.

Utilizing an Equivalency Table developed by the Wisconsin Information System for Local Roads (WISLR), the PCI ratings generated by the Transmap condition assessment were converted to Pavement Surface Evaluation and Rating (PASER) scores. Ratings were then input into the Roadsoft model.

After evaluation of the efficacy of that approach, the City determined that this outside condition rating approach would be utilized going forward. This methodology was again employed in the City's 2017 rating effort.

However, with continued emphasis on the use of the PASER rating system and Roadsoft as an asset management tool, the City decided in 2019 to switch to directly rating its street using the PASER system. While the PASER rating method does not yield the detailed pavement fault data of the PCI system, the City will be able to shorten its total pavement rating cycle from once every three years to once every two years.

2.3 2014 Condition Assessment Data

The following tables and figures represent the results of the citywide pavement condition rating conducted in Fall 2019 for all asphalt and concrete paved roads. *Brick streets, gravel roads, and bridge decks were not rated and are not included in data shown*. Historic rating data is contained within the Council presentation materials in the Appendices.

Figure 5 represents the 1-10 PASER rating results for the entire street network and Figure 6 breaks ratings down based on the Local and Major systems.

2019 PAVEMENT EVALUATION CITY OF ANN ARBOR SUMMARY OF RATING RESULTS						
Rating	Concrete (mi.)	Percentage	Asphalt (mi.)	Percentage	Total (mi.)	Percentage
10	0.000	0.0%	1.287	0.5%	1.287	0.4%
9	0.237	3.3%	12.061	4.3%	12.298	4.2%
8	1.191	16.5%	31.105	11.0%	32.296	11.1%
7	1.339	18.5%	36.699	13.0%	38.038	13.1%
6	0.915	12.7%	30.985	10.9%	31.900	11.0%
5	1.972	27.3%	34.450	12.2%	36.422	12.5%
4	1.460	20.2%	40.641	14.4%	42.101	14.5%
3	0.113	1.6%	56.655	20.0%	56.768	19.6%
2	0.000	0.0%	36.077	12.7%	36.077	12.4%
1	0.000	0.0%	3.059	1.1%	3.059	1.1%
Total	7.227	100%	283.019	100%	290.246	100%
2019 Average Rating	***5.889***		***4.922***		***4.946***	

Figure 5
2019 PASER Overall Street System Ratings

2019 PAVEMENT EVALUATION CITY OF ANN ARBOR SUMMARY OF RATING RESULTS				
Rating	Local Roads	Percentage	Major Roads	Percentage
10	0.834	0.4%	0.453	0.4%
9	6.444	3.5%	5.854	5.6%
8	21.376	11.5%	10.920	10.5%
7	19.214	10.3%	18.824	18.1%
6	15.121	8.1%	16.779	16.1%
5	19.317	10.4%	17.105	16.5%
4	32.056	17.2%	10.045	9.7%
3	41.763	22.4%	15.005	14.4%
2	28.257	15.2%	7.820	7.5%
1	1.946	1.0%	1.113	1.1%
Total	186.328	100%	103.918	100%
2019 Average Rating	***4.675***		***5.432***	

Figure 6
2019 PASER Street Ratings by Local and Major Systems

Figures 7-9 depict PASER rating results by percentages of street segments that fall into each of the designated ratings ranges.

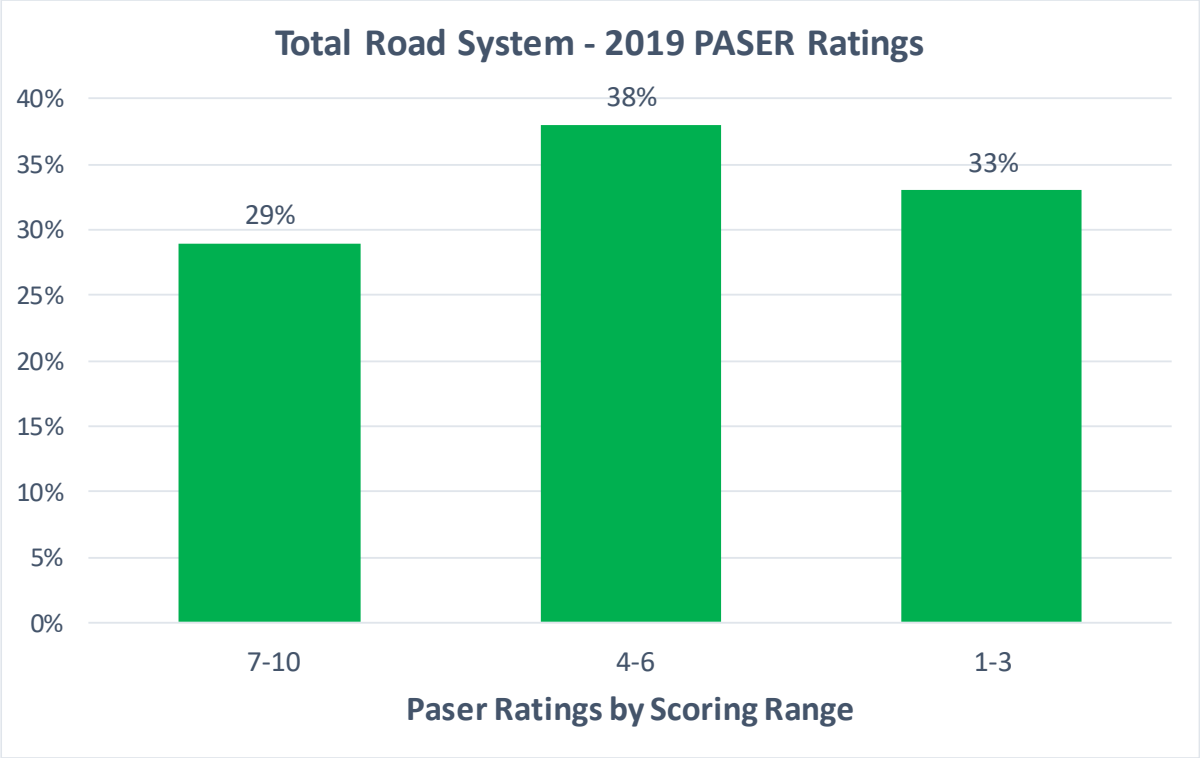


Figure 7
PASER Condition Ratings: Overall System by PASER Range

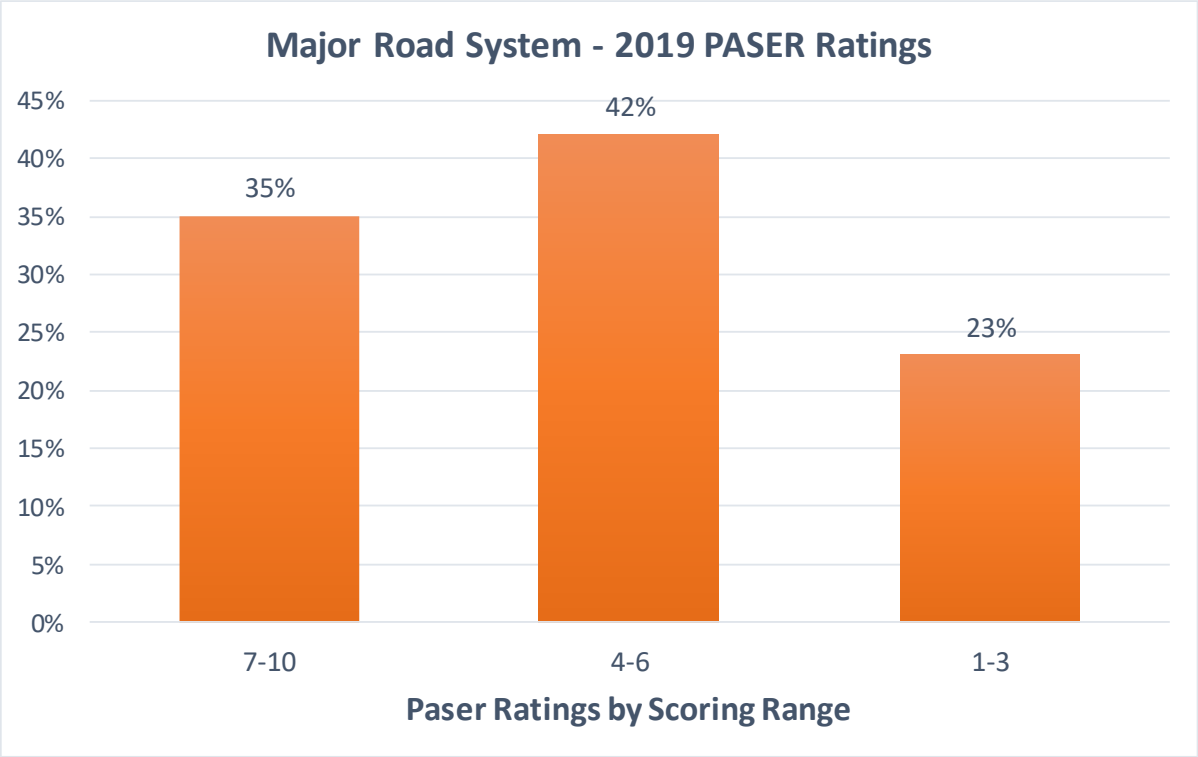


Figure 8
PASER Condition Ratings: Major Street System by PASER Range

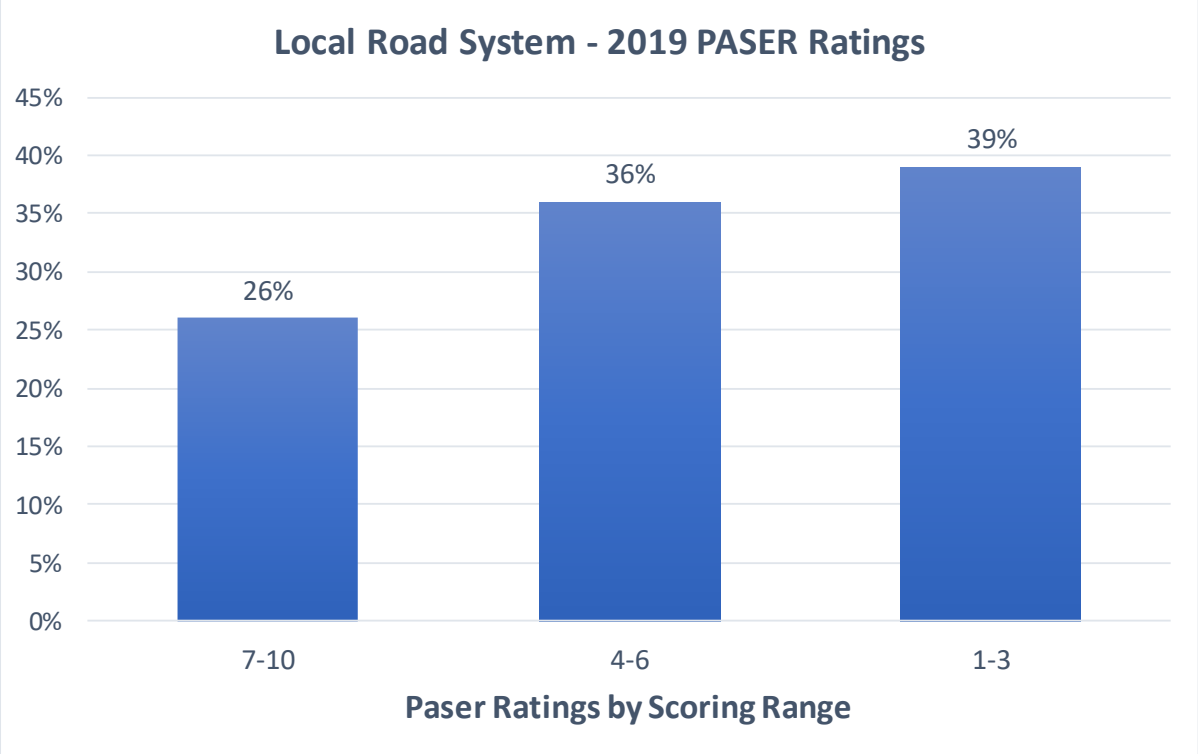


Figure 9
PASER Condition Ratings: Local Street System by PASER Range

These figures indicate that the percentage of Local streets in Poor condition (39%) continues to exceed that of the Major street system (23%), indicative of the far greater mileage of Local streets to be repaired and maintained and the historically lower investment in this portion of the system.

2.4 Strategy for Ongoing Condition Rating

Based on a fiscal analysis of a sustainable approach to condition rating, the entire street system will be evaluated every two years. This interval will permit regular evaluation of the predictive deterioration curves utilized in the Plan's chosen Roadsoft predictive model.

Step 3: Determine Remaining Service Life of Pavement

The current known ratings provide important information regarding the estimated remaining life for the pavements owned by the City. The estimation of remaining life of service was based on the standard degradation models included in the PASER rating system.

Because of the complexity of degradation curves, there is not a simple direct relationship between a street segment's PASER rating and its predicted years of remaining service life (RSL). For example, a street with a PASER rating of 7 may have an RSL anywhere from 6 to 9 years.

In general, a street with a higher PASER rating will have a higher RSL. Further, as a technical term, Remaining Service Life is deemed to be zero at a PASER rating of 4. It is important to note that the PASER rating is a reflection of the surface quality of the roadway, not an absolute indicator of quality. A roadway with a low PASER rating, or one past its Remaining Service Life, is still a usable road.

Figure 10 depicts the projected remaining service life of the Local, Major, and Total street system expressed as a percentage of lane miles with more than 10 years of remaining service life (RSL), those with 5 to 10 years of RSL, and those with less than 5 years RSL. Data is based on current data from the degradation curves used in the City's strategy models.

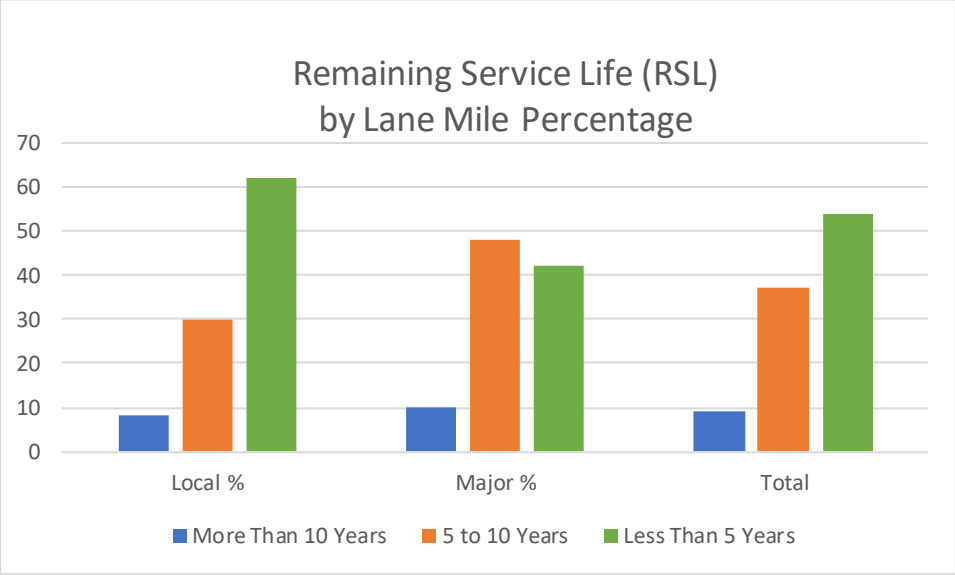


Figure 10
Remaining Service Life for System

Step 4: Determine Lifecycle and Replacement Cost of Assets

4.1 System Value

In 2002, the City determined an audited value for the City's pavement system and has since updated it annually based on pavement treatments completed within the past fiscal year. As of June 30, 2019, the value of the street system was approximately $849,148,075.

4.2 General Sources of Funding for Lifecycle Costs

Responsibility for management of the City's pavement assets is shared among Units. Allocating of responsibilities and funds occurs principally as follows:

a. Act 51 monies have traditionally been administered by the City's Public Works Unit for a broad range of street maintenance functions. These include snow plowing, street sweeping, maintenance of pedestrian facilities, patching potholes, and maintaining signs, signals, street lights, and pedestrian crossings. This Unit also responds to other street related repair requests generated by citizens through the City's A2FixIt web application. The City's Engineering Unit utilizes Act 51 monies to maintain the street pavement marking system and to perform targeted capital preventive maintenance functions.

b. Since 1984, voters of the City have approved a street millage, monies from which have traditionally been utilized for street resurfacing and reconstruction projects. These funds are managed by the City's Engineering Unit under the direction of the City Engineer.

c. In 2013, an Annual Capital Preventive Maintenance fund was carved out from within street millage funds to foster greater consideration of capital preventive maintenance treatment alternatives which go beyond the level of routine maintenance, but which stop short of rehabilitation, resurfacing or reconstruction.

d. In 2017, and again in 2019, Washtenaw County passed a Roads and Non-Motorized millage. The City receives approximately two million dollars in revenue annually from this millage and allocates approximately $500,000 of those funds to non-motorized improvements.

e. The City actively seeks grants and other outside funds from sources such as STP-Urban funds, CMAQ funds, TAP funds, and TIGER grants. These funds are sought primarily to acquire monies for sig-

nificant reconstruction projects on major roads or to address safety projects.

4.3 "Mix of Fixes" Identification

As part of development of this Plan, the Team considered the various pavement treatment alternatives being used historically as well those which could potentially be added to the "mix of fixes."

Treatment emphasis for a number of years had been on routine maintenance coupled with what the State's Transportation Asset Management Council (TAMC) classifies as Structural Improvements (SI), i.e. rehabilitative measures such as resurfacing and reconstruction. Largely missing from improvement efforts were what TAMC defines as Capital Preventive Maintenance (CPM) treatment measures.

Figure 11 represents the mix of Treatment Types chosen based on the two predominant pavement surface types of asphalt and concrete. A range of CPM measures were included, as detailed in Figure 11.

Surface Type	Treatment	TAMC Class	TAMC Treatment Definition
Asphalt	Crack Seal	MCPM	Overband Crack Fill
	Slurry Seal	MCPM	Slurry Seal
	Microsurface	MCPM	Single Course Micro-Surfacing
	Cape Seal	MCPM	Cape Seal
	Mill & Fill - <2 Thick	MCPM	Cold Milling & Bituminous Overlay (< 40mm)
	Resurfacing- Mill & replace >=2 & < total)	MSI	Bituminous Resurfacing
	Rehabilitation (Remove & Replace full depth)	MSI	Bituminous Resurfacing
	Reconstruction (Major)	MSI	Bituminous Reconstruction
Concrete	Crack Sealing	MCPM	Concrete Crack Sealing
	Joint Resealing	MCPM	Cncr Jnts Reseal
	Joint Repair	MCPM	Concrete Joint & Surface Spall Repair
	Full Depth / Slab Replacement	MCPM	Full Depth Concrete Pavement Repair
	Full Depth / Overlay	MSI	Multiple Course HMA Overlay on Concrete
	Reconstruction	MSI	Concrete Reconstruction

Figure 11
"Mix of Fixes" For Asphalt and Concrete Streets

4.4 Expected Costs of Each Treatment Type

For each treatment type identified (see Figure 11), the Team reviewed the City's typical historic cost for same to set initial per-lane-mile costs.

Utilizing the Roadsoft metric of cost per square yard of surface and resultant cost per lane mile of treatment, typical costs for each treatment were established for use in development of the pavement asset management model.

After initially establishing costs for each treatment, the City now reviews these figures every one to two years and updates average costs accordingly.

Figure 12 indicates the treatment costs so developed in Spring 2020 for asphalt streets (the predominant street type). Costs for concrete streets are not shown as the City has very limited concrete street mileage and limited cost data for same. Separate treatment costs were established for the Local and Major systems based on historic analysis.

Costs shown include construction cost and associated overhead costs including engineering design and construction engineering costs. Also included in the figures for Structural Improvements were the typical costs of associated work such as curb repair or replacement and ordinary non-motorized improvements. Excluded were stormwater control and water quality improvements funded by the City's Stormwater Utility, and sanitary sewer and water distribution system improvements funded by the City Wastewater and Water Utilities.

Treatment	Costs per square yard surface	Costs per square lane mile
Crack Seal	$ 0.58	$ 5,104.00
Microsurface, Single Course - Major	$ 10.50	$ 92,400.00
Microsurface, Single Course - Local	$ 10.00	$ 88,000.00
Cape Seal Major	$ 17.00	$ 149,600.00
Cape Seal Local	$ 15.00	$ 132,000.00
Mill & Fill Major - < = 2 Thick	$ 33.00	$ 290,400.00
Mill & Fill Local - < = 2 Thick	$ 42.00	$ 369,600.00
Resurfacing Major - Mill & replace > 2 & < total)	$ 72.00	$ 633,600.00
Resurfacing Local - Mill & replace > 2 & < total)	$ 57.00	$ 501,600.00
Rehabilitation Major (Remove & Replace full depth)	$ 100.00	$ 880,000.00
Rehabilitation Local (Remove & Replace full depth)	$ 85.00	$ 748,000.00
Reconstruction (Major)	$ 520.00	$ 4,576,000.00
Reconstruction (Local)	$ 110.00	$ 968,000.00

Figure 12
Costs by Treatment Type for Asphalt

Step 5: Determine Target Level of Service

5.1 Setting Target Level of Service

Based on the information developed in previous steps, the Team's next effort was to determine a Target Level of Service for the City's street system.

Establishment of a Target Level of Service for an asset is a key component of any Asset Management Plan. For such a Plan to be successful, it is critical that the overall goal reflects a target service level supported and championed by a community's governing body.

The Ann Arbor City Council, in a planning retreat held in late 2014, identified a number of key priorities for the City and set dashboard goals for each. A key priority dashboard goal related to the City's pavement system included striving for "Roads that are rated better than fair."

In an initial Ann Arbor City Council work session on pavement asset management, held on October 12, 2015, Team leaders updated Council on the Plan work completed to that point with emphasis on the system condition assessment and the need to add CPM measures to the treatment mix of fixes. Presentation materials from that session are included in the Appendix, Exhibit D.

The Council dashboard goal of achieving "Roads that are rated better than fair" was discussed. Council indicated that this goal was intended as a guideline, that the Team should continue with Plan efforts, and then return with a specific recommendation on Target Level of Service framed in the spirit of that goal.

After analyzing information gathered in Plan Steps 1-4, conducting preliminary efforts related to Plan Steps 6-9, and meeting with City management staff, Team leaders participated in a second Council work session on February 8, 2016. Presentation materials from that session are included in the Appendix, Exhibit E. Focus was on Level of Service and Long-term planning models.

Figure 13 below depicts the then-current condition data reported for each Act 51 classification of street and the Team-recommended pavement system Target Level of Service.

Acknowledged was that this Target Level of Service represents an aggressive goal and is contingent upon availability of funds as projected.

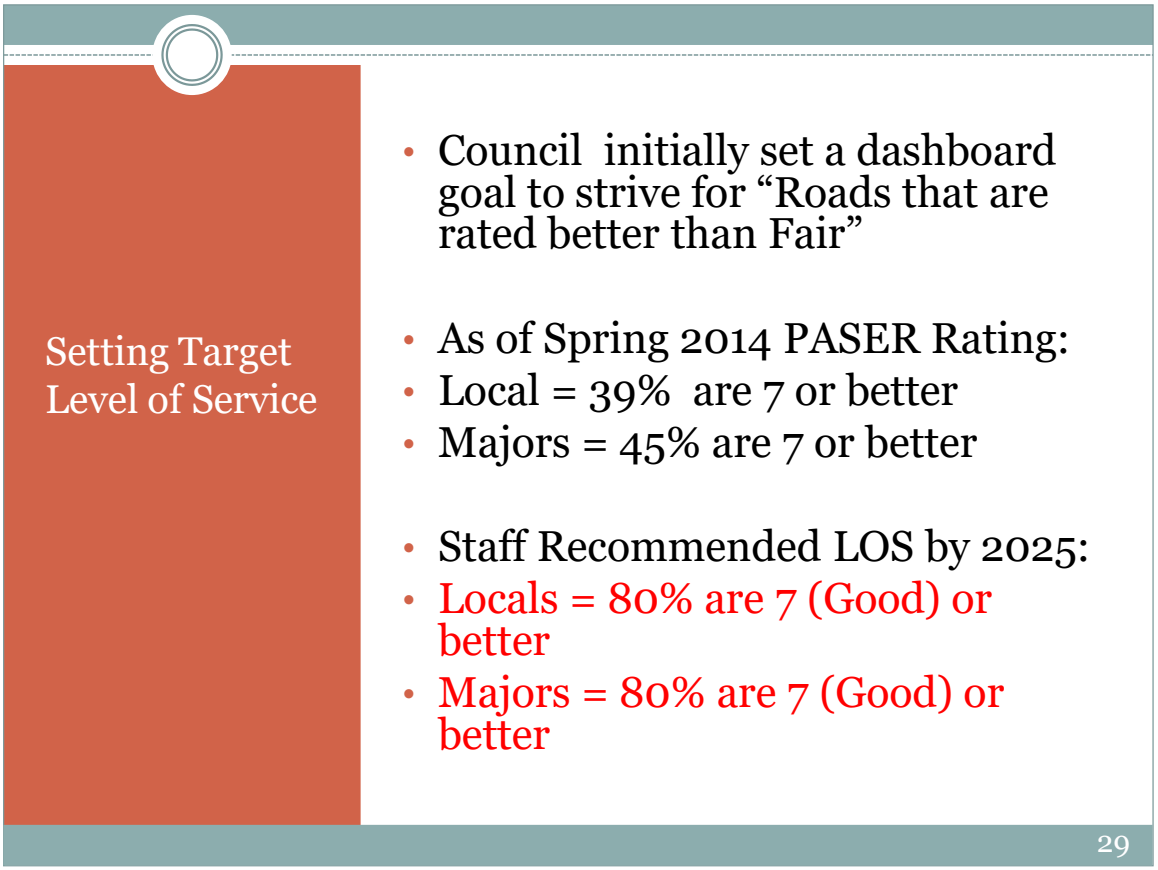


Figure 13
Target Level of Service

Setting of this goal, which was endorsed by Council, was key to later pavement asset management modeling (see Steps 8 and 9 later in this Plan).

City Council continues to be apprised of progress towards the Target Level of Service goals and pavement asset management efforts in general. An update in April 2018 presented the results of pavement ratings performed in 2017 as well as updated information on miles of roads treated from Plan inception to that point. The presentation also discussed challenges towards meeting target goals for the City's extensive Local street system and conveyed the intent to implement separate treatment strategies for the City's Local and Major street networks (see Appendix, Exhibit F). This update also acquainted Council with updates to the City's Bridge Asset Management and introduced a Streetlight Asset Management Plan to assure adequate lighting of the City's street network.

Following completion of the 2019 pavement condition ratings, a presentation was made to City Council in December 2019 (see Appendix, Exhibit G).

5.2 Alignment of Target with City Sustainability Framework Goals.

The City of Ann Arbor has identified sixteen specific Sustainability Framework goals grouped into four overarching groups (see the Appendix, Exhibit H). Those goals advanced by this Plan include:

Sustainability Framework Goals Impacted:

- Transportation Options
- Sustainable Systems
- Integrated Land Use
- Human Services
- Safe Community
- Economic Vitality

The four overarching goals of the Sustainability Framework are: Climate and Energy, Community, Land Use and Access, and Resource Management. Of those relevant to this Plan, Transportation Options, Sustainable Systems, and Integrated Land Use fall within the Land Use and Access group while Human Services, Safe Community, and Economic Vitality fall within the Community group.

The six relevant goals from the Framework are defined as follows:

Transportation Options - Establish a physical and cultural environment that supports and encourages safe, comfortable and efficient ways for pedestrians, bicyclists, and transit users to travel throughout the city and region

Sustainable Systems - Plan for and manage constructed and natural infrastructure systems to meet the current and future needs of our community

Integrated Land Use - Encourage a compact pattern of diverse development that maintains our unique sense of place, preserves our natural systems, and strengthens our neighborhoods, corridors, and downtown

Human Services - Provide services that meet basic human needs of impoverished and disenfranchised residents to maximize the health and well-being of the community

Safe Community - Minimize risk to public health and property from manmade and natural hazards

Economic Vitality - Develop a prosperous, resilient local economy that provides opportunity by creating jobs, retaining and attracting talent, supporting a diversity of businesses across all sectors, and rewarding investment in our community

Step 6: Determine Criticality of Assets (Risk of Failure)

The inventory and condition data gathered in Step 1 (Develop Asset Inventory) and Step 2 (Assess Condition of Assets) were input into Roadsoft.

A determination was made that the City's historic pavement treatment and condition asset data (housed in its MicroPAVER model and in various GIS layers) would not be input into Roadsoft or utilized in determining the risk of failure for each pavement segment.

This decision was predicated on several factors:

- Previous condition data had been gathered over a number of years and so could not provide a uniform snapshot at any point in time from which to build a predictive model
- Condition data was gathered by reviewers of varying training levels
- Treatment data was available primarily for Structural Improvement efforts but not for previous CPM treatment measures
- The time and effort required to import such historic data into Roadsoft was predicted to be disproportionate to its value given the previous constraints

In essence, the decision was made to "start fresh" using data from the pavement condition assessment conducted in Spring of 2014. Treatments completed after that date were also recorded using Roadsoft's Projects function.

The Team then utilized Roadsoft's Pavement Asset Management Deterioration Curve Definition function to examine various choices to predict how pavement segments are likely to deteriorate to failure over time.

Team decision was to utilize the model-suggested curves as reflected in Figure 14.

Curve Type	Chosen Deterioration Curve
Asphalt Standard Curve	Logistic Growth Model Unforced Through Zero
Concrete Standard Curve	Logistic Growth Model Forced Through Zero

Figure 14
Deterioration Curve Types for Asphalt & Concrete Streets

Step 7: Formalize Optimal Operations & Maintenance Program

The City's Public Works Unit performs many key functions with regard to pavement asset management. While the principal focus of this Plan is on CPM and Structural Improvement treatments of the pavement surface itself, routine operations are also critical to the long-term health of the street system.

7.1 Patching and Pothole Repair

Public Works proactively monitors and repairs pavement areas which require pothole repair or patching. In addition, in July of 2014, the City instituted use of an application called A2FixIt to enable community members to report observed potholes as well as issues such as malfunctioning stoplights. A2FixIt can be downloaded as an application to a smartphone or computer and can also be accessed via a simple "Report a Problem" link on the City's website.

This system replaced a more cumbersome web-based system. Citizen response to this simpler method of reporting has been highly positive. Reports of potholes needing repair also continue to be received via calls from the City Public Safety Unit (police), and direct call-ins. Public Works strives to remediate any hazard immediately and to address 90% of all service requests within 72 hours. Often this results in a short-term repair to be followed by a more permanent patch or repair. The Public Works Supervisor or designee responsible for Street Maintenance monitors that follow-up occurs.

Requests are funneled into the City's Cityworks software and utilized to create service requests and work orders as warranted. Cityworks enables detailed tracking and reporting related to pothole repair requests. As depicted in Figure 15, a total of 5,735 service requests were received overall during the past three years.

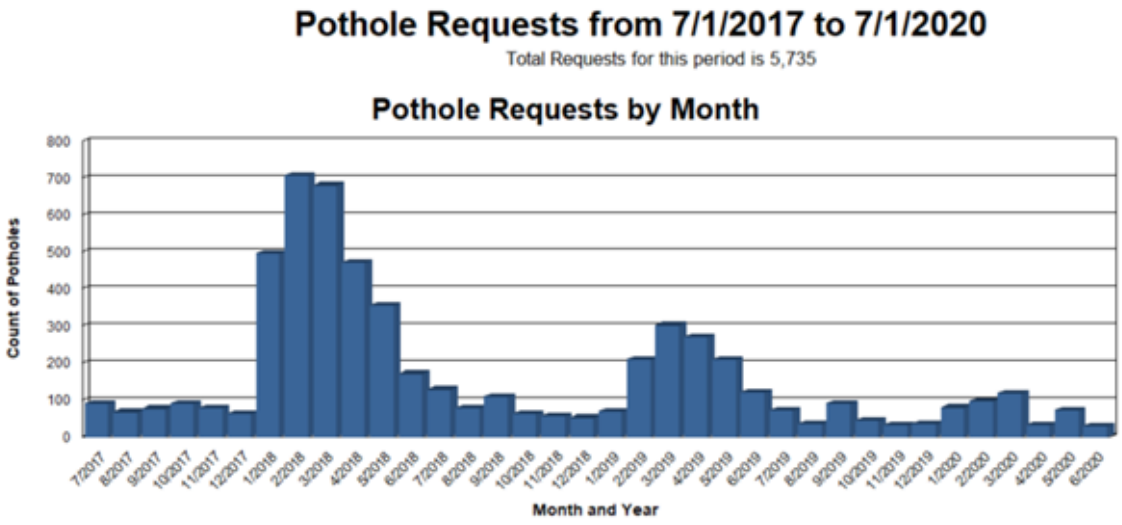


Figure 15
Pothole Repair Service Requests (7/1/2017-6/30/2020)

As expected, given freeze-thaw cycles, March is routinely the peak month for pothole repairs.

The City's Public Works Unit's Pothole website also provides educational materials acquainting the public with how potholes form. It also provides links for reporting potholes on City streets as well as on MDOT routes in or near the City.

Management of permanent pavement patching efforts following emergency and non-emergency utility repairs (such as water main breaks and installation and repair of utility service leads) continues to present a challenge. The Public Works Unit inventoried the backlog of such repairs and continues to work on procedures to cut down on the time to get the permanent pavement repairs done. Contracts were recently awarded to two pavement-repair firms to assist with this effort. Performance bonds were required.

7.2 Crack Sealing

Initial crack-sealing as a CPM measure following resurfacing or reconstruction, and all crack sealing on Major streets has traditionally been handled by the Engineering Unit. Such treatments are included in the Capital Plan per Step 8 below.

Crack sealing on Local streets which are already more advanced on the deterioration curve (i.e. below the treatment trigger points discussed in Step 8 below) was previously handled by the Public Works Unit. However, with the increased emphasis on capital preventative maintenance, all crack sealing is now handled through the City's Engineering Unit.

7.3 Street Sweeping

The City sweeps all streets twice a year utilizing Act 51 funds. Major streets are, on the average, swept more frequently due to higher traffic volumes and greater debris. In addition, during leaf falling season, one to two additional sweepings might occur utilizing funding from the City's Solid Waste Unit and Stormwater Utility.

Sweeping occurs more frequently within the Downtown Development Authority area where significant numbers of outdoor public events and higher pedestrian use tend to generate higher amounts of debris.

Streets with bike lanes are swept monthly utilizing alternative transportation funds.

The Public Works Unit has established routes for Local and Major street sweeping. A layer depicting these routes is maintained in the City's GIS system (see Appendix, Exhibit I for current map).

7.4 Snow Plowing and Salting

The City is responsible for maintaining a road system that is reasonably safe and convenient to the traveling public. This charge for good stewardship requires the City to establish level of service goals for the operations and maintenance of the roads.

Winter Operations
City policy has established five priority rankings for plowing and winter operations activities. These priority rankings are:

Priority 1 - State Trunklines
Priority 2 - High volume hard surface roads
Priority 3 - Medium volume hard surface roads
Priority 4 - Subdivision streets
Priority 5 - Gravel roads, alleys, dead ends and Cul-De-Sacs

This information is shared with citizens on a Street Plowing FAQ on the City's Public Services Area web pages.

The Public Works Unit has established routes for snow plowing and salting. A layer depicting these routes is maintained in the City's GIS system. The plow routes are shown in the Appendix, Exhibit J for current map). The City also pretreats salt routes in advance of snow events with salt brine and additional additives made in-house.

7.5 Control of Street and Curb Cuts

Section 4.20, of Chapter 47 (Streets) of the City Code, entitled *Curb cuts and driveway approaches,* requires a permit prior to the creation of any curb cut or opening to a City street. The ordinance sets the number of allowable driveways per parcel, addresses location standards, and establishes design criteria. The City Public Services Department Standard Specifications also provide further standards for the design and construction of driveways.

Step 8: Formalize Optimal Capital Improvement Program

8.1 Six Year Capital Improvements Program

This City's Capital Improvements Plan (CIP) outlines a schedule of public service expenditures over the ensuing six-year period. The CIP does not address all of the capital expenditures for the City, but provides for large, physical improvements that are permanent in nature, including the basic facilities, services, and installations needed for the functioning of the community.

To qualify for inclusion into the CIP, a project must comply with standard per Figure 16 below.

- Constitute permanent, physical or system improvements greater than or equal to (GTE) $100,000; or
- A "program" of projects whose total is GTE $100,000 (e.g. Annual Capital Street Maintenance)
- Significant equipment purchases in excess of $100,000 with a useful life of at least ten years; or
- A study of at least $50,000 that will lead to such projects;
- Add to the value or capacity of the infrastructure of the City.

Projects that are considered operational or routine maintenance are excluded.

Figure 16
Criteria for Project Inclusion in the Capital Improvements Plan

Preparation of the Capital Improvements Plan is done under the authority of the Municipal Planning Commission Act (Act 33 of the Public Acts of 2008). It is the City Planning Commission's goal that the CIP be used as a tool to implement the City Master Plan and assist in the City's financial planning.

The Capital Improvements Plan proposes project funding relative to the anticipated availability of fiscal resources and the choice of specific improvements to be achieved throughout the six-year plan. The first two years of the Capital Improvements Plan serve as the basis for establishing the City's Capital Projects Budget (CPB). The CIP and CPB make up the City's Capital Improvements Program.

The Capital Improvements Program process begins with a review of identified system needs and concludes with the proposed CPB as outlined in Figure 17 below.

Figure 17
Capital Improvements Plan Process Flow

Development of the City's overall CIP is a highly inclusive effort. The CIP team includes 13 Asset Category teams, 11 service units, and over 50 staff members. Transportation asset groups include Airport, Active Transportation, Bridges, New Streets, Other Transportation, Parking Facilities, and Transit in addition to Street Construction.

While the Street Construction asset group plays the central role related to programming of projects per this Pavement Asset Management Plan, pavement-related capital improvement projects are also impacted by the other Transportation as well as by the Utility asset groups (Sanitary, Stormwater, and Water).

The key processes in CIP plan development (commonly called "The Three Ps') are:

- Project Needs Identification
- Prioritization of Needs
- Programming of Projects

Historically, Project Needs Identification for pavement treatment projects has been driven heavily by staff knowledge of condition issues and by outside requests. As for many communities, project selection has historically tended to rely on a "worst first" methodology with emphasis on resurfacing and reconstruction projects. Modifications to the project identification process based on the development of this Plan are discussed in Section 8.3 below.

In the Prioritization of Needs process, the City has, for nearly twenty years, utilized a formal set of core prioritization criteria which, with minor exceptions, were common to all CIP asset groups. Those criteria took into account the City's Sustainability Framework goals, interactions with proposed utility work, socio-economic factors, safety, and other considerations.

In 2020, the City entered into a contract to replace its existing Excel-based prioritization software with a software called Allovance. The Streets group recently

completed a series of meetings to update and revise the core criteria into strategic value goals, create streets-specific scoring metrics for each strategic value, and employed a pairwise comparison technique to weight each value. A copy of the draft Strategic Value Scorecard thus created is included in the Appendix, Exhibit K. Figure 18 depicts the high-level strategic values and their relative weights in the prioritization process.

Figure 18
Strategic Value Weights for Street Construction Asset Group

It is noted that, among others, these Strategic Values specifically place substantial weight on whether a project is advancing the goals of this Plan. Coordination with other City projects (e.g. water replacement projects) or with MDOT or the Washtenaw County Road Commission also adds additional +scoring weight to a proposed capital street improvement.

After each potential pavement project is rated, the Allovance modeling tool generates a Streets capital project list in ranked order.

In the final Programming of Projects step, the City considers a number of criteria including:

- Project's prioritization score
- Whether utilities underneath the pavement will require repair or replacement along with or prior to undertaking the pavement treatment
- Availability of funds both from pavement sources and from companion utility revenues

Based on those factors, each capital street project is assigned a fiscal year(s) in the CIP.

For the last full CIP cycle covering the City's Fiscal years 2020-2025, a total funding need for streets of $78,505,000 was identified of which approximately $20,900,000 was anticipated to come from outside funding sources such as Surface Transportation Program-Urban funds and Act 51 funds.

A copy of the Street Construction component of the FY2020-FY2025 CIP is included in the Appendix, Exhibit L.

8.2 Development of Pavement Asset Management Model Treatment Triggers

While the robust CIP process described above has historically provided sound guidance for a six-year planning window, performance of Steps 1-7 of this Plan identified the need for other planning and predictive tools to further inform the process.

In particular, the need to incorporate capital preventive maintenance treatments as well as to examine a longer capital planning window were identified as key factors.

With those goals in mind, the Team first evaluated each of the treatment types identified in Step 4 and determined appropriate treatment triggers for each. Figure 19 depicts the results of that decision making.

Treatment	Type	Min Trigger	Max Trigger	Reset
Crack Seal	PM (CPM)	7	7	8
Microsurface, Single Course - Local	PM (CPM)	6	6	8
Microsurface, Single Course - Major	PM (CPM)	6	6	8
Cape Seal Major	PM (CPM)	5	6	8
Cape Seal Local	PM (CPM)	5	6	8
Mill & Fill Major - < = 2 Thick	PM (CPM)	5	5	9
Mill & Fill Local - < = 2 Thick	PM (CPM)	4	5	9
Resurfacing Major - Mill & replace > 2 & < total)	RH (SI)	3	4	9
Resurfacing Local - Mill & replace > 2 & < total)	RH (SI)	3	4	9
Rehabilitation Major (Remove & Replace full depth)	RH (SI)	2	3	10
Rehabilitation Local (Remove & Replace full depth)	RH (SI)	2	3	10
Reconstruction (Local)	RC (SI)	1	10	10
Reconstruction (Major)	RC (SI)	1	2	10

Figure 19
Pavement Treatment Triggers for Asphalt and Concrete Streets

These triggers were then entered into the Roadsoft Surface Definition module for use in pavement asset management model development.

8.3 Selection of Pavement Projects for Inclusion in the CIP using the Treatment Triggers

Development of treatment triggers, in combination with condition ratings for all treatment segments, now allows identification of a broader candidate pool of pavement capital projects.

Rather than simply responding to staff or citizen-identified pavement treatment needs (generally for street segments with low PASER ratings), the City can now proactively identify streets for which various CPM treatments and structural improvements are appropriate.

Recognizing that identifying specific streets to receive such capital preventive maintenance treatments would not be viable, a "bucket" project entitled *Annual Capital Street Maintenance Program* has been added to the CIP. This, along with an *Annual Local Street Resurfacing* project allows for maximum flexibility in capital street planning.

Step 9: Establish Sustainable Funding Strategy

9.1 Available Funding Sources

One of two main sources for funding of the City's street system is the Michigan Transportation Fund (MTF). This fund is supported by vehicle registration fees and the Michigan state gas tax. The City's allocation is based on a formula which includes factors such as population, miles of certified roads and vehicle registration fees within the City. City Council Resolution R-217-5.04 (see the Appendix, Exhibit M) has designated 5% of these funds to be specifically utilized for Non-Motorized Transportation needs.

The second main source of income is a locally approved street millage of up to 2.125 mils. City Council Resolution R-16-30, passed April 4, 2016 (see the Appendix, Exhibit N), set forth policy guidelines for the use of such current millage revenue funds. A renewal vote will be on the ballot in November 2020. Ann Arbor voters have passed similar street millage ballot proposals since 1984. This renewal millage is expected to generate approximately $13.8 million annually for needed street and bridge treatments and for repair and construction of city public sidewalks.

In addition to Michigan Transportation Fund and street millage revenues, the City is contracted by the Michigan Department of Transportation to maintain the State Trunklines within corporate limits. The current contract number is 2019-0628.

The City also receives federal and state grants for individual projects and may receive contributions from private developers and other governmental entities for specific improvements. The City further receives revenues from right of way permits and other fees, special assessment districts, and interest from invested funds.

The City is a participant in the Washtenaw County Federal Urban Aid Committee of the Washtenaw Area Transportation Study (WATS). The City channels requests for STP-Urban funding through that body and is slated to tentatively receive approximately $5.5 million in such funds for fiscal years 2020 to 2023 through the Transportation Improvement Plan (TIP) (see the Appendix, Exhibit O).

The detailed fiscal year 2019 Act 51 report of revenues and expenditures is included in the Appendix, Exhibit P.

9.2 Capital Planning Model and Funding Strategy Assumptions

The Roadsoft *Strategy Evaluation and Optimization* module of its Pavement Asset Management function enables analysis of the efficacy of various combinations of funding and treatment strategies.

The first step in building the original model was to determine an average annual budget to be used for model input. A target budget of $13,000,000 in annual spending was utilized with sources as follows:

- Street Millage: $10,000,000 (average)
- Surface Transportation Funds (STP): $2,000,000 (average)
- Present Act 51 Capital Maintenance/Other: $1,000,000 (average)

It is noted that the City's Act 51 funds are largely used to support routine maintenance (snow plowing, street sweeping, pavement marking, pothole repair, patching, signs and signals etc.) but is not, other than the $1,000,000 shown, included in this model which only addresses capital treatments.

The $13,000,000 annual projected capital project revenue was also developed with the specific assumption that the City's street millage will be renewed and that STP-U funding levels will stay at levels as typically funded.

Because the pavement condition data in the Roadsoft model was limited to a single rating, and deterioration curves are untested, the initial model strategy period was set for ten (10) years.

Present model strategies are based on annual projected total fund availability ranging between $13,000 and $16,000. Due to the Covid-19 crisis, revenues might be affected.

9.3 Pavement Asset Management Strategy Model Analysis

The team initially tested a number of model strategies to determine which would project greatest progress over the next ten-year period toward hitting the City's Target Level of Service of Service of having 80% of its streets in Good condition (PASER rating of 7 or better). Initial strategies all modeled the street system as a whole and included No Capital Spending, Continuing Present Strategy (Structural Improvements Only), Roadsoft Optimized Strategy, and a Locally Optimized Strategy. The latter was chosen and has been guiding efforts to date.

Per information previously discussed, a decision was made to create separate strategy models for the City's Major and Local street networks. Per Steps 4 and 8 above, treatment costs and triggers were established for each network. Locally Optimized strategies were then developed in a manner similar to the initial efforts. Because of present funding uncertainties due to Covid-19 and certain Roadsoft Pavement Asset Management Module upgrades in progress, it is antici-

pated that the strategies presented below will continue to be revised as information changes. Results of the City's CIP modifications this fall will also be integrated into any such modifications.

9.3.1 Major Street Network Locally Optimized Strategy

The strategy depicted in Figure 20 was developed based on a continued commitment to the asset management principle of "The Right Fix at The Right Time" with significant continued use of CPM treatment measures. The strategy also takes into account projects identified in the City's current Capital Improvement Plan.

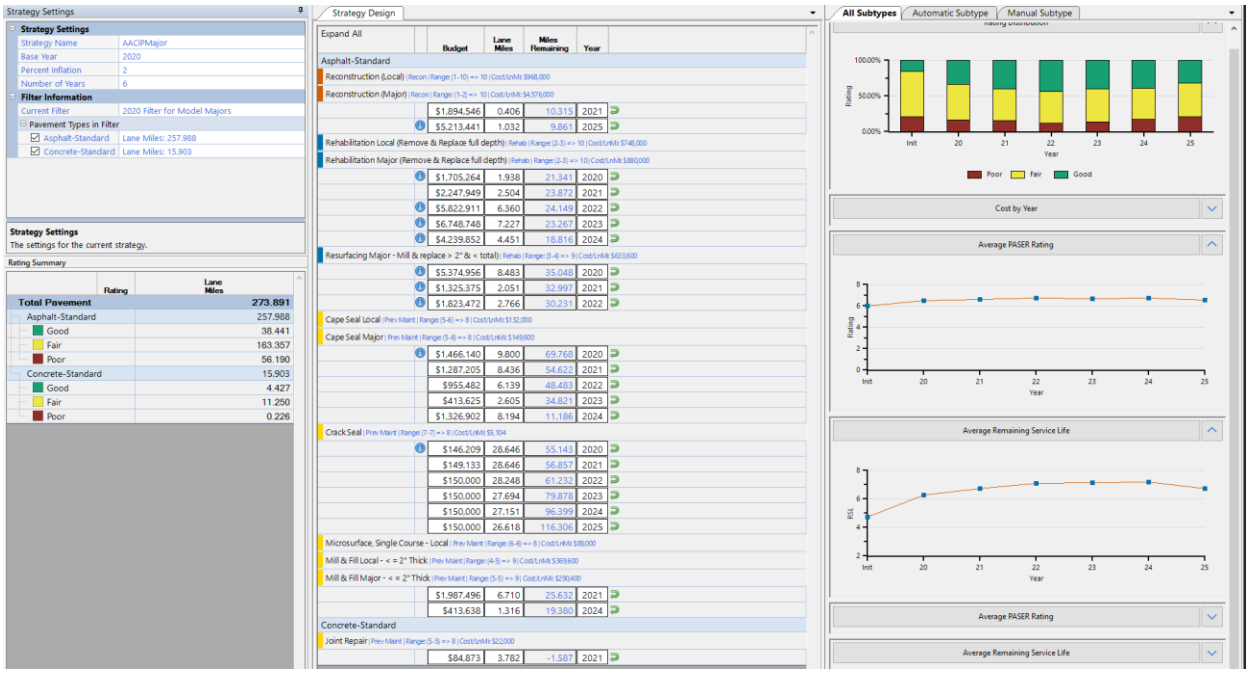


Figure 20
Model Result: Locally Optimized Major Street Network Model

A Roadsoft Report setting forth the details associated with this strategy is included in the Appendix, Exhibit Q.

9.3.2 Local Street Network Locally Optimized Strategy

In a similar fashion, Locally Optimized Strategy was developed for the Local Street Network as shown in Figure 21.

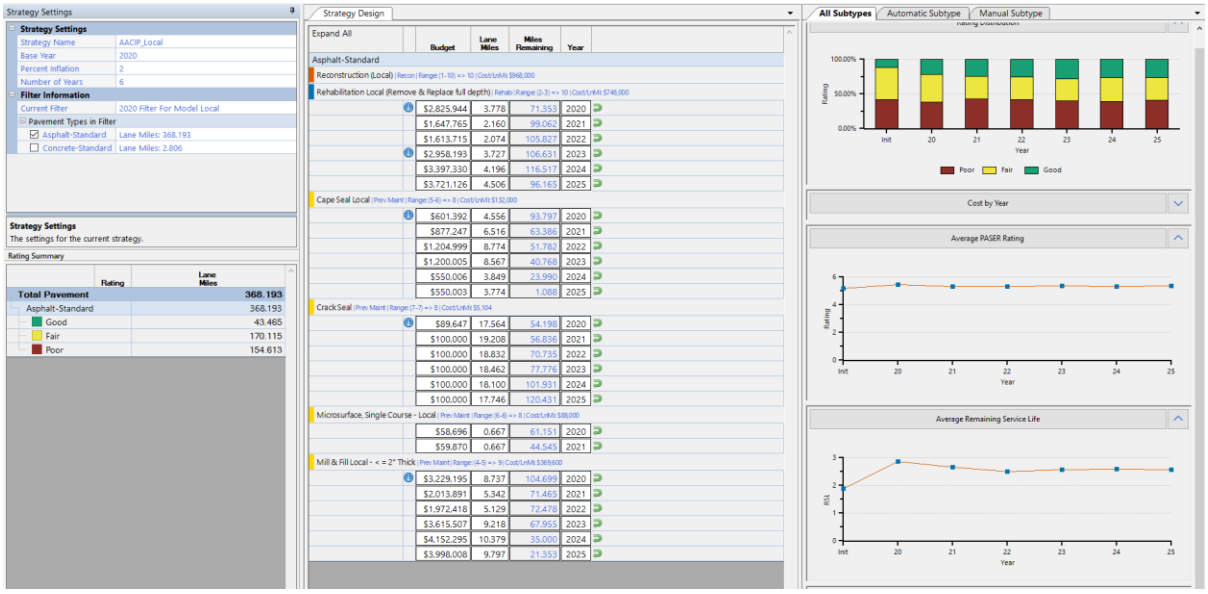


Figure 21
Model Results: Locally Optimized Local Street Network Strategy

A Roadsoft Report setting forth the details associated with this strategy is included in the Appendix, Exhibit R.

Step 10: Generate Asset Management Plan

10.1 Plan Document

This Pavement Asset Management Plan serves as a record document, as of September 2020, for this effort.

10.2 Plan Evaluation and Modifications

To be effective, asset management plans require regular evaluation and monitoring.

A number of key evaluation methods have, therefore, been established. These include:

- Recording annually all pavement structural and capital preventive maintenance treatments utilizing the Roadsoft Projects function. See Appendix, Exhibit S for a graph depicting lane miles treated since fiscal year 2014 and Exhibit T for a Roadsoft report of projects completed since formal TAMC Plan approval in January 2017.
- Recording specifics of design treatments (pavement mixes, binders, etc.) using the Roadsoft Design function
- Evaluating condition of all streets every two years
- Checking the accuracy of the chosen deterioration curves against actual pavement performance and adjusting curves as necessary
- Evaluating long-term effectiveness of particular pavement treatments based on the rate at which they deteriorate
- Re-running the Roadsoft Locally Optimized Models after each pavement condition rating and adjusting treatment strategy as needed to continue progress toward Target Level of Service
- Adjusting the Model as needed based on increasing or decreasing funding from that projected during model development

10.3 Summary of Key Plan Steps

The following represent the key findings per each of the nine formative steps of this Plan.

10.3.1 Asset Inventory

- The Act 51 certified City street system includes about 298 centerline miles of streets of which about 27 miles are part of the National Highway System
- The street system is comprised of about 197 miles of Local streets and 101 miles of Major streets
- Asphalt is the predominant street surface material (approx. 94%)
- Gravel streets represent about 13 miles of the street system

- Inventories have been established for the City's culvert and traffic signal systems
- Roadsoft and ArcGIS are key inventory software tools

10.3.2 Condition Assessment

- Condition of all streets segments were rated in Spring of 2019
- 29% of all streets were PASER rated 7-10
- 38% of all streets were PASER rated 4-6
- 33% of all streets were PASER rated 1-3
- The City will assess condition of all streets every two years

10.3.3 Remaining Service Life (RSL) of Paved Streets

- PASER rating is a reflection of the surface quality of the roadway, not an absolute indicator of quality
- A roadway with a low PASER rating, or one past its Remaining Service Life (considered 0 at PASER rating of 4) is still a usable road
- About 9% of the system's lane miles have an RSL greater than 10 years
- About 37% of the system's lane miles have an RSL of 5-10 years
- About 54% of the system's lane miles have an RSL of less than 5 years

10.3.4 Life Cycle and Replacement Cost of Street System

- As of June 30, 2019, the value of the street system was approximately $849,148,075
- Treatment costs vary per treatment from an estimated low of $5,100/lane mile for crack sealing (CPM) to an estimated high of $4,576,000 per lane mile for total pavement reconstruction on a Major street (SI)

10.3.5 Target Level of Service (LOS)

- Target LOS calls for 80% of all paved streets to be PASER rated 7 or better by 2025
- Target LOS is in alignment with the City's Sustainability Framework Goals
- Target LOS addresses a City Council priority goal to "Fix Our Roads"

10.3.6 Determination of Risk of Failure

- For asphalt roads, chosen deterioration curve is Logistic Growth Model Unforced Through Zero
- For concrete roads, chosen deterioration curve is Logistic Growth Model Forced Through Zero

10.3.7 Operations and Maintenance Program

- The City averaged about 1,900 pothole repair requests annually over the past three years
- Crack-sealing as a CPM measure following resurfacing or reconstruction, is handled by the Engineering Unit
- Goal is to sweep all streets twice annually using Act 51 funds
- Additional sweeping efforts are made in busier areas
- City policy has established five priority rankings for plowing and winter operations activities

10.3.8 Optimal Capital Investment

- The City's six-year Capital Improvements Plan (CIP) includes a robust prioritization system
- The CIP programming strategy coordinates paving projects with other infrastructure projects and in cooperation with other agencies
- Development of pavement treatment triggers, in combination with condition ratings for all treatment segments, now allows identification of a broader candidate pool of pavement capital projects
- Inclusion of Annual Capital Preventive Maintenance projects is key to Plan success

10.3.9 Establish Sustainable Funding Strategy

- An annual capital budget of $13,000,000 to $16,0000 was established for strategy modelling, drawing upon a local street millage and Act 51 funding
- Operations and Maintenance are funded from Act 51 funds
- Additional Act 51 funds from House Bill 4737 will be directed in approximately equal measures to capital projects and operations and maintenance
- A Locally Optimized Pavement Treatment strategy was developed that projects making significant progress towards the Target level of Service by 2025

10.3.10 Evaluation and Modification

- This Plan shall be regularly monitored and adjusted as needed to assure progression towards the Target Level of Service Goal

EXHIBIT A

Culvert Inventory Map

City of Ann Arbor Maintained Culverts

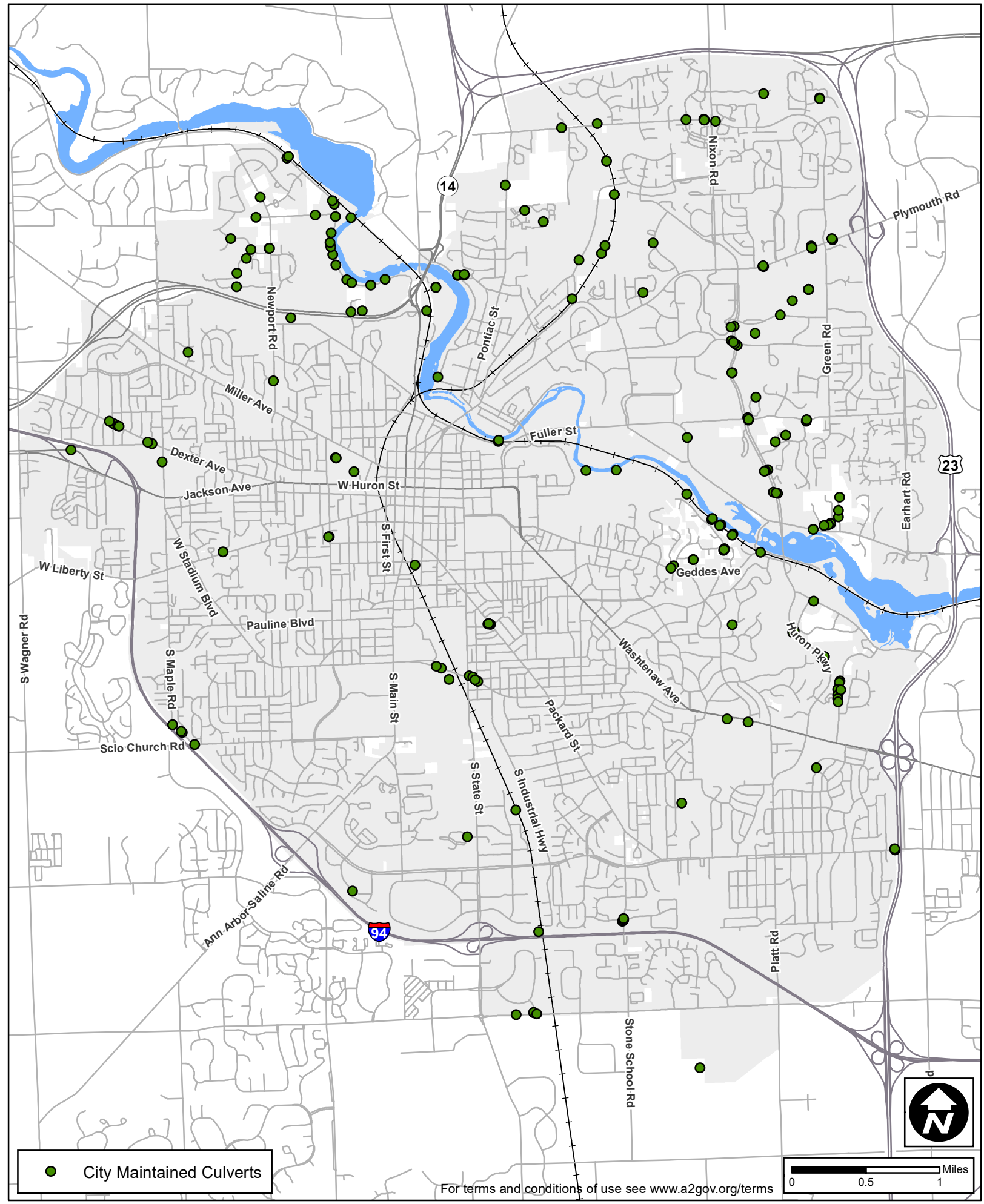


EXHIBIT B

Culvert Inventory

Culvert Inventory						
FACILITYID	**Install Date**	**Basin**	**Diameter**	**Material**	**CrossSectionShape**	**Recorded Length**
95-52732	1/1/1966	Malletts Creek	54"	Reinforced Concrete	Circular	58
95-52819	12/1/1987	Malletts Creek	54"	Reinforced Concrete	Circular	63
95-52495	12/1/1961	Malletts Creek	60"	Reinforced Concrete	Circular	75
95-52797	12/1/1987	Malletts Creek	48"	Reinforced Concrete	Circular	76
95-67048	10/1/1975	Malletts Creek	15"	Reinforced Concrete	Circular	62
95-67179	unknown	Malletts Creek	21"	Reinforced Concrete	Circular	27
95-67180	10/1/1975	Malletts Creek	21"	Reinforced Concrete	Circular	64
95-67777	5/1/1961	Malletts Creek	Other	Dutile Iron	EllipHorz	85
95-67778	5/1/1961	Malletts Creek	Other	Dutile Iron	EllipHorz	84
95-68463	7/1/1985	Malletts Creek	24"	Reinforced Concrete	Circular	52
95-68016	9/1/1995	Malletts Creek	27"	CON	Circular	166
95-68622	unknown	Malletts Creek	24"	CON	Circular	94
95-69814	7/1/1997	Malletts Creek	36"	CON	Circular	37
95-69815	7/1/1997	Malletts Creek	15"	CON	Circular	33
95-69647	7/1/1997	Malletts Creek	10"	Dutile Iron	Circular	43
95-69648	7/1/1997	Malletts Creek	10"	Dutile Iron	Circular	20
95-69530	7/1/1997	Malletts Creek	10"	Dutile Iron	Circular	20
95-69531	7/1/1997	Malletts Creek	10"	Dutile Iron	Circular	30
95-70032	11/1/1988	Malletts Creek	18"	CON	Circular	65
95-50978	4/1/1967	Malletts Creek	18"	CON	Circular	167
95-70448	unknown	Malletts Creek	36"	Dutile Iron	Circular	67
95-70054	7/1/1997	Malletts Creek	12"	Dutile Iron	Circular	54
95-70807	unknown	Malletts Creek	60"	CON	Circular	30
95-70366	unknown	Malletts Creek	60"	CON	Circular	27
95-70274	unknown	Malletts Creek	24"	CON	Circular	36
95-70650	9/1/1976	Malletts Creek	18"	CON	Circular	85
95-70652	9/1/1976	Malletts Creek	15"	CON	Circular	62
95-70836	7/1/1973	Swift Run	36"	unknown	Circular	38
95-70837	7/1/1973	Swift Run	36"	unknown	Circular	65
95-63070	10/1/1968	Traver Creek	48"	CON	Circular	301
95-71663	5/1/1998	rectly into Huron Riv	18"	CON	Circular	94
95-71678	10/1/1968	Traver Creek	66"	CON	Circular	87
95-71769	7/1/2003	Traver Creek	12"	CON	Circular	74
95-55844	unknown	Traver Creek	24"	Vitrified Clay	Circular	59
95-71822	9/1/1992	Traver Creek	18"	Dutile Iron	Circular	46
95-62997	8/1/1992	Traver Creek	Other	CON	EllipHorz	112
95-63158	11/1/1998	Traver Creek	36"	CON	Circular	170
95-71914	9/1/1938	rectly into Huron Riv	12"	CON	Circular	70
95-55840	unknown	Traver Creek	36"	Vitrified Clay	Circular	46
95-56069	unknown	Traver Creek	12"	Dutile Iron	Circular	39
95-72569	6/1/1957	rectly into Huron Riv	12"	CON	Circular	5
95-72571	6/1/1957	rectly into Huron Riv	12"	CON	Circular	31
95-72555	unknown	Traver Creek	48"	CON	Circular	49
95-72616	9/1/1969	Traver Creek	24"	Vitrified Clay	Circular	97
95-72708	2/1/1991	Traver Creek	Other	CON	RectClosed	23
95-72944	unknown	Traver Creek	48"	Dutile Iron	Circular	51
95-72953	unknown	Traver Creek	24"	Vitrified Clay	Circular	59
95-72962	12/1/1997	Traver Creek	12"	Dutile Iron	Circular	85
95-62908	unknown	Traver Creek	12"	CON	Circular	91
95-73005	unknown	Millers Creek	15"	Dutile Iron	Irregular	23
95-59227	6/1/1969	Millers Creek	84"	CON	Circular	116

95-53704	5/1/1967	Millers Creek	90"	CON	Circular	78
95-73012	unknown	Millers Creek	15"	Dutile Iron	Circular	23
95-64636	6/1/1969	Millers Creek	Other	CON	EllipHorz	51
95-73092	unknown	Millers Creek	39"	CON	Circular	116
95-73093	unknown	Millers Creek	Other	CON	RectClosed	48
95-73124	7/1/2000	Millers Creek	54"	Dutile Iron	Circular	28
95-64617	unknown	Millers Creek	72"	Dutile Iron	Circular	70
95-59229	6/1/1969	Millers Creek	Other	CON	EllipHorz	108
95-73246	7/1/2000	Millers Creek	54"	Dutile Iron	Circular	76
95-73252	6/1/2001	Millers Creek	90"	CON	Circular	6
95-53696	5/1/1967	Millers Creek	90"	CON	Circular	47
95-73356	7/1/1988	Millers Creek	12"	CON	Circular	30
95-73363	6/1/1969	Millers Creek	84"	CON	Circular	60
95-73364	6/1/1969	Millers Creek	84"	CON	Circular	39
95-64463	6/1/1969	Millers Creek	Other	CON	EllipHorz	74
95-73559	6/3/1999	Millers Creek	18"	CON	Circular	92
95-55331	6/3/1999	Millers Creek	18"	CON	Circular	6
95-62857	unknown	Fleming Creek	18"	CON	Circular	42
95-73850	5/1/1970	Millers Creek	36"	CON	Circular	8
95-73944	5/1/1970	Millers Creek	36"	CON	Circular	32
95-50192	11/1/1965	Millers Creek	66"	CON	Circular	136
95-74006	unknown	Millers Creek	84"	CON	Circular	137
95-55115	unknown	Millers Creek	60"	CON	Circular	64
95-73961	11/1/1965	Millers Creek	66"	CON	Circular	82
95-73949	11/1/1965	Millers Creek	84"	CON	Circular	100
95-63319	11/1/1965	Millers Creek	84"	CON	Circular	97
95-74010	11/1/1965	Millers Creek	84"	CON	Circular	45
95-62988	4/1/1961	Millers Creek	54"	CON	Circular	68
95-74244	unknown	Millers Creek	18"	Dutile Iron	Circular	41
95-74246	unknown	Millers Creek	12"	Dutile Iron	Circular	95
95-74248	unknown	Millers Creek	12"	Dutile Iron	Circular	234
95-74406	unknown	Millers Creek	48"	Dutile Iron	Circular	97
95-74503	unknown	Millers Creek	72"	CON	Circular	10
95-74525	unknown	Millers Creek	12"	CON	Circular	2
95-74526	unknown	Millers Creek	12"	CON	Circular	2
95-74560	11/1/1960	Millers Creek	Other	CON	RectClosed	16
95-62986	11/1/1960	Millers Creek	Other	CON	RectClosed	23
95-55318	5/1/1970	Millers Creek	Other	CON	RectClosed	50
95-55206	8/15/1961	Millers Creek	48"	CON	RectClosed	50
95-74561	unknown	Millers Creek	24"	Dutile Iron	CircFilled	247
95-74562	unknown	Millers Creek	24"	Dutile Iron	CircFilled	248
95-74563	unknown	Millers Creek	24"	Dutile Iron	CircFilled	247
95-74564	unknown	Millers Creek	24"	Dutile Iron	CircFilled	247
95-74565	unknown	Millers Creek	18"	Dutile Iron	Circular	21
95-74567	unknown	Millers Creek	39"	Dutile Iron	Circular	91
95-74705	unknown	Fleming Creek	18"	CON	Circular	14
95-74900	9/1/1971	rectly into Huron Riv	12"	Dutile Iron	Circular	8
95-62532	unknown	rectly into Huron Riv	44"	Dutile Iron	Circular	60
95-75029	9/1/1971	rectly into Huron Riv	12"	Dutile Iron	Circular	26
95-62834	9/2/1998	rectly into Huron Riv	48"	CON	Circular	60
95-62822	9/2/1998	rectly into Huron Riv	Other	CON	Arch	78
95-75064	6/1/1989	rectly into Huron Riv	Other	CON	RectClosed	40
95-62408	9/1/1998	rectly into Huron Riv	Other	CON	Arch	143

95-62407	9/1/1998	rectly into Huron Riv	Other	CON	Arch	158
95-57648	3/1/1967	rectly into Huron Riv	36"	Dutile Iron	Circular	76
95-62469	3/1/1967	rectly into Huron Riv	36"	Dutile Iron	Circular	76
95-75324	unknown	rectly into Huron Riv	Other	CON	RectClosed	40
95-75423	unknown	rectly into Huron Riv	30"	CON	Circular	88
95-75461	4/1/1967	rectly into Huron Riv	42"	CON	Circular	74
95-75792	unknown	rectly into Huron Riv	48"	Dutile Iron	Circular	31
95-75826	unknown	rectly into Huron Riv	48"	CON	Circular	18
95-75827	unknown	rectly into Huron Riv	15"	Dutile Iron	Circular	28
95-75658	5/1/1963	rectly into Huron Riv	60"	CON	Circular	34
95-50454	5/1/1963	rectly into Huron Riv	60"	CON	Circular	25
95-75890	6/1/1989	rectly into Huron Riv	48"	Dutile Iron	Circular	40
95-75892	6/1/1989	rectly into Huron Riv	48"	Dutile Iron	Circular	43
95-59231	unknown	rectly into Huron Riv	48"	Dutile Iron	Circular	80
95-75895	unknown	rectly into Huron Riv	24"	Dutile Iron	Circular	99
95-76140	unknown	rectly into Huron Riv	10"	HDPE	Irregular	19
95-76151	unknown	rectly into Huron Riv	30"	CON	Circular	28
95-76201	3/1/1967	rectly into Huron Riv	14"	CON	Circular	40
95-76202	7/1/2009	rectly into Huron Riv	14"	CON	Circular	38
95-76203	7/1/2009	rectly into Huron Riv	14"	CON	Circular	36
95-76204	7/1/2009	rectly into Huron Riv	14"	CON	Circular	39
95-76205	3/1/1967	rectly into Huron Riv	12"	Dutile Iron	Circular	67
95-76206	3/1/1967	rectly into Huron Riv	24"	Dutile Iron	Circular	62
95-76222	9/1/1971	rectly into Huron Riv	Other	Dutile Iron	Arch	68
95-76224	unknown	rectly into Huron Riv	24"	Dutile Iron	Circular	112
95-59167	6/1/1989	rectly into Huron Riv	36"	CON	Circular	39
95-76298	unknown	rectly into Huron Riv	15"	Dutile Iron	Circular	20
95-76460	unknown	rectly into Huron Riv	15"	Dutile Iron	Circular	39
95-59112	9/1/1958	rectly into Huron Riv	Other	CON	RectClosed	40
95-76464	12/1/1967	rectly into Huron Riv	Other	CON	RectClosed	55
95-62839	9/2/1998	rectly into Huron Riv	15"	CON	Circular	61
95-76487	unknown	rectly into Huron Riv	15"	CON	Circular	36
95-62598	8/1/1969	Honey Creek	12"	CON	Circular	65
95-50818	4/1/1967	rectly into Huron Riv	42"	CON	Circular	82
95-63046	6/1/2009	rectly into Huron Riv	45"	CON	Circular	50
95-76453	6/1/2009	rectly into Huron Riv	24"	CON	Circular	48
95-76454	6/1/2009	rectly into Huron Riv	30"	CON	Circular	49
95-76455	3/1/1967	rectly into Huron Riv	14"	CON	Circular	61
95-76830	unknown	rectly into Huron Riv	18"	HDPE	Circular	33
95-76831	unknown	rectly into Huron Riv	18"	HDPE	Circular	2
95-76833	7/1/1969	Honey Creek	24"	CON	Circular	181
95-64229	3/7/1927	Allen Creek	18"	Vitrified Clay	Circular	473
95-61320	7/1/1965	Allen Creek	47"	CON	RectClosed	4
95-50484	4/1/1928	Allen Creek	24"	CON	RectClosed	51
95-61321	1/1/1946	Allen Creek	47"	CON	RectClosed	29
95-77505	unknown	Allen Creek	12"	Dutile Iron	Circular	21
95-77506	unknown	Allen Creek	12"	Dutile Iron	Circular	30
95-77507	unknown	Allen Creek	12"	Dutile Iron	Circular	51
95-77616	1/1/2002	Allen Creek	24"	CON	RectClosed	35
95-77617	1/1/1946	Allen Creek	Other	CON	RectClosed	13
95-77619	1/1/1946	Allen Creek	24"	CON	RectClosed	8
95-50393	2/1/1961	Allen Creek	16"	CON	Circular	56
95-78321	11/1/2002	Allen Creek	12"	CON	Circular	17

95-78350	4/1/1979	Allen Creek	12"	Dutile Iron	Circular	32
95-63084	4/1/1979	Allen Creek	12"	Dutile Iron	Circular	60
95-57305	1/1/1951	Allen Creek	24"	CON	Circular	34
95-78625	2/1/1962	Allen Creek	12"	CON	Circular	85
95-78626	2/1/1992	Allen Creek	Other	CON	EllipHorz	50
95-53033	8/1/1968	Allen Creek	Other	CON	EllipHorz	21
95-80017	8/1/1927	Allen Creek	66"	CON	Arch	26
95-80334	8/1/1927	Allen Creek	66"	CON	Arch	40
95-81216	7/1/2009	rectly into Huron Riv	14"	Reinforced Concrete	Circular	32
95-81226	6/1/2009	rectly into Huron Riv	14"	Reinforced Concrete	Circular	45
95-065640	2/1/2007	Swift Run	24"	unknown	<Null>	52
95-065687	9/1/2010	Allen Creek	24"	unknown	<Null>	89
95-065706	9/1/2010	Allen Creek	18"	unknown	<Null>	29
95-065707	9/1/2010	Allen Creek	18"	unknown	<Null>	33
95-067040	unknown	rectly into Huron Riv	<Null>	unknown	<Null>	41
95-070076	5/1/2012	Allen Creek	<Null>	Reinforced Concrete	<Null>	181
95-070077	5/1/2012	Allen Creek	<Null>	Reinforced Concrete	<Null>	223
95-070751	unknown	Malletts Creek	12"	HDPE	<Null>	50
95-071041	5/1/2012	Malletts Creek	<Null>	Reinforced Concrete	<Null>	133
95-071043	5/1/2012	Malletts Creek	<Null>	Reinforced Concrete	<Null>	132
95-071059	5/1/2012	Malletts Creek	<Null>	Reinforced Concrete	<Null>	116
95-071591	10/1/2014	Traver Creek	24"	Reinforced Concrete	<Null>	57
95-072684	unknown	rectly into Huron Riv	8"	unknown	<Null>	31
95-073831	9/30/2017	Traver Creek	Unknown	Unknown	<Null>	27
95-073900	9/30/2017	Traver Creek	18"	Corrugated Metal Pipe	<Null>	86
95-073901	9/30/2017	Traver Creek	18"	Corrugated Metal Pipe	<Null>	86
95-75651	5/1/1963	rectly into Huron Riv	60"	CON	Circular	16
95-59110	5/1/1963	rectly into Huron Riv	60"	CON	Circular	16
95-071055	5/1/2012	Malletts Creek	<Null>	Reinforced Concrete	<Null>	107
95-073647	11/1/2015	rectly into Huron Riv	24"	Reinforced Concrete	<Null>	25
95-073648	11/1/2015	rectly into Huron Riv	24"	Reinforced Concrete	<Null>	8
95-72568	6/1/1957	rectly into Huron Riv	12"	CON	Circular	20
95-72570	6/1/1957	rectly into Huron Riv	12"	unknown	Circular	32
95-076063	5/1/2020	rectly into Huron Riv	60"	Reinforced Concrete	Circular	58
95-076064	5/1/2020	rectly into Huron Riv	60"	Reinforced Concrete	Circular	24

EXHIBIT C

Traffic Signal

and Pedestrian RRFB Map

Traffic Signals and RRFBs

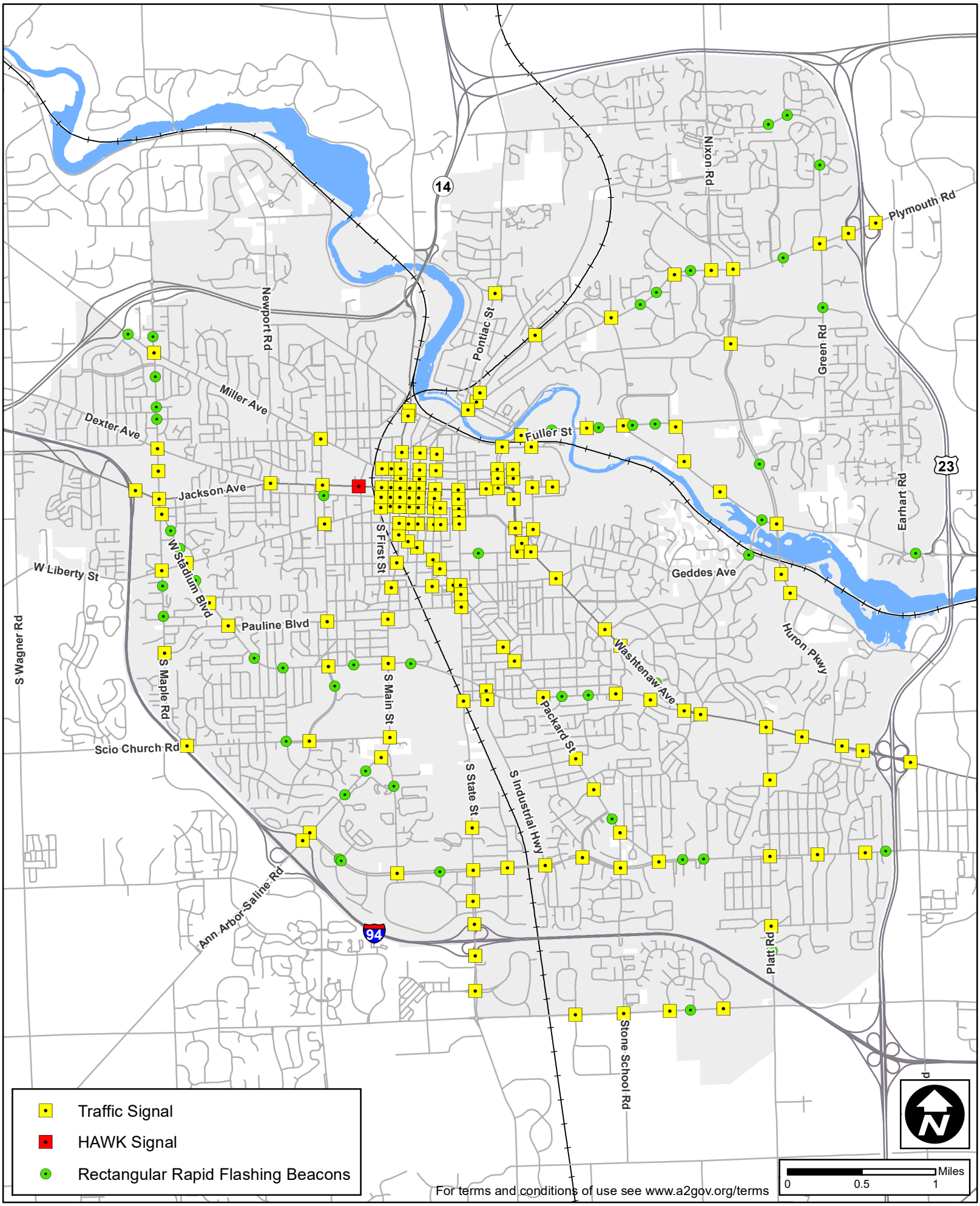


EXHIBIT D

Pavement Asset Management Presentation to City Council:

October 12, 2015

City of Ann Arbor
Pavement Asset Management

PRESENTATION TO CITY COUNCIL

Council Goal: Fix Our Roads

Priority: Repairs/Reconstruction of Roads

Responsible Service Area(s): Public Services

Problem(s): Deteriorated Road Infrastructure

Indicator(s):

- System-wide pavement condition rating
- Miles and area of roadway receiving treatment

Sustainability Framework Goals Impacted:

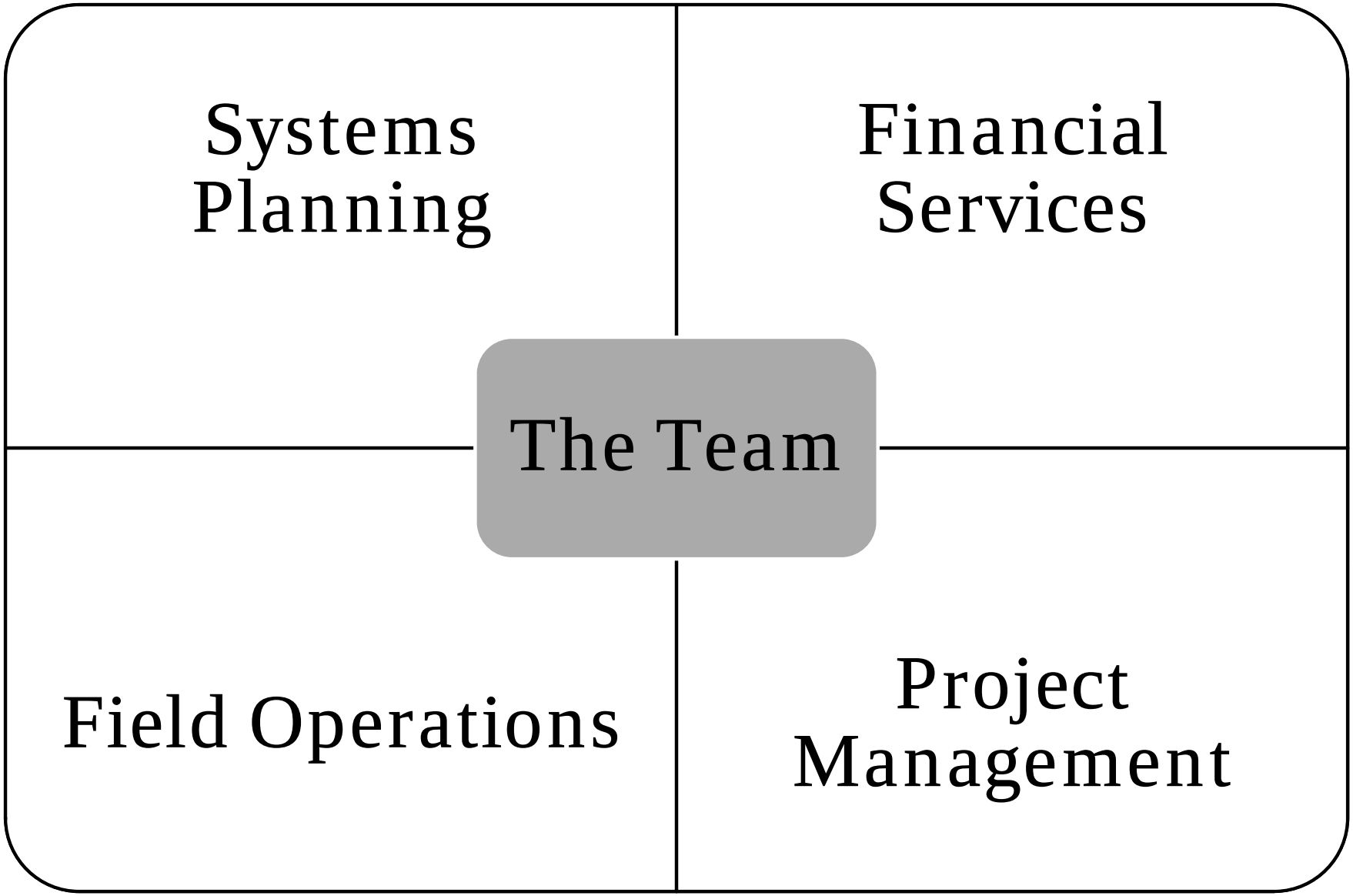
- Transportation Options
- Sustainable Systems
- Integrated Land Use
- Human Services
- Safe Community
- Economic Vitality

Sustainability Action Plan Goal

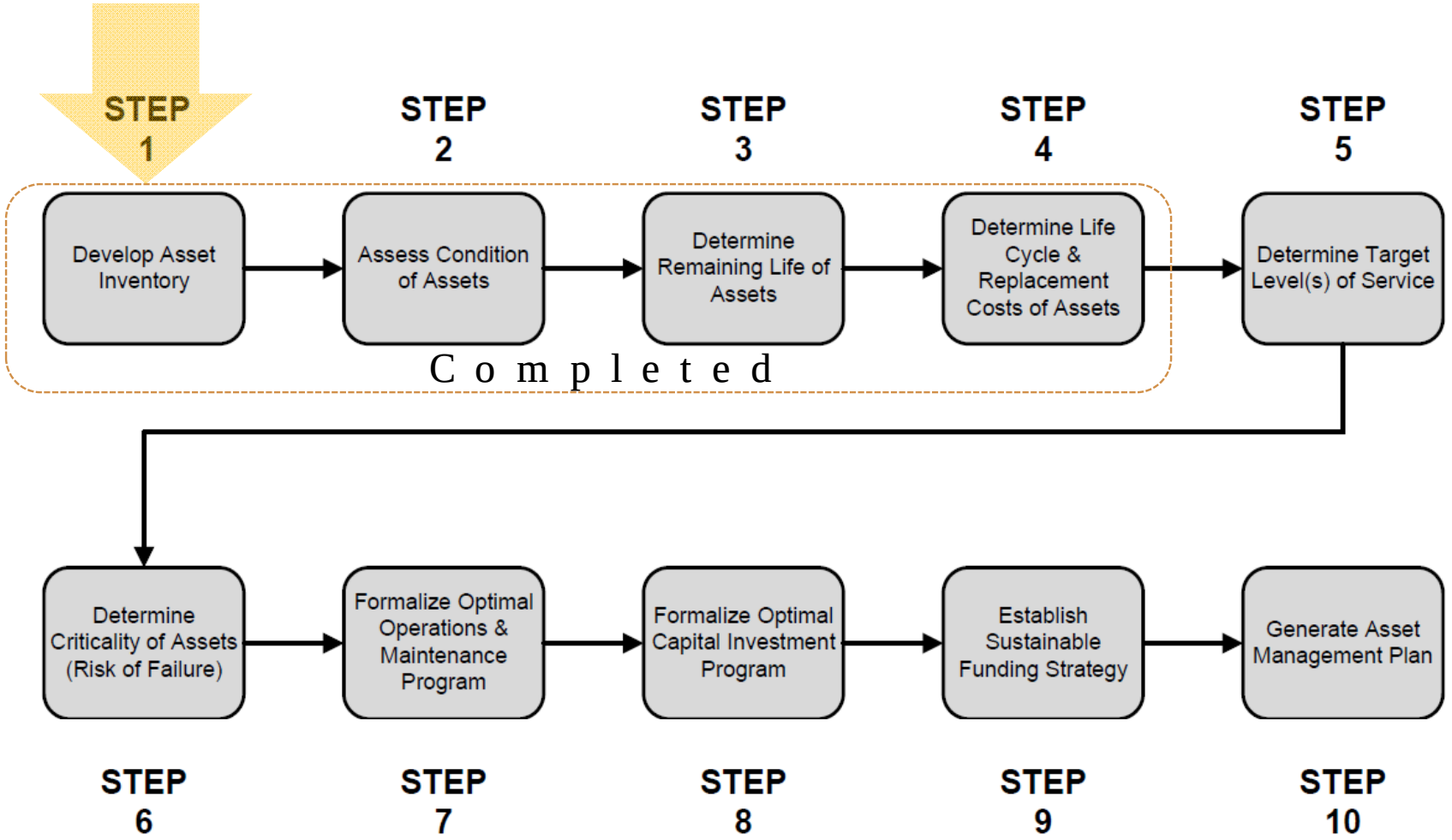
Sustainable Systems

Plan for and manage constructed and natural infrastructure to meet the current and future needs of our community

Target LU 5: Develop a comprehensive Pavement Asset Management Plan to establish a target level for pavement condition and develop a plan of action to achieve that target.


Systems Planning
Financial Services
The Team
Field Operations
Project Management

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



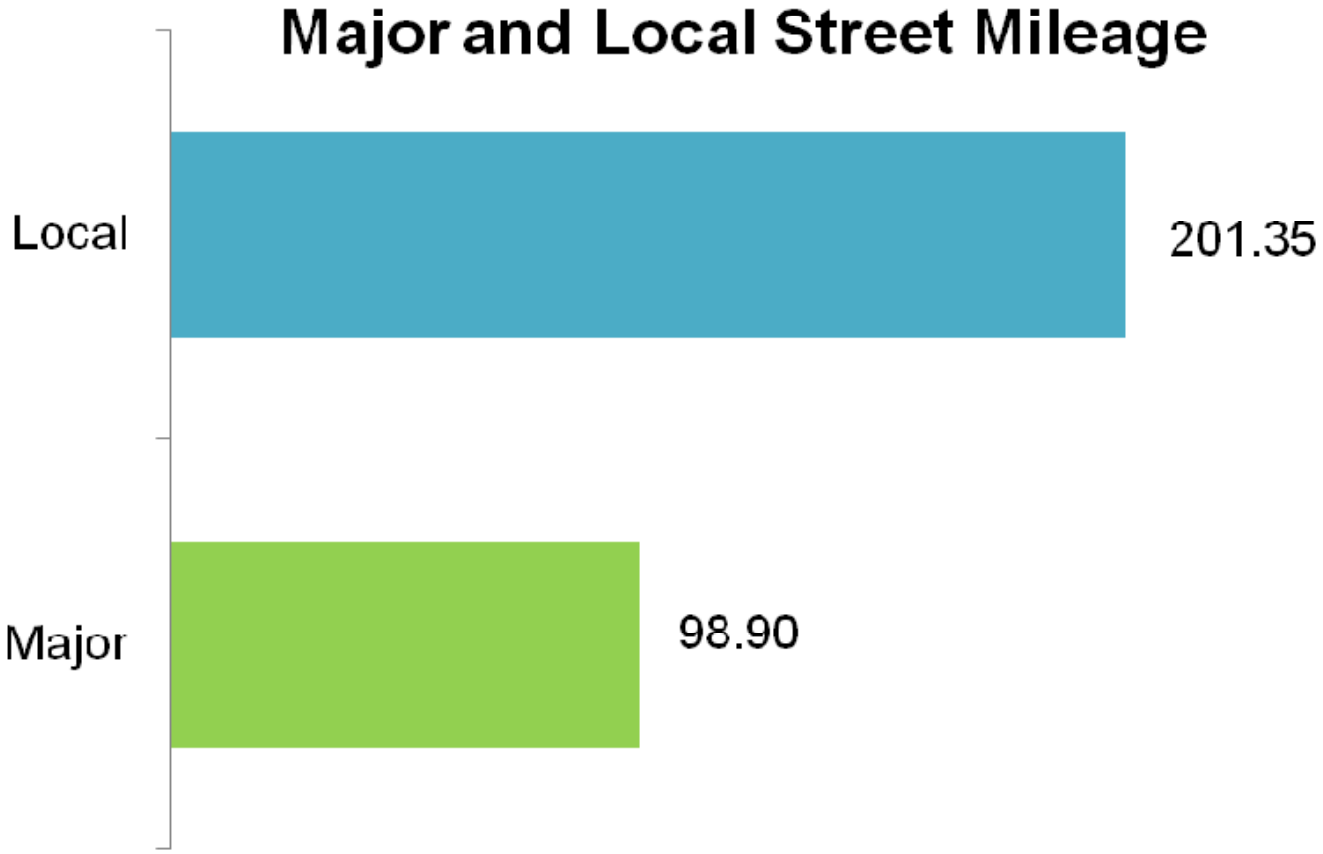
Step 1:
Develop Street Inventory

Miles of Street by Material and Classification					
Classification	Asphalt	Brick	Gravel	Concrete	Totals
Major	94.99	0.37	0.00	3.54	98.90
Local	187.79	0.37	12.19	1.00	201.35
Subtotal:	282.78	0.74	12.19	4.54	300.25

Figures Exclude Bridge Decks and State Trunklines

Miles Shown Are Centerline Miles

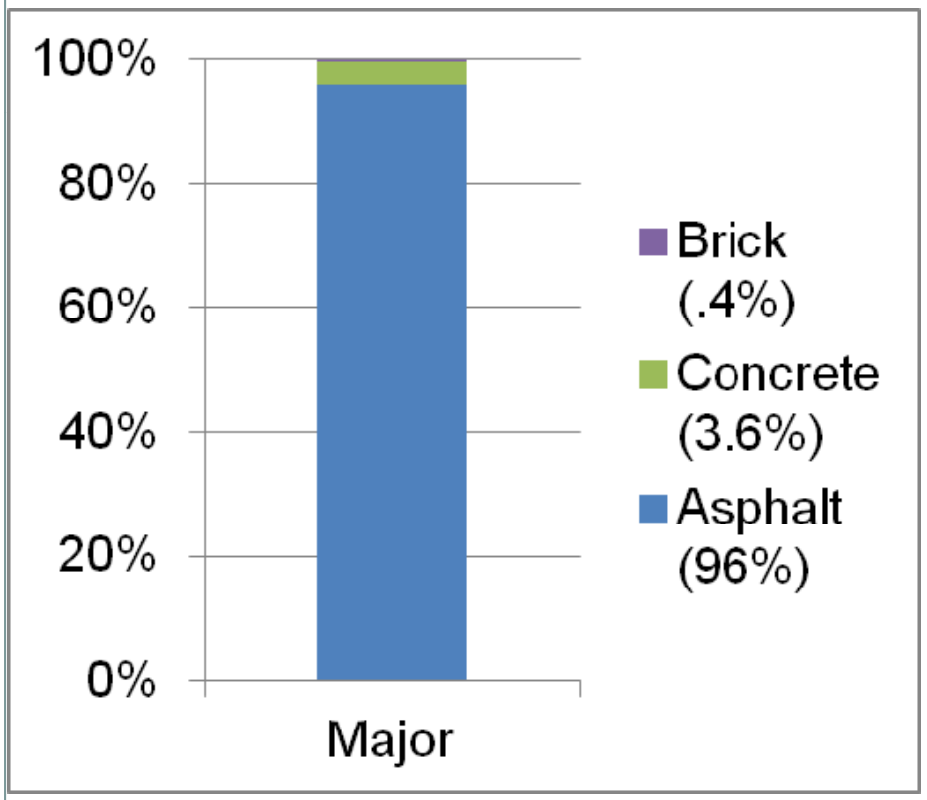
Major and Local Street Inventory (Centerline Miles)



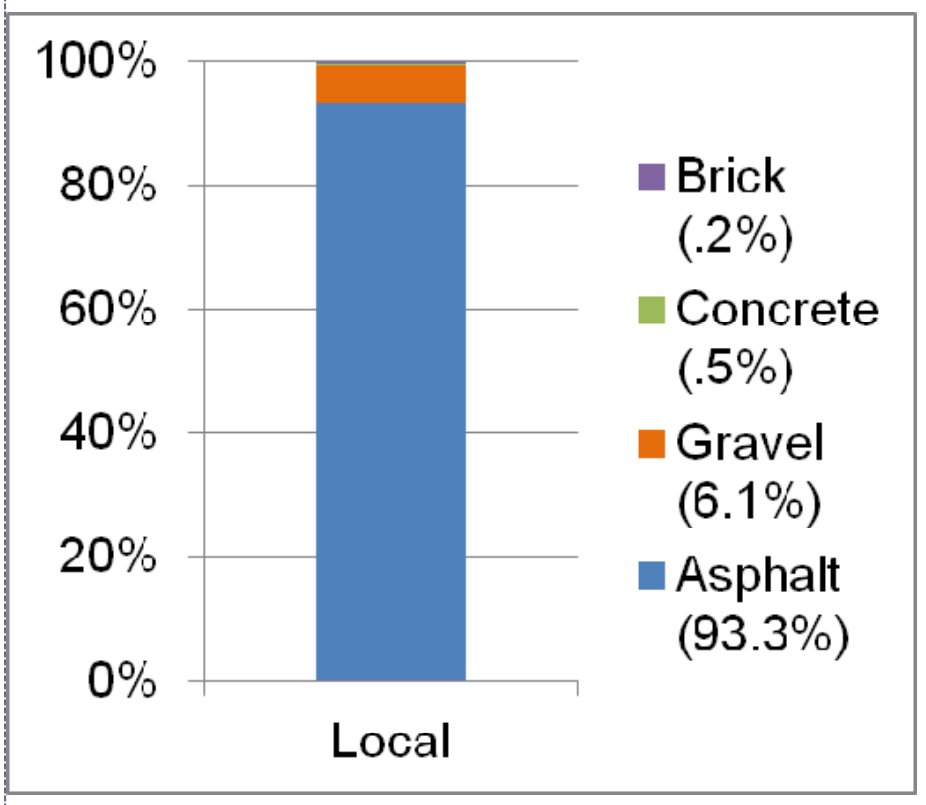
Total of 300.25 Centerline Miles of Streets

Street Material Types: Centerline Mile Percentages

Major Streets



Local Streets



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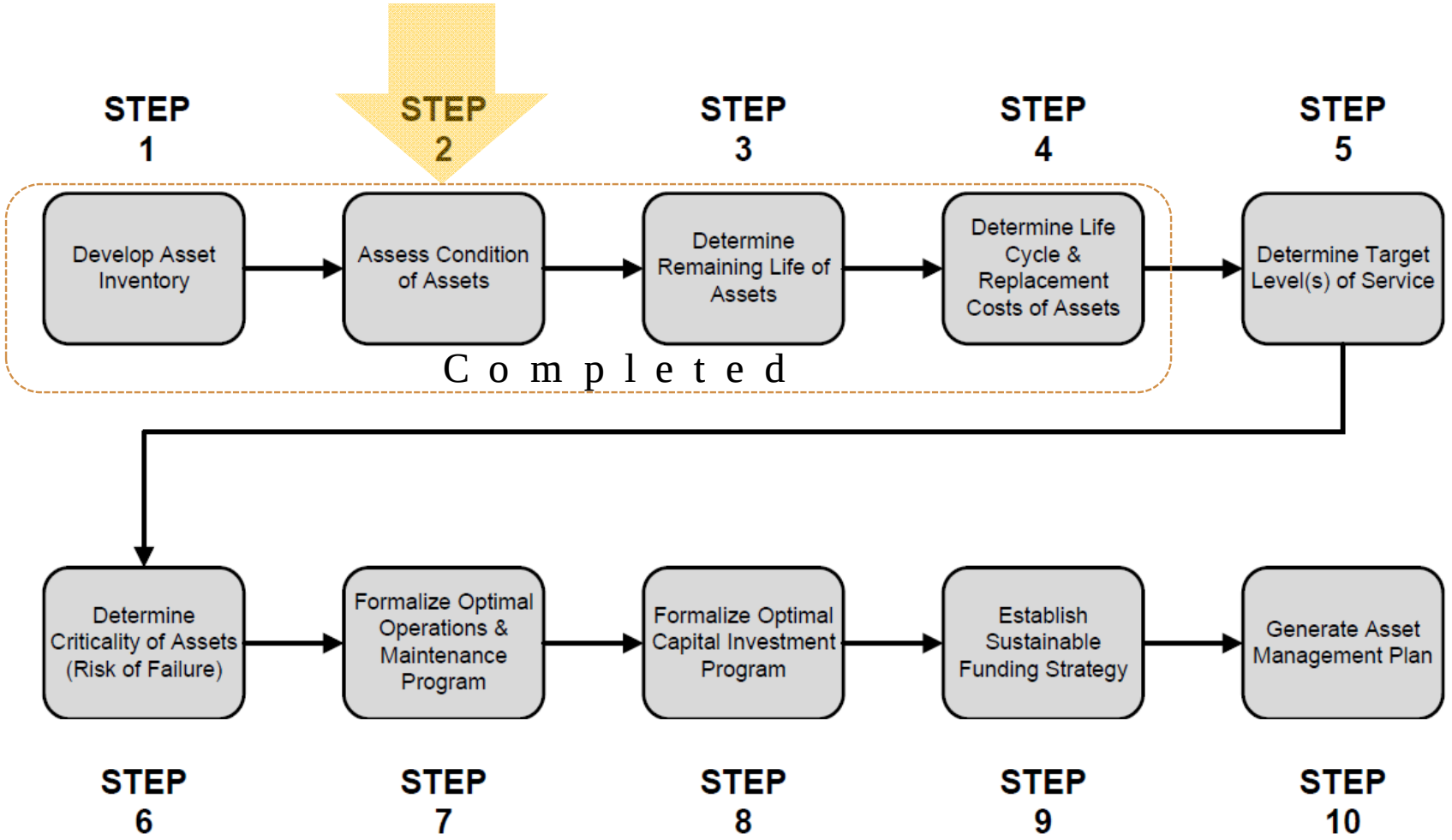


Step 2:

Pavement Condition Rating

- In Spring 2014, hired consultant to rate all paved city streets
- Rating all streets at the same time maximizes the effectiveness of pavement asset management software
- Ratings will be updated in Spring 2017 and every 3 years thereafter

Utilized PASER Rating System for Pavement Condition Assessment

- **"PASER" is short for Pavement Surface Evaluation and Rating**
- **The Michigan Department of Transportation ("MDOT") has adopted the PASER system to rate street pavement condition**

Paser Ratings Scale

Rating 10 – Excellent
Rating 9 – Excellent
Rating 8 – Very Good
Rating 7 – Good
Rating 6 – Good
Rating 5 – Fair
Rating 4 – Fair
Rating 3 – Poor
Rating 2 – Very Poor
Rating 1 – Failed

Source: Adapted From "'Paser Manual:" Transportation Information Center; University of Wisconsin Madison

PASER RATING 10

PASER RATING 7

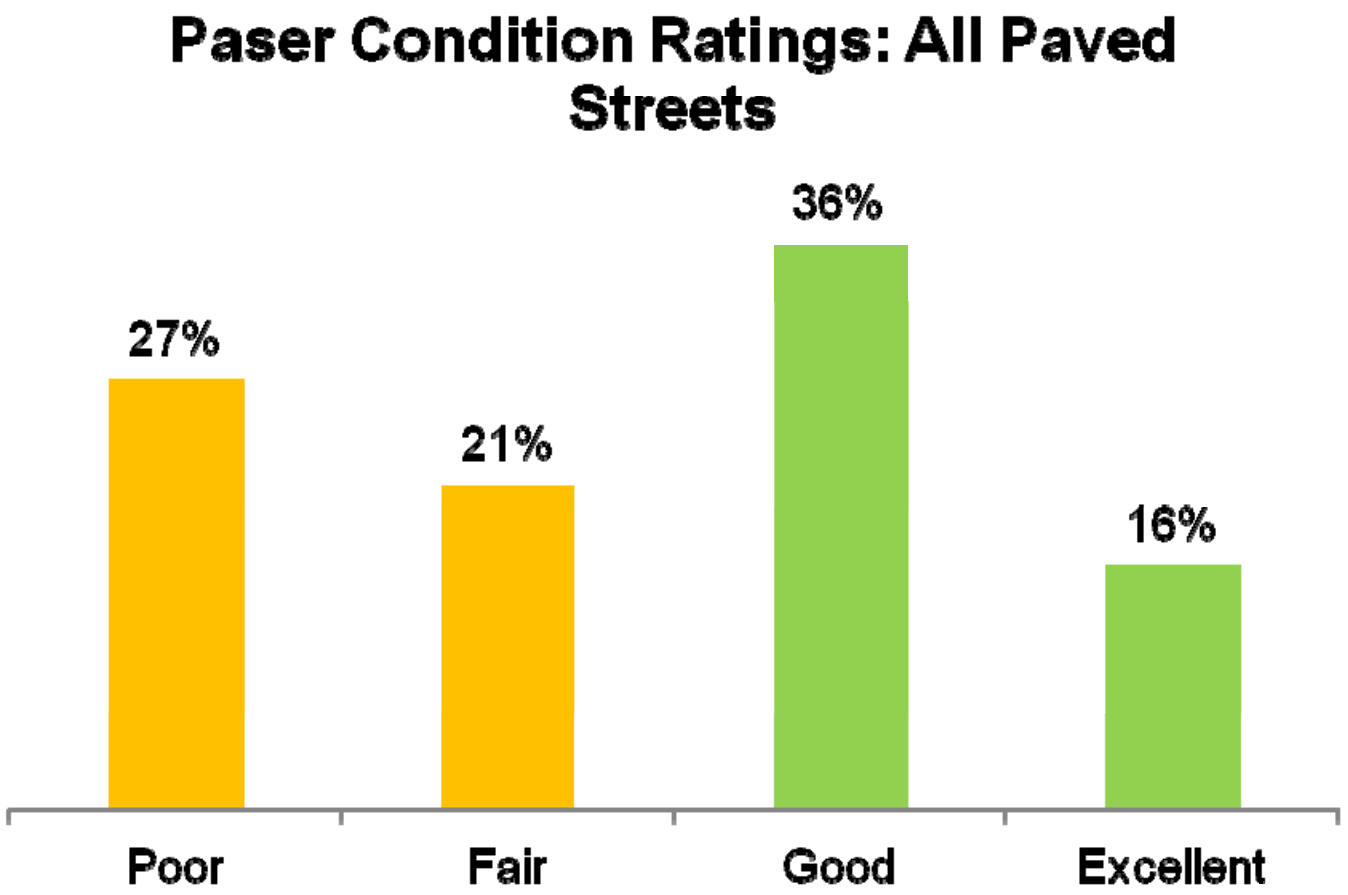
PASER RATING 4

PASER RATING 1

Paser Ratings: All Paved Streets

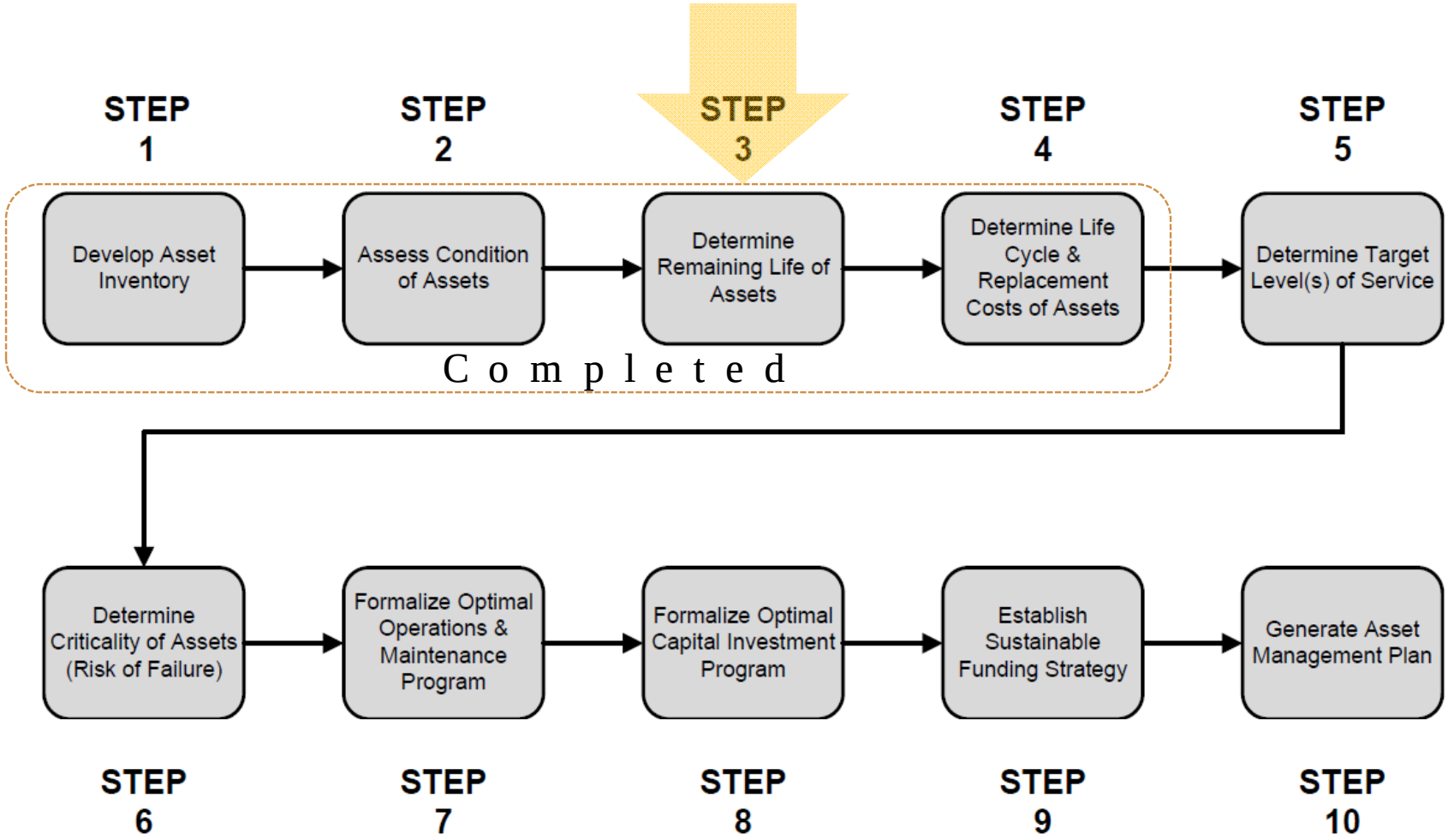
Rating	Description	Miles	Percent
9,10	Excellent	44.91	16%
6,7,8	Good	103.93	36%
4,5	Fair	59.44	21%
1,2,3	Poor	79.05	27%
	Totals:	287.32	100%

Paser Rating Results: All Paved Streets



Over 50% of all paved streets meet City Council criteria of "better than fair" condition

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS

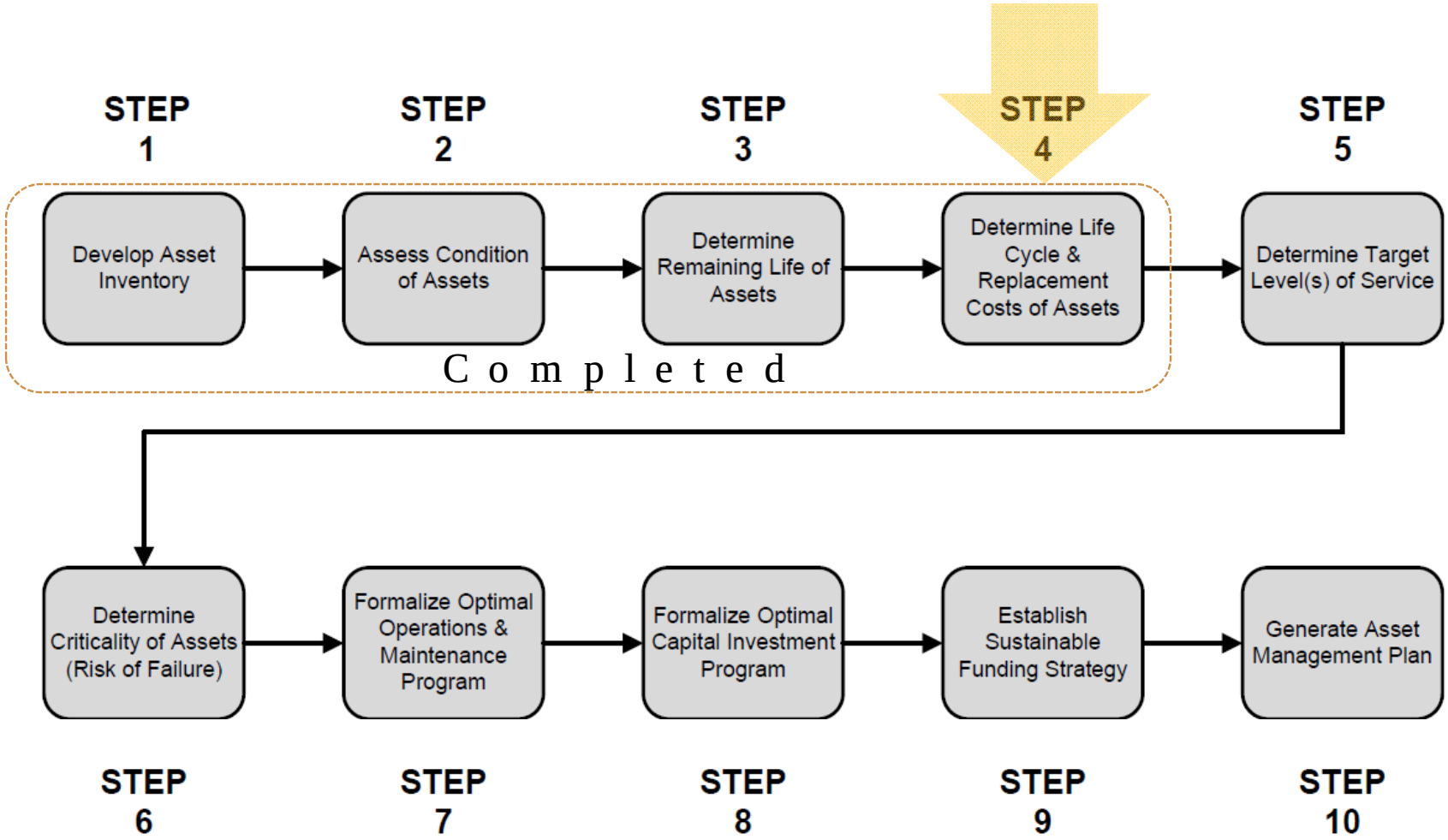


Step 3:

Determine remaining life of pavement

- Utilizing Roadsoft software
- Roadsoft calculates remaining life based on entered condition rating
- Roadsoft recalculates the remaining life after a pavement treatment
- Roadsoft can be adjusted based on local experience

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS

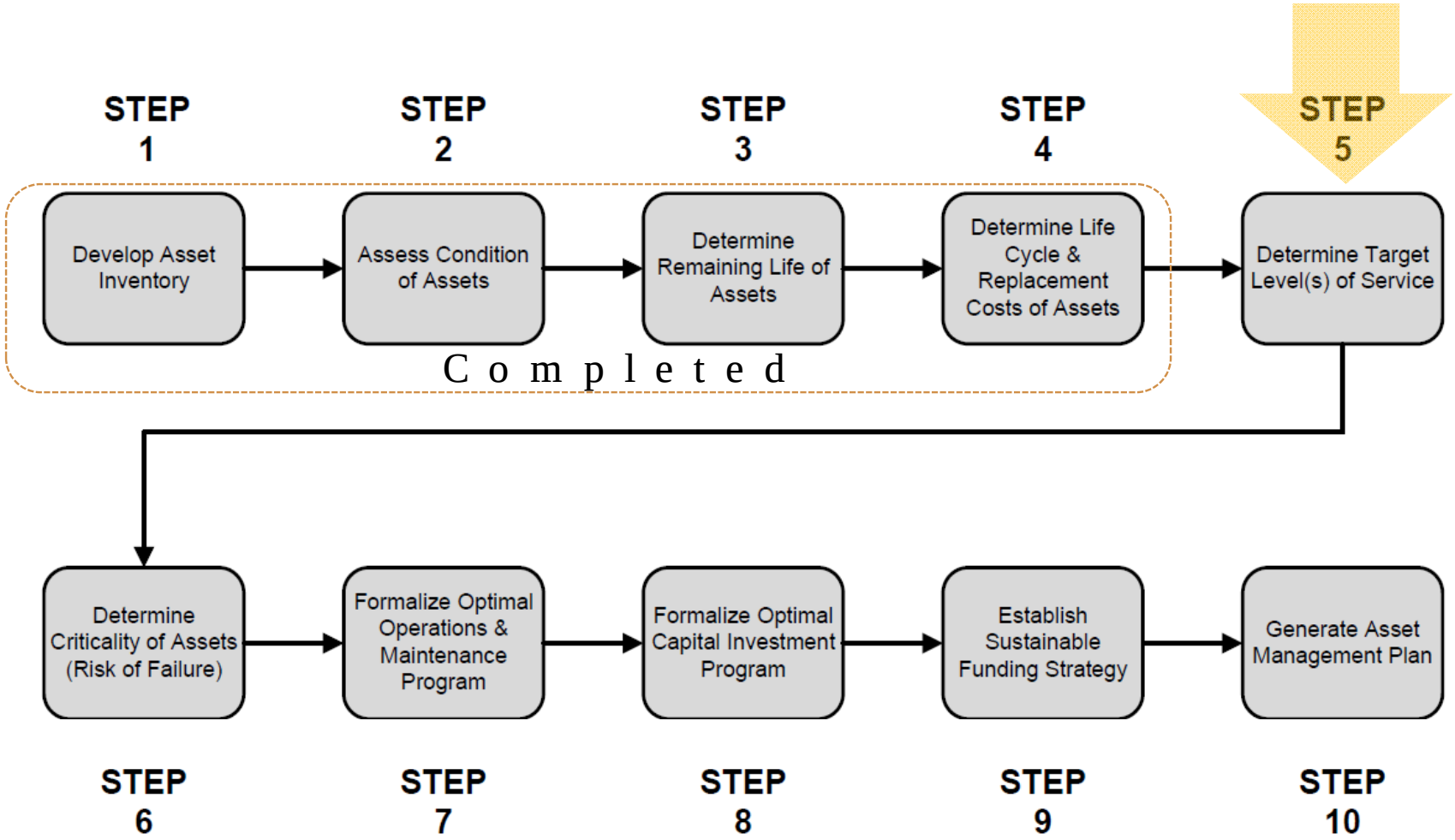


Step 4:

Determine Life Cycle and Replacement Cost of Pavement

- Team made initial determination of costs (being refined)
- Using Ann Arbor historic data for the costs of resurfacing and reconstruction
- Using benchmarked data for costs of treatments such as crack sealing and seal coating
- Using Field Operations maintenance data for the balance of lifecycle costs

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



Step 5:

Target Level of Service

- Council set a dashboard goal to strive for "Roads that are rated better than fair"
- In PASER, that equates to a rating of 6 or Greater
- Presently, 52% of City paved streets meet this Level of Service
- The Pavement Asset Management Team is working on a strategy to increase the percentage of streets meeting this target

Challenges to Improving Target Street Condition Percentage

- In the absence of a treatment, a road's rating will steadily *decrease*
- Ratings deteriorate faster at the high end, making it difficult to maintain Good and Excellent rating
- Funding levels will never be such that all roads can be treated every year
- Presently treat 2 - 4% of streets annually

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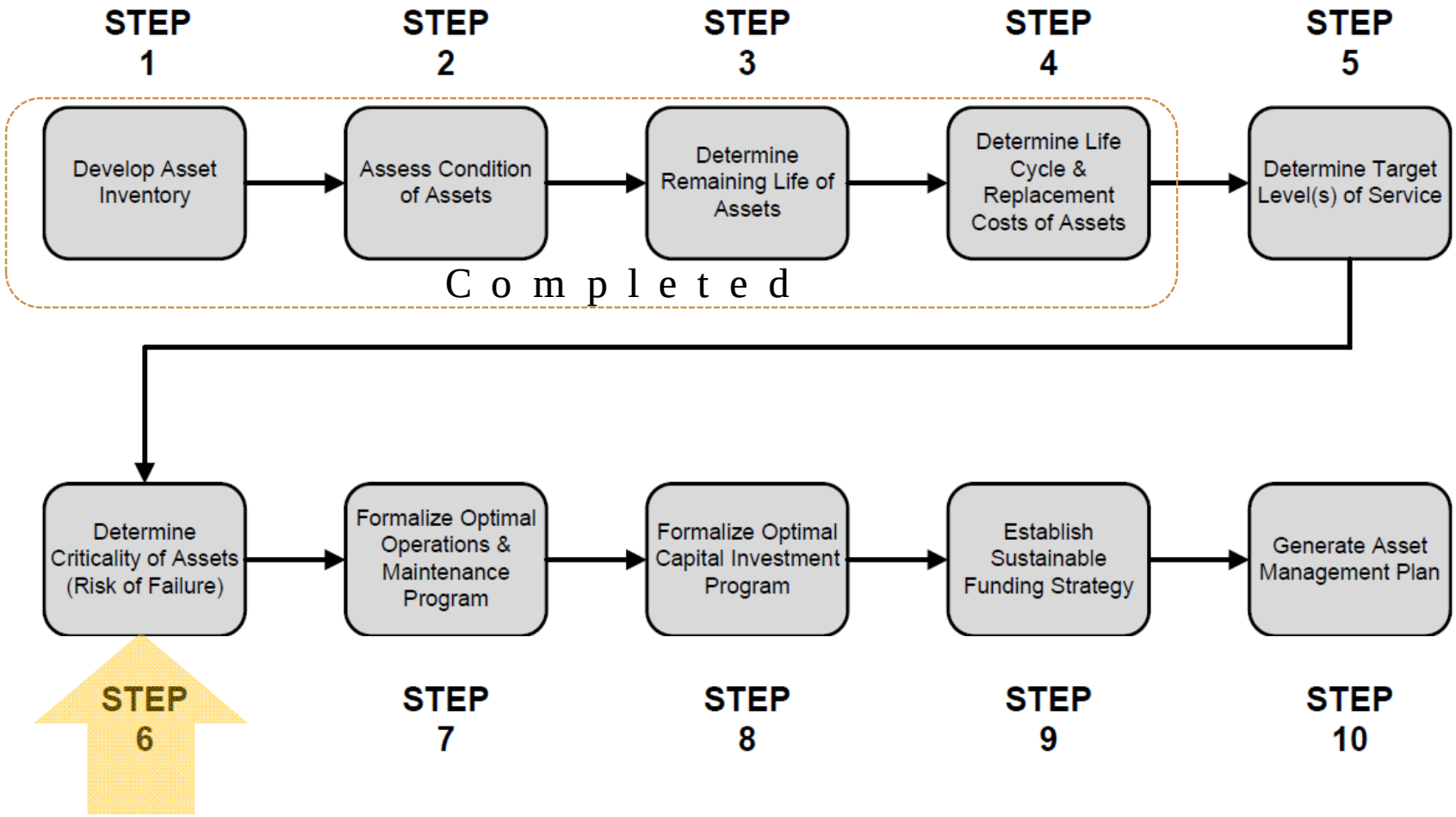
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS

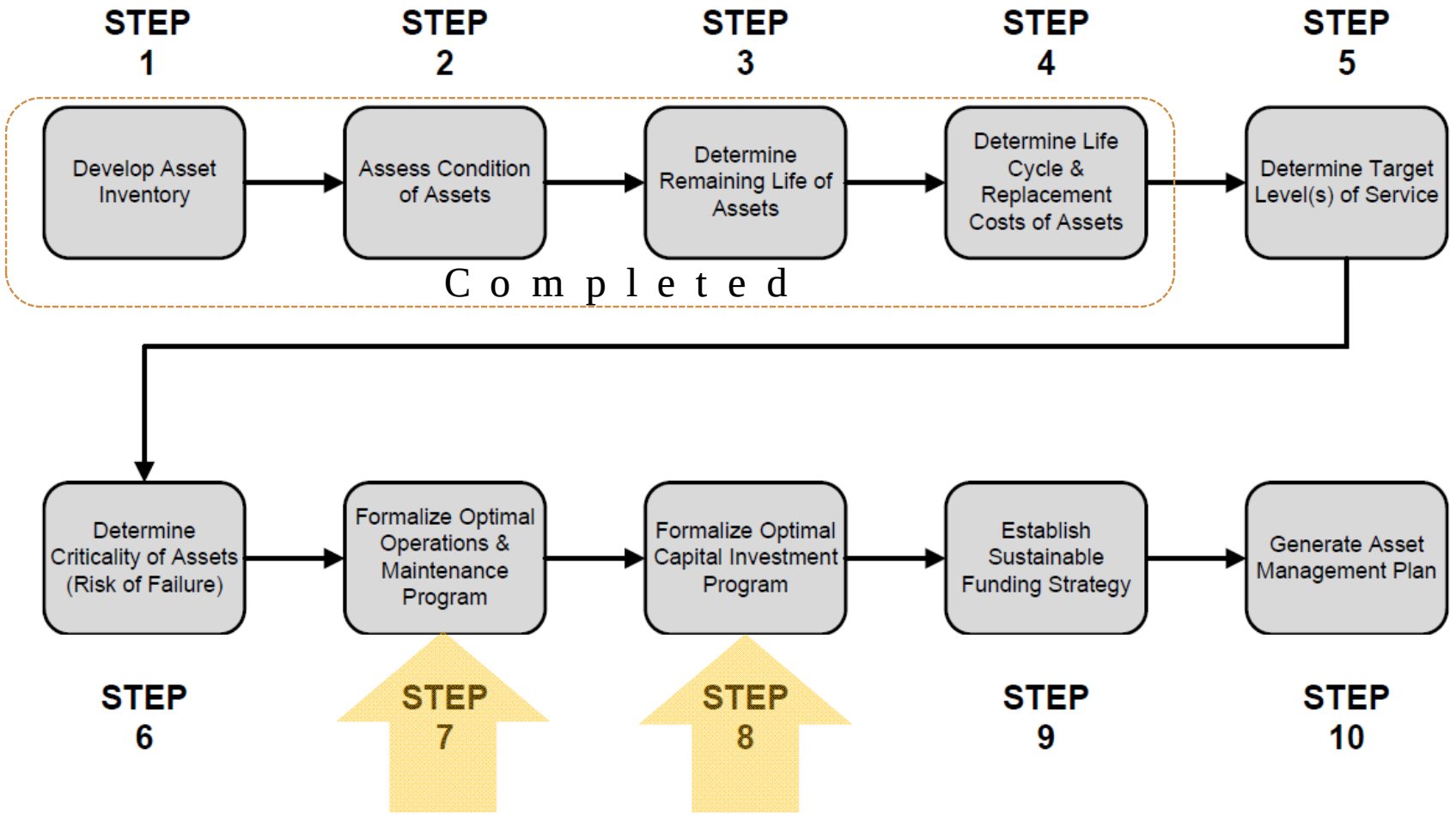


Step 6:

Determine Criticality of Streets (Risk and Consequences of Failure)

- The more a street is driven upon, the faster it will fail
- More users relying upon a street in their day to day travels equals more people affected by that failure
- Major streets carry more travelers:
  - **MDOT recognizes this by funding Major streets at a higher Act 51 level**
- In Roadsoft, Major and Local streets can be managed independently

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



Step 7:

Formalize Optimal Pavement Operation and Maintenance Plan

and

Step 8:

Formalize Optimal Capital Investment Program

- "The right fix at the right time" is the pavement asset management mantra
- The City is expanding its "mix of fixes" beyond the three basic treatments of Routine Maintenance, Resurfacing, and Reconstruction
- An intermediate fix category called Capital Preventive Maintenance ("CPM") has begun to be utilized

The “Food Chain” of Fixes

Routine Maintenance: Pothole Repair and Patching

Capital Preventive Maintenance ("CPM")

WHY?

1. Measures are designed to keep streets functioning at an acceptable level of service without large expenditures

2. Reflects Council goal to reinvest at "mid-life cycle, not at point of failure"

Capital Preventive Maintenance: Crack Sealing

Capital Preventive Maintenance: Thin Mill and Fill (Less than 2”)

Capital Preventive Maintenance: Slurry Seal

Resurfacing:
Replace Paving Surface

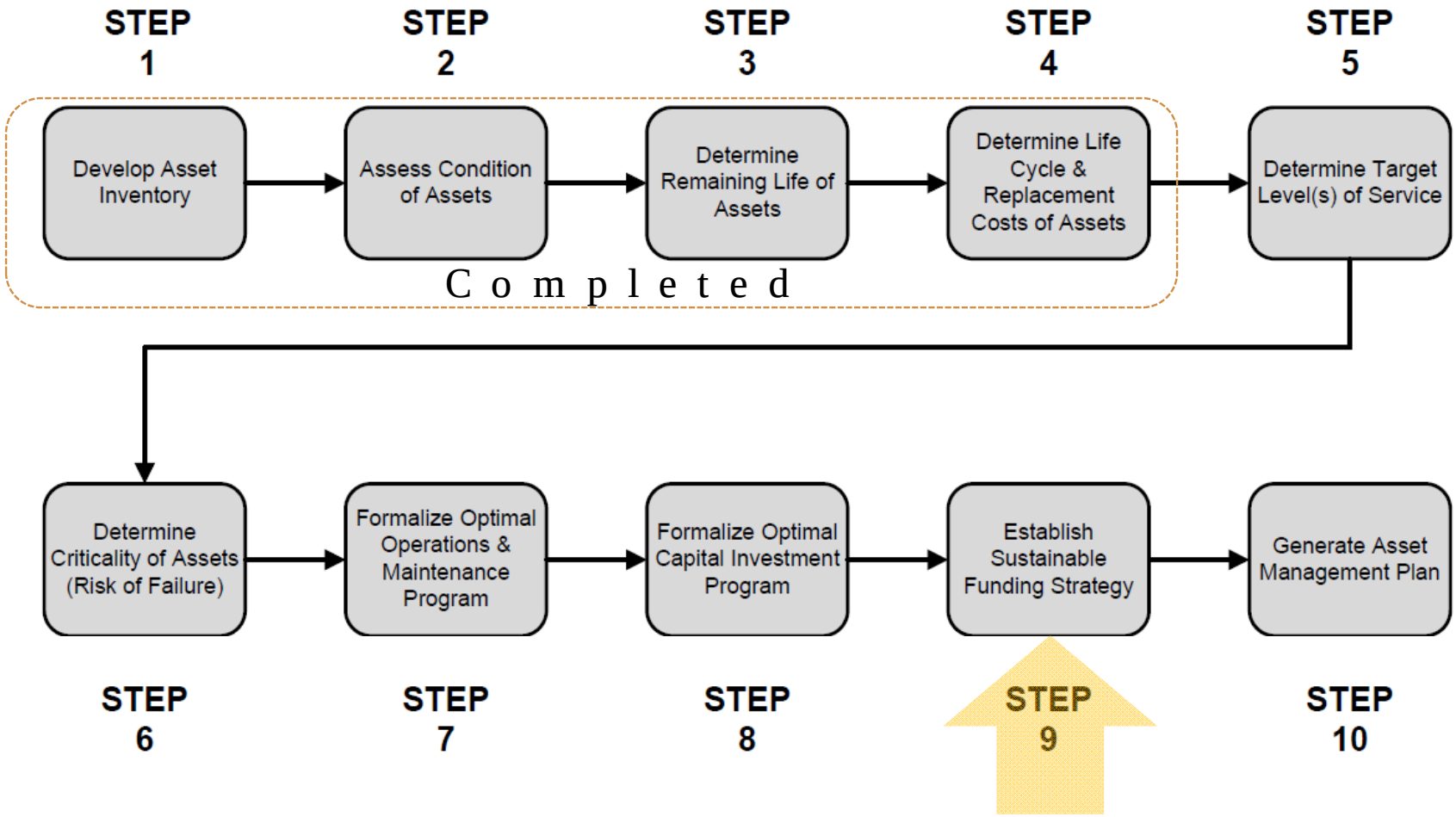
Reconstruction

Tools for Operational and Capital Investment Optimization

In Roadsoft:

1. **Define each type of treatment or "Fix"**
2. **Set a rating "trigger" for each type of Fix (e.g., a rating of 7 might trigger crack sealing)**
3. **Utilize Roadsoft tools to test various financial and treatment strategies based on those Fixes and Triggers**

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



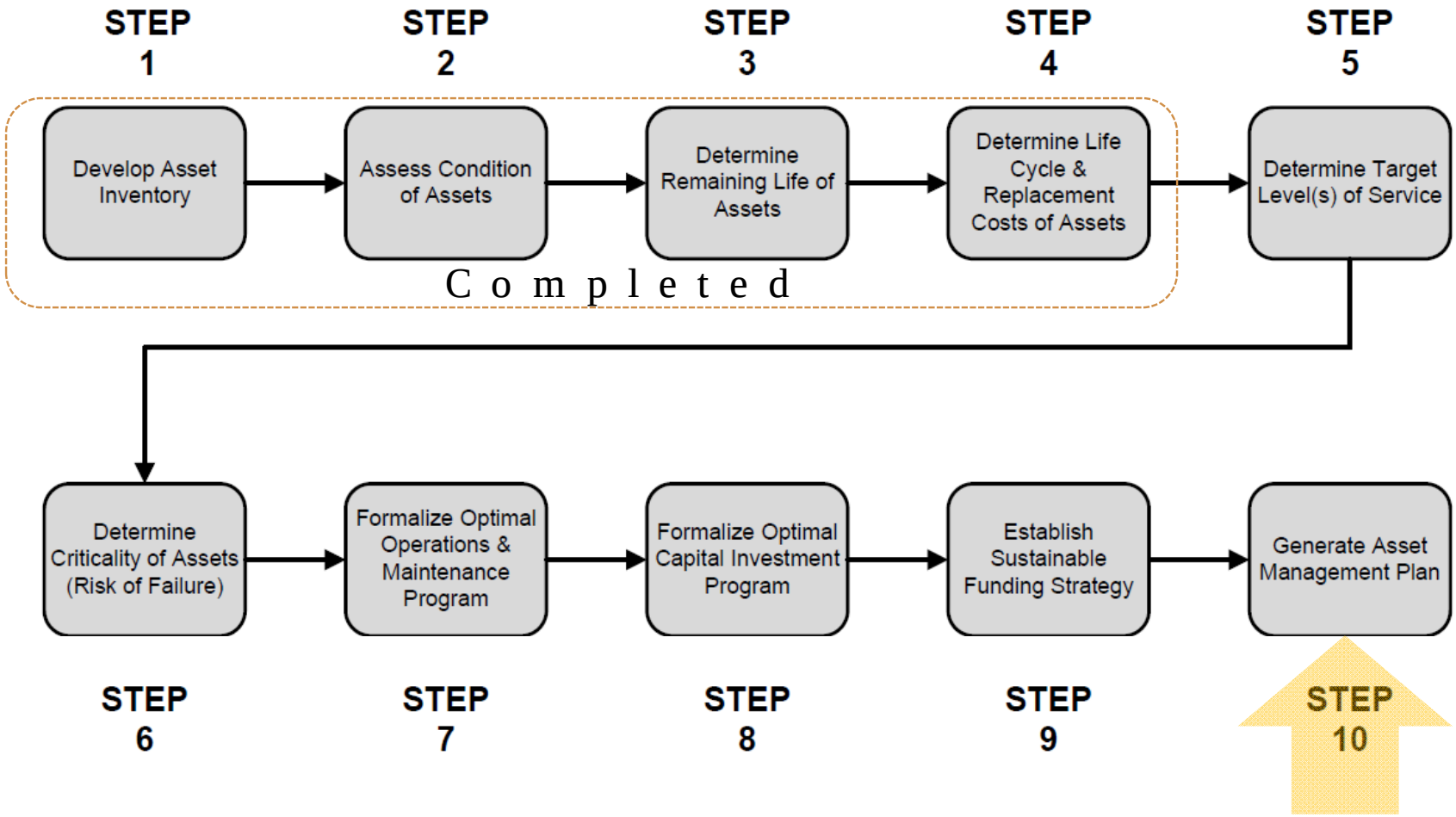
Step 9:

Establish Sustainable Funding Strategy

Road Funding Sources:

- Act 51 ("Gas Tax")
- Street Millage
- Surface Transportation Program-Urban (STP-U)
- Congestion Mitigation and Air Quality (CMAQ)
- Other federal funds
- County Millage

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



Step 10:

Putting the Steps Together

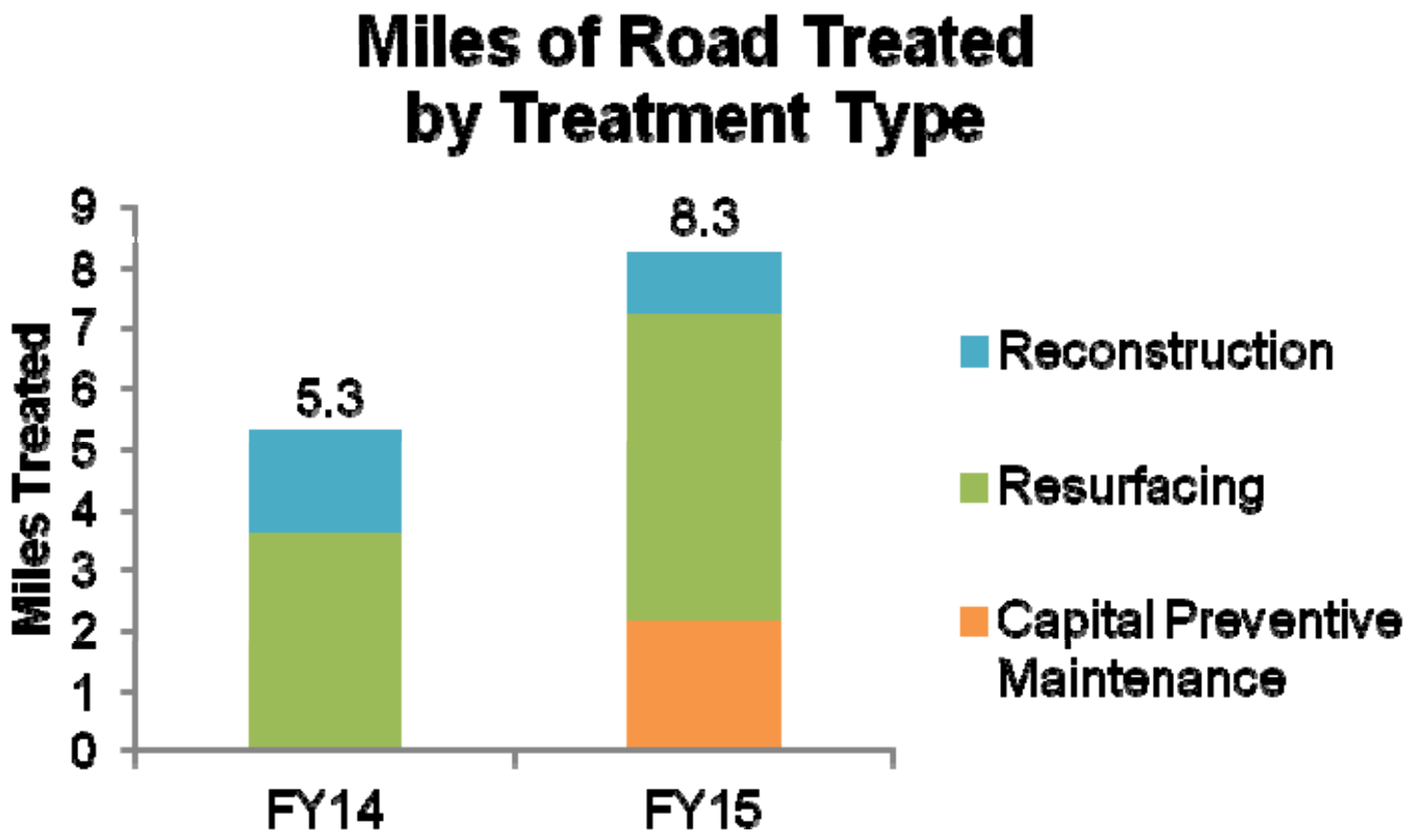
1. By the end of FY2016, the Pavement Asset Management Team will complete the remaining steps to produce a final Pavement Asset Management Plan

2. The Plan will be submitted to MDOT

3. Upon Approval by MDOT, the City will have greater flexibility in allocating Act 51 funds between Major and Local streets

4. The Plan will establish a strategy for how the City will achieve and maintain the target Level Of Service

Miles of Roadway Receiving Treatment



The 2016 Paving Season

- $2.4 million dollars of County millage funding will be utilized on selected major street Capital Preventive Maintenance (CPM) projects
- Stadium (Hutchins to Kipke) and Geddes (Huntington to Hickory) will be major street reconstruction projects
- An annual CPM treatment program utilizing crack sealing and other CPM measures will be launched
- The annual Major and Local Street Resurfacing program will continue

Questions?

THANK YOU SO MUCH FOR YOUR TIME

EXHIBIT E

Pavement Asset Management Plan Update

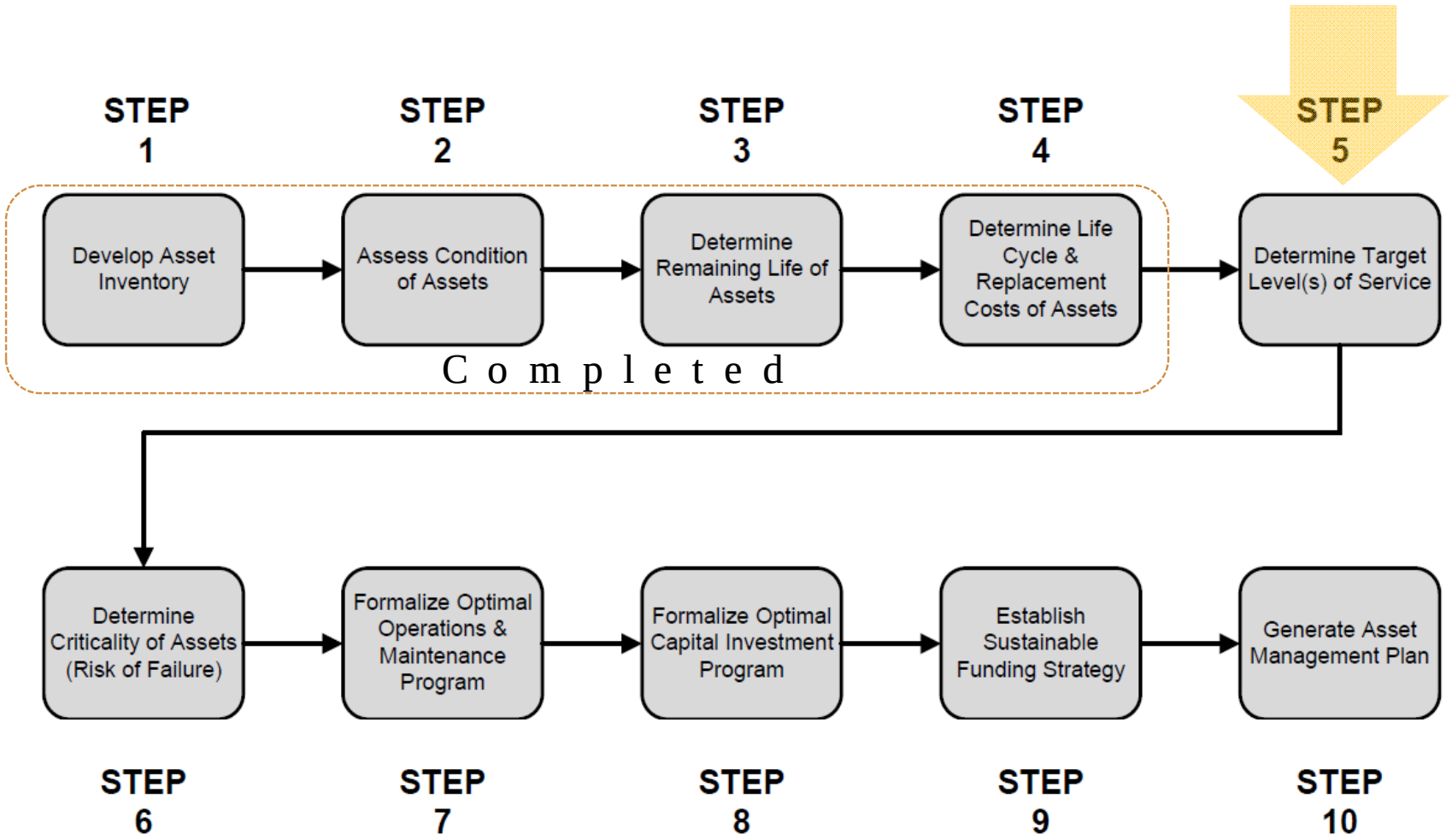
Presentation to City Council:

February 8, 2016

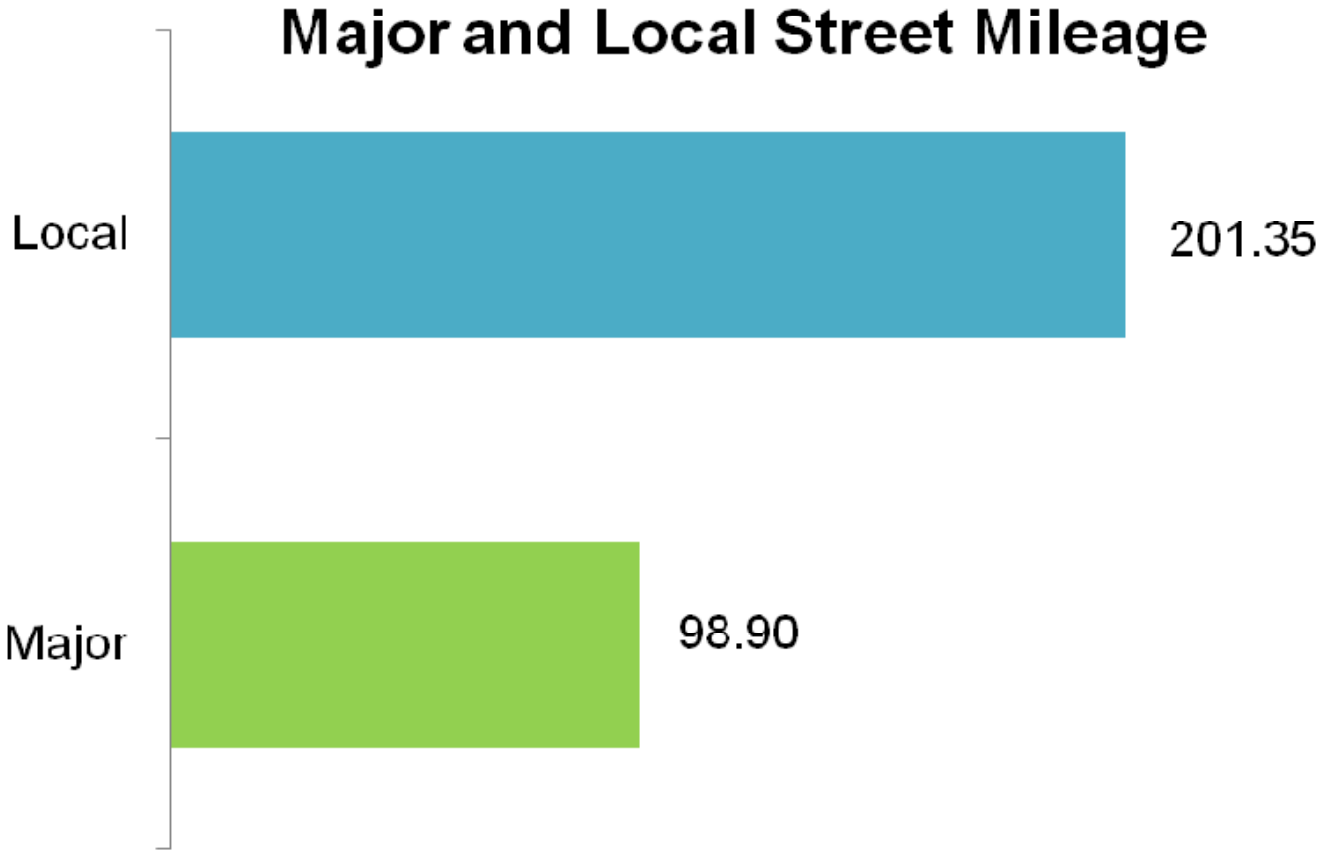
City of Ann Arbor Pavement Asset Management Update

PRESENTATION TO CITY COUNCIL

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



Major and Local Street Inventory (Centerline Miles)



Total of 300.25 Centerline Miles of Streets

Utilized PASER Rating System for Pavement Condition Assessment

- **"PASER" is short for Pavement Surface Evaluation and Rating**
- **The Michigan Department of Transportation ("MDOT") has adopted the PASER system to rate street pavement condition**

Paser Ratings Scale

Rating 10 – Excellent
Rating 9 – Excellent
Rating 8 – Very Good
Rating 7 – Good
Rating 6 – Good
Rating 5 – Fair
Rating 4 – Fair
Rating 3 – Poor
Rating 2 – Very Poor
Rating 1 – Failed

Source: Adapted From "'Paser Manual:" Transportation Information Center; University of Wisconsin Madison

Paser Ratings: All Paved Streets

Rating	Description	Miles	Percent
9,10	Excellent	44.91	16%
6,7,8	Good	103.93	36%
4,5	Fair	59.44	21%
1,2,3	Poor	79.05	27%
	Totals:	287.32	100%

Adding Capital Preventive Maintenance

- "The right fix at the right time" is the pavement asset management mantra
- The City is expanding its "mix of fixes" beyond the three basic treatments of Routine Maintenance, Resurfacing, and Reconstruction
- An intermediate fix category called Capital Preventive Maintenance ("CPM") has begun to be utilized

The “Food Chain” of Fixes

Routine Maintenance: Pothole Repair and Patching

Capital Preventive Maintenance: Crack Sealing

Capital Preventive Maintenance: Road Surface Sealing

Capital Preventive Maintenance: Thin Mill and Fill (Less than 2”)

Resurfacing:
Replace Paving Surface

Reconstruction

Fixes and Triggers

Treatment: (Position cursor on splitter line above this text to adjust data shown.)

Treatment	Type	Min Trigger	Max Trigger	Reset	New Surf	Surface
Crack Seal	PM (CPM)	7	7	8	No	$0.83
Slurry Seal	PM (CPM)	6	6	8	No	$5.20
Microsurface	PM (CPM)	6	6	8	No	$5.20
Cape Seal	PM (CPM)	5	6	9	Yes	$8.40
Mill & Fill - <2" Thick	PM (CPM)	5	5	9	Yes	$25.00
Resurfacing- Mill & replace >=2" & < total)	RH (SI)	3	4	9	Yes	$52.00
Mill and Fill >1.5"	RH (SI)	3	4	9	Yes	$65.00
Rehabilitation (Remove & Replace full depth)	RH (SI)	2	3	10	Yes	$62.00
Reconstruction (Major)	RC (SI)	1	2	10	Yes	$170.00

Building the Pavement Asset Management Model

Basis of Annual Budget for Model

- Street Millage: $10,000,000
- Surface Transportation Funds (STP): $2,000,000
- Present Act 51 Capital Maintenance/Other: $1,000,000

Total: $13,000,000

Note: Act 51 largely supports routine maintenance (snow plowing, street sweeping, pavement marking, pothole repair, patching, signs and signals etc.) but is not included in this model which only addresses capital projects.

Testing Various Models

In the slides that follow:

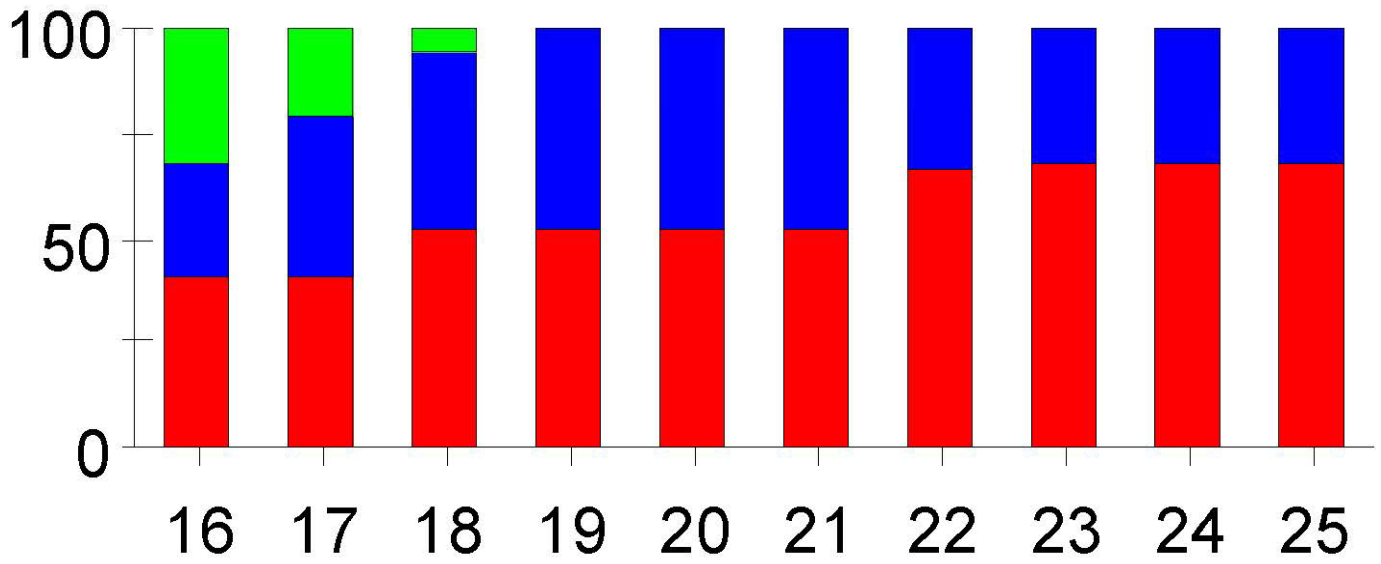
Green = Good

Blue = Fair

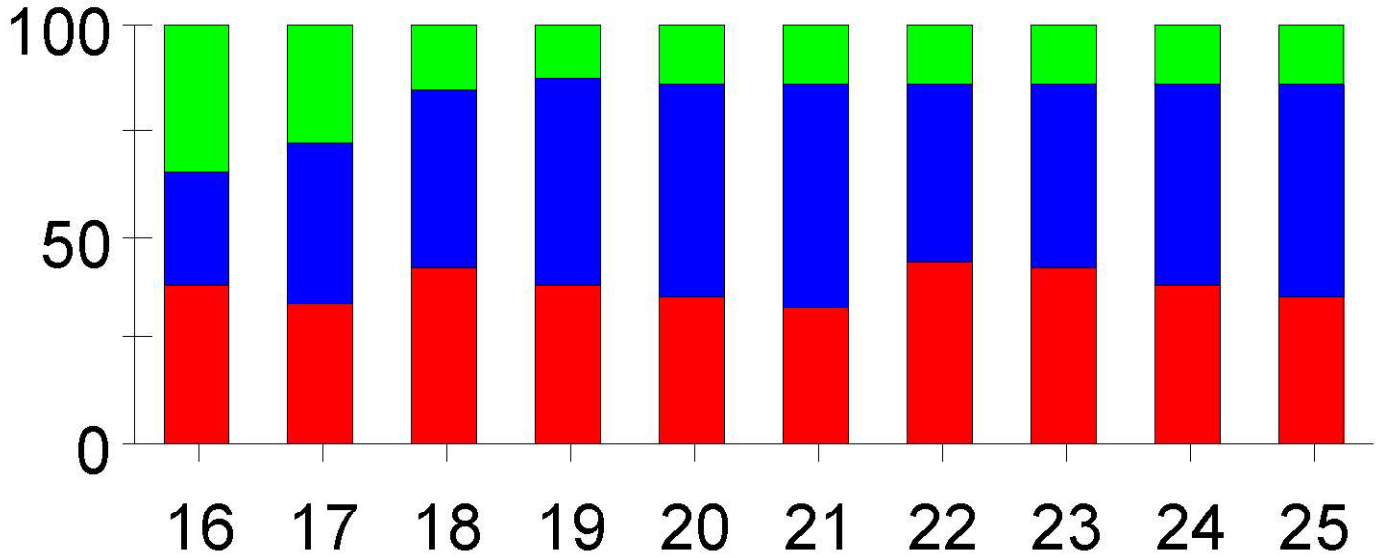
Red = Poor

Models show change from the end of FY 2016 to the end of FY 2025

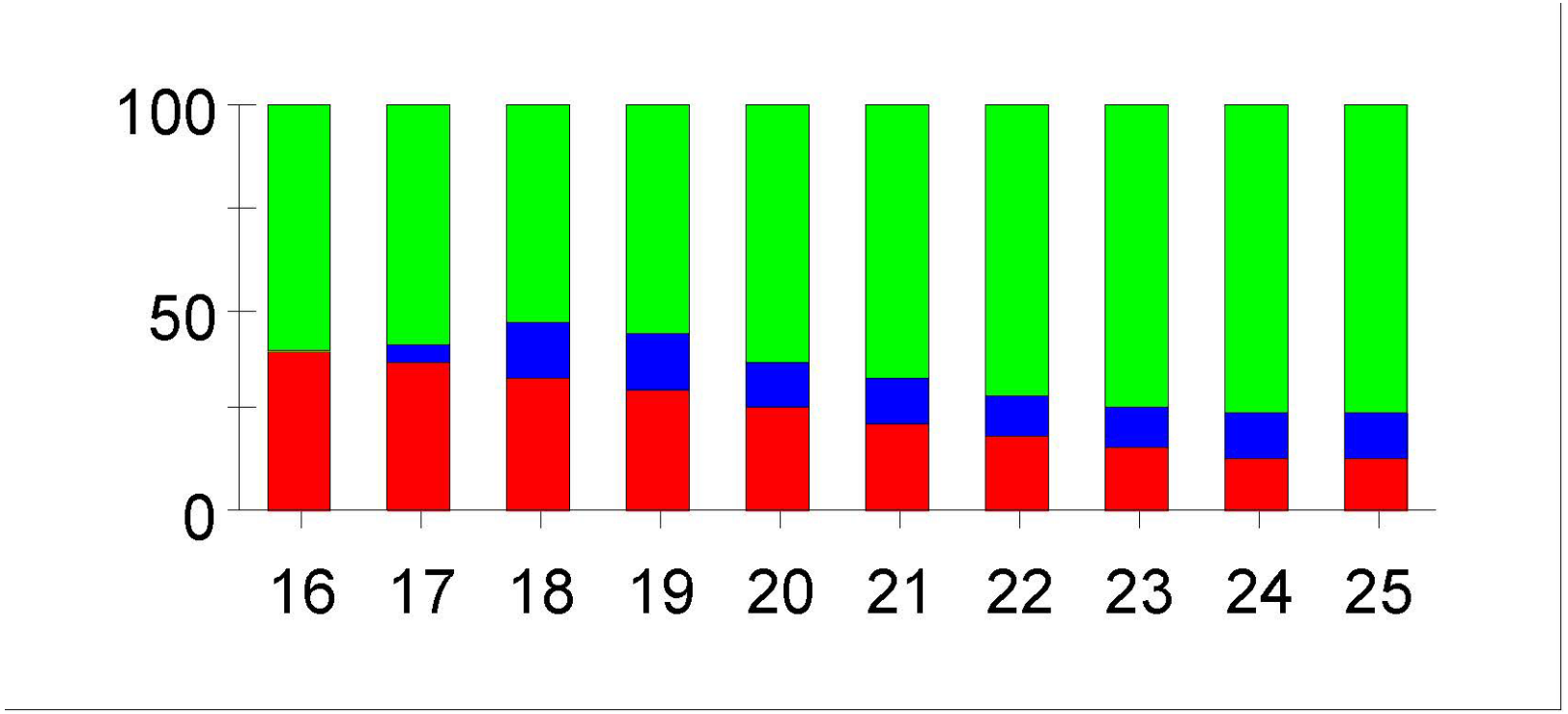
No Capital Spending Strategy



Strategy Through FY14: Resurfacing and Reconstruction with No Capital Preventive Maintenance (CPM): $13M/Annual



Model Ideal Strategy: $13M/Annual



Now We Have the Perfect Strategy….Right?

NOT YET!!!

ADJUSTMENTS NEEDED TO IDEAL MODEL

- Adjust for committed road projects
- Adjust to allow for coordination with utility projects
- Adjust to local contracting capacity
- Adjust to ease into fixes new to A2

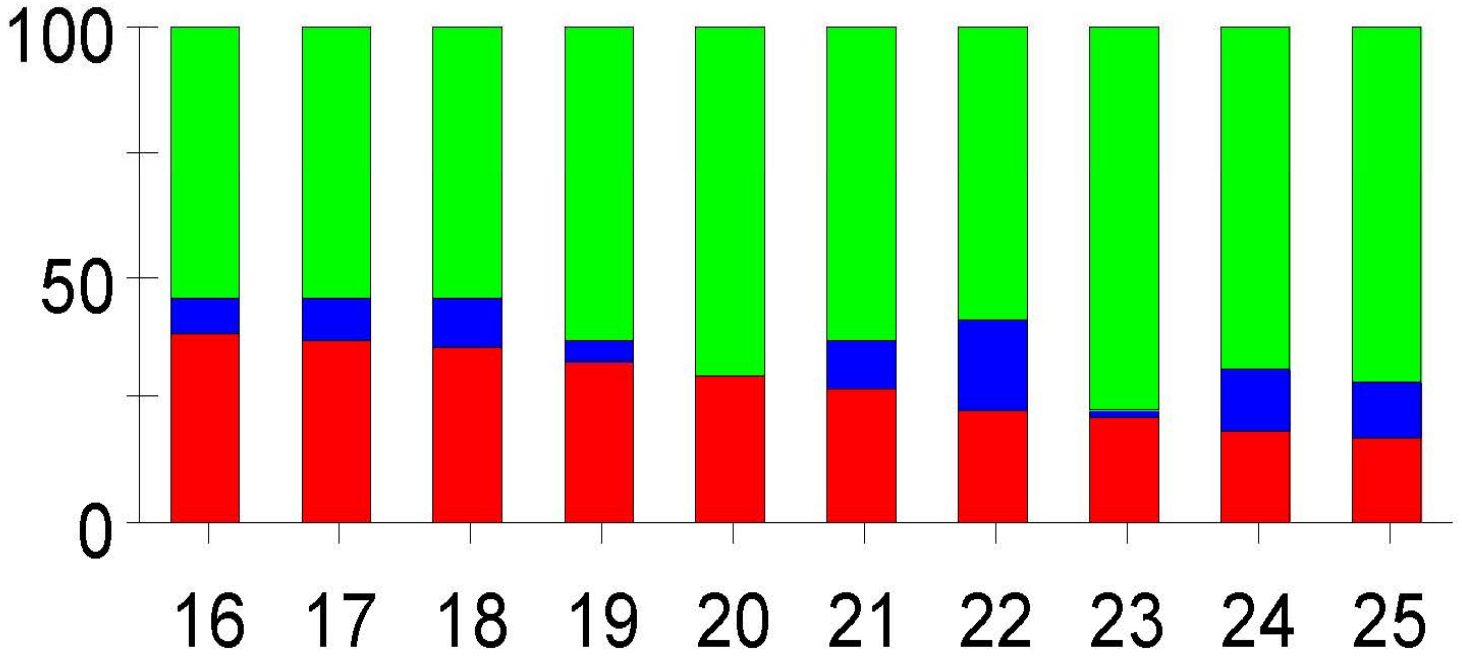
CREATE LOCALLY OPTIMIZED STRATEGY

IN ESSENCE:

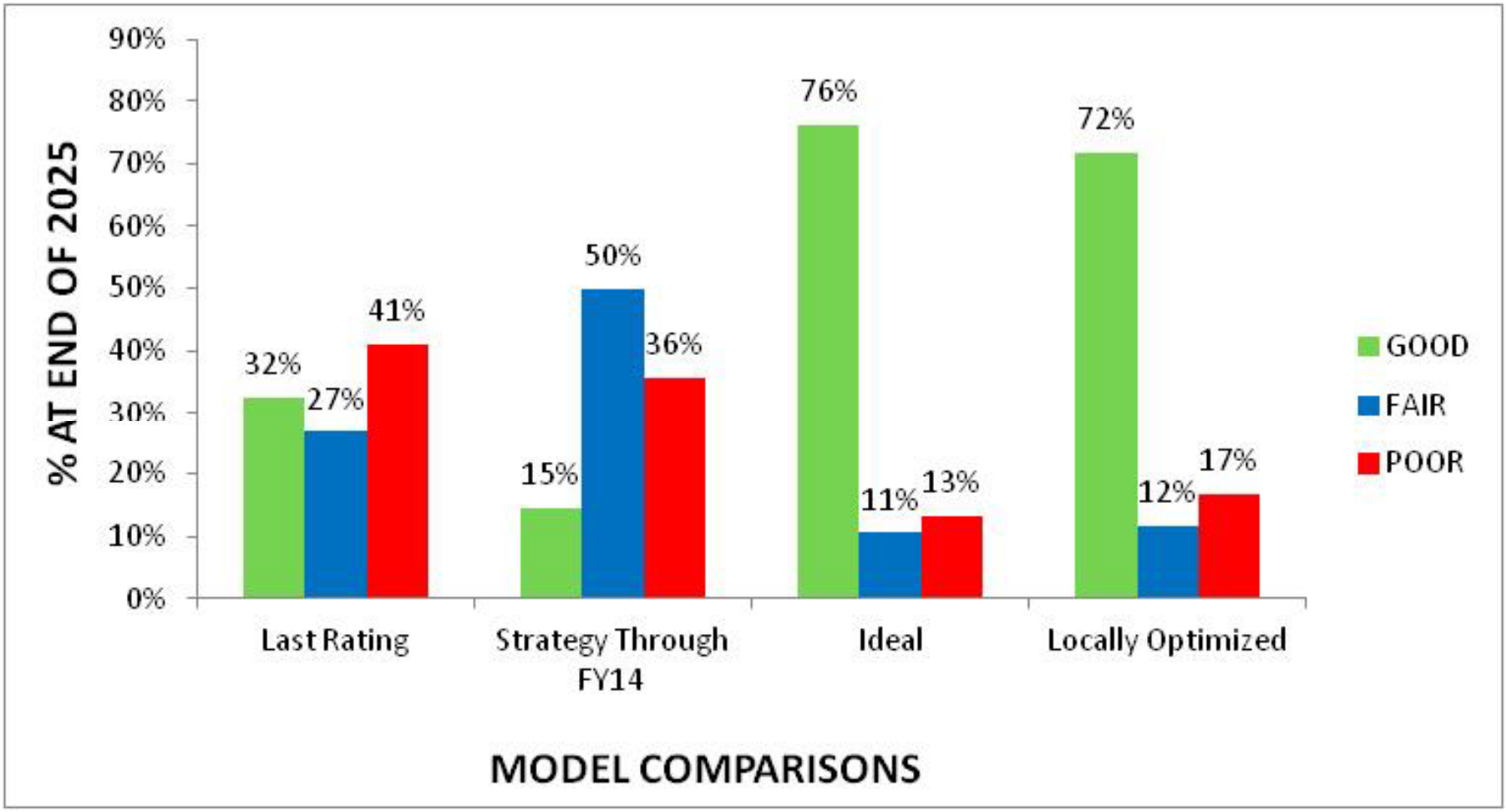
BE GUIDED BY THE PRINCIPALS OF THE IDEAL MODEL

BUT ADJUST TO LOCAL CONDITIONS

Locally Optimized Model: $13M/Annual

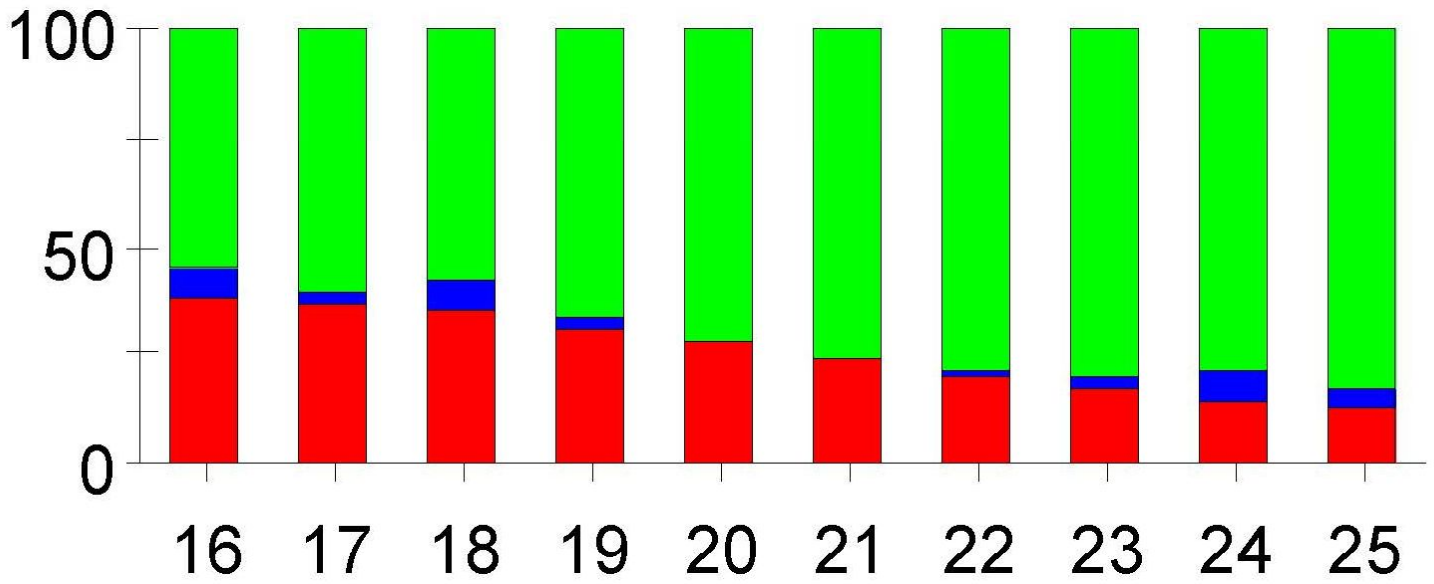


Model Comparisons:

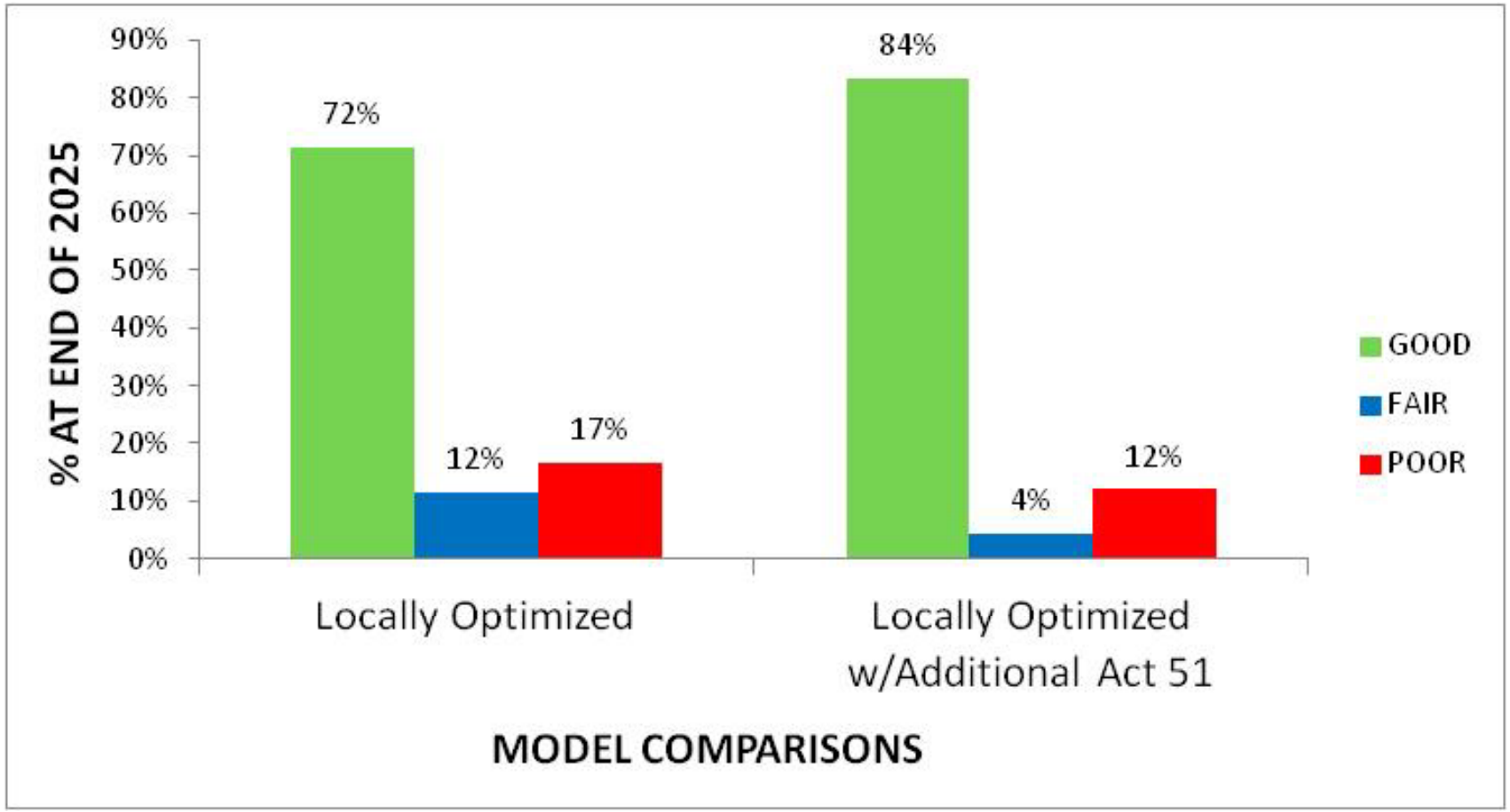


Effects on Model with Additional Act 51 Funds

Effects of Using 50% of Additional Act 51 Funds on the Locally Optimized Model



Locally Optimized Model Comparisons



Setting Target Level of Service

- Council set a dashboard goal to strive for “Roads that are rated better than fair”

- As of Last PASER Rating:
- Local = 39% are 7 or better
- Majors = 45% are 7 or better

- Staff Recommended LOS by 2025:
- Locals = 80% are 7 (Good) or better
- Majors = 80% are 7 (Good) or better

Model Adjustments and Check-Ins

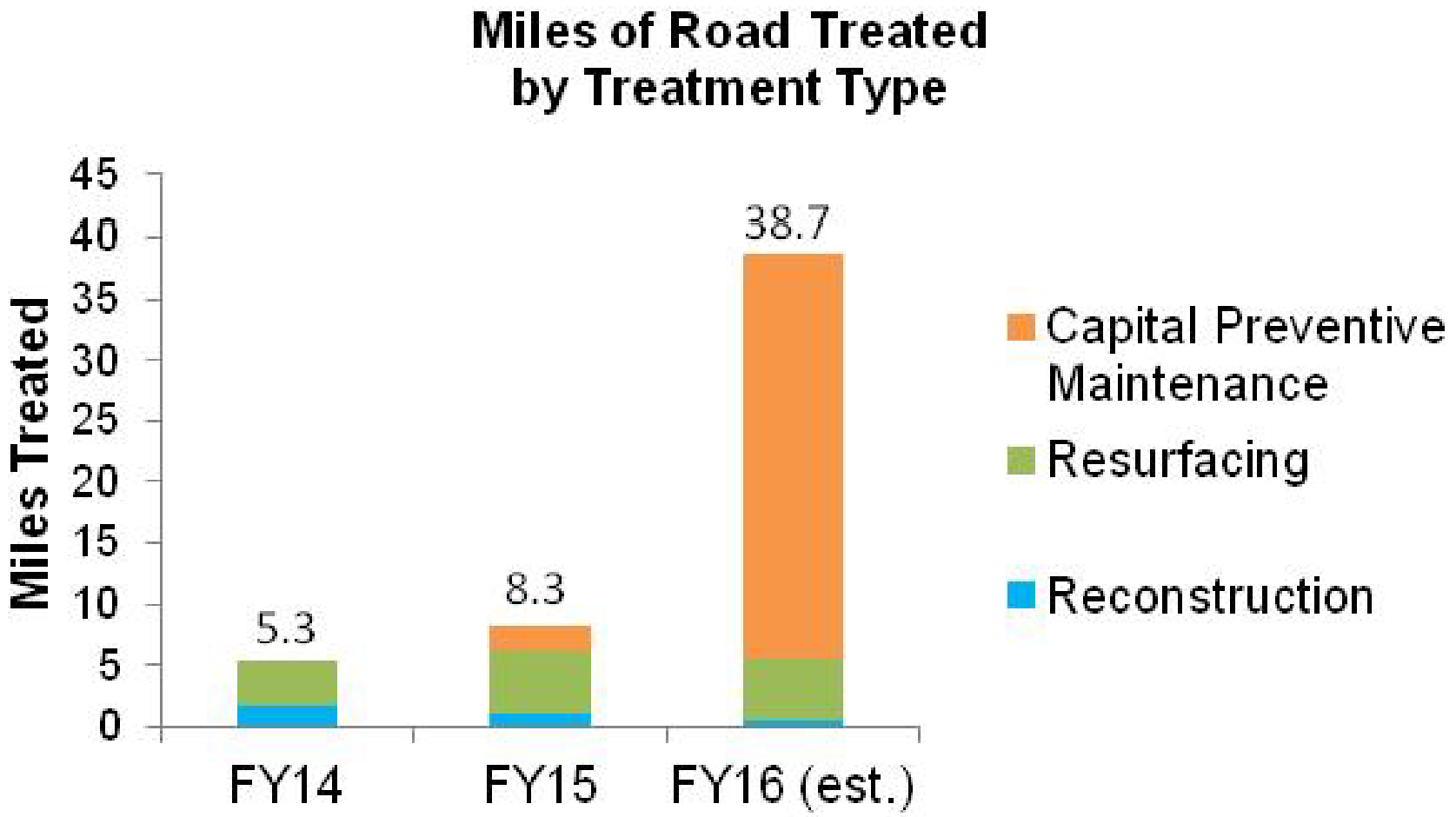
To Assess Progress Towards Target Level of Service:

- We will obtain PASER ratings every 3 years
- Based on new ratings, treatment performances will be assessed
- Global progress towards 10 year target Level of Service will be evaluated
- Model will be adjusted as needed

The 2016 Paving Season

- Stadium (Hutchins to Kipke) and Geddes (Huntington to Hickory) will be major street **reconstruction** projects
- The annual Major and Local Street **Resurfacing** program will continue
- $2.4 million of County millage funding will be utilized on Capital Preventive Maintenance (CPM) projects using **thin mill and fill**
- A $2 M Capital Preventive Maintenance treatment program utilizing **crack sealing, cape sealing,** and **micro-surfacing** is planned

Miles of Roadway Receiving Treatment



Questions?

THANK YOU SO MUCH FOR YOUR TIME

EXHIBIT F

Pavement Asset Management Plan Update Presentation to City Council

April 9, 2018

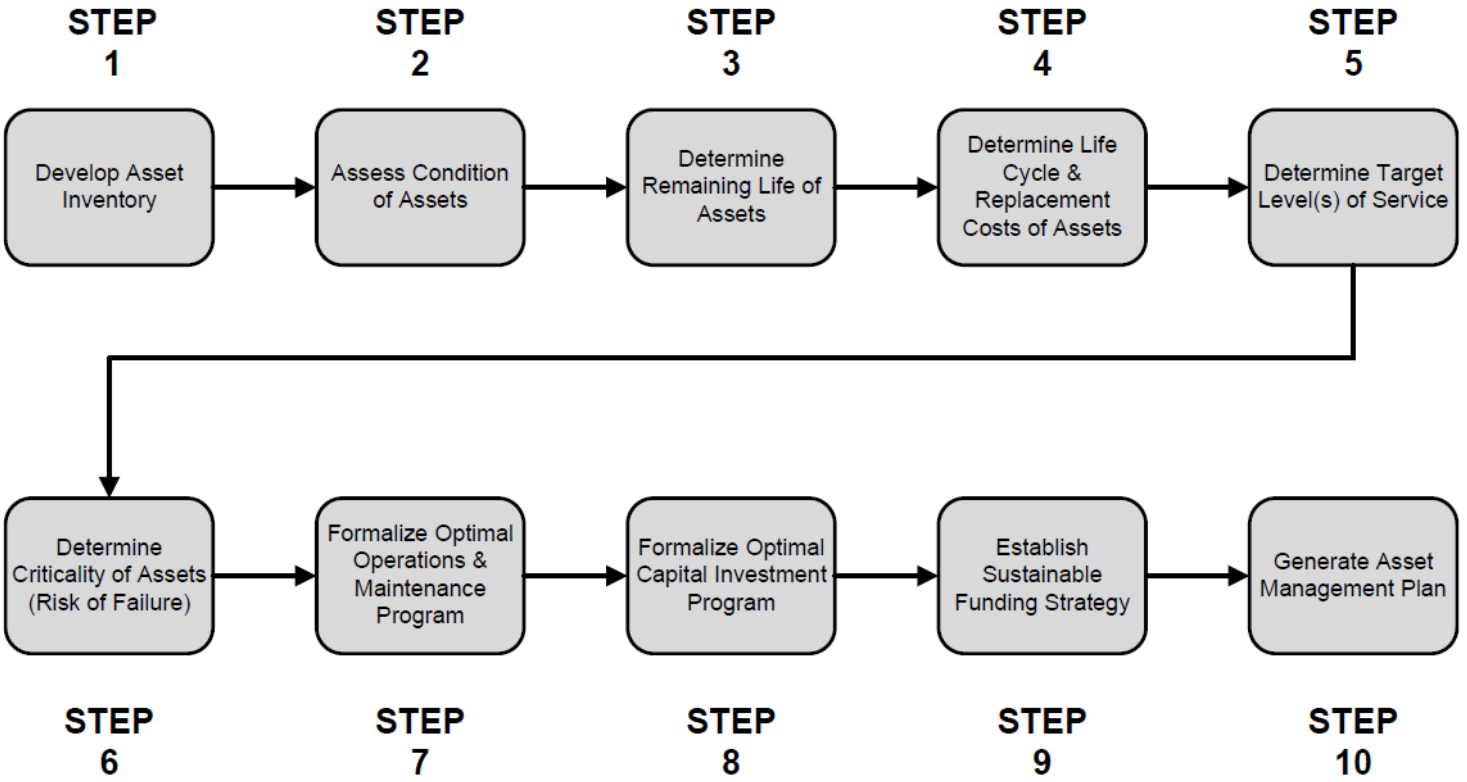
Building for Tomorrow – Infrastructure and Projects

PRESENTATION TO
ANN ARBOR CITY COUNCIL
APRIL 9, 2018

Agenda

- Asset Management Plan Process Refresher
- Pavement Asset Management Plan and Street Ratings Update
- Bridge Asset Management Plan
- Streetlight Asset Management Plan
- Sanitary Sewer Asset Management Plan Progress
- Stormwater Asset Management Plan Progress
- Water Asset Management Plan Status

CITY OF ANN ARBOR
ASSET MANAGEMENT PLAN
DEVELOPMENT PROCESS



Pavement Asset Mgt. and Street Ratings

Council Goal: Fix Our Roads

Priority: Repairs/Reconstruction of Roads

Responsible Service Area(s): Public Services

Problem(s): Deteriorated Road Infrastructure

Indicator(s):

- Miles of roadway receiving treatment
- System-wide pavement condition rating

Sustainability Framework Goals Impacted:

- Transportation Options
- Sustainable Systems
- Integrated Land Use
- Human Services
- Safe Community
- Economic Vitality

Target Level of Service

- Council originally set a goal to strive for “Roads that are rated better than fair”
- After staff presentations, Council acknowledged LOS Goals for 2025 as:
- Locals = 80% are 7 (Good) or better
- Majors = 80% are 7 (Good) or better

Key Paradigm Shift in 2014:

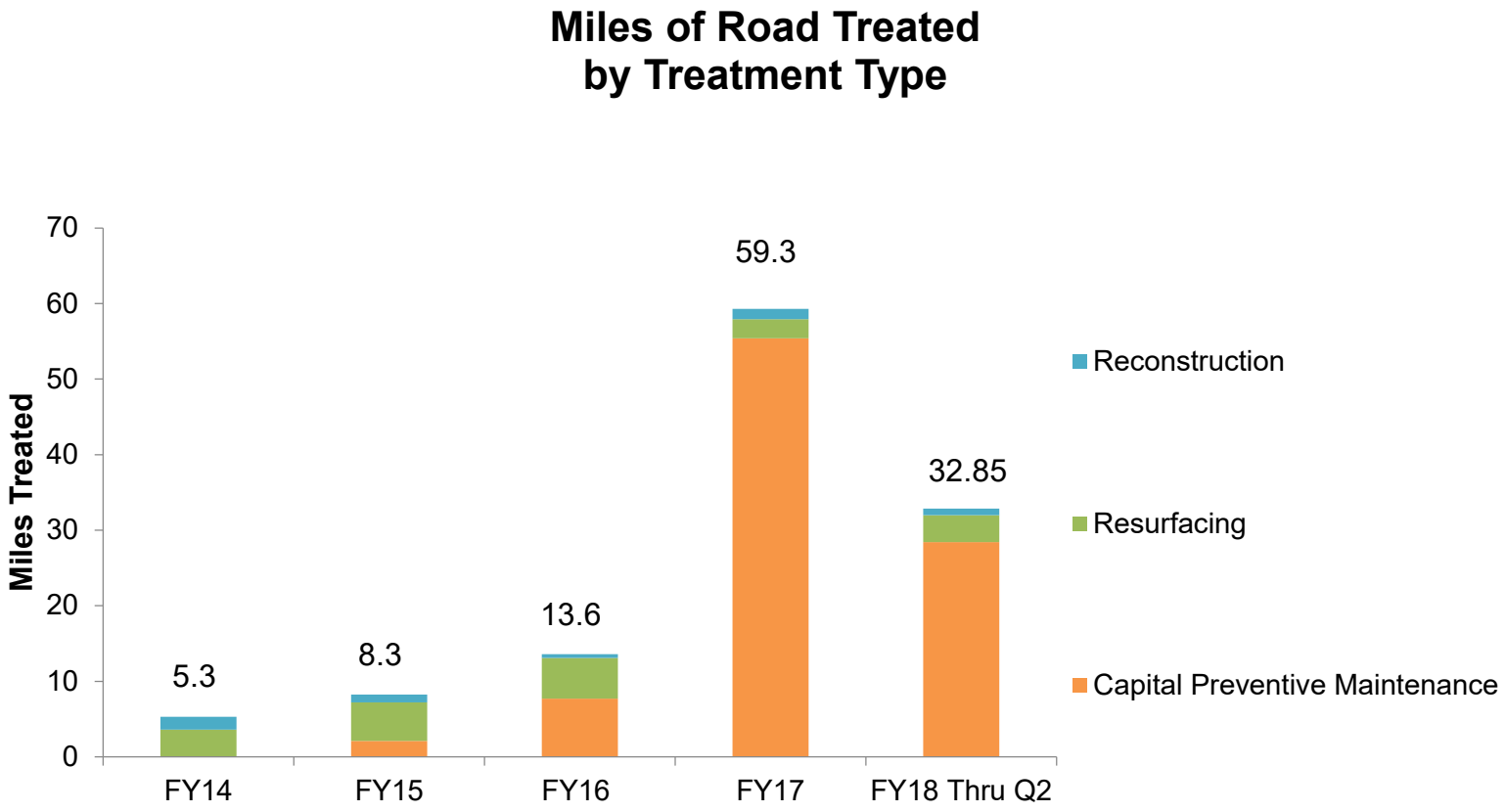
Adding Capital Preventive Maintenance

- "The right fix at the right time" is the pavement asset management mantra
- The City began expanding its "mix of fixes" beyond the three basic treatments of Routine Maintenance, Resurfacing, and Reconstruction
- An intermediate fix category called Capital Preventive Maintenance ("CPM") began to be utilized

New CPM Techniques Utilized to Date:

- Began an aggressive crack sealing program
- Began utilizing a thin mill and fill technique on Major roads (increase ratings from 5 to 9)
- Began preparatory work in Fall 2017 for new surface treatments to be initiated this Spring
- Initial emphasis was on Major streets

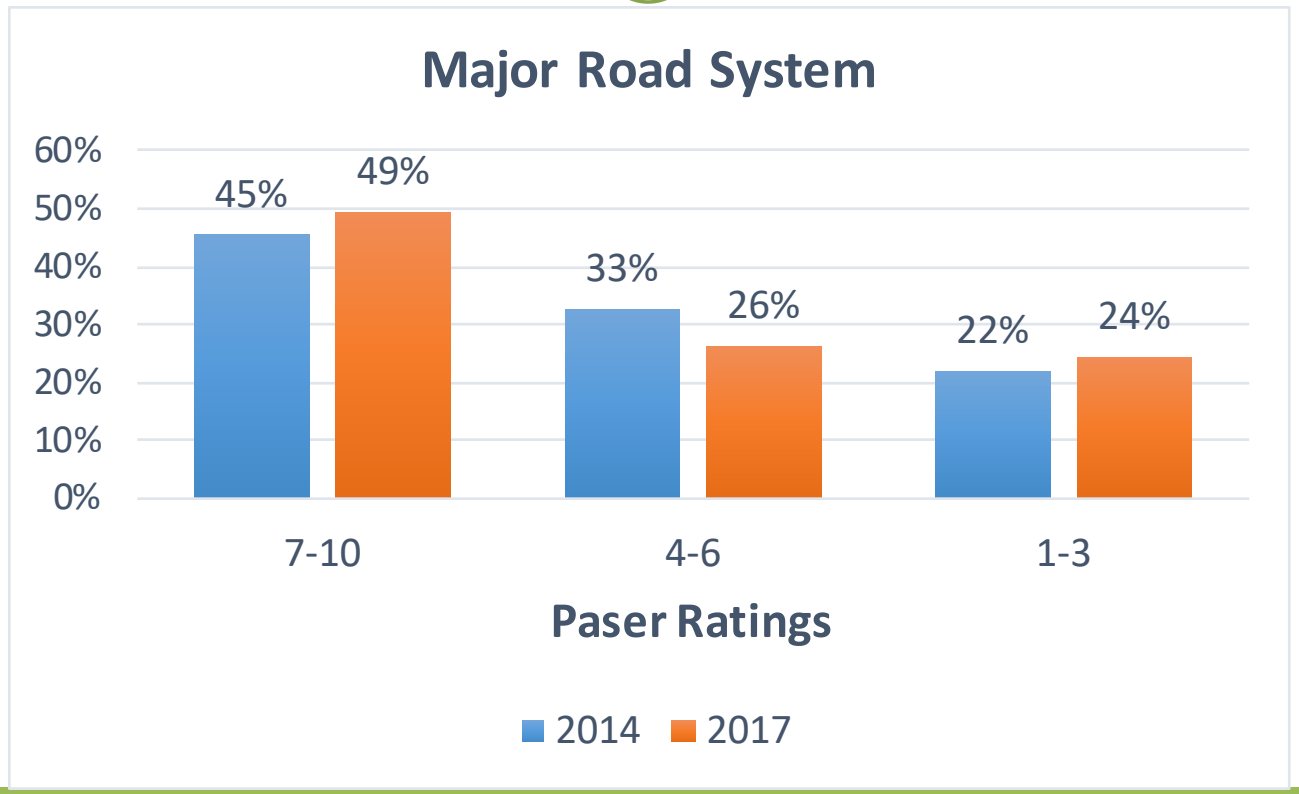
Progress on Miles of Road Treated



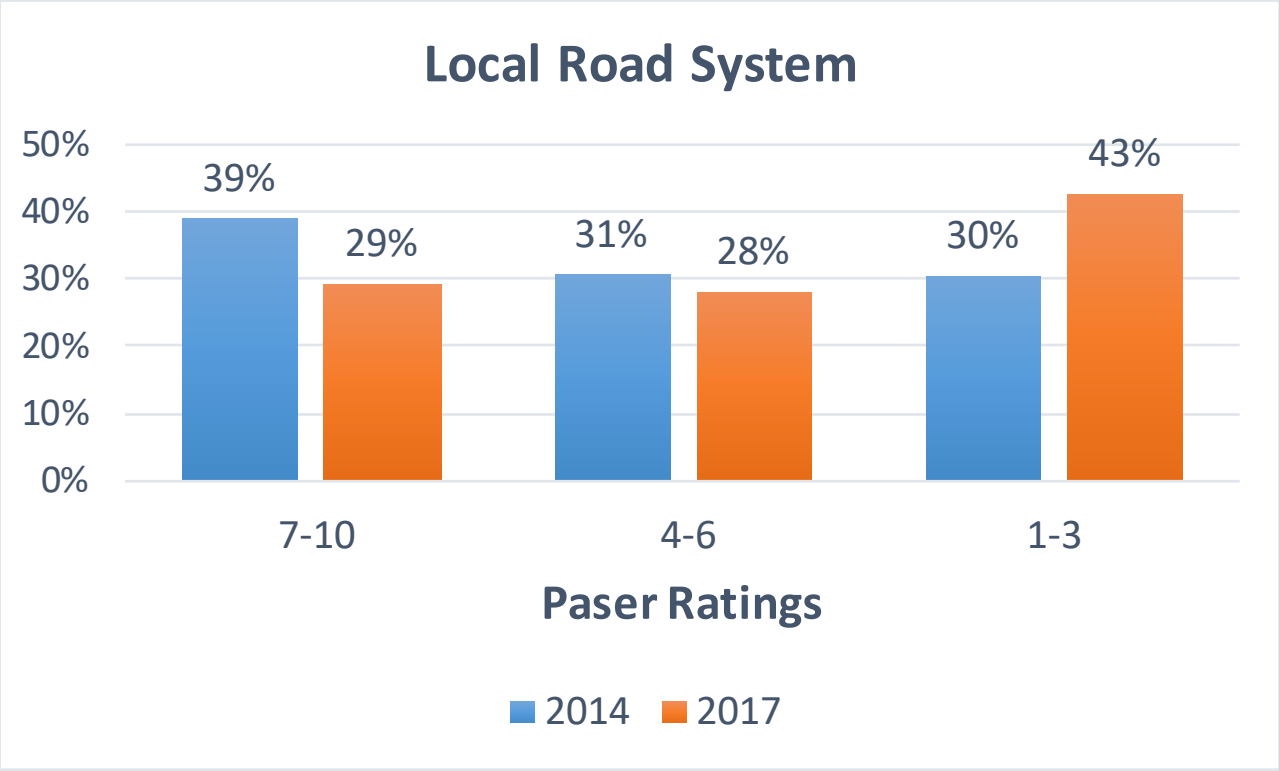
Ratings Efforts To Date:

- Consultant TransMap rated all streets in Spring 2014
- Staff presented those ratings to City Council
- Consultant rated all streets again in June 2017

PASER Ratings: Major Streets



PASER Ratings: Local Streets



Challenges and Strategies re Local Streets

- For Local Streets, initial concentration was on crack sealing as a CPM measure; this extends the time during which streets stay at a rating of 7 or above but does not elevate Fair or Poor roads into the target Good category

- This spring, the City will be undertaking a significant project to apply surface treatments as a new CPM technique for both Major and Local streets; this treatment will elevate streets in Fair condition (ratings of 5-6) to the target Good category (7 or better)

- Outside funding sources are heavily geared toward Major Streets and yet Local Streets represent about 2/3 of street mileage

- We are in the “darkness before the dawn” stage!

Next Steps

- Undertaking a significant Pavement Asset Management Model update
- Investigating idea of separate models for Local and Major streets
- Continuing the progress being made on Major Streets
- Pursuing aggressive surface treatment strategy for Local streets

Next Steps

- Switching PAVER to PASER
- Believe conversion overstates the Poor category
- Considering rating next year
- Resurfacing dollars will be directed to Poor streets
- Anticipate shifts in CIP projects to accomplish this

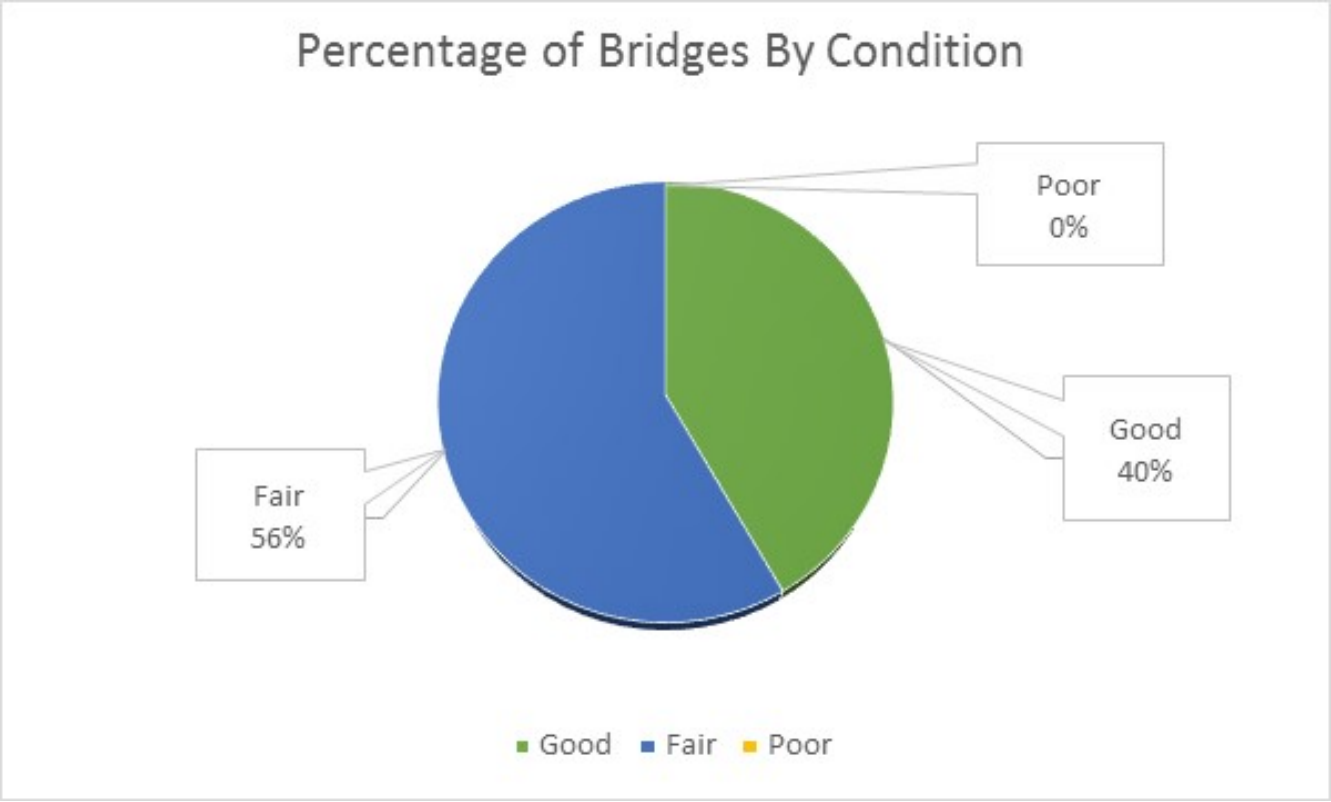
Bridge Asset Management Plan

Bridge Asset Management Plan

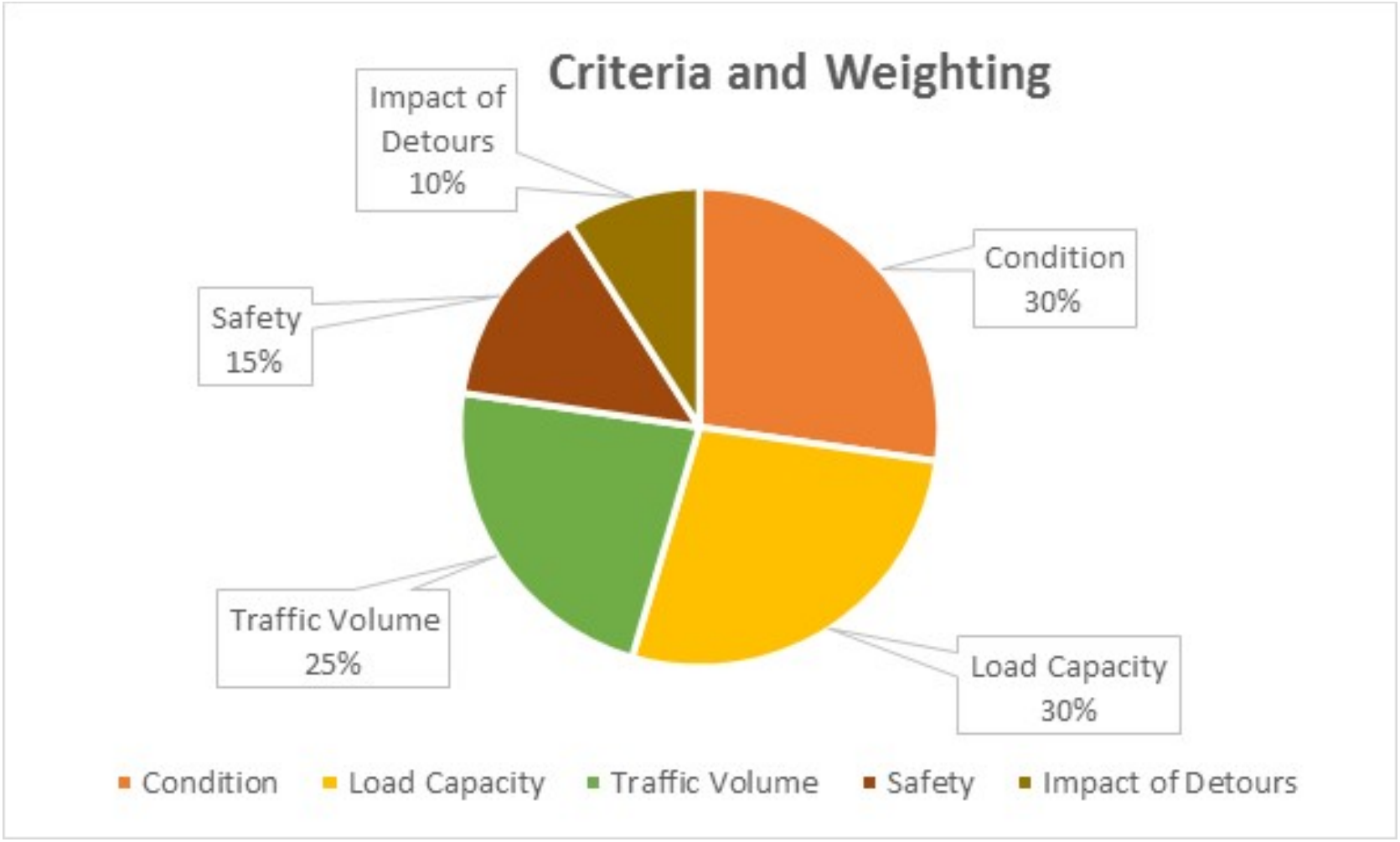
- Plan created in 2016 for cost-effective preservation of the City's 13 vehicular bridges, 1 below-grade parking structure, and 1 tunnel (inspection only)

Bridge Condition Information

- Condition assessment showed 40% in Good condition, 56% in Fair, and 0% in Poor:



Bridge Prioritization Criteria Established

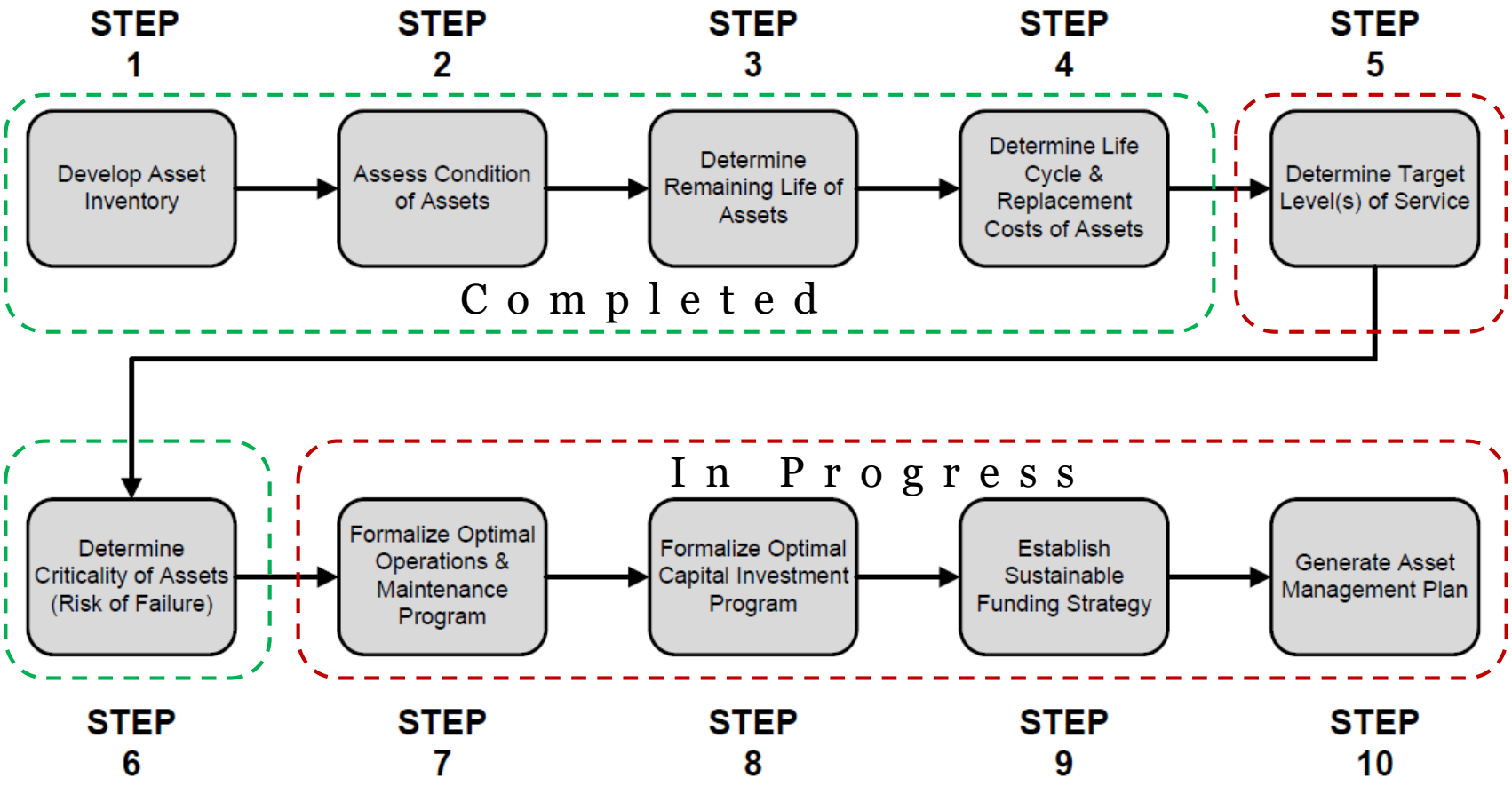


Bridge Asset Management Strategy

- Bridges are inspected every other year to update condition assessment
- Plan identifies O & M and capital strategies and needs on both an overall and bridge-by-bridge basis
- Total Funding Needs through FY2021 were identified as $3,347,000
- Federal and Local Proposed Funding Sources were identified

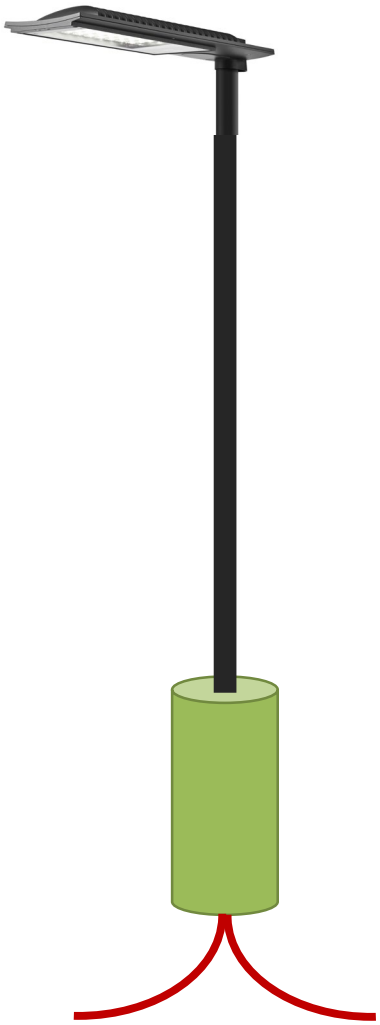
Streetlight Asset Management Plan

Streetlight Asset Management Plan Development Process



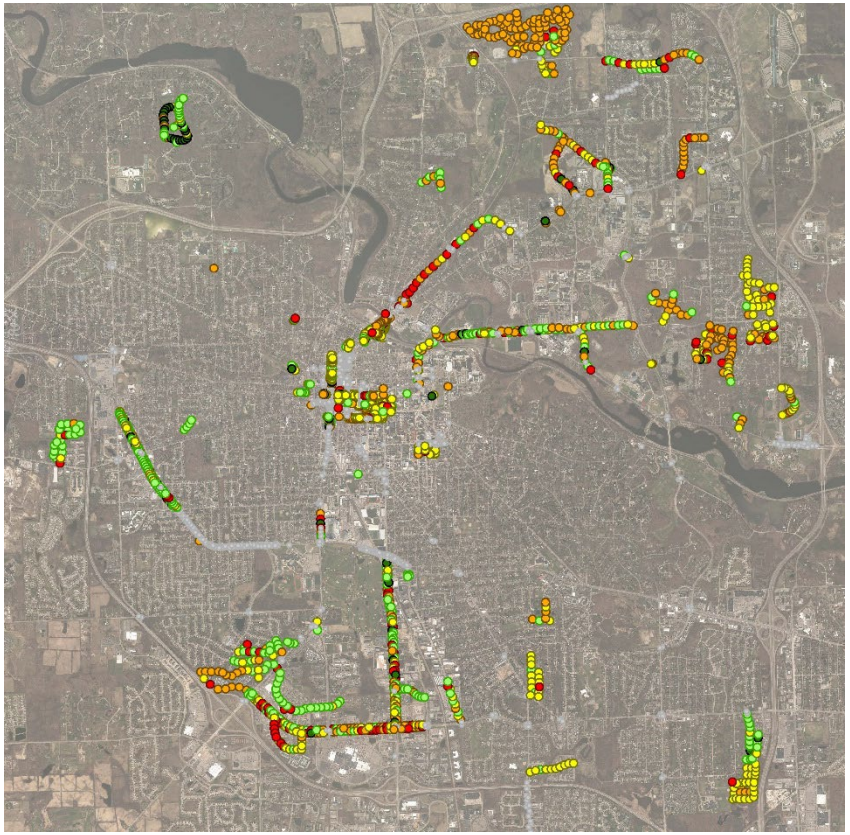
Condition Assessment Project

- Completed in 2017
  - Fill Inventory Gaps
  - Develop Condition Rating System
  - Calculate Remaining Useful Life
  - Prioritize and Budget Replacement and Repairs
- Evaluated Four Components
  - Luminaire/Light
  - Pole
  - Foundation
  - Electrical



Condition Assessment Project

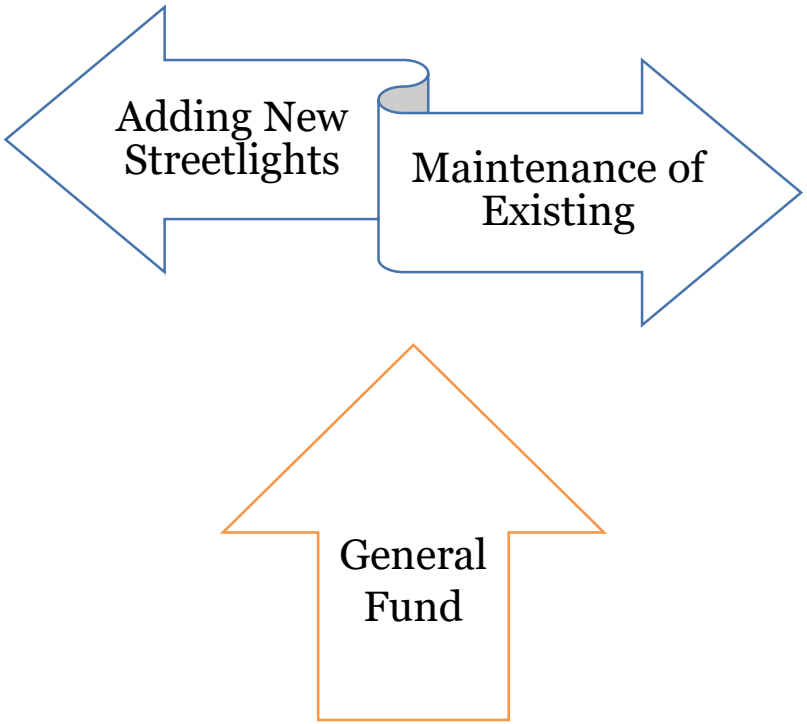
- Identified $2.6M in Repair/Replacement Needs
- Average System Score is Good
- Over 1,050 lights with one component rated marginal or lower
- Most issues related to pole condition or the electrical system



Target Level of Service

Streetlight Prioritization Model

- **Traffic**
  - Incident History
  - Incident Potential
  - Proximity to Transit Stops
  - Street Classification
- **Existing Systems**
  - City vs. DTE
  - Current Lighting Levels
- Proximity to Activity Generator/Destination
- Public Requests/Desire

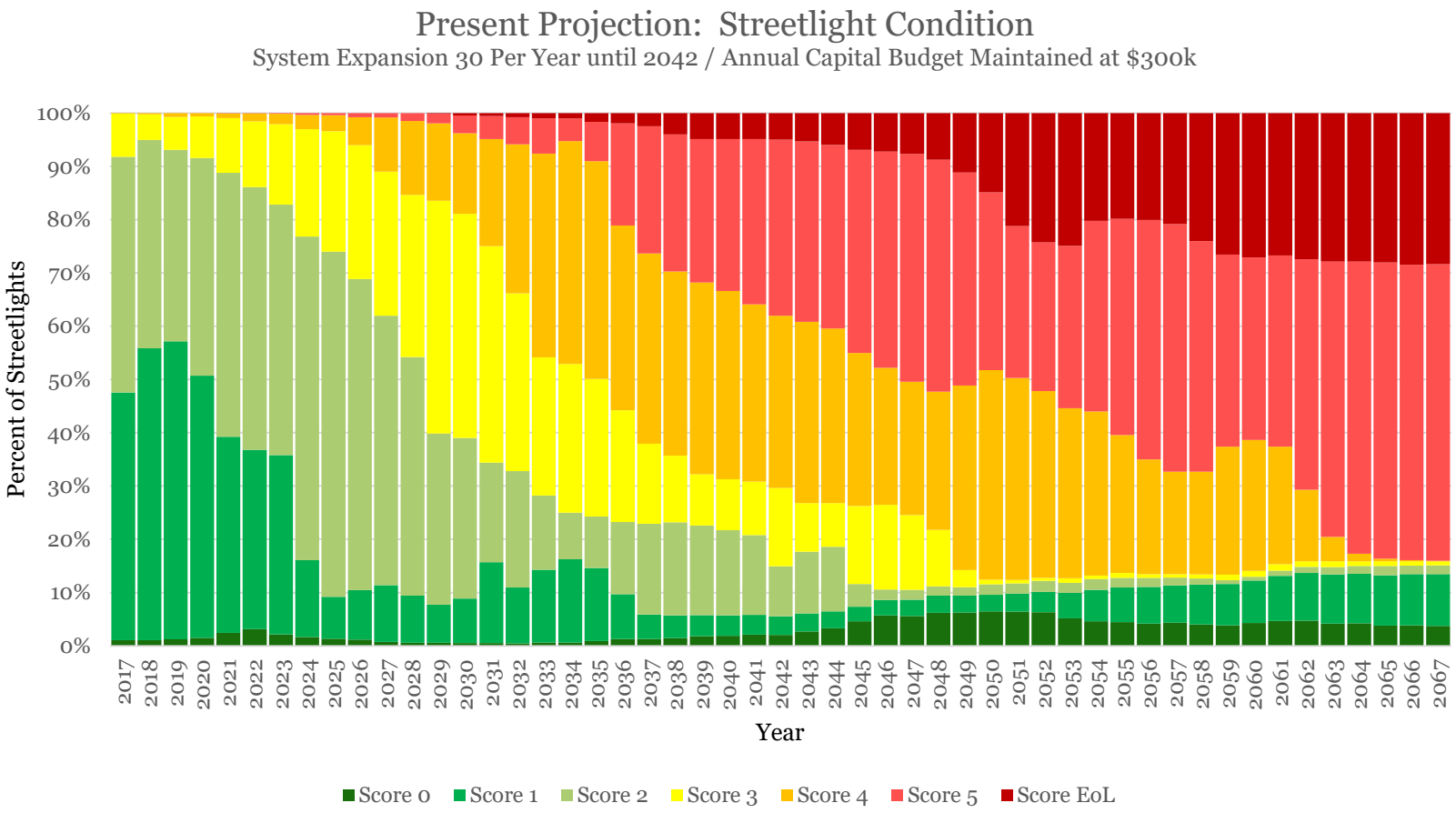


assetic predictor

Developed Asset Management Model Based on Condition Assessment Data

- Optimize Capital Funding
- Optimize O&M Plan
- Prioritize Repair/Replacement

Asset Management Model



Asset Management Model

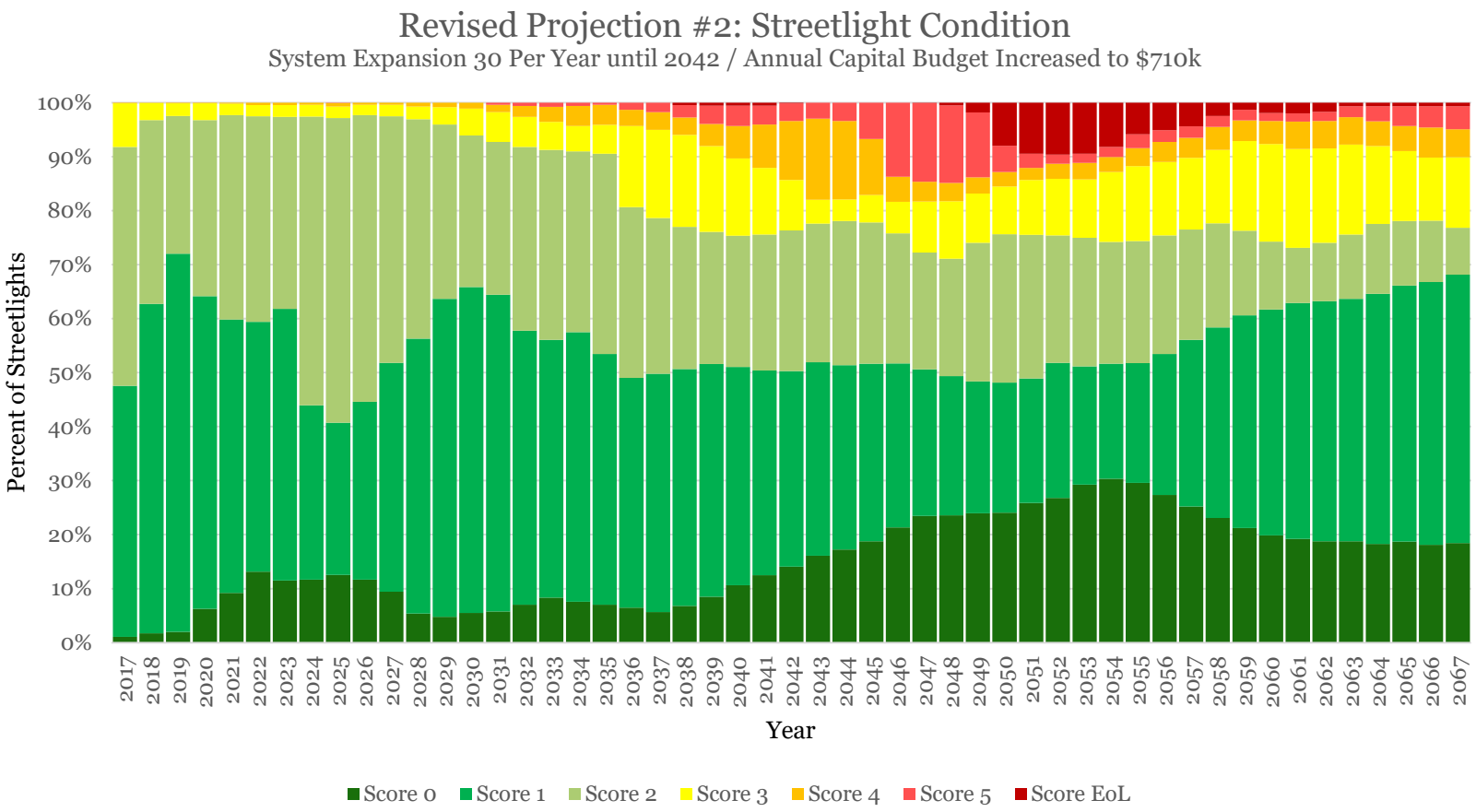


EXHIBIT G

Pavement Asset Management Plan Update Presentation to City Council

December 2019

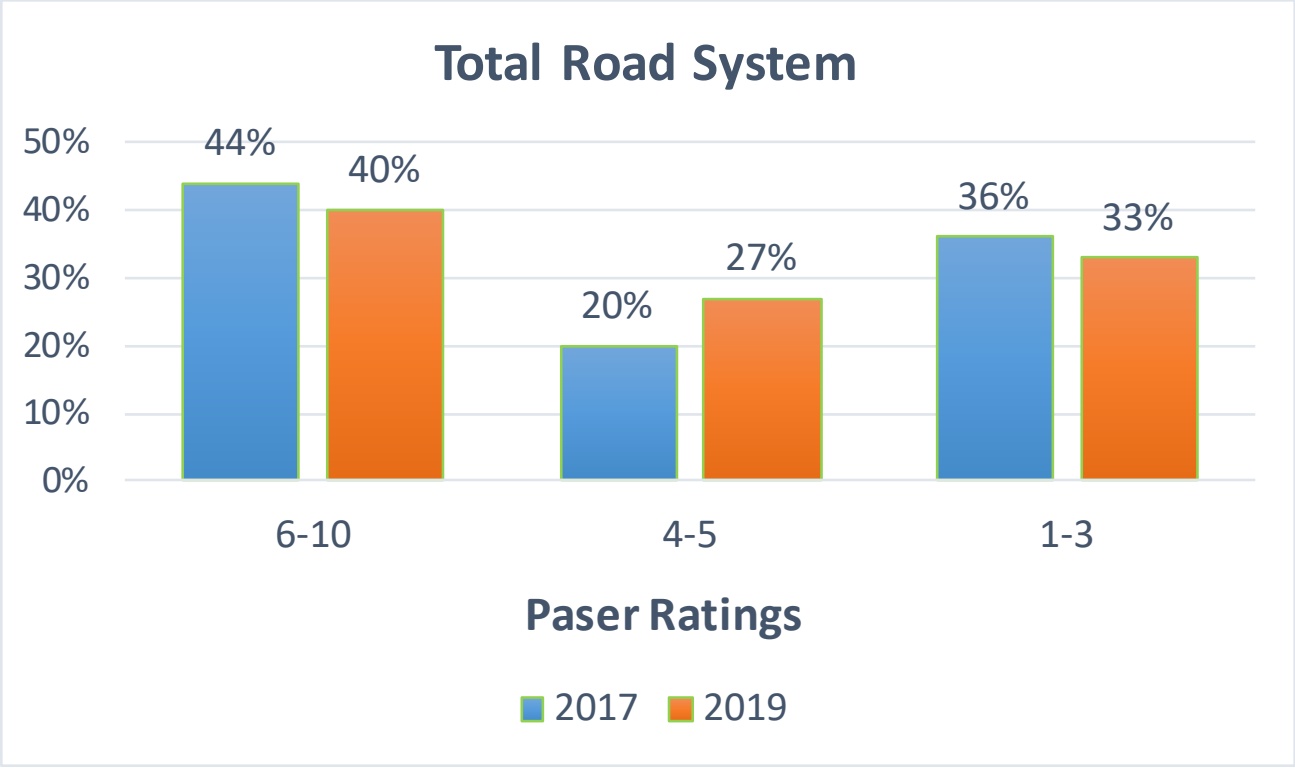
City of Ann Arbor
Pavement Condition Update

CITY COUNCIL PLANNING SESSION
DECEMBER 8, 2019

Current Target Level of Service

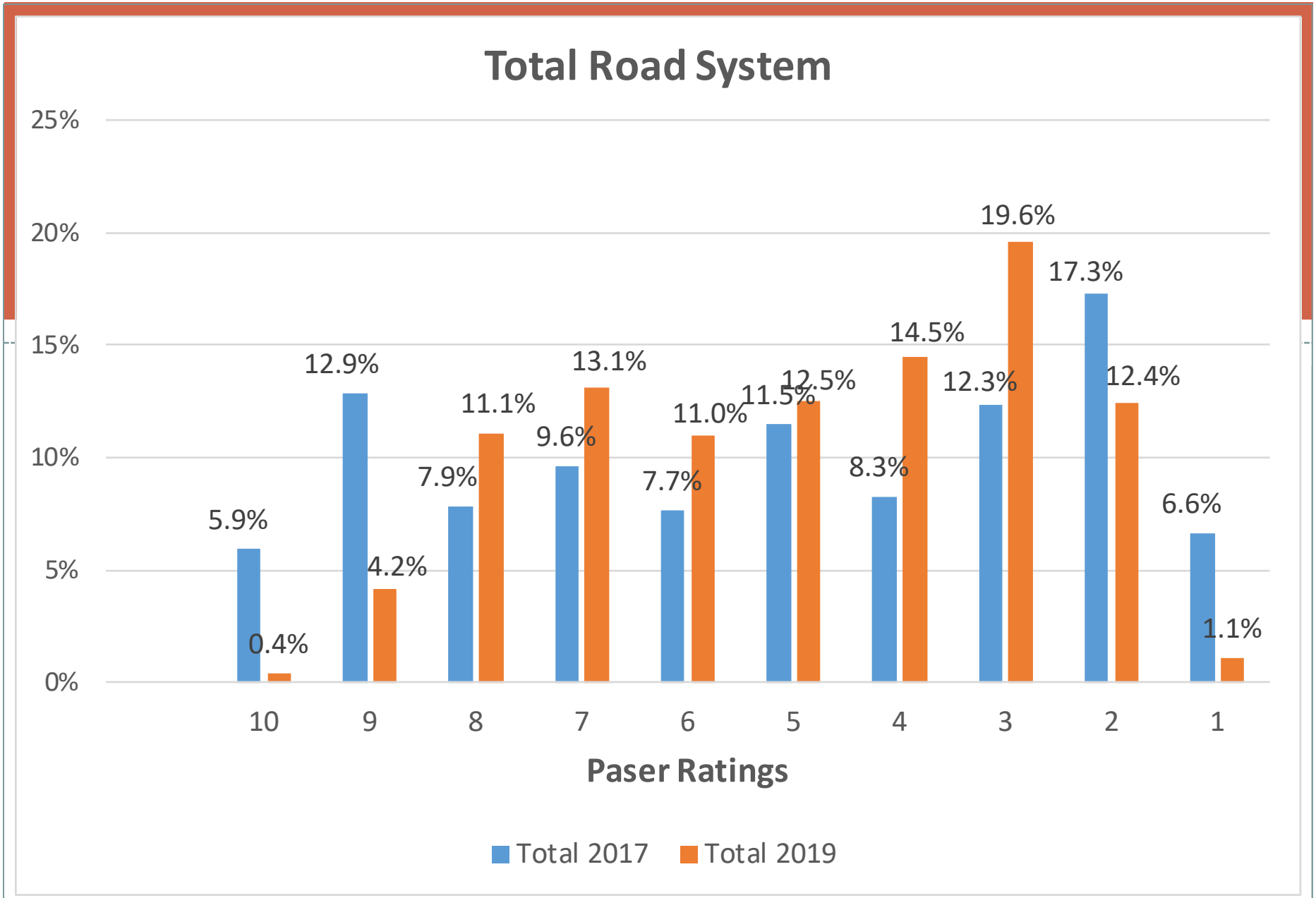
- Council set a dashboard goal to strive for “Roads that are rated better than fair”
- Recommended LOS by 2025:
- Locals = 80% are 7 (Good) or better
- Majors = 80% are 7 (Good) or better

Condition Comparison: 2017 vs. 2019



Observations on Data

- Data currently being reviewed by staff
- Previous ratings performed in PAVER system; may not be readily comparable to current PASER system
- Previous system overrepresented the “extremes” (i.e. ratings of 9&10 and 1)
- Data is showing in increase in the middle ranges (moving more towards a bell curve)
- Staff to continue working on modeling and planning for coming 2020 Asset Management Plan Update requirement from the State


Total Road System
25%
20%
15%
10%
5%
0%
5.9%
0.4%
12.9%
4.2%
7.9%
11.1%
9.6%
13.1%
7.7%
11.0%
11.5%
12.5%
8.3%
14.5%
12.3%
19.6%
17.3%
12.4%
6.6%
1.1%
10
9
8
7
6
5
4
3
2
1
Paser Ratings
Total 2017
Total 2019

	Total 2017	Total 2019
	Percent	Percent
10	5.9%	0.4%
9	12.9%	4.2%
8	7.9%	11.1%
7	9.6%	13.1%
6	7.7%	11.0%
5	11.5%	12.5%
4	8.3%	14.5%
3	12.3%	19.6%
2	17.3%	12.4%
1	6.6%	1.1%
	100%	100%

Condition Comparison: 2017 vs. 2019 (using 7-10)

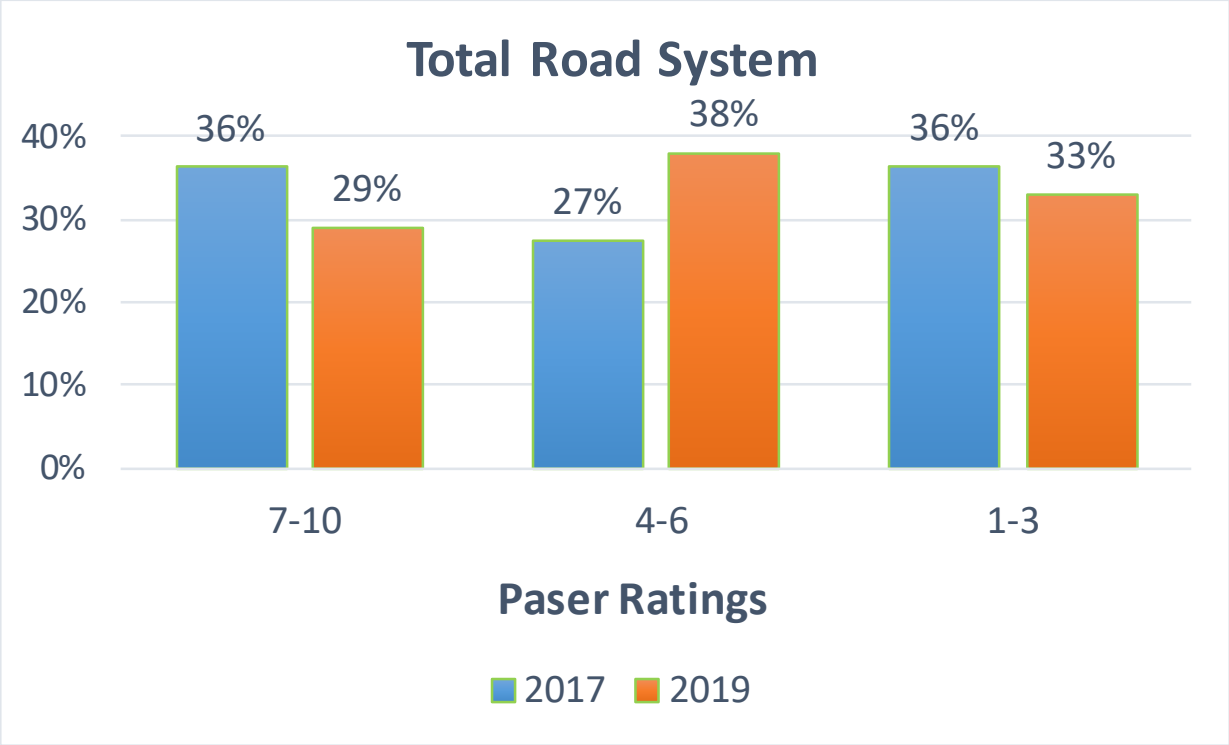


EXHIBIT H

Sustainability Framework Goals

CLIMATE AND ENERGY

Sustainable Energy – Improve access to and increase use of renewable energy by all members of our community

Energy Conservation – Reduce energy consumption and eliminate net greenhouse gas emissions in our community

High Performance Buildings – Increase efficiency in new and existing buildings within our community

COMMUNITY

Engaged Community - Ensure our community is strongly connected through outreach, opportunities for engagement, and stewardship of community resources

Diverse Housing - Provide high quality, safe, efficient, and affordable housing choices to meet the current and future needs of our community, particularly for homeless and low-income households

Human Services - Provide services that meet basic human needs of impoverished and disenfranchised residents to maximize the health and well-being of the community

Safe Community - Minimize risk to public health and property from manmade and natural hazards

Active Living and Learning - Improve quality of life by providing diverse cultural, recreational, and educational opportunities for all members of our community

Economic Vitality - Develop a prosperous, resilient local economy that provides opportunity by creating jobs, retaining and attracting talent, supporting a diversity of businesses across all sectors, and rewarding investment in our community

LAND USE AND ACCESS

Transportation Options - Establish a physical and cultural environment that supports and encourages safe, comfortable and efficient ways for pedestrians, bicyclists, and transit users to travel throughout the city and region

Sustainable Systems - Plan for and manage constructed and natural infrastructure systems to meet the current and future needs of our community

Integrated Land Use - Encourage a compact pattern of diverse development that maintains our unique sense of place, preserves our natural systems, and strengthens our neighborhoods, corridors, and downtown

RESOURCE MANAGEMENT

Clean Air and Water - Eliminate pollutants in our air and water systems

Healthy Ecosystems - Conserve, protect, enhance, and restore our aquatic and terrestrial ecosystems

Responsible Resource Use - Produce zero waste and optimize the use and reuse of resources in our community

Local Food - Conserve, protect, enhance, and restore our local agriculture and aquaculture resources

EXHIBIT I

Street Sweeping Map

Major and Local Sweep Routes

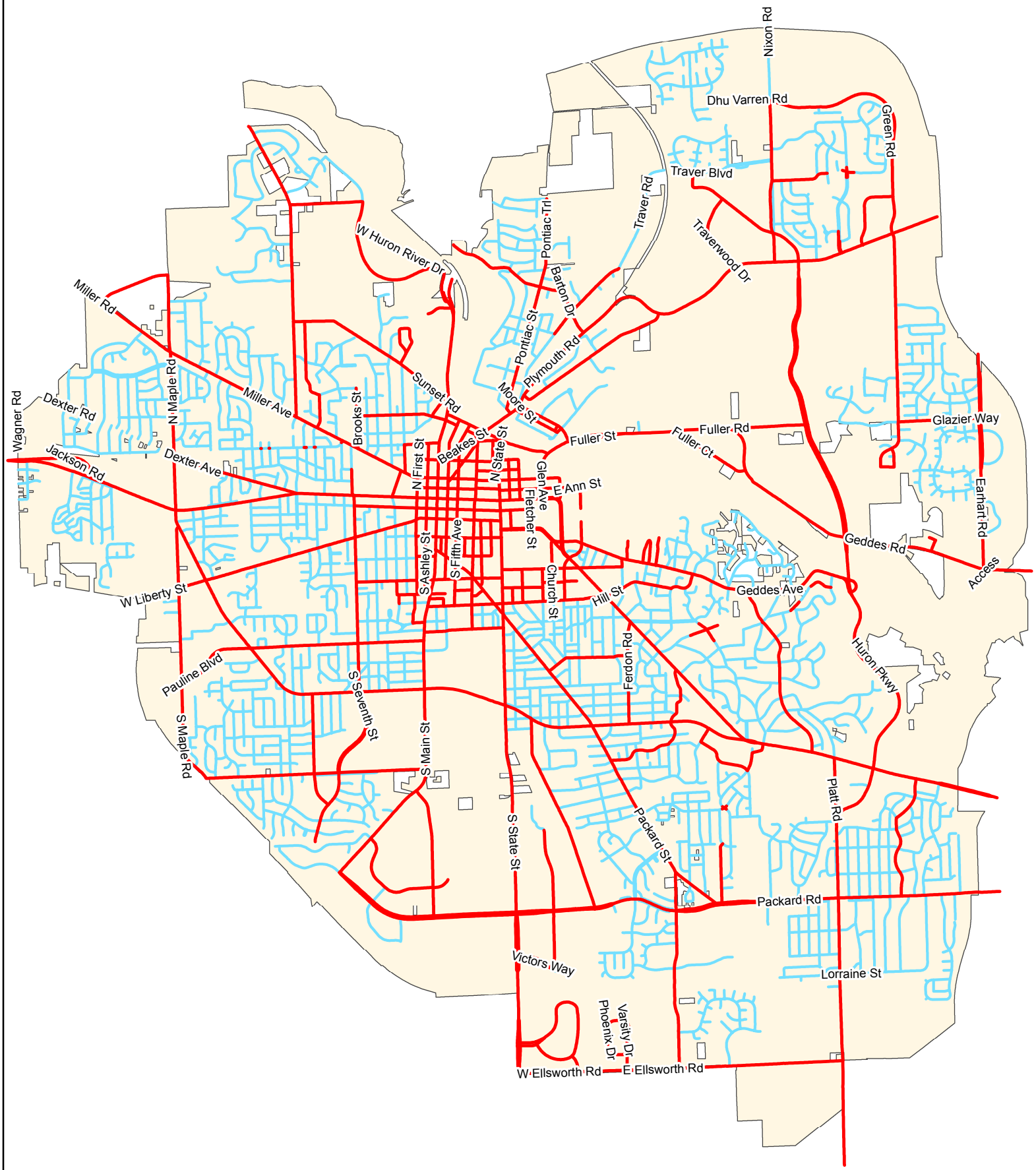
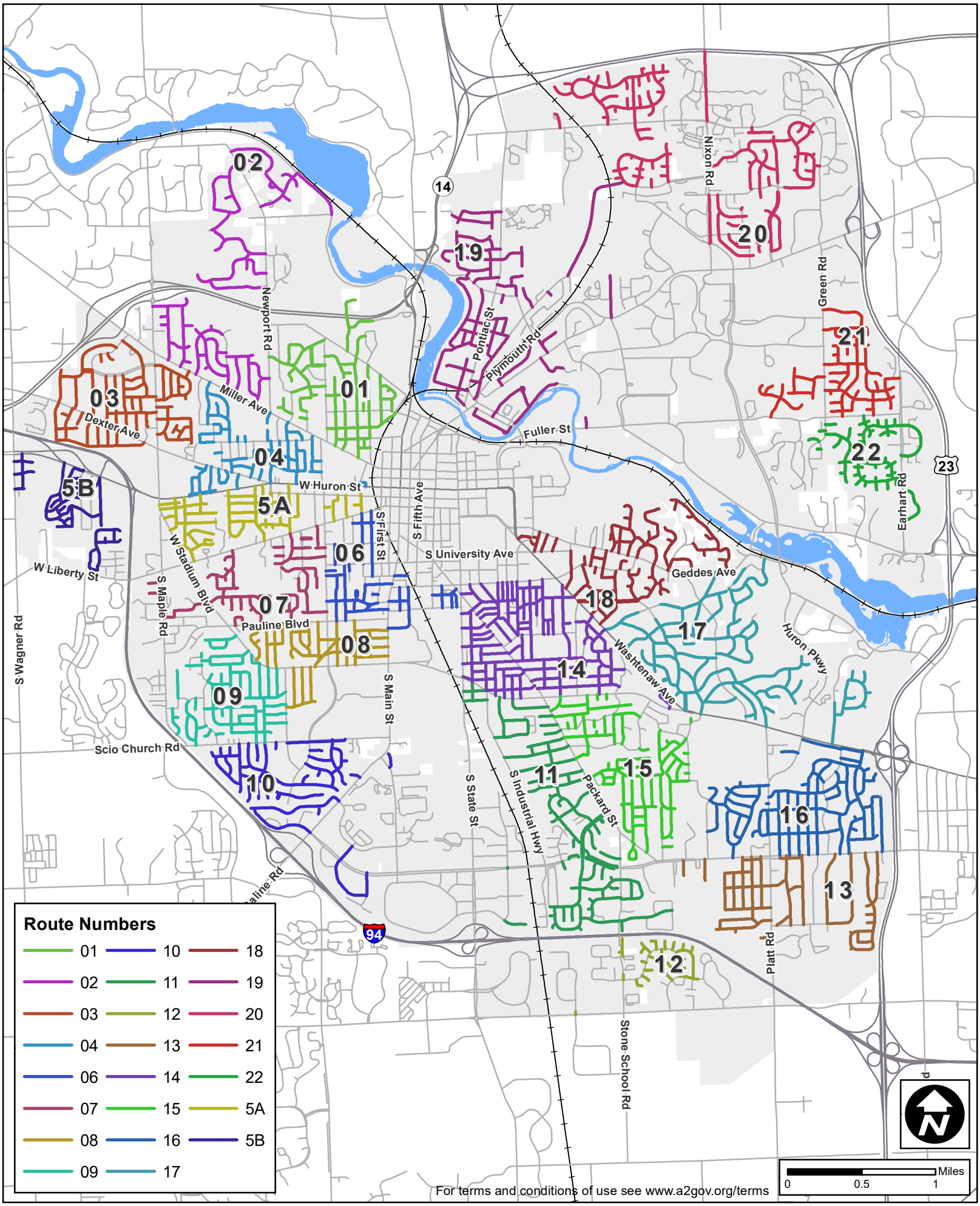


EXHIBIT J

Snow Plow Routes Map

Plow Routes


02
14
19
Nixon Rd
20
Green Rd
21
03
Dexter Ave
Miller Ave
Newport Rd
01
Pontiac St
Plymouth Rd
Fuller St
22
23
Earhart Rd
04
W Huron St
5B
5A
S Fifth Ave
S First St
06
S University Ave
W Liberty St
S Wagner Rd
W Stadium Blvd
S Maple Rd
07
Pauline Blvd
08
Geddes Ave
18
17
Huron Pkwy
Washtenaw Ave
14
09
S Main St
Scio Church Rd
10
11
15
S Industrial Hwy
Packard St
S State St
16
13
12
Platt Rd
Stone School Rd
94
Route Numbers
01
02
03
04
06
07
08
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10
11
12
13
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15
16
17
18
19
20
21
22
5A
5B
N
Miles
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0.5
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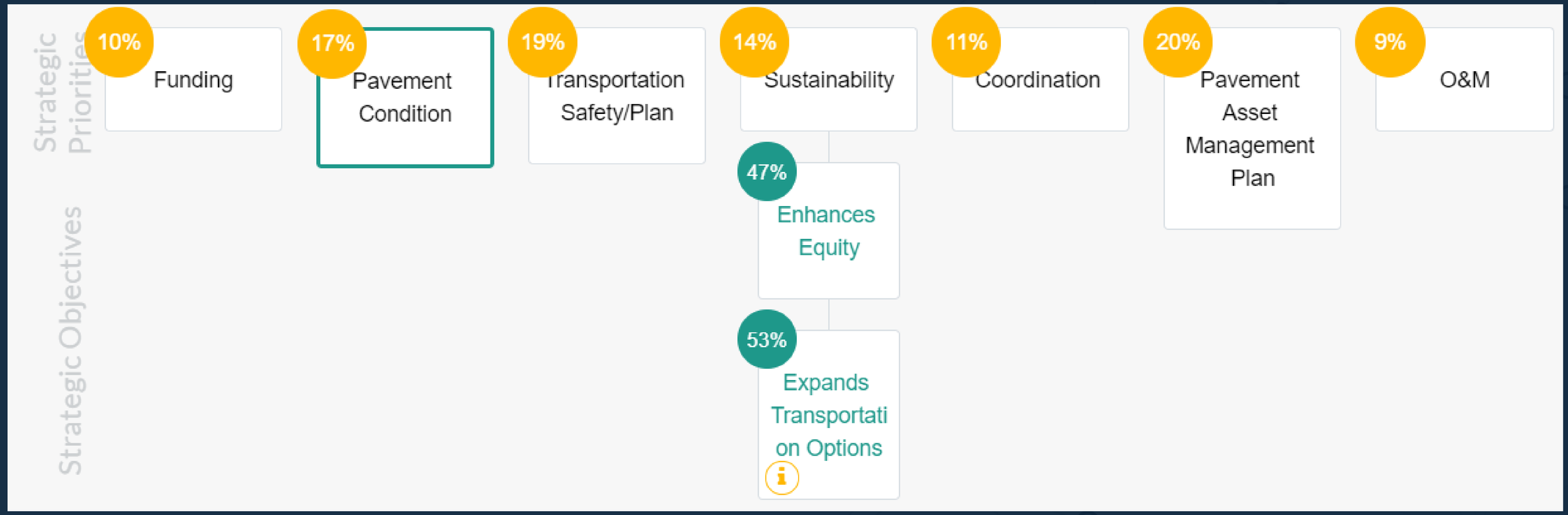
EXHIBIT K

Streets Strategic Value Scorecard and Metrics

Strategic Value Scorecard - Streets



QUANTIFY

PRIORITY: O&M

Set the criteria for each level of the scale for *O&M*

Low Desirability

- Has a net increase (i.e. adds facilities) in O&M

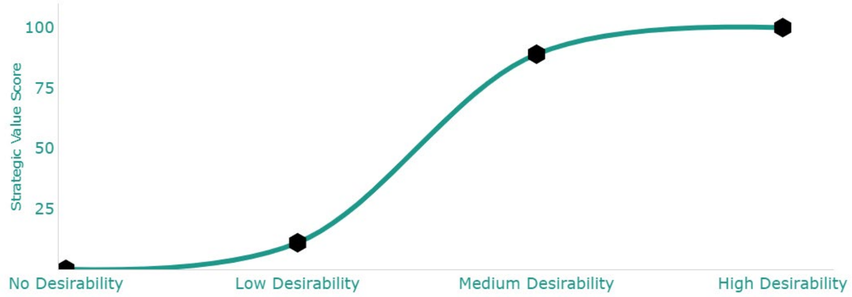
Medium Desirability

- A modest contribution to O&M cost reduction (i.e. nonstructural improvements)

High Desirability

- A significant contribution to O&M cost reduction (i.e. structural improvements)

Resulting scale for *O&M*



QUANTIFY

PRIORITY: COORDINATION

Set the criteria for each level of the scale for *Coordination*

Low Desirability

- A project that has minimal interaction with other asset groups

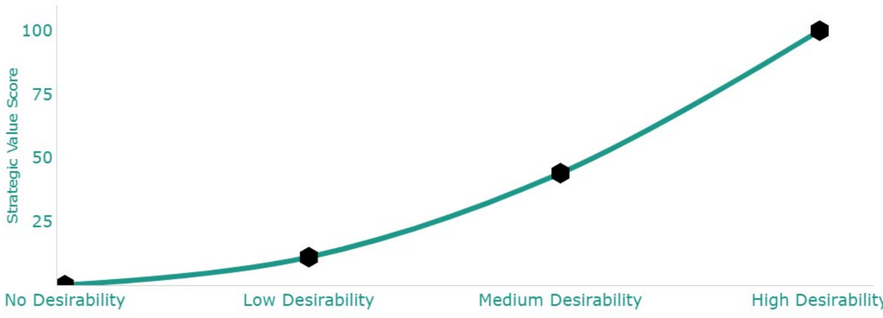
Medium Desirability

- A project that is coordinated with other asset groups resulting Modest in cost savings and minimizes disruption to the public OR
- Has partnership with external agencies that minimize disruption to the public AND/OR provides opportunity to increase consistency across jurisdictional boundary

High Desirability

- A project that is coordinated with other asset groups resulting in Significant cost savings and minimizes disruption to the public OR
- Has partnership with external agencies that minimize disruption to the public AND/OR provides opportunity to increase consistency across jurisdictional boundary

Resulting scale for *Coordination*



QUANTIFY

PRIORITY: SUSTAINABILITY

OBJECTIVE: EXPANDS TRANSPORTATION OPTIONS

Set the criteria for each level of the scale for *Expands Transportation Options*

Low Desirability

- Maintains or improves existing active transportation and/or transit features

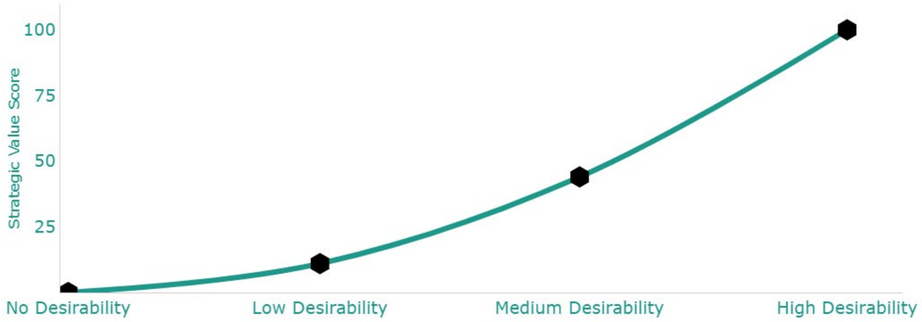
Medium Desirability

- Adds active transportation and/or transit features

High Desirability

- Prioritizes active transportation and transit

Resulting scale for *Expands Transportation Options*



QUANTIFY

PRIORITY: SUSTAINABILITY

OBJECTIVE: ENHANCES EQUITY

Set the criteria for each level of the scale for *Enhances Equity*

Low Desirability

Project occurs in a neighborhood with a low percentage of households in poverty (less than 1%) **AND…**

Medium Desirability

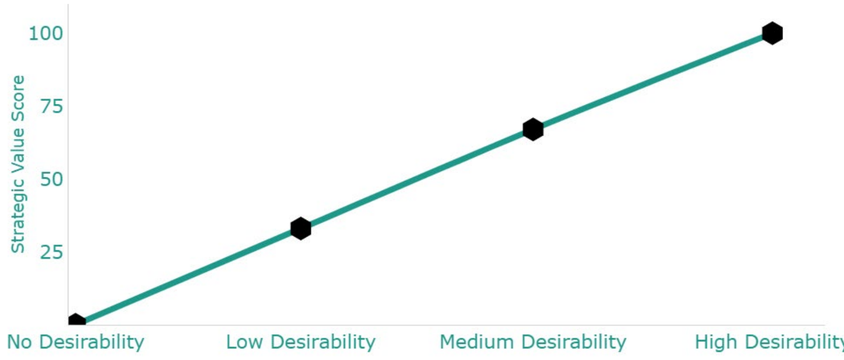
Project occurs in a neighborhood with a moderate percentage of households in poverty (1-9%) **AND…**

High Desirability

Project occurs in a neighborhood with a high percentage of households in poverty (greater than 10%) **AND…**

https://headwaterseconomics.org/tools/neighborhoods-at-risk/

Resulting scale for *Enhances Equity*



QUANTIFY

PRIORITY: PAVEMENT ASSET MANAGEMENT PLAN

Set the criteria for each level of the scale for *Pavement Asset Management Plan*

Low Desirability

No significant contribution to the plan

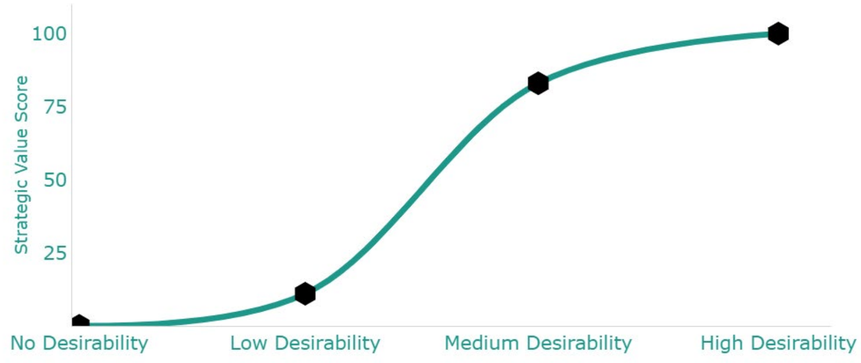
Medium Desirability

Modestly aligns with plan (utility driven projects that require higher treatment level than what the plan specifies)

High Desirability

Significantly aligns with plan (matches recommended annual investment level)

Resulting scale for *Pavement Asset Management Plan*



QUANTIFY

PRIORITY: TRANSPORTATION SAFETY/PLAN

Set the criteria for each level of the scale for *Transportation Safety/Plan*

Low Desirability

- Includes minor improvements that may improve transportation safety

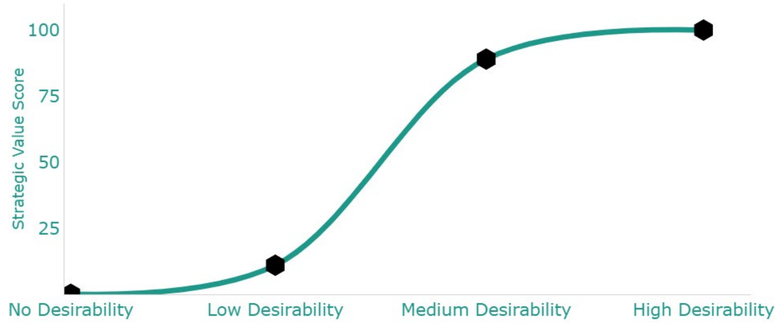
Medium Desirability

- Includes project elements that have a significant positive impact to transportation safety OR
- Is a Tier 2 improvement
- **CAPTURE CONNECTIVITY OR OTHER PLAN ELEMENTS (RAYMOND) (ex: 3 or more objectives addressed)**

High Desirability

- Project is being driven by a transportation safety need OR
- Is a Tier 1 improvement

Resulting scale for *Transportation Safety/Plan*



QUANTIFY

PRIORITY: FUNDING

Set the criteria for each level of the scale for *Funding*

Low Desirability

- Funding is identified from unstable/unreliable sources (i.e. General Fund, Special Assessments, Competitive Grants that are not yet awarded)

Medium Desirability

- Funding available from standard City funding sources (i.e. Act 51, Street Millage, County Millage).

High Desirability

- Has anticipated substantial project funding (>33%) from outside non-loan sources (i.e. STP, U of M, Developers, Grants, etc.)

Resulting scale for *Funding*

QUANTIFY

PRIORITY: PAVEMENT CONDITIONS

Set the criteria for each level of the scale for *Pavement Condition*

Low Desirability

- PASER score 9+

Medium Desirability

- PASER score 5

High Desirability

- PASER score 1

Resulting scale for *Pavement Condition*

EXHIBIT L

FY2020-FY2025 CIP Plan:

Street Construction

Capital Improvements Plan
Project Revenues Summary By Category

ProjectID	Project Name	Prioritization Model Rank		Funding (in thousands) * Prior Years	2020	2021	2022	2023	2024	2025	Beyond 2026	Total
Transportation - Street Construction												
TR-SC-16-16	Ann (First St to Fifth Ave) Resurfacing	16	**TOTALS**	$0	$0	$0	$0	$200	$200	$0	$0	$400
TR-SC-20-06	Ann (State to Glen) Resurfacing	28	**TOTALS**	$0	$0	$0	$0	$0	$200	$360	$0	$560
TR-SC-15-02	Annual Capital Street Maintenance Program	32	**TOTALS**	$7,604	$3,404	$1,950	$2,350	$2,595	$1,950	$1,950	$0	$21,802
TR-SC-13-07	Annual Local Street Resurfacing Program (ASRP)	36	**TOTALS**	$15,630	$2,670	$4,700	$4,950	$5,300	$5,400	$5,400	$0	$44,050
TR-SC-18-03	Barton Dr (M14 to Pontiac) Resurfacing	3	**TOTALS**	$0	$350	$350	$0	$0	$0	$0	$0	$700
TR-SC-16-09	Boardwalk (Eisenhower north to end) Resurfacing	35	**TOTALS**	$0	$275	$490	$0	$0	$0	$0	$0	$765
TR-SC-16-10	Broadway (Plymouth to Plymouth) Resurfacing	29	**TOTALS**	$0	$0	$750	$810	$0	$0	$0	$0	$1,560
TR-SC-18-17	Brooks (Miller to Sunset) Resurfacing	29	**TOTALS**	$0	$0	$0	$0	$450	$780	$0	$0	$1,230
TR-SC-06-05	Detroit Street Brick Rd Pavement Reconstruction	25	**TOTALS**	$0	$0	$0	$0	$0	$0	$1,175	$1,825	$3,000
TR-SC-16-13	Division Ave (Hoover to Madison) CPM	21	**TOTALS**	$185	$0	$0	$0	$0	$0	$0	$0	$185
TR-SC-20-01	Downtown Alley Improvements	8	**TOTALS**	$0	$700	$0	$0	$0	$0	$0	$0	$700
TR-SC-18-12	Earhart (Geddes to Greenhills) Resurfacing	33	**TOTALS**	$0	$0	$0	$855	$285	$0	$0	$0	$1,140
TR-SC-18-13	Earhart (Greenhills to US23) Resurfacing	33	**TOTALS**	$0	$0	$0	$0	$575	$1,155	$0	$0	$1,730
TR-SC-20-12	First and Ashley (Kingsley to Madison) and Kingsley (Main t	1	**TOTALS**	$0	$1,030	$308	$0	$0	$0	$0	$0	$1,337
TR-SC-20-10	Fletcher (N University to Huron) Resurfacing	27	**TOTALS**	$0	$0	$0	$0	$0	$120	$240	$0	$360
TR-SC-08-01	Fuller Rd/Maiden Ln/East Medical Center Dr Area Rd. Desig	2	**TOTALS**	$745	$100	$100	$100	$100	$100	$100	$0	$1,345
TR-SC-14-04	Geddes Ave (Observatory to Highland) Road Improvements	15	**TOTALS**	$0	$0	$0	$450	$800	$0	$0	$0	$1,250
TR-SC-20-20	Geddes Road (Church to Observatory) Resurfacing	37	**TOTALS**	$235	$0	$0	$0	$0	$0	$0	$0	$235
TR-SC-20-11	Granger (State to Packard) Resurfacing	39	**TOTALS**	$0	$440	$0	$0	$0	$0	$0	$0	$440

*Funding is rounded to the nearest thousands

Capital Improvements Plan
Project Revenues Summary By Category

ProjectID	Project Name	Prioritization Model Rank		Prior Years	Funding (in thousands) * 2020	2021	2022	2023	2024	2025	Beyond 2026	Total
TR-SC-18-04	Greenview (Stadium to Scio Church) Resurfacing	29	**TOTALS**	$0	$0	$0	$0	$0	$430	$860	$0	$1,290
TR-SC-16-07	Hoover (Main to State) and Greene Resurfacing	28	**TOTALS**	$505	$445	$0	$0	$0	$0	$0	$0	$950
TR-SC-18-18	Huron Pkwy/Tuebingen (Nixon to Traver) Resurfacing	24	**TOTALS**	$0	$0	$0	$400	$800	$0	$0	$0	$1,200
TR-SC-20-07	Ingalls and Kingsley (Huron to State) Resurfacing	29	**TOTALS**	$0	$0	$0	$0	$0	$250	$500	$0	$750
TR-SC-12-05	Liberty (First to Main) Road Reconstruction	14	**TOTALS**	$65	$0	$0	$0	$0	$0	$0	$700	$765
TR-SC-20-05	Liberty (Stadium to Crest) Resurfacing	29	**TOTALS**	$460	$0	$0	$0	$0	$0	$0	$0	$460
TR-SC-16-11	Main St (Huron to William) Resurfacing	29	**TOTALS**	$0	$0	$0	$200	$275	$0	$0	$0	$475
TR-SC-14-15	Miller - Newport Intersection Improvements	38	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$800	$800
TR-SC-20-04	Miller Avenue (Linda Vista to Chapin) Rehabilitation	24	**TOTALS**	$0	$0	$0	$0	$0	$600	$1,000	$0	$1,600
TR-SC-20-15	Nixon (Bluett to Dhu Varren) Phase 2 Road Improvements	12	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$3,494	$3,494
TR-SC-20-16	Nixon (Dhu Varren to S of M-14) Phase 3 Road Improvement	12	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$2,000	$2,000
TR-SC-20-14	Nixon (Huron Pkwy to S of Bluett) Phase 1 Road Improveme	12	**TOTALS**	$0	$0	$0	$0	$0	$0	$2,020	$0	$2,020
TR-SC-18-09	North University (State to Fletcher) Resurfacing	10	**TOTALS**	$0	$0	$125	$255	$0	$0	$0	$0	$380
TR-SC-18-15	Platt (Huron Pkwy to Packard) Resurfacing	29	**TOTALS**	$0	$0	$0	$875	$425	$0	$0	$0	$1,300
TR-SC-18-14	Platt (Washtenaw to Huron Pkwy) Resurfacing	21	**TOTALS**	$515	$0	$0	$0	$0	$0	$0	$0	$515
TR-SC-20-21	Plymouth Rd (Nixon to US-23) CPM	17	**TOTALS**	$0	$618	$200	$0	$0	$0	$0	$0	$818
TR-SC-16-14	Pontiac, Moore, Swift Area Resurfacing	26	**TOTALS**	$0	$0	$0	$0	$250	$320	$0	$0	$570
TR-SC-18-06	Scio Church (Maple to 7th) Road Resurfacing	7	**TOTALS**	$0	$100	$668	$1,354	$0	$0	$0	$0	$2,122
TR-SC-14-21	Seventh (Scio Church to Greenview) Road Improvements	22	**TOTALS**	$0	$0	$0	$450	$850	$0	$0	$0	$1,300
TR-SC-18-10	South Industrial (Stimson to Eisenhower) Concrete Pavement	19	**TOTALS**	$0	$1,400	$300	$0	$0	$0	$0	$0	$1,700

*Funding is rounded to the nearest thousands

Capital Improvements Plan
Project Revenues Summary By Category

ProjectID	Project Name	Prioritization Model Rank		Funding (in thousands) * Prior Years	2020	2021	2022	2023	2024	2025	Beyond 2026	Total
TR-SC-18-16	South University (State to E University) Resurfacing	23	**TOTALS**	$0	$645	$330	$0	$0	$0	$0	$0	$975
TR-SC-18-02	Springwater Phase IV Road Reconstruction	28	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$998	$998
TR-SC-18-19	Springwater Phase V Road Reconstruction	20	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$1,320	$1,320
TR-SC-20-19	State St (Ellsworth to I-94 EB Ramp) Road Improvements	3	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$6,200	$6,200
TR-SC-20-03	State St (Hoover to Granger) Resurfacing	4	**TOTALS**	$0	$0	$0	$0	$0	$250	$520	$0	$770
TR-SC-14-06	State St (Huron to S University) Resurfacing	13	**TOTALS**	$0	$0	$1,310	$620	$0	$0	$0	$0	$1,930
TR-SC-20-17	State St (I-94 WB Ramps to Oakbrook) Road Improvements	3	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$16,350	$16,350
TR-SC-20-18	State St (Interchange at I-94 Bridge and Ramp) Reconstructio	3	**TOTALS**	$0	$0	$0	$0	$0	$0	$0	$9,450	$9,450
TR-SC-06-07	State St (Kingsley to Fuller/Depot) Brick Pavement Reconstru	34	**TOTALS**	$0	$0	$0	$0	$0	$0	$250	$500	$750
TR-SC-18-08	State St (S University to Packard) Resurfacing	11	**TOTALS**	$0	$0	$0	$0	$180	$360	$0	$0	$540
TR-SC-18-11	State St (Stimson to Oakbrook) Concrete Repairs	39	**TOTALS**	$195	$390	$0	$0	$0	$0	$0	$0	$585
TR-SC-16-20	Stone School Rd (Eisenhower to I-94) Resurfacing	9	**TOTALS**	$550	$0	$0	$0	$0	$0	$0	$0	$550
TR-SC-16-15	Traverwood (Plymouth to Huron Pkwy) Resurfacing	37	**TOTALS**	$810	$0	$0	$0	$0	$0	$0	$0	$810
TR-SC-16-02	W Huron Alley Repair and Improvements	31	**TOTALS**	$0	$0	$300	$0	$0	$0	$0	$0	$300
TR-SC-20-02	Washington (First to Third) Reconstruction	6	**TOTALS**	$0	$0	$0	$0	$0	$0	$425	$875	$1,300
TR-SC-20-13	William (Ashley St to State) Pavement Treatments	5	**TOTALS**	$368	$0	$0	$0	$0	$0	$0	$0	$368
TR-SC-12-01	Zina Pitcher/Catherine (Ann to Glen) Resurfacing	18	**TOTALS**	$0	$0	$0	$0	$0	$390	$0	$0	$390
				$27,866	$12,566	$11,880	$13,669	$13,085	$12,505	$14,800	$44,512	$150,883

*Funding is rounded to the nearest thousands

EXHIBIT M

Non-Motorized Transportation
Council Resolution R-217-5-04

R-217-5-04

RESOLUTION TO ESTABLISH ANNUAL GOALS FOR ALTERNATIVE TRANSPORTATION

Whereas, The City Council through the resolution R-176-5-03 has established a policy direction to establish a connected network of bicycle lanes along main commuter routes within ten years;

Whereas, The Council deems it prudent to establish intermediate goals with a time frame less than 10 years to establish this integrated system;

Whereas, In the same resolution, the Council increased the percentage of Act 51 funds devoted to implementing the action plan in the Bicycle Mater Plan to 5.0% annually;

Whereas, Michigan Act 51 of 1951, in section 247.660k(1), includes that "Transportation purposes as provided in this Act included provisions for facilities and services for non-motorized transportation, including bicycling";

Whereas, The City's existing Bicycle Master Plan is outdated;

Whereas, The City has retained the services of a non-motorized transportation planning consultant to update the outdated Bicycle Master Plan and include the necessary revisions and complete the Citywide non-motorized Transportation Plan for the City of Ann Arbor;

Whereas, The consultant will be compensated for this services from the General Fund portion of the 2004 Alternative Transportation budget and other monies contribute by the DDA and the University of Michigan; and

Whereas, The City Council directs that the appropriated 5.0% of Act 51 fund revenues, to the maximum extent possible, be used for the construction, repair and service of the network of bicycle lanes along main commuter routes;

RESOLVED, That City Council hereby asks the City Administrator to formulate and implement a three-year plan for the construction of the integrated bike lane network, with explicit yearly projections of the number of miles of bike lane to be constructed annually;

RESOLVED, That where bike lanes are installed as an incidental addition to a road project, all costs for the planning, design and engineering be paid for by that project fund or the General Fund as appropriate; and

RESOLVED, That where bike lanes and other non-motorized improvements are installed or maintained in a manner that is not incidental to a road, all costs for engineering and construction, including service and repairs of the non-motorized facilities, not budgeted elsewhere, be paid by the monies appropriated from the 5.0% Act 51 Fund revenue.

Sponsored by Council Member Johnson and Mayor Hieftje

APPROVED
BY ANN ARBOR CITY COUNCIL
May 24, 2004

CITY CLERK
ANN ARBOR, MI

EXHIBIT N

Street Millage Policy:
Council Resolution R-16-30

City of Ann Arbor

301 E. Huron St.
Ann Arbor, MI 48104
http://a2gov.legistar.com
/Calendar.aspx

Council Action

Resolution: R-16-130

File Number: 16-0486 **Enactment Number: R-16-130**

Resolution of Intent on the Use and Administration of the Street, Bridge, and Sidewalk Millage Funds

Whereas, If approved by the voters, the Street, Bridge, and Sidewalk Millage on the August 2, 2016, ballot would provide funding for streets, bridges, and sidewalks as described in detail in Attachment A; and

Whereas, The City Council wants to adopt policy guidelines for the use of the funds if the Street, Bridge, and Sidewalk Millage is approved by the voters at the August 2, 2016 election and wants to inform the voters of those policy guidelines;
RESOLVED, That City Council adopt the following policy guidelines for the administration of the Streets, Bridges and Sidewalks Millage:

1. The Street, Bridge, and Sidewalk Millage Use and Administration Guidelines as stipulated in Attachment A are approved.
2. The City Administrator will track and account for the expenditure of the millage fund in accordance with the attached Guidelines and will report to the City Council annually on a calendar year basis.

Sponsored by: Councilmembers Briere, Smith and Mayor Taylor

At a meeting of the City Council on 4/4/2016, a motion was made by Chip Smith, seconded by Graydon Krapohl, that this Resolution R-16-130 be Approved. The motion passed.

Yeas:	7	Councilmember Warpehoski, Mayor Taylor, Councilmember Grand, Councilmember Krapohl, Councilmember Westphal, Councilmember Ackerman, and Councilmember Smith
Nays:	3	Councilmember Lumm, Councilmember Kailasapathy, and Councilmember Eaton
Absent:	1	Councilmember Briere

ATTACHMENT A

STREET, BRIDGE, AND SIDEWALK FUND USE AND ADMINISTRATION GUIDELINES

If the millage is approved, providing up to 2.125 mills for street and bridge repair, and for sidewalk repair and construction (the "2017 Street, Bridge, and Sidewalk Millage"):

1. The 2017 Street, Bridge, and Sidewalk Millage may be used for the following, including without limitation:

    - resurfacing or reconstruction of existing paved City streets and bridges, including on-street bicycle lanes and other non-motorized facilities;
    - construction, reconstruction, or enhancement of pedestrian crosswalks;
    - reconstruction and construction of accessible street crossings and corner ramps;
    - Capital Preventative Maintenance (CPM) measures for existing paved streets and bridges;
    - Repair and/or replacement of sidewalks within the public right-of-way adjacent to properties against which the City levies property taxes; and
    - Construction of new sidewalks, but only to the extent the funded portion would not otherwise be funded by special assessment

2. The 2017 Street, Bridge, and Sidewalk Millage local share contributions to the City's federally funded transportation improvement projects will be used to assist the City in securing Federal and State transportation grants.

3. The 2017 Street, Bridge, and Sidewalk Millage may be used for the construction of new sidewalks, but will not be used to fund any portion of new sidewalk construction that would otherwise be funded by special assessment.

4. To the extent the 2017 Street, Bridge, and Sidewalk Millage is used for the repair of individual sidewalks slabs, it will be used only for sidewalks adjacent to properties outside the Downtown Development District ("DDD") against which the City levies property taxes and adjacent to single- and two-family houses within the DDD against which the City levies property taxes.

5. Notwithstanding the provisions of Paragraph 4, provisions were added to Section 4:58 of City Code for the 2012 Street and Bridge Resurfacing and Reconstruction and Sidewalk Repair millage to allow the City and the Downtown Development Authority ("DDA") to enter into agreements governing the obligations of each to fund or to perform sidewalk repairs. The City and DDA have entered into agreements for all five years of the 2012-2016 millage under which the DDA has provided funding to the City and the City has done sidewalk repairs within the DDD. Section 4:58 of City Code will need to be amended to extend the existing

or similar provisions for the duration of the 2017 Street, Bridge, and Sidewalk Millage.

6. Provisions also were added to Section 4:58 of City Code for the 2012 Street and Bridge Resurfacing and Reconstruction and Sidewalk Repair millage to remove the obligation of property owners outside the DDD to maintain the sidewalks adjacent to their properties for the duration of that millage. This section of City Code will need to be amended to extend that provision for the duration of the 2017 Street, Bridge, and Sidewalk Millage.

7. Funds from the 2017 Street, Bridge, and Sidewalk Millage that are used for street and/or bridge repair will be tracked and accounted for separately from the millage funds used for sidewalks.

EXHIBIT O

FY2020-FY2023 WATS TIP Plan

ALL PROJECT SEARCH - STANDARD REPORT

Fiscal Year(s) : 2020, 2021, 2022, 2023

Date Approved by WATS: March 18, 2020

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Local Bridge																																	
2021	Local	208103	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Bridge Road / Mast Road	Bridge Rd, Str# 10971 and Mast Rd, Str# 10996 over Huron River, Washtenaw	0.000	Bridge CPM	Miscellaneous Bridge Capital Preventative Maintenance			CON	Programmed	20-23	$147,200	$27,600	$9,200	$184,000	BHT	$399,000	Admin Modification	06/11/2019			N/A	04/09/2021		06/04/2021				Approved
2021	Local	208103	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Bridge Road / Mast Road	Bridge Rd, Str# 10971 and Mast Rd, Str# 10996 over Huron River, Washtenaw	0.000	Bridge CPM	Miscellaneous Bridge Capital Preventative Maintenance			CON	Programmed	20-23	$172,000	$32,250	$10,750	$215,000	BHT	$399,000	Admin Modification	06/11/2019			N/A	04/09/2021		06/04/2021				Approved
GPA Type Subtotals:			**Local Bridge**													**$319,200**	**$59,850**	**$19,950**	**$399,000**														
Local Livability and Sustainability																																	
2020	Local	203579	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Fuller Ct	Limits of Fuller Ct. project: South side of Fuller Ct. from Fuller to 2250	0.819	Roadside Facilities - Preserve	fill sidewalk gaps			CON	Programmed	20-23	$274,385	$0	$396,615	$671,000	STU	$671,000	Admin Modification	08/02/2019	07/11/2018	07/11/2018	N/A	04/10/2020		06/05/2020			ns: 5/19 - increase STU, reduce Local per target update. Total cost unchanged	Approved
2020	Local	204889	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Huron River Dr	Huron River Drive, Zeeb Road to Delhi Road	1.729	Roadside Facilities - Improve	Construct B2B/IBT Trail segment D2, Phase 2			CON	Programmed	20-23	$1,000,000	$0	$952,435	$1,952,435	TAU	$3,904,870	Admin Modification	07/31/2019			N/A	07/10/2020		09/04/2020				Approved
2020	Local	204889	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Huron River Dr	Huron River Drive, Zeeb Road to Delhi Road	1.729	Roadside Facilities - Improve	Construct B2B/IBT Trail segment D2, Phase 2			CON	Programmed	20-23	$1,000,000	$0	$952,435	$1,952,435	TA	$3,904,870	Admin Modification	07/31/2019			N/A	07/10/2020		09/04/2020				Approved
2020	Local	204934	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Dexter	Grand St	Mill Creek Trail -Phase II	0.342	Roadside Facilities - Improve	Shared Use Path & Trailhead			CON	Active	20-23	$313,693	$0	$822,734	$1,136,427	TAU	$1,136,427	Admin Modification	09/10/2019			N/A	11/15/2019	10/23/2019	01/10/2020				Approved
2020	Local	208962	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Dixboro Rd	Dixboro rd	0.974	Roadside Facilities - Improve	Dixboro Road Shared Use Trail			CON	Programmed	20-23	$726,636	$0	$721,443	$1,448,079	TAU	$1,448,079	Admin Modification	08/27/2019			N/A	04/10/2020		06/05/2020				Approved
GPA Type Subtotals:			**Local Livability and Sustainability**													**$3,314,714**	**$0**	**$3,845,662**	**$7,160,376**														
Local Road																																	
2021	Local	133178	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Chelsea	Old US-12	Mill Crk to M-52/W. of Freer Rd to E.	0.156	Road Rehabilitation	Resurfacing.			CON	Suspended	20-23	$240,000	$0	$60,000	$300,000	STUL		Admin Modification	06/11/2019	07/11/2018	07/11/2018	N/A	10/09/2020		12/04/2020				Approved
2020	Local	202702	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Manchester	Dutch Dr	Dutch Dr. from Hibbard to M-52	0.772	Road Capital Preventive Maintenance	Milling and one coarse overlay			CON	Active	20-23	$0	$109,938		$109,938	EDD	$438,085	Admin Modification	11/21/2019	07/11/2018	07/11/2018	N/A	02/07/2020	02/10/2020	04/03/2020				Approved
2020	Local	202702	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Manchester	Dutch Dr	Dutch Dr. from Hibbard to M-52	0.772	Road Capital Preventive Maintenance	Milling and one coarse overlay			CON	Active	20-23	$299,988	$0	$28,159	$328,147	STL	$438,085	Admin Modification	11/21/2019	07/11/2018	07/11/2018	N/A	02/07/2020	02/10/2020	04/03/2020				Approved
2020	Local	203561	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Hewitt Rd	Washtenaw to Huron River Drive	0.796	Road Capital Preventive Maintenance	Rehabilitate roadway			CON	Active	20-23	$425,000	$0	$106,250	$531,250	STU	$531,250	Admin Modification	07/31/2019	07/11/2018	07/11/2018	N/A	12/02/2019	12/17/2019	02/07/2020				Approved
2021	Local	203566	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Packard St	Carpenter to Golfside	1.004	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$600,000	$0	$150,000	$750,000	STU	$750,000	Admin Modification	06/11/2019	07/11/2018	07/11/2018	N/A	07/09/2021		09/03/2021				Approved
2020	Local	203568	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Whitmore Lake Rd	Six Mile from Whitmore Lake to US-23 - Whitmore Lake from Five Mile to Six	1.053	Road Rehabilitation	Rehabilitate Roadway			CON	Active	20-23	$164,788	$0	$41,197	$205,985	STU	$381,250	Admin Modification	09/12/2019	07/11/2018	07/11/2018	N/A	11/08/2019	11/25/2019	01/10/2020			ns: 5/19 - adding STUL, reducing STU, total cost unchanged	Approved
2020	Local	203568	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Whitmore Lake Rd	Six Mile from Whitmore Lake to US-23 - Whitmore Lake from Five Mile to Six	1.053	Road Rehabilitation	Rehabilitate Roadway			CON	Active	20-23	$140,212	$0	$35,053	$175,265	STUL	$381,250	Admin Modification	09/12/2019	07/11/2018	07/11/2018	N/A	11/08/2019	11/25/2019	01/10/2020			ns: 5/19 - adding STUL, reducing STU, total cost unchanged	Approved
2020	Local	203572	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	W Waters Rd	Township Line to Oak Valley	0.397	Road Rehabilitation	Rehabilitate Roadway			CON	Active	20-23	$385,000	$0	$96,250	$481,250	STU	$481,250	Admin Modification	09/20/2019	07/11/2018	07/11/2018	N/A	11/08/2019	11/26/2019	01/10/2020				Approved
2020	Local	203574	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Whittaker Rd	Willis to Textile	3.318	Road Capital Preventive Maintenance	Rehabilitate Roadway			CON	Active	20-23	$658,380	$0	$164,595	$822,975	STU	$822,975	Admin Modification	09/12/2019	07/11/2018	07/11/2018	N/A	12/02/2019	12/17/2019	02/07/2020				Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Local Road																																	
2020	Local	203639	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Plymouth Rd	Murfin Avenue to Nixon Road	0.778	Road Rehabilitation	Restore and Rehabilitate			CON	Active	20-23	$353,000	$0	$390,020	$743,020	NH	$817,923	Admin Modification	01/27/2020	07/11/2018	07/11/2018	N/A	02/07/2020	02/12/2020	04/03/2020			ns: 5/19 - change HIPU to STU, total cost unchanged	Approved
2020	Local	203639	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Plymouth Rd	Murfin Avenue to Nixon Road	0.778	Road Rehabilitation	Restore and Rehabilitate			CON	Active	20-23	$61,308	$0	$13,595	$74,903	HIPU	$817,923	Admin Modification	01/27/2020	07/11/2018	07/11/2018	N/A	02/07/2020	02/12/2020	04/03/2020			ns: 5/19 - change HIPU to STU, total cost unchanged	Approved
2021	Local	205593	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Ford Rd	Ford Rd from Plymouth-Ann Arbor Rd to M-153	1.457	Road Rehabilitation	PM			CON	Programmed	20-23	$560,000	$0	$140,000	$700,000	STU	$700,000	Admin Modification	06/11/2019			N/A	01/08/2021		03/05/2021				Approved
2021	Local	205597	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Wiard Rd	Wiard Rd from I-94 to Airport Dr.	3.300	Road Rehabilitation	PM			CON	Programmed	20-23	$365,000	$0	$91,250	$456,250	NH	$1,218,500	Admin Modification	06/11/2019			N/A	02/05/2021		04/02/2021			ns: 4/19 - reduce NH increase STU, budget unchanged SF add December 2018	Approved
2021	Local	205597	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Wiard Rd	Wiard Rd from I-94 to Airport Dr.	3.300	Road Rehabilitation	PM			CON	Programmed	20-23	$609,800	$0	$152,450	$762,250	STU	$1,218,500	Admin Modification	06/11/2019			N/A	02/05/2021		04/02/2021			ns: 4/19 - reduce NH increase STU, budget unchanged SF add December 2018	Approved
2021	Local	205599	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Countywide	0.000	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$454,356	$0	$113,589	$567,945	STU	$567,945	Admin Modification	06/11/2019			N/A	01/08/2021		03/05/2021			ns: 5/19 - increase STU per target increase	Approved
2021	Local	205604	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	E Bemis Rd	Bemis from Platt to Carpenter	0.948	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$335,000	$0	$83,750	$418,750	STU	$418,750	Admin Modification	06/11/2019			N/A	01/08/2021		03/05/2021				Approved
2022	Local	205614	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Platt Rd	Platt from Huron Parkway to Packard	0.515	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$650,000	$0	$650,000	$1,300,000	STU	$1,300,000	Admin Modification	07/29/2019			N/A	01/07/2022		03/04/2022				Approved
2022	Local	205615	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Earhart Rd	Earhart Geddes to Greenhill	0.817	Road Rehabilitation	Street Resurfacing			CON	Programmed	20-23	$570,000	$0	$570,000	$1,140,000	STU	$1,140,000	Admin Modification	07/29/2019			N/A	01/07/2022		03/04/2022				Approved
2022	Local	205625	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	I-94BL	citywide	0.000	Road Rehabilitation	Capital Preventative Maintenance			CON	Programmed	20-23	$400,000	$0	$400,000	$800,000	STU	$800,000	Admin Modification	01/30/2020			N/A	01/07/2022		03/04/2022				Approved
2022	Local	205629	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Countywide	0.000	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$173,438	$0	$57,812	$231,250	STU	$231,250	Admin Modification	07/29/2019			N/A	01/07/2022		03/04/2022				Approved
2021	Local	205632	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Pontiac Trl	North Territorial Rd at Pontiac Trail	0.000	Road Rehabilitation	PM			CON	Programmed	20-23	$600,000	$0	$150,000	$750,000	STL	$750,000	Admin Modification	06/11/2019			N/A	04/09/2021		06/04/2021				Approved
2021	Local	205633	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Rehabilitate Roadway Countywide rural	0.000	Road Rehabilitation	Pavement treatment will follow the LAP guidelines for PM and 3R work			CON	Programmed	20-23	$232,000	$0	$58,000	$290,000	STL	$415,000	Admin Modification	06/11/2019			N/A	04/09/2021		06/04/2021			SF added December 2018 federal stl 220,553 and state d 114,006,	Approved
2021	Local	205633	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Rehabilitate Roadway Countywide rural	0.000	Road Rehabilitation	Pavement treatment will follow the LAP guidelines for PM and 3R work			CON	Programmed	20-23	$0	$125,000	$0	$125,000	EDD	$415,000	Admin Modification	06/11/2019			N/A	04/09/2021		06/04/2021			SF added December 2018 federal stl 220,553 and state d 114,006,	Approved
2022	Local	205634	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Road Rehabilitation	0.000	Road Rehabilitation	Road Rehabilitation			CON	Programmed	20-23	$849,000	$0	$212,250	$1,061,250	STL	$1,186,250	Admin Modification	06/11/2019			N/A	02/04/2022		04/01/2022				Approved
2022	Local	205634	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Road Rehabilitation	0.000	Road Rehabilitation	Road Rehabilitation			CON	Programmed	20-23	$0	$125,000	$0	$125,000	EDD	$1,186,250	Admin Modification	06/11/2019			N/A	02/04/2022		04/01/2022				Approved
2023	Local	205637	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Road Rehabilitation	0.000	Road Rehabilitation	Road Rehabilitation			CON	Programmed	20-23	$866,000	$0	$216,500	$1,082,500	STL	$1,207,500	Admin Modification	08/02/2019			N/A	01/06/2023		03/03/2023			SF added December 2018 federal 853,704 and state d 122,598	Approved
2023	Local	205637	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Road Rehabilitation	0.000	Road Rehabilitation	Road Rehabilitation			CON	Programmed	20-23	$0	$125,000	$0	$125,000	EDD	$1,207,500	Admin Modification	08/02/2019			N/A	01/06/2023		03/03/2023			SF added December 2018 federal 853,704 and state d 122,598	Approved
2022	Local	205638	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Carpenter Rd	Carpenter from N. Cloverlane to Ellsworth	0.662	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$62,808	$0	$15,702	$78,510	STU	$543,510	Admin Modification	06/11/2019			N/A	01/07/2022		03/04/2022			ns: 4/19 - reduce NH, increase STU, total unchanged	Approved
2022	Local	205638	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Carpenter Rd	Carpenter from N. Cloverlane to Ellsworth	0.662	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$372,000	$0	$93,000	$465,000	NH	$543,510	Admin Modification	06/11/2019			N/A	01/07/2022		03/04/2022			ns: 4/19 - reduce NH, increase STU, total unchanged	Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Local Road																																	
2023	Local	205642	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Saline	Clark St	Clark St. Harris to Maple	0.313	Road Rehabilitation	3R			CON	Programmed	20-23	$409,250	$0	$90,750	$500,000	STU	$500,000	Admin Modification	07/29/2019			N/A	01/06/2023		03/03/2023				Approved
2022	Local	205646	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Barker Rd	Barker US-23 to end of Pavement	0.945	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$189,170	$0	$47,292	$236,462	STU	$418,749	Admin Modification	07/31/2019			N/A	01/07/2022		03/04/2022			ns: 4/19 - add STUL, reduce STU, total cost unchanged	Approved
2022	Local	205646	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Barker Rd	Barker US-23 to end of Pavement	0.945	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$145,830	$0	$36,457	$182,287	STUL	$418,749	Admin Modification	07/31/2019			N/A	01/07/2022		03/04/2022			ns: 4/19 - add STUL, reduce STU, total cost unchanged	Approved
2023	Local	205648	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	E Huron River Dr	Huron River Dr. from Hospital entrance to Hogback	0.618	Road Rehabilitation	PM			CON	Programmed	20-23	$280,000	$0	$70,000	$350,000	STU	$350,000	Admin Modification	08/19/2019			N/A	10/07/2022		10/07/2022			SF added December 2018	Approved
2023	Local	205651	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	PM work	0.000	Road Rehabilitation	PM work			CON	Programmed	20-23	$471,249	$0	$117,812	$589,061	STU	$775,000	Admin Modification	07/29/2019			N/A	02/01/2023		10/06/2023			ns: 4/19 - add STUL, reduce STU, total cost unchanged	Approved
2023	Local	205651	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	PM work	0.000	Road Rehabilitation	PM work			CON	Programmed	20-23	$148,751	$0	$37,188	$185,939	STUL	$775,000	Admin Modification	07/29/2019			N/A	02/01/2023		10/06/2023			ns: 4/19 - add STUL, reduce STU, total cost unchanged	Approved
2023	Local	205654	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	W Ann St	Road Rehabilitation	0.000	Road Rehabilitation	Capital Preventative Maintenance			CON	Programmed	20-23	$644,679	$0	$161,169	$805,848	STU	$805,848	Admin Modification	01/30/2020			N/A	02/06/2023		09/01/2023				Approved
2022	Local	205668	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Tuttle Hill Rd	Tuttle Hill from Martz to Huron River Dr	2.064	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$500,000	$0	$125,000	$625,000	STU	$625,000	Admin Modification	06/11/2019			N/A	01/07/2022		03/04/2022				Approved
2022	Local	205675	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Grove St	Grove from Harris to Bridge	1.474	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$660,000	$0	$165,000	$825,000	STU	$825,000	Admin Modification	07/29/2019			N/A	01/07/2022		03/04/2022				Approved
2022	Local	205679	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Leforge Rd	LeForge from Clark to Geddes	1.005	Road Rehabilitation	Rehabilitate roadway			CON	Programmed	20-23	$215,000	$0	$55,000	$270,000	STU	$270,000	Admin Modification	07/29/2019			N/A	01/07/2022		03/04/2022				Approved
2020	Local	205954	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Maple St	Maple from Saline City Limits to Textile	0.731	Road Rehabilitation	Rehabilitate roadway			CON	Active	20-23	$300,000	$0	$75,000	$375,000	STU	$375,000	Admin Modification	09/12/2019			N/A	11/08/2019	11/26/2019	01/10/2020				Approved
2020	Local	205956	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Countywide Urban	0.000	Road Rehabilitation	Rehabilitate roadway			CON	Abandoned	20-23	$246,483	$0	$61,620	$308,103	STU		Admin Modification	05/07/2019			N/A	10/11/2019		12/06/2019				Approved
2021	Local	208388	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Chelsea	Sibley Rd	M-52 to City Limits	0.698	Road Rehabilitation	Resurface			CON	Programmed	20-23	$375,000	$0	$93,750	$468,750	STUL	$468,750	Admin Modification	10/03/2019			N/A	10/05/2020						Approved
2023	Local	208389	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Chelsea	W Middle St	M-52 to RR Tracks	0.819	Road Rehabilitation	Resurface			CON	Programmed	20-23	$375,000	$0	$93,750	$468,750	STUL	$468,750	Admin Modification	10/04/2019			N/A	10/03/2022						Approved
GPA Type Subtotals:			**Local Road**													**$15,387,490**	**$484,938**	**$5,319,210**	**$21,191,638**														
Local Traffic Operations And Safety																																	
2020	Local	202916	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Countywide	39 intersections in Washtenaw County	0.000	Traffic Safety	Work to include signal optimization, modernization, and actuation			CON	Active	20-23	$1,052,824	$0	$0	$1,052,824	CPMG	$1,052,824	Admin Modification	12/11/2019	07/11/2018	07/11/2018	N/A	12/13/2019	12/13/2019	02/07/2020				Approved
2020	Local	202917	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	N Zeeb Rd	City of Ann Arbor	0.000	Traffic Safety	Expansion of the existing SCOOT Adaptive Traffic Signal			CON	Abandoned	20-23	$869,640	$0	$217,410	$1,087,050	CPM		Admin Modification	10/25/2019			N/A	11/15/2019		01/10/2020				Approved
2020	Local	202926	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Citywide (Ann Arbor)	29 intersections in the City of Ann Arbor	0.000	Traffic Safety	Expansion of the existing SCOOT Adaptive Traffic Signal of the City			CON	Active	20-23	$1,087,050	$0	$0	$1,087,050	CPMG	$1,095,996	Admin Modification	01/27/2020	07/11/2018	07/11/2018	N/A	01/27/2020	02/10/2020	04/03/2020				Approved
2021	Local	205594	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	S Main St	S. Main from Stadium to Ann Arbor Saline	0.657	Traffic Safety	Sidewalk gap fill			CON	Programmed	20-23	$1,016,196	$0	$1,213,804	$2,230,000	STU	$2,230,000	Admin Modification	06/11/2019			N/A	10/09/2020		12/04/2020			ns: 5/19 - increase STU, reduce local, total cost unchanged	Approved
2022	Local	205612	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	I-94BL	Citywide	0.000	Traffic Safety	Sidewalk Gaps			CON	Programmed	20-23	$300,000	$0	$300,000	$600,000	STU	$600,000	Admin Modification	01/30/2020			N/A	01/07/2022		03/04/2022				Approved
2021	Local	205624	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Brookside St	2441 Washtenaw Ave Ypsilanti MI	0.000	Traffic Safety	Pedestrian			CON	Programmed	20-23	$250,000	$0	$62,500	$312,500	STU	$312,500	Admin Modification	06/11/2019			N/A	10/09/2020		12/04/2020			SF add December 2018	Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Local Traffic Operations And Safety																																	
2022	Local	205626	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Kewanee St	Washtenaw Ave from Kewanee to Berkley	0.258	Traffic Safety	Pedestrian			CON	Programmed	20-23	$250,000	$0	$62,500	$312,500	STU	$312,500	Admin Modification	07/29/2019			N/A	01/07/2022		03/04/2022			SF added December 2018	Approved
2023	Local	205627	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	N Mansfield St	Mansfield at Washtenaw Ave.	0.000	Traffic Safety	Pedestrian			CON	Programmed	20-23	$250,000	$0	$62,500	$312,500	STU	$312,500	Admin Modification	07/29/2019			N/A	01/06/2023		03/03/2023				Approved
2023	Local	205653	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	E Ann St	Citywide non-motorized improvements	0.000	Traffic Safety	Sidewalk Gaps			CON	Programmed	20-23	$300,000	$0	$75,000	$375,000	STU	$375,000	Admin Modification	01/30/2020			N/A	10/07/2022		11/04/2022				Approved
2020	Local	207447	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Huron Parkway	Huron Parkway at Glazier Way and at Baxter Street, city of Ann Arbor	0.114	Traffic Safety	Rapid rectangular flashing beacons and contrast lighting			CON	Programmed	20-23	$165,240	$0	$18,360	$183,600	HSIP	$183,600	Admin Modification	07/31/2019			N/A	01/10/2020		03/06/2020				Approved
2020	Local	207448	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Hewitt Road	Hewitt Road between Burns Avenue and Harding Avenue, Washtenaw County	0.082	Traffic Safety	Rapid rectangular flashing beacon, sidewalk, relocate crosswalk			CON	Programmed	20-23	$262,667	$0	$29,185	$291,852	HSIP	$291,852	Admin Modification	07/31/2019			N/A	01/10/2020		03/06/2020				Approved
2020	Local	207449	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Wagner Road	Wagner Road from south of Liberty Rd to Huron River Dr, Washtenaw County	3.387	Traffic Safety	Signal modernization, durable markings, signing, spot drainage			CON	Programmed	20-23	$383,719	$0	$42,636	$426,355	HSIP	$468,991	Admin Modification	07/31/2019			N/A	01/10/2020		03/06/2020				Approved
2020	Local	207451	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Wagner Road	Wagner Rd from Ann Arbor-Saline Rd to south of Liberty Rd, Washtenaw County	3.531	Traffic Safety	Left turn lane at Waters Road, centerline rumble strips, markings			CON	Programmed	20-23	$597,872	$0	$66,430	$664,302	HSIP	$730,732	Admin Modification	07/31/2019			N/A	01/10/2020		03/06/2020				Approved
2023	Local	208628	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Packard St	Streets in downtown and selected corridors	6.339	ITS Applications	Communication Expansion and System Improvement for Arterial Traffic Operati			CON	Programmed	20-23	$1,391,381	$0	$0	$1,391,381	CPMG	$1,391,381	Admin Modification	01/30/2020			N/A	07/07/2023		09/01/2023				Approved
2022	Local	208632	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Plymouth Rd	Signal optimization, modernization and actuation along Plymouth Rd	5.769	ITS Applications	Signal optimization, modernization and actuation along Plymouth Rd			OPS	Programmed	20-23	$535,358	$0	$0	$535,358	CPMG	$535,358	Admin Modification	09/16/2019			N/A	07/01/2022	07/01/2022					Approved
2023	Local	208634	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	N Zeeb Rd	Countywide Interconnect System Enhancement	0.000	ITS Applications	Countywide interconnect system enhancement			OPS	Programmed	20-23	$1,350,000	$0	$0	$1,350,000	CPMG	$1,350,000	Admin Modification	10/17/2019			N/A	07/03/2023	07/07/2023					Approved
2022	Local	208635	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	S State Rd	State Rd interconnect project	3.700	ITS Applications	5 intersections: state rd at Morgan; STate at Lavender Ln, State at Textile			OPS	Programmed	20-23	$501,482	$0	$0	$501,482	CPMG	$501,482	Admin Modification	09/16/2019			N/A	07/01/2022	07/01/2022					Approved
2022	Local	208649	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Jackson Rd	Signal interconnection, modernization, and actuation along Jackson, Baker,	0.000	ITS Applications	Signal interconnection, modernization, and actuation			OPS	Programmed	20-23	$1,274,418	$0	$0	$1,274,418	CMG	$1,274,418	Admin Modification	09/16/2019			N/A	10/01/2021	10/01/2021					Approved
2022	Local	208659	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Plymouth Rd	Dixboro at Plymouth	0.000	Minor Widening	Add 150' SB right turn lane			OPS	Programmed	20-23	$240,000	$0	$60,000	$300,000	CPM	$300,000	Admin Modification	09/16/2019			N/A	10/01/2021	09/02/2022					Approved
2020	Local	209643	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Railroad	S Ashley St	At Ann Arbor Railroad in the City of Ann Arbor, Washtenaw County	0.000	Railroad	upgrade to 12" flashers			CON	Active	20-23	$14,175	$1,575	$0	$15,750	STRH	$15,750	Admin Modification	12/03/2019			N/A	01/31/2020	01/10/2020					Approved
2020	Local	209644	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Railroad	W Jefferson St	At Ann Arbor Railroad in the City of Ann Arbor, Washtenaw County	0.000	Railroad	upgrade flashers and disappearing legend NRT sign			CON	Active	20-23	$6,251	$695	$0	$6,945	STRH	$6,945	Admin Modification	12/03/2019			N/A	01/31/2020	01/10/2020					Approved
GPA Type Subtotals:			**Local Traffic Operations And Safety**													**$12,098,273**	**$2,270**	**$2,210,325**	**$14,310,867**														

S/TIP Line items

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
S/TIP Line items																																	
2020	Trunkline	113501	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 BR	I-94 BL to M-14	1.239	Reconstruction	Reconstruct possible ASCRL in sections			ROW	Programmed	20-23	$81,850	$15,881	$2,269	$100,000	NH	$12,925,000			08/06/2019	12/17/2019	N/A	09/03/2020		12/03/2021				Approved
2021	Trunkline	113501	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 BR	I-94 BL to M-14	1.239	Reconstruction	Reconstruct possible ASCRL in sections			UTL	Programmed	20-23	$20,463	$3,971	$567	$25,000	NH	$12,925,000			08/06/2019	12/17/2019	N/A	06/03/2021		12/03/2021				Approved
2022	Trunkline	113501	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 BR	I-94 BL to M-14	1.239	Reconstruction	Reconstruct possible ASCRL in sections			CON	Programmed	20-23	$9,249,050	$1,794,581	$256,369	$11,300,000	NH	$12,925,000	Admin Modification	08/06/2019	08/06/2019	10/02/2019	N/A	10/05/2021		12/03/2021				Approved
2021	Trunkline	128728	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 S	SB US-23 interchange at US-12	0.654	Traffic Safety	Interchange improvements			CON	Programmed	20-23	$1,800,701	$399,300	$0	$2,200,001	CPM	$2,375,001	Admin Modification	06/11/2019	07/24/2019	10/02/2019	N/A	10/05/2020		12/04/2020				Approved
2021	Trunkline	128729	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 N	NB US-23 interchange at US-12	0.653	Traffic Safety	Interchange improvements			CON	Programmed	20-23	$1,727,035	$382,965	$0	$2,110,000	CPM	$2,285,000	Admin Modification	06/11/2019	07/24/2019	10/02/2019	N/A	10/05/2020		12/04/2020				Approved
2020	Trunkline	200202	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12	US-12 at Platt Rd intersection	0.480	Minor Widening	Operational improvements			ROW	Programmed	20-23	$409,250	$90,750	$0	$500,000	CPM	$6,140,000	Admin Modification	04/18/2019	12/06/2019	12/17/2019	N/A	07/02/2020		11/06/2020				Approved
2020	Trunkline	200202	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12	US-12 at Platt Rd intersection	0.480	Minor Widening	Operational improvements			CON	Programmed	20-23	$3,388,590	$751,410	$0	$4,140,000	CPM	$6,140,000	Admin Modification	04/18/2019	08/06/2019	10/02/2019	N/A	09/11/2020		11/06/2020				Approved
2023	Trunkline	201015	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94 W	Washtenaw/Jackson County Line to Freer	6.542	Road Rehabilitation	Two course mill & resurface			CON	Programmed	20-23	$26,910,511	$2,990,057	$0	$29,900,568	IM	$33,219,998			07/25/2019	10/02/2019	N/A	10/07/2022		12/02/2022				Approved
2022	Trunkline	202036	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94 E	10 bridges in western Washtenaw County	0.000	Bridge CPM	Epoxy Overlays			CON	Programmed	20-23	$4,263,582	$473,731	$0	$4,737,312	IM	$5,478,804			07/25/2019	10/02/2019	N/A	07/08/2022		09/02/2022				Pending
2020	Local	202458	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Miller Rd	Miller Road over Honey Creek, Str# 10981, Washtenaw County	0.000	Bridge Replacement	Bridge Replacement			CON	Active	20-23	$0	$950,000	$50,000	$1,000,000	MCS	$1,000,000	Admin Modification	02/04/2020	08/06/2019	10/02/2019	N/A	03/06/2020	02/19/2020	05/01/2020				Approved
2020	Local	202674	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	7 Mile Rd	Pontiac Trail at Seven Mile	0.000	Reconstruction	Install Single lane roundabout			CON	Active	20-23	$524,469	$0	$280,531	$805,000	STL	$805,000	Admin Modification	10/21/2019	10/03/2016	10/03/2016	N/A	01/17/2020	02/10/2020	04/03/2020				Approved
2020	Local	203564	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Miller Rd	Miller Road at Wagner Road	0.000	Reconstruction	Install single lane roundabout			CON	Active	20-23	$805,000	$0	$201,250	$1,006,250	STU	$1,006,250	Admin Modification	10/21/2019	07/11/2018	07/11/2018	N/A	02/17/2020	02/25/2020	05/01/2020			ns: 5/19 - increase cost, as resurfacing component	Approved
2020	Local	203583	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ypsilanti	W Cross St	Courtland to Wallace	0.443	Reconstruction	reconstruct roadway			CON	Active	20-23	$1,101,823	$0	$675,455	$1,777,278	STU	$1,777,278	Admin Modification	09/12/2019	09/12/2019	11/02/2019	N/A	12/03/2019	12/17/2019	02/07/2020			ns: 5/19 - increase STU per target updates sf 9/19 - added non-participating water main work in amount of $400,500	Approved
2020	Local	205166	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	S Industrial Hwy	South Industrial from East Stadium Boulevard to East Eisenhower	1.261	Road Rehabilitation	Concrete Pavement Repair			CON	Programmed	20-23	$709,142	$0	$800,000	$1,509,142	STU	$1,792,458	Admin Modification	02/04/2020	08/06/2019	11/02/2019	N/A	06/05/2020		06/05/2020			moved to TIP line item: AC/ACC project	Approved
2021	Local	205166	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	S Industrial Hwy	South Industrial from East Stadium Boulevard to East Eisenhower	1.261	Road Rehabilitation	Concrete Pavement Repair	ACC	2021	CON	Programmed	20-23	$283,316			$283,316	STU	$1,792,458	Admin Modification	02/04/2020	08/06/2019	11/02/2019	N/A	06/05/2020		06/05/2020			moved to TIP line item: AC/ACC project	Approved
2021	Local	205585	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Dexter	3rd St	Third from Broad to Central	0.120	Reconstruction	Reconstruction			CON	Programmed	20-23	$358,304	$0	$186,600	$544,904	STU	$544,904	Admin Modification	06/11/2019	08/06/2019	10/02/2019	N/A	12/04/2020		12/04/2020			ns: 5/19 - increase STU, update location from Baker to Third, update work type from resurface to reconstruct	Approved
2021	Local	205591	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Scio Church Rd	Scio Church Rd from Seventh to Maple	0.825	Road Rehabilitation	3R			CON	Programmed	20-23	$267,481	$0	$1,228,818	$1,496,299	STU	$2,450,000	Admin Modification	03/04/2019	08/06/2019	10/02/2019	N/A	12/04/2020		12/04/2020			SF add job December 2018	Approved
2022	Local	205591	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Scio Church Rd	Scio Church Rd from Seventh to Maple	0.825	Road Rehabilitation	3R	ACC	2022	CON	Programmed	20-23	$953,701			$953,701	STU	$2,450,000	Admin Modification	03/04/2019	08/06/2019	10/02/2019	N/A	12/04/2020		12/04/2020			SF add job December 2018	Approved
2023	Local	205643	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ypsilanti	N Huron River Dr	Huron River Dr. Cornell to LaForge	0.587	Reconstruction	Reconstruction			CON	Programmed	20-23	$2,062,000	$0	$1,160,000	$3,222,000	STU	$3,222,000			07/25/2019	10/02/2019	N/A	10/07/2022		12/02/2022			SF added December 2018 Engineering amount 645,000 ypsi	Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
S/TIP Line items																																	
2021	Trunkline	205652	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23	Stony Creek Road & Willis Road over US-23	0.000	Bridge Replacement	Deck Replacement, steel repairs, substructure repairs, and approach work			CON	Programmed	20-23	$4,455,501	$987,994	$0	$5,443,495	NH	$6,200,851					N/A	08/06/2021		10/01/2021		Phase Added		Pending
2023	Local	205656	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Maiden Ln	Fuller Rd/Maiden Lane/E. Medical Center Dr.	0.800	Reconstruction	Reconstruction			CON	Programmed	20-23	$379,000	$0	$3,621,000	$4,000,000	NH	$8,000,000			07/24/2019	10/02/2019	N/A	09/01/2023		09/01/2023			ns: 4/19 - reduce NH, increase STU based on updated targets SF december 2018	Approved
2023	Local	205656	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor	Maiden Ln	Fuller Rd/Maiden Lane/E. Medical Center Dr.	0.800	Reconstruction	Reconstruction			CON	Programmed	20-23	$621,000	$0	$3,379,000	$4,000,000	STU	$8,000,000			07/24/2019	10/02/2019	N/A	09/01/2023		09/01/2023			ns: 4/19 - reduce NH, increase STU based on updated targets SF december 2018	Approved
2021	Local	205667	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	W 8 Mile Rd	Currie at Eight Mile Rd.	0.000	Reconstruction	Reconstruction and add roundabout at intersection			CON	Programmed	20-23	$142,983	$0	$35,745	$178,728	STUL	$750,000	Admin Modification	10/24/2019	07/25/2019	10/02/2019	N/A	11/13/2020		01/08/2021			ns: 4/19 - reduce STU, add STUL, total cost unchanged -- SF added december 2018. This is a joint funding project with Washtenaw County RC and Oakland County RC	Approved
2021	Local	205667	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	W 8 Mile Rd	Currie at Eight Mile Rd.	0.000	Reconstruction	Reconstruction and add roundabout at intersection			CON	Programmed	20-23	$157,017	$0	$414,255	$571,272	STU	$750,000	Admin Modification	10/24/2019	07/25/2019	10/02/2019	N/A	11/13/2020		01/08/2021			ns: 4/19 - reduce STU, add STUL, total cost unchanged -- SF added december 2018. This is a joint funding project with Washtenaw County RC and Oakland County RC	Approved
2021	Local	208113	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Dennison Rd	Dennison Road over Saline River, Str# 11000, Washtenaw County	0.000	Bridge Replacement	Bridge Replacement			CON	Programmed	20-23	$1,215,200	$227,850	$75,950	$1,519,000	BRT	$1,519,000			07/25/2019	10/02/2019	N/A	10/09/2020		12/04/2020				Approved
2021	Local	208115	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Washtenaw County	Geddes Rd	Geddes Road over Fowler Creek, Str# 10977, Washtenaw County	0.000	Bridge Replacement	Bridge Replacement			CON	Programmed	20-23	$745,600	$139,800	$46,600	$932,000	BRT	$932,000			07/25/2019	10/02/2019	N/A	04/09/2021		06/04/2021				Approved
2021	Local	208382	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Milan	Platt St	Main Street to Redman Road	0.885	Reconstruction	Reconstruct			CON	Programmed	20-23	$375,000	$0	$1,863,000	$2,238,000	STUL	$2,238,000	Admin Modification	10/03/2019	07/25/2019	12/17/2019	N/A	10/05/2020						Approved
2020	Local	209149	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Southeastern Michigan Council Of Governments	Ann Arbor-Detroit Project	From Blake Transit Center, Ann Arbor to Grand Circus Park, Downtown Detroit	0.000	Transit	New express bus service between Detroit and Ann Arbor			NI	Programmed	20-23	$561,083	$0	$0	$561,083	DSTP	$561,083			12/06/2019		N/A	01/02/2020		04/03/2020		Phase Added		Pending
2020	Trunkline	210043	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94	from Freer to Parker	5.510	Road Rehabilitation	Milling and two-course overlay, bridge preservation			CON	Programmed	20-23	$26,362,191	$2,929,132	$0	$29,291,323	IM	$31,863,117	Admin Modification	02/27/2020	02/27/2020		N/A	09/11/2020		11/06/2020				Approved
2021	Trunkline	210085	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23	Stony Creek to Ellsworth	6.830	Road Rehabilitation	Milling and two-course overlay			CON	Programmed	20-23	$31,276,685	$6,935,515	$0	$38,212,200	NH	$42,012,200					N/A	08/06/2021		10/01/2021				Pending
GPA Type Subtotals:			**S/TIP Line items**													**$121,207,528**	**$19,072,937**	**$14,277,409**	**$154,557,872**														
Transit Capital																																	
2020	Multi-Modal	202805	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	FY20 CMAQ - Bus replacement			NI	Programmed	20-23	$1,137,205	$284,301	$0	$1,421,506	CPM	$1,421,506	Admin Modification	10/21/2019	03/01/2018	06/27/2018	06/27/2018	09/30/2020					This projects budget has been adjusted and is ready to be approved.	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1305-bus stop improvements	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$124,000	$31,000	$0	$155,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020					TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Transit Capital																																	
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1101-<30 foot replacement bus with or without lift	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$1,008,000	$252,000	$0	$1,260,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1802-capital cost of contracting	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$608,000	$152,000	$0	$760,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1801-preventative maintenance	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$40,000	$10,000	$0	$50,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1207-architect and engineer	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$464,000	$116,000	$0	$580,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1105-van replacement, any size with or without lift	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$704,000	$176,000	$0	$880,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1404-computers (hardware and software)	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$1,409,062	$352,265	$0	$1,761,327	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1409-administrative vehicle	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$80,000	$20,000	$0	$100,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1408-maintenance equipment (hoists, tools, etc.)	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$80,000	$20,000	$0	$100,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1206-Bus terminal facility improvements	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$1,765,597	$441,399	$0	$2,206,996	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1403-office equipment (copier, office furniture, etc.)	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$60,000	$15,000	$0	$75,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$1,230,795	$307,699	$0	$1,538,494	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203218	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)	Transit Urban Capital Improvements: purchase buses and vehicles, etc.			NI	Programmed	20-23	$576,000	$144,000	$0	$720,000	5307	$10,186,817	Admin Modification	09/17/2019	05/23/2018	N/A	05/23/2018	09/30/2020				TIP IDs 23144, 23145, 23147, 23148, and 23149	Approved
2020	Multi-Modal	203222	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1101-<30 foot replacement bus with or without lift	Transit Capital 5310 Small Vehicles, Mob. Mgt.			NI	Programmed	20-23	$56,000	$14,000	$0	$70,000	5310	$216,745	Admin Modification	02/06/2020	05/23/2018	N/A	05/23/2018	09/30/2020					Approved
2020	Multi-Modal	203222	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1802-capital cost of contracting	Transit Capital 5310 Small Vehicles, Mob. Mgt.			NI	Programmed	20-23	$24,000	$6,000	$0	$30,000	5310	$216,745	Admin Modification	02/06/2020	05/23/2018	N/A	05/23/2018	09/30/2020					Approved
2020	Multi-Modal	203222	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1801-preventative maintenance	Transit Capital 5310 Small Vehicles, Mob. Mgt.			NI	Programmed	20-23	$20,000	$5,000	$0	$25,000	5310	$216,745	Admin Modification	02/06/2020	05/23/2018	N/A	05/23/2018	09/30/2020					Approved
2020	Multi-Modal	203222	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1811-misc. (explanation must be provided in work detail)	Transit Capital 5310 Small Vehicles, Mob. Mgt.			NI	Programmed	20-23	$20,596	$5,149	$0	$25,745	5310	$216,745	Admin Modification	02/06/2020	05/23/2018	N/A	05/23/2018	09/30/2020					Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Transit Capital																																	
2020	Multi-Modal	203222	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital Improvements	Areawide	0.000	SP1105-van replacement, any size with or without lift	Transit Capital 5310 Small Vehicles, Mob. Mgt.			NI	Programmed	20-23	$52,800	$13,200	$0	$66,000	5310	$216,745	Admin Modification	02/06/2020	05/23/2018	N/A	05/23/2018	09/30/2020						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$357,600	$89,400	$0	$447,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1403-office equipment (copier, office furniture, etc.)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$120,000	$30,000	$0	$150,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$135,200	$33,800	$0	$169,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1408-maintenance equipment (hoists, tools, etc.)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$80,000	$20,000	$0	$100,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1801-preventative maintenance	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$40,000	$10,000	$0	$50,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1207-architect and engineer	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$168,000	$42,000	$0	$210,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$608,000	$152,000	$0	$760,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1206-Bus terminal facility improvements	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$4,120,000	$1,030,000	$0	$5,150,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1409-administrative vehicle	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$82,400	$20,600	$0	$103,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205878	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$1,172,800	$293,200	$0	$1,466,000	5307	$8,605,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2021	Multi-Modal	205894	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5339 Bus Replacement			NI	Programmed	20-23	$992,000	$248,000	$0	$1,240,000	5339	$1,240,000	Admin Modification	06/11/2019		N/A		09/30/2021						Approved
2021	Multi-Modal	205895	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1101-<30 foot replacement bus with or without lift	Transit Capital 5310 Small Vehicles			NI	Programmed	20-23	$152,800	$38,200	$0	$191,000	5310	$191,000	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$139,200	$34,800	$0	$174,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$1,600,000	$400,000	$0	$2,000,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1409-administrative vehicle	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$84,800	$21,200	$0	$106,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$608,000	$152,000	$0	$760,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1206-Bus terminal facility improvements	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$295,200	$73,800	$0	$369,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1801-preventative maintenance	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$40,000	$10,000	$0	$50,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Transit Capital																																	
2022	Multi-Modal	205911	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$256,000	$64,000	$0	$320,000	5307	$3,779,000	Admin Modification	06/11/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205913	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5339 Bus Replacement			NI	Programmed	20-23	$992,000	$248,000	$0	$1,240,000	5339	$1,240,000	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205914	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1101-<30 foot replacement bus with or without lift	Transit Capital 5310 Small Vehicles and Mob. Mgt.			NI	Programmed	20-23	$157,600	$39,400	$0	$197,000	5310	$279,900	Admin Modification	07/31/2019		N/A		09/30/2022						Approved
2022	Multi-Modal	205914	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1811-misc. (explanation must be provided in work detail)	Transit Capital 5310 Small Vehicles and Mob. Mgt.			NI	Programmed	20-23	$66,320	$16,580	$0	$82,900	5310	$279,900	Admin Modification	07/31/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$608,000	$152,000	$0	$760,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1206-Bus terminal facility improvements	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$295,200	$73,800	$0	$369,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1409-administrative vehicle	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$84,800	$21,200	$0	$106,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$1,600,000	$400,000	$0	$2,000,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$256,000	$64,000	$0	$320,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$139,200	$34,800	$0	$174,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205933	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1801-preventative maintenance	Transit Capital 5307 Buses, Equip, Facilities, etc			NI	Programmed	20-23	$40,000	$10,000	$0	$50,000	5307	$3,779,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205936	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5339 Bus Replacement			NI	Programmed	20-23	$992,000	$248,000	$0	$1,240,000	5339	$1,240,000	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205937	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1811-misc. (explanation must be provided in work detail)	Transit Capital 5310 Small Vehicles and Mob. Mgt.			NI	Programmed	20-23	$54,400	$13,600	$0	$68,000	5310	$265,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2023	Multi-Modal	205937	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1101-<30 foot replacement bus with or without lift	Transit Capital 5310 Small Vehicles and Mob. Mgt.			NI	Programmed	20-23	$157,600	$39,400	$0	$197,000	5310	$265,000	Admin Modification	07/31/2019		N/A		09/29/2023						Approved
2020	Multi-Modal	205941	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital 5339 Bus Replacement			NI	Programmed	20-23	$992,000	$248,000	$0	$1,240,000	5339	$1,393,004	Admin Modification	09/17/2019		N/A		09/30/2020						Approved
2020	Multi-Modal	205941	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1206-Bus terminal facility improvements	Transit Capital 5339 Bus Replacement			NI	Programmed	20-23	$122,403	$30,601	$0	$153,004	5339	$1,393,004	Admin Modification	09/17/2019		N/A		09/30/2020						Approved
2020	Multi-Modal	208439	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY20 5311-JARC			NI	Programmed	20-23	$72,000	$18,000	$0	$90,000	5311	$90,000	Admin Modification	07/29/2019		N/A		09/30/2020						Approved
2021	Multi-Modal	208443	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY21 5311-JARC			NI	Programmed	20-23	$72,000	$18,000	$0	$90,000	5311	$90,000	Admin Modification	07/29/2019		N/A		09/30/2021						Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Transit Capital																																	
2022	Multi-Modal	208445	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY22 5311-JARC			NI	Programmed	20-23	$72,000	$18,000	$0	$90,000	5311	$90,000	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	208447	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY23 5311-JARC			NI	Programmed	20-23	$72,000	$18,000	$0	$90,000	5311	$90,000	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2020	Multi-Modal	208449	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6410-5310 Projects	Transit Capital FY20 5310-New Freedom-Traditional			NI	Active	20-23	$30,000	$7,500	$0	$37,500	5310	$37,500	Admin Modification	09/10/2019		N/A		09/30/2020	10/25/2019					Approved
2021	Multi-Modal	208451	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6470-New Freedom Projects	Transit Capital FY21 5311-New Freedom			NI	Programmed	20-23	$30,000	$7,500	$0	$37,500	5310	$37,500	Admin Modification	07/29/2019		N/A		09/30/2021						Approved
2022	Multi-Modal	208453	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6470-New Freedom Projects	Transit Capital FY22 5310-New Freedom			NI	Programmed	20-23	$30,000	$7,500	$0	$37,500	5310	$37,500	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	208456	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6470-New Freedom Projects	Transit Capital FY23 5310 New Freedom			NI	Programmed	20-23	$30,000	$7,500	$0	$37,500	5310	$37,500	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2021	Multi-Modal	208461	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide	0.000	6410-5310 Projects	Transit Capital FY21 5310			NI	Programmed	20-23	$204,000	$51,000	$0	$255,000	5310	$255,000	Admin Modification	07/29/2019		N/A		09/30/2021						Approved
2023	Multi-Modal	208462	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide	0.000	6410-5310 Projects	Transit Capital FY23 5310			NI	Programmed	20-23	$283,054	$70,764	$0	$353,818	5310	$353,818	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2020	Multi-Modal	208464	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY20 5311-JARC			NI	Abandoned	20-23	$48,000	$12,000	$0	$60,000	5311		Admin Modification	07/29/2019		N/A		09/30/2020						Approved
2021	Multi-Modal	208466	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY21 5311-JARC			NI	Programmed	20-23	$48,000	$12,000	$0	$60,000	5311	$60,000	Admin Modification	07/29/2019		N/A		09/30/2021						Approved
2022	Multi-Modal	208469	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY22 5311-JARC			NI	Programmed	20-23	$48,000	$12,000	$0	$60,000	5311	$60,000	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	208472	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide	0.000	6460-JARC Projects	Transit Capital FY23 5311-JARC			NI	Programmed	20-23	$48,000	$12,000	$0	$60,000	5311	$60,000	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2021	Multi-Modal	208619	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital FY21 CMAQ			NI	Programmed	20-23	$1,296,000	$324,000	$0	$1,620,000	CPM	$1,620,000	Admin Modification	09/16/2019				09/30/2021						Approved
2022	Multi-Modal	208621	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	AAATA Service Area	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital FY22 CMAQ			NI	Programmed	20-23	$1,334,232	$333,558	$0	$1,667,790	CPM	$1,667,790	Admin Modification	09/16/2019				09/30/2022						Approved
2023	Multi-Modal	208622	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Capital	AAATA Service Area	0.000	SP1104-40 foot and greater replacement bus with or without lift	Transit Capital FY23 CMAQ			NI	Programmed	20-23	$1,373,592	$343,398	$0	$1,716,990	CPM	$1,716,990	Admin Modification	09/16/2019				09/29/2023						Approved
2020	Multi-Modal	209065	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Capital	Areawide	0.000	6410-5310 Projects	Transit Capital FY20 5310			NI	Programmed	20-23	$333,454	$83,363	$0	$416,817	5310	$416,817	Admin Modification	09/10/2019		N/A		09/30/2020						Approved
GPA Type Subtotals:			**Transit Capital**													**$32,493,910**	**$8,123,477**	**$0**	**$40,617,387**														
Transit Operating																																	
2020	Multi-Modal	203219	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	SP3000-operating except JARC and New Freedom	Transit Operating Assistance 5307 Urban			NI	Programmed	20-23	$3,331,250	$9,600,000	$20,000,000	$32,931,250	5307	$32,931,250	Admin Modification	03/05/2019	08/06/2019	N/A	10/02/2019	09/30/2020						Approved
2020	Multi-Modal	203223	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	1170-Other Capital Items (Bus)	Mobility management/ trip assistance			NI	Abandoned	20-23	$110,000	$27,500	$0	$137,500	5310		Admin Modification	10/26/2018	05/23/2018	N/A	05/23/2018	09/30/2020						Approved
2020	Multi-Modal	203225	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	3000-Operating Assistance	Transit operating - FY 20 Section 5311 rural			NI	Programmed	20-23	$324,071	$0	$324,071	$648,142	5311	$648,142	Admin Modification	03/04/2020	05/23/2018	N/A	05/23/2018	09/30/2020						Approved

Transit Operating

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
2021	Multi-Modal	205879	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	SP3000-operating except JARC and New Freedom	Transit Operating Assistance 5307 Urban			NI	Programmed	20-23	$3,400,000	$9,600,000	$20,000,000	$33,000,000	5307	$33,000,000			07/25/2019	N/A	10/02/2019	09/30/2021						Approved
2021	Multi-Modal	205909	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	3000-Operating Assistance	Transit Operating 5311 Rural			NI	Programmed	20-23	$369,352	$179,000	$562,000	$1,110,352	5311	$1,110,352	Admin Modification	02/06/2020		N/A		09/30/2021						Approved
2022	Multi-Modal	205912	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	SP3000-operating except JARC and New Freedom	Transit Operating Assistance 5307 Urban			NI	Programmed	20-23	$3,400,000	$9,600,000	$20,000,000	$33,000,000	5307	$33,000,000			07/25/2019	N/A	10/02/2019	09/30/2022						Approved
2022	Multi-Modal	205915	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	3000-Operating Assistance	Transit Operating 5311 Rural			NI	Programmed	20-23	$386,000	$179,000	$562,000	$1,127,000	5311	$1,127,000	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	205934	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	SP3000-operating except JARC and New Freedom	Transit Operating Assistance 5307 Urban			NI	Programmed	20-23	$3,400,000	$9,600,000	$20,000,000	$33,000,000	5307	$33,000,000			07/24/2019	N/A	10/02/2019	09/29/2023						Approved
2023	Multi-Modal	205939	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	3000-Operating Assistance	Transit Operating 5311 Rural			NI	Programmed	20-23	$386,000	$179,000	$562,000	$1,127,000	5311	$1,127,000	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2020	Multi-Modal	208077	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide/Washtenaw County	0.000	6460-JARC Projects	Operating assistance.			NI	Active	20-23	$95,476	$95,476	$0	$190,952	5311	$190,952	Admin Modification	10/07/2019		N/A		09/30/2020	11/18/2019					Approved
2020	Multi-Modal	208078	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide/Washtenaw County	0.000	6460-JARC Projects	Mobility management.			NI	Active	20-23	$72,000	$18,000	$0	$90,000	5311	$90,000	Admin Modification	10/07/2019		N/A		09/30/2020	11/18/2019					Approved
2020	Multi-Modal	208094	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Operating	Areawide/Washtenaw County	0.000	6460-JARC Projects	Operating assistance.			NI	Active	20-23	$40,750	$40,750	$0	$81,500	5311	$81,500	Admin Modification	10/07/2019		N/A		09/30/2020	11/18/2019					Approved
2020	Multi-Modal	208095	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Capital	Areawide/Washtenaw County	0.000	6460-JARC Projects	Mobility management.			NI	Active	20-23	$48,000	$12,000	$0	$60,000	5311	$60,000	Admin Modification	10/07/2019		N/A		09/30/2020	11/18/2019					Approved
2020	Multi-Modal	208441	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY20 5311 JARC Operating			NI	Programmed	20-23	$95,476	$95,476	$0	$190,952	5311	$190,952	Admin Modification	07/29/2019		N/A		09/30/2020						Approved
2021	Multi-Modal	208442	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY21 5311-JARC Operating			NI	Programmed	20-23	$95,476	$95,476	$0	$190,952	5311	$190,952	Admin Modification	07/29/2019		N/A		09/30/2021						Approved
2022	Multi-Modal	208444	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY22 5311-JARC Operating			NI	Programmed	20-23	$95,476	$95,476	$0	$190,952	5311	$190,952	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	208446	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY23 5311-JARC Operating			NI	Programmed	20-23	$95,476	$95,476	$0	$190,952	5311	$190,952	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2020	Multi-Modal	208448	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6470-New Freedom Projects	Transit Operating FY20 5311-New Freedom Operating			NI	Active	20-23	$72,344	$0	$72,344	$144,688	5310	$144,688	Admin Modification	07/29/2019		N/A		09/30/2020	10/25/2019					Approved
2021	Multi-Modal	208452	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6470-New Freedom Projects	Transit Operating FY21 5310 New Freedom Operating			NI	Programmed	20-23	$72,344	$0	$72,344	$144,688	5310	$144,688	Admin Modification	07/29/2019		N/A		09/30/2021						Approved
2022	Multi-Modal	208455	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6470-New Freedom Projects	Transit Operating FY22 5310 New Freedom Operating			NI	Programmed	20-23	$72,344	$0	$72,344	$144,688	5310	$144,688	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	208457	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	People's Express	Transit Operating	Areawide	0.000	6470-New Freedom Projects	Transit Operating FY23 5310 New Freedom Operating			NI	Programmed	20-23	$72,344	$0	$72,344	$144,688	5310	$144,688	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2020	Multi-Modal	208463	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY20 5311-JARC Operating			NI	Abandoned	20-23	$40,750	$40,750	$0	$81,500	5311		Admin Modification	07/29/2019		N/A		09/30/2020						Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
Transit Operating																																	
2021	Multi-Modal	208465	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY21 5310			NI	Programmed	20-23	$40,750	$40,750	$0	$81,500	5311	$81,500	Admin Modification	07/29/2019		N/A		09/30/2021						Approved
2022	Multi-Modal	208467	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY22 5311-JARC			NI	Programmed	20-23	$40,750	$40,750	$0	$81,500	5311	$81,500	Admin Modification	07/29/2019		N/A		09/30/2022						Approved
2023	Multi-Modal	208471	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Western-Washtenaw Area Value Express	Transit Operating	Areawide	0.000	6460-JARC Projects	Transit Operating FY23 5311-JARC			NI	Programmed	20-23	$40,750	$40,750	$0	$81,500	5311	$81,500	Admin Modification	07/29/2019		N/A		09/29/2023						Approved
2021	Multi-Modal	209005	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	3000-Operating Assistance	Transit Operating FY21 Section 5310			NI	Programmed	20-23	$68,750	$0	$68,750	$137,500	5310	$137,500	Admin Modification	09/17/2019		N/A		09/30/2021						Approved
2020	Multi-Modal	209077	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	0.000	3000-Operating Assistance	Transit Operating FY20 Section 5310			NI	Programmed	20-23	$88,204	$0	$88,204	$176,408	5310	$176,408	Admin Modification	02/06/2020		N/A		09/30/2020						Approved
GPA Type Subtotals:			**Transit Operating**													**$16,354,133**	**$39,675,630**	**$82,456,401**	**$138,486,164**														
Trunkline Bridge																																	
2023	Trunkline	204943	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 SB	4 structures on US-23 / M-14	0.000	Bridge CPM	Epoxy Overlay, Steel Repairs			CON	Programmed	20-23	$1,671,779	$370,713	$0	$2,042,490	NH	$2,370,747	Admin Modification	03/17/2020			N/A	07/07/2023		09/01/2023		GPA over or over 25%		Pending
2021	Trunkline	208856	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23	Willow Road over US-23	0.000	Bridge Rehabilitation	Healer sealer, Substructure Repairs			CON	Programmed	20-23	$175,114	$38,830	$0	$213,944	BO	$247,431	Admin Modification	03/17/2020			N/A	08/06/2021		10/01/2021		GPA over or over 25%		Pending
2021	Trunkline	208857	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23	Bemis and Carpenter Roads over US-23	0.000	Bridge CPM	Epoxy Overlay, Healer Sealer, Substructure Patching			CON	Programmed	20-23	$1,237,177	$274,340	$0	$1,511,517	NH	$1,748,103	Admin Modification	03/17/2020			N/A	08/06/2021		10/01/2021		GPA over or over 25%		Pending
2021	Trunkline	209015	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94	US-12 BR over I-94	0.000	Bridge CPM	Epoxy Overlay			CON	Programmed	20-23	$717,613	$79,734	$0	$797,347	IM	$922,150	Admin Modification	10/02/2019			N/A	08/06/2021		10/01/2021		GPA over or over 25%		Pending
GPA Type Subtotals:			**Trunkline Bridge**													**$3,801,683**	**$763,617**	**$0**	**$4,565,298**														
Trunkline Livability and Sustainability																																	
2020	Trunkline	209344	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94	Chelsea Rest Area	0.000	Roadside Facilities - Preserve	Septic field Replacement			CON	Active	20-23	$418,108	$92,714	$0	$510,822	ST	$577,451	Admin Modification	10/03/2019			N/A	02/07/2020	02/25/2020	04/03/2020				Approved
2020	Trunkline	209612	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12BR	Huron St Over I-94	0.779	Roadside Facilities - Improve	Non-motorized path			PE	Programmed	20-23	$245,550	$0	$54,450	$300,000	TA	$3,301,556	Admin Modification	01/13/2020			N/A	02/07/2020		10/01/2021				Approved
2022	Trunkline	209612	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12BR	Huron St Over I-94	0.779	Roadside Facilities - Improve	Non-motorized path			CON	Programmed	20-23	$2,315,614	$25,942	$660,000	$3,001,556	TA	$3,301,556	Admin Modification	01/13/2020			N/A	10/01/2021		10/01/2021		GPA over or over 25%		Pending
GPA Type Subtotals:			**Trunkline Livability and Sustainability**													**$2,979,272**	**$118,656**	**$714,450**	**$3,812,378**														
Trunkline Road																																	
2020	Trunkline	113542	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-17	Normal to Mich, I-94 to Mich, Hamilton to Ecorse	1.736	Road Rehabilitation	Mill & resurface; Concrete patches			ROW	Programmed	20-23	$61,388	$13,613	$0	$75,000	ST	$7,182,097	Admin Modification	07/31/2019	07/11/2018	07/11/2018	N/A	03/30/2020		12/03/2021				Approved
2022	Trunkline	113542	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-17	Normal to Mich, I-94 to Mich, Hamilton to Ecorse	1.736	Road Rehabilitation	Mill & resurface; Concrete patches			CON	Programmed	20-23	$5,500,320	$1,219,680	$0	$6,720,000	ST	$7,182,097			07/24/2019	10/02/2019	N/A	10/05/2021		12/03/2021				Approved
2020	Trunkline	204002	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 N	Stony Creek to Ellsworth	6.978	Road Capital Preventive Maintenance	Single Course Mill & Resurface			CON	Abandoned	20-23	$3,627,593	$804,409	$0	$4,432,000	NH		Admin Modification	07/31/2019			N/A	01/10/2020		03/06/2020				Approved
2020	Trunkline	204072	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-52	Dutch Drive to I-94	9.777	Road Capital Preventive Maintenance	Multiple course microsurface			CON	Programmed	20-23	$1,248,213	$276,788	$0	$1,525,000	ST	$1,688,000	Admin Modification	06/11/2019			N/A	08/07/2020		10/02/2020				Approved
2021	Trunkline	205206	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-17 W	M-17 west of Summit to Huron St	0.655	Road Capital Preventive Maintenance	Single course mill& resurface, ADA ramps			CON	Abandoned	20-23	$360,140	$79,860	$0	$440,000	ST		Admin Modification	06/11/2019			N/A	11/13/2020		01/08/2021				Approved
2022	Trunkline	208686	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12	US-12 Maple to Industrial	1.202	Road Capital Preventive Maintenance	Single course mill and resurface			CON	Programmed	20-23	$871,703	$193,298	$0	$1,065,000	NH	$1,180,000	Admin Modification	08/15/2019			N/A	12/10/2021		02/04/2022				Approved

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status
GPA Type Subtotals:			**Trunkline Road**													**$11,669,357**	**$2,587,648**	**$0**	**$14,257,000**															
Trunkline Traffic Operations And Safety																																	
2023	Trunkline	113506	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	EB I-94	I-94 EB near Kalmbach Rd.	1.000	Traffic Safety	Install De-icing system			PE	Abandoned	20-23	$7,110	$790	$0	$7,900	HSIP				07/25/2019	11/02/2019	N/A	11/02/2022		08/07/2023				Approved
2023	Trunkline	113506	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	EB I-94	I-94 EB near Kalmbach Rd.	1.000	Traffic Safety	Install De-icing system			CON	Abandoned	20-23	$358,383	$39,820	$0	$398,203	HSIP				07/25/2019	11/02/2019	N/A	08/07/2023		08/07/2023				Approved
2022	Trunkline	120343	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12	from Austin Rd to I-94 interchange	7.280	Traffic Safety	Signal modernization, detection, interconnect			PE	Programmed	20-23	$150,000	$0	$0	$150,000	CMG	$1,115,600			07/28/2016	10/03/2016	N/A	10/22/2021		09/01/2023				Approved
2022	Trunkline	120343	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12	from Austin Rd to I-94 interchange	7.280	Traffic Safety	Signal modernization, detection, interconnect			ROW	Programmed	20-23	$40,000	$0	$0	$40,000	CMG	$1,115,600			07/28/2016	10/03/2016	N/A	10/28/2021		09/01/2023				Approved
2023	Trunkline	120343	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12	from Austin Rd to I-94 interchange	7.280	Traffic Safety	Signal modernization, detection, interconnect			CON	Programmed	20-23	$925,600	$0	$0	$925,600	CMG	$1,115,600			07/24/2019	10/02/2019	N/A	07/07/2023		09/01/2023				Approved
2022	Trunkline	120363	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94	Various locations in Washtenaw and Monroe Counties	2.219	Traffic Safety	Modernize, detection, radio interconnect			PE	Programmed	20-23	$450,000	$0	$0	$450,000	CMG	$2,995,703			07/25/2019	10/02/2019	N/A	10/11/2021		03/01/2024				Approved
2022	Trunkline	120363	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	I-94	Various locations in Washtenaw and Monroe Counties	2.219	Traffic Safety	Modernize, detection, radio interconnect			ROW	Programmed	20-23	$40,000	$0	$0	$40,000	CMG	$2,995,703			07/25/2019	10/02/2019	N/A	02/03/2022		03/01/2024				Approved
2022	Trunkline	202569	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-12BR	I-94BL, US-23BR, US-12BR, US-12	35.727	Traffic Safety	Non-freeway Signing replacement			CON	Programmed	20-23	$632,000	$0	$0	$632,000	NHG	$758,300	Admin Modification	08/02/2019	05/08/2018	05/08/2018	N/A	10/08/2021		12/03/2021			TIP ID for CON Phase is 23977	Approved
2020	Trunkline	204781	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23BR N	EB M14 and NB US23/WBM14	1.909	ITS Applications	Truck overheight warning system			CON	Programmed	20-23	$321,392	$71,267	$0	$392,659	NH	$402,672	Admin Modification	07/31/2019			N/A	06/12/2020		08/07/2020				Approved
2020	Trunkline	204901	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-14 E	M14EB (US-23BR)	4.223	ITS Applications	Install a Queue warning/stopped traffic advisory system			CON	Programmed	20-23	$456,922	$101,321	$0	$558,243	NH	$683,243	Admin Modification	01/02/2020			N/A	06/12/2020		08/07/2020				Approved
2020	Trunkline	205833	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-17	M-17 sidewalk gaps in Ann Arbor, Ypsilanti Twp & Ypsilanti	0.175	Traffic Safety	Construct sidewalk			PE	Active	20-23	$67,500	$6,562	$938	$75,000	HSIP	$255,306	Admin Modification	07/31/2019			N/A	10/01/2019	11/20/2019	03/05/2021				Approved
2021	Trunkline	205833	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-17	M-17 sidewalk gaps in Ann Arbor, Ypsilanti Twp & Ypsilanti	0.175	Traffic Safety	Construct sidewalk			CON	Programmed	20-23	$162,275	$15,777	$2,254	$180,306	HSIP	$255,306	Admin Modification	06/11/2019			N/A	01/08/2021		03/05/2021				Approved
2020	Trunkline	206241	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 N	US-23 Geddes Rd to Ellsworth	3.155	Traffic Safety	Construct median cable barrier			PE	Programmed	20-23	$316,319	$35,147	$0	$351,465	HSIP	$2,360,832	Admin Modification	11/25/2019			N/A	12/06/2019		01/07/2022				Approved
2022	Trunkline	206241	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 N	US-23 Geddes Rd to Ellsworth	3.155	Traffic Safety	Construct median cable barrier			CON	Programmed	20-23	$1,808,430	$200,937	$0	$2,009,367	HSIP	$2,360,832	Admin Modification	11/25/2019			N/A	11/12/2021		01/07/2022				Approved
2020	Trunkline	207977	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 S	Various locations within Washtenaw Co.	8.568	ITS Applications	Installation of various ITS Devices			PE	Programmed	20-23	$172,536	$38,259	$0	$210,795	NH	$1,032,503	Admin Modification	07/29/2019			N/A	11/04/2019		02/04/2022				Approved
2022	Trunkline	207977	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	US-23 S	Various locations within Washtenaw Co.	8.568	ITS Applications	Installation of various ITS Devices			CON	Programmed	20-23	$672,568	$149,140	$0	$821,708	NH	$1,032,503	Admin Modification	06/11/2019			N/A	12/10/2021		02/04/2022				Approved
2023	Trunkline	209147	Southeast Michigan Council of Governments (SEMCOG)	Washtenaw	MDOT	M-14 E	M-14, US-23 in Washtenaw County	16.006	ITS Applications	Install ITS Devices			PE	Programmed	20-23	$272,079	$60,333	$0	$332,412	NH	$2,854,462	Admin Modification	10/21/2019			N/A	11/04/2022		02/07/2025				Approved
GPA Type Subtotals:			**Trunkline Traffic Operations And Safety**													**$6,853,114**	**$719,353**	**$3,192**	**$7,575,658**															
Grand Total:																**$226,478,674**	**$71,608,376**	**$108,846,599**	**$406,933,638**															

Total Job Phases Reported: 173

Fiscal Year	Job Type	Job #	MPO	County	Responsible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	AC/ ACC	ACC Year(s)	Phase	Phase Status	S/TIP Cycle	Fed Estimated Amount	State Estimated Amount	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost	Action Type	Action Approval Date	Local Fed Approval Date	FHWA Approval Date	FTA Approval Date	Schedule Obligation Date	Actual Obligation Date	Schedule Let Date	Actual Let Date	Federal Amendment Type	Comments	S/TIP Status

Preferences:

Report Format: Standard

FISCAL Year(s): 2020, 2021, 2022, 2023

MPO/Non-MPO: Southeast Michigan Council of Governments (SEMCOG)

County: Washtenaw

Prosperity Region: ALL

MDOT Region: University

STIP Cycle: Fiscal Year 2020 - Fiscal Year 2023

STIP Status: Approved, Pending
(A - Approved, P - Pending)

Job Type: Trunkline, Local, Multi-Modal

Phase Type: ALL

Phase Status: ALL
(AP - Programmed, AC - Active, CP - Completed)
(Active - Obligated)

Amendment Type: ALL

Template: Trunkline - ALL, Local - ALL, Multi-Modal - ALL

Finance System: Trunkline - ALL, Local - ALL, Multi-Modal - ALL

RTF: ALL

Include S/TIP Exempt: No

EXHIBIT P

Act 51 Fiscal Report: FY2019

Michigan Department
of Transportation
Form 2030

CITY OR VILLAGE OF: **Ann Arbor**

Act 51
STREET FINANCIAL REPORT
FOR CITIES AND VILLAGES

FOR THE FISCAL YEAR ENDED

June 30, 2019

This information is required in accordance with Act 51 of P.A. 1951, as amended. Failure to provide this information will cause funds to be withheld. This report is subject to review by Michigan Department of Transportation and correction by the submitting agency before final acceptance by Michigan Department of Transportation.

The financial report accurately reflects the REVENUES AND EXPENDITURES OF ALL STREET WORK and funds by systems, and conforms to the requirements of P.A. 51 of 1951, as amended.

ATTEST

Clerk or Treasurer Signature

Michael Pettigrew
Print Name

mpettigrew@a2gov.org
E-mail address

(734)794-6541
Phone number

12/20/19
Date

Street Administrator Signature

Mr. Nicholas S. Hutchinson
Print Name

nhutchinson@a2gov.org
E-mail address

(734)946-0007
Phone number

12/20/19
Date

Mail completed form to:

MDOT
Financial Operations Division
P.O. Box 30050
Lansing, MI 48909

(OR)

E-mail form to : MDOT-Outreach@michigan.gov

(OR)

Fax form to : 517-335-1828

City or Village of: Ann Arbor
Fiscal Year - 2019
Start: 07/01/2018 End: 06/30/2019

BALANCE SHEET

ASSETS	MAJOR STREET FUND	LOCAL STREET FUND
1. Cash	$ 15,166,802.00	$ 7,720,938.00
2. Investments	-	-
3. Receivables		
a. Accounts	793,017.00	-
b. Due From Other Governmental Units	-	-
c. Special Assessments	-	-
d. Interest	-	-
e. Other	-	-
4. Due From State		
a. Michigan Transportation Fund (MTF)	1,622,271.00	452,863.00
b. Trunkline Preservation	-	
c. Road Projects	-	-
d. Other	1,268.00	-
5. Due From Federal Government		
a. Federal Highway Administration (FHWA)	-	-
b. Other	-	-
6. Due From Other Funds		
a. General	-	-
b. Major Street		-
c. Local Street	-	
d. Municipal Street	-	-
e. Other	-	-
7. Inventory	-	-
8. Other Assets		
a. Prepaid Expenses	-	-
b. Other	-	-
9. TOTAL ASSETS (must agree with Total Liabilities and Fund Balance - line 14)	**$ 17,583,358.00**	**$ 8,173,801.00**

BALANCE SHEET

LIABILITIES AND FUND BALANCES	MAJOR STREET FUND	LOCAL STREET FUND
10. Accounts Payable	$ 563,701.00	$ 608,399.00
11. Due To Other Funds		
a. General	-	-
b. Major Street		-
c. Local Street	-	
d. Other	-	-
12. Other Liabilities		
a. Due to State	-	-
b. Accrued Payroll	-	-
c. Other Accrued Liabilities	43,056.00	15,587.00
d. Advances From Other Funds	-	-
e. Deferred Revenue	-	-
13. Fund Balance (This amount is populated from line 53)	16,976,601.00	7,549,815.00
14. TOTAL LIABILITIES AND FUND BALANCE (Must agree with Total Assets - line 9)	**$ 17,583,358.00**	**$ 8,173,801.00**

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE

REVENUES	MAJOR STREET FUND	LOCAL STREET FUND
15. Tax Levies	$ -	$ -
16. Federal Grants		
a. MDOT Payments to Private Contractors	-	-
b. Negotiated Contracts	60,540.00	-
17. State Grants		
a. Michigan Transportation Fund (Act 51)	9,314,612.00	2,602,761.00
b. Winter Maintenance (Act 51)	-	-
c. Local Bridge Fund	-	-
d. Transportation Economic Development Fund	-	-
e. Metro Act Fund	-	-
f. Other	699,753.00	699,753.00
18. State Trunkline Preservation (must show expenditures on line 34)	226,327.00	
19. Interest	456,995.00	222,812.00
20. Special Assessments	-	-
21. Contributions From Counties	-	-
22. Contributions From Adjacent Governmental Units	-	-
23. Miscellaneous	1,993,741.00	192,664.00
24. TOTAL REVENUES	**$ 12,751,968.00**	**$ 3,717,990.00**

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE

EXPENDITURES	MAJOR STREET FUND	LOCAL STREET FUND
25. Construction - Streets (Incl. Eng. & R.O.W.)	$ -	$ -
26. Construction - Structures (Incl. Eng. & R.O.W.)	-	-
27. Preservation - Streets	20,925,330.00	8,106,831.00
28. Preservation - Structures	172,549.00	-
29. Traffic Services - Streets and Structures	3,170,515.00	260,218.00
30. Winter Maintenance - Streets and Structures	807,965.00	345,317.00
31. Administration, Engineering & Record Keeping	498,032.00	157,964.00
32. Roadside Parks (Major Street Only)	-	
33. Contributions to Adjacent Governmental Units	-	-
34. State Trunkline Preservation (must show revenue on line 18)	181,635.00	
35. State Trunkline Construction - City/Village Share	-	-
36. Miscellaneous	-	-
DEBT SERVICE		
37. Principal	553,760.00	64,740.00
38. Interest and Bank Fees	122,363.00	19,769.00
39. TOTAL EXPENDITURES	$ 26,432,149.00	$ 8,954,839.00

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE

OTHER FINANCING SOURCES (USES)	MAJOR STREET FUND	LOCAL STREET FUND
40. General Fund	$ -	$ -
41. Municipal Street Fund	-	-
42. Capital Improvement Fund	-	-
43. Transfer - Major to Local	(73,971.00)	73,971.00
44. Transfer - Local to Major	-	-
45. Bond Proceeds	-	-
46. Equipment Installment Purchase Proceeds	-	-
47. Other	17,710,849.00	6,446,734.00
48. TOTAL OTHER FINANCING SOURCES (USES)	**$ 17,636,878.00**	**$ 6,520,705.00**
49. Excess of Revenues and Other Sources Over/Under Expenditures and Other Uses	3,956,697.00	1,283,856.00
50. Fund Balance at Beginning of Year	13,019,904.00	6,265,959.00
51. Prior Period Adjustment	-	-
52. Adjusted Fund Balance at Beginning of Year	13,019,904.00	6,265,959.00
53. Fund Balance at End of Year	**$ 16,976,601.00**	**$ 7,549,815.00**

ACTUAL QUALIFIED EXPENDITURES FOR NONMOTORIZED IMPROVEMENTS

Your Grand Total must equal or exceed 1% of your Fiscal Year MTF returns multiplied by 10.

*Sum of lines 17a and 17b, Major and Local

$11,917,373.00 x .01 x 10 = $1,191,737.30

Fiscal Year	2010	2011	2012	2013	2014	
Expenditures	333,525.00	572,383.00	1,412,761.00	2,010,019.00	2,147,660.00	
Fiscal Year	**2015**	**2016**	**2017**	**2018**	**2019**	**Grand Total**
Expenditures	3,083,961.00	3,473,823.00	2,869,099.00	2,836,002.00	2,669,135.00	$ 21,408,368.00

Detailed records must be maintained for future reference or review.

Distribute Current Year Expenditures to the Following Categories

Road Facilities

Bike Lanes: $ 19,862.00

Shoulders: $ -

Other: $ 306,175.00

Non-Road Facilities

Shared Use Paths/Structures: $ 179,530.00

Sidewalks/Curb Ramps: $ 1,885,463.00

Pavement Markings/Signs: $ 85,210.00

Other: $ -

Non-Motorized Services

Planning/Education: $ 192,895.00

SCHEDULE OF CAPITAL ASSETS
MAJOR AND LOCAL STREET FUNDS

					CURRENT YEAR		
Date of Purchase	**Description**	**Fund** M = Major L = Local	**Original Purchase Price**	**Prior Years Depreciation**	**Beginning Book Balance**	**Depreciation Expense**	**Ending Book Balance**
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Totals:							

City or Village of: Ann Arbor
Fiscal Year - 2019
Start: 07/01/2018 End: 06/30/2019

SCHEDULE OF LONG TERM DEBT
MAJOR AND LOCAL STREET FUNDS

							CURRENT YEAR		
Date of Issue	Description	Fund M = Major L = Local	Amount of Issue	Date of Maturity	Amount Retired Prior Year(s)	Beginning Balance	Bank Fees Interest Expenses Amount	Amount Retired	Ending Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
03/27/2012	MTF REFUNDING BONDS	M	2,670,000.00	12/01/2023	2,915,000.00	(245,000.00)	28,080.00	245,000.00	(490,000.00)
11/18/2015	MNTC FAC REFUNDING	M	4,392,080.00	03/01/2029	4,694,640.00	(302,560.00)	94,283.00	308,760.00	(611,320.00)
11/18/2015	MNTC FAC REFUNDING	L	920,920.00	03/01/2029	984,360.00	(63,440.00)	19,769.00	64,740.00	(128,180.00)
	Totals:		7,983,000.00		8,594,000.00	$(611,000.00)	$ 142,132.00	$ 618,500.00	1,229,500.00)

ASSET MANAGEMENT
Projects Completed During the County Fiscal Year

Work Type: Cape Seal Major

Project ID	Project Cost	Date Open to Traffic	Pavement Type
2019-CS-M1	307,000.00	06/30/2019	Asphalt

Work Type: Mill & Fill Local - < = 2" Thick

Project ID	Project Cost	Date Open to Traffic	Pavement Type
2018C LSR-17	40,840.00	11/20/2018	Asphalt

Work Type: Mill & Fill Major - < = 2" Thick

Project ID	Project Cost	Date Open to Traffic	Pavement Type
2018C LSR-18	703,000.00	08/27/2018	Asphalt
TR-SC-14-07 (B)	32,775.00	05/22/2019	Asphalt

Work Type: Reconstruction

Project ID	Project Cost	Date Open to Traffic	Pavement Type
TR-SC-14-07 (D)	281,800.00	05/22/2019	Brick

Work Type: Reconstruction (Major)

Project ID	Project Cost	Date Open to Traffic	Pavement Type
TR-SC-14-07 (A)	1,046,500.00	05/22/2019	Asphalt

Work Type: Rehabilitation Local (Remove & Replace full depth)

Project ID	Project Cost	Date Open to Traffic	Pavement Type
2018C LSR-1	745,450.00	08/30/2018	Asphalt

2018C LSR-11	70,525.00	08/30/2018	Asphalt
2018C LSR-12	229,100.00	11/20/2018	Asphalt
2018C LSR-13	174,755.00	07/02/2018	Asphalt
2018C LSR-14	715,840.00	07/24/2018	Asphalt
2018C LSR-15	224,794.00	07/07/2018	Asphalt
2018C LSR-2	282,200.00	08/31/2018	Asphalt
2018C LSR-3	151,935.00	07/02/2018	Asphalt
2018C LSR-4	243,700.00	10/24/2018	Asphalt
2018C LSR-7	217,400.00	11/01/2018	Asphalt
2018C LSR-8	96,700.00	11/01/2018	Asphalt
2018C LSR-9	147,750.00	10/24/2018	Asphalt
2019C LSR-1	458,300.00	06/14/2019	Asphalt
TR-SC-14-07 (C)	183,350.00	05/22/2019	Asphalt
UT-SN-18-04	126,000.00	11/14/2018	Asphalt
UT-WS-12-06	587,400.00	11/14/2018	Asphalt
UT-WS-18-02	56,400.00	10/15/2018	Asphalt
UT-WS-18-08	80,400.00	10/01/2018	Asphalt

Work Type: Rehabilitation Major (Remove & Replace full depth)

Project ID	Project Cost	Date Open to Traffic	Pavement Type

TR-SC-14-09	2,111,400.00	11/30/2018	Asphalt

Work Type: Resurfacing Major - Mill & replace > 2" & < total)

Project ID	Project Cost	Date Open to Traffic	Pavement Type
TR-SC-18-14	426,500.00	06/18/2019	Asphalt
TR-SC-14-07 (E)	43,600.00	05/22/2019	Asphalt
TR-SC-16-19	168,550.00	07/30/2018	Asphalt
TR-SC-18-05	861,500.00	07/12/2018	Asphalt

Work Type: Resurfacing- Mill & replace > 2" & < total)

Project ID	Project Cost	Date Open to Traffic	Pavement Type
2018C LSR-6	167,850.00	10/24/2018	Asphalt
TR-SC-14-01	300,250.00	08/08/2018	Asphalt
TR-SC-14-12	1,686,800.00	10/26/2018	Asphalt

Sub Ledger Report - Assets

Line: 3 Other - Major

Account	Amount ($)	Description
Taxes	0.00	Taxes Receivable
Allow	0.00	Allowance for Uncollectibles

Line: 4 Michigan Transportation Fund (MTF) - Local

Account	Amount ($)	Description
MDOT	232,312.00	Due from MDOT May 2019
MDOT	220,551.00	Due from MDOT June 2019

Line: 4 Michigan Transportation Fund (MTF) - Major

Account	Amount ($)	Description
MDOT	831,568.00	Due from MDOT May 2019
MDOT	790,703.00	Due from MDOT June 2019

Line: 4 Other - Local

Account	Amount ($)	Description
-	0.00	PUBLIC ACT84

Line: 4 Other - Major

Account	Amount ($)	Description
-	1,268.00	adjusting entry-error to be corrected

Line: 5 Other - Major

Account	Amount ($)	Description
-	0.00	Grant Revenue-UMTRI Proj

Sub Ledger Report - Liabilities

Line: 12 Other Accrued Liabilities - Local

Account	Amount ($)	Description
-	15,587.00	Accrued Liabilities

Line: 12 Other Accrued Liabilities - Major

Account	Amount ($)	Description
-	43,056.00	Accrued Liabilites
-	0.00	Deposits Payable

Sub Ledger Report - Revenues

Line: 16 Negotiated Contracts - Major

Account	Amount ($)	Description
-	60,540.00	UMTRI-US DEPT TRANS GRANT

Line: 17 Other - Local

Account	Amount ($)	Description
-	699,753.00	MI General Fund

Line: 17 Other - Major

Account	Amount ($)	Description
-	0.00	MI General Fund
-	699,753.00	STATE OF MI -GENERAL FUND

Line: 23 Miscellaneous - Local

Account	Amount ($)	Description
-	192,664.00	Charges for Services
-	0.00	Miscellaneous revenue
-	0.00	Interest/Dividends

Line: 23 Miscellaneous - Major

Account	Amount ($)	Description
-	1,993,741.00	Charges for Services
-	0.00	Intra-governmental sales

Sub Ledger Report - Other Financing Sources (Uses)

Line: 47 Other - Local

Account	Amount ($)	Description
-	2,270,030.00	Stormwater Sewer
-	4,176,704.00	Street Repair Millage
-	0.00	General Fund
-	0.00	Fleet Fund
-	0.00	Risk Fund

Line: 47 Other - Major

Account	Amount ($)	Description
-	0.00	Project Mgmt Fund
-	0.00	Risk Fund
-	3,468.00	Sewage Disposal
-	7,157,003.00	Storm
-	37,548.00	Central Stores
-	10,512,830.00	Street Millage

Sub Ledger Report - Non Motorized

Line: 55 Non-Motorized Services Planning / Education

Account	Amount ($)	Description
-	192,895.00	Planning/Education

Line: 55 Non-Road Facilities - Other

Account	Amount ($)	Description
-	0.00	Bike Share Prog-Cnty Partnership

Line: 55 Road Facilities - Other

Account	Amount ($)	Description
-	306,175.00	Other-Road Facilities

EXHIBIT Q

Locally Optimized Treatment and Funding Strategy:

Major Network

Strategy Comprehensive Report

Ann Arbor (CityVillage)

Report Module: Strategy Evaluation
Today's Date: Wednesday, August 19, 2020

AACIPMajor

Base Year: 2020
Percent Inflation: 2
Number of Years: 6
Optimized: No
Current Filter: 2020 Filter for Model Majors
Evaluation Date: 5/19/2020

Strategy Comprehensive Report

AACIPMajor

Base Year	2020
Percent Inflation	2
Number of Years	6
Optimized	No
Current Filter	2020 Filter for Model Majors

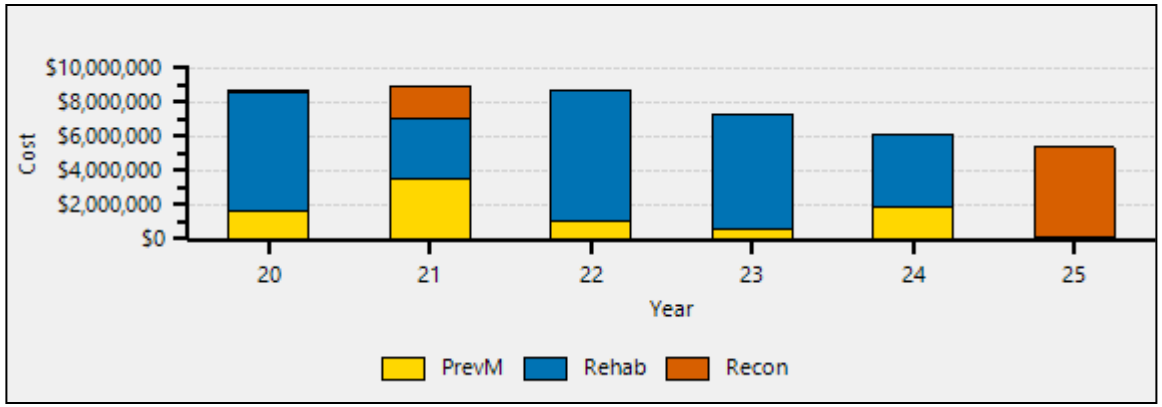
Subtype	Treatment	Trigger	Reset	Cost/Ln Mile	Budget	Lane Miles	Year
Asphalt-Standard	RC (SI) Reconstruction (Major)	1 - 2	10	$4,667,520.00			
					$1,894,546	0.406	2021
					$5,213,441	1.032	2025
	RH (SI) Rehabilitation Major (Remove & Replace full depth)	2 - 3	10	$880,000.00			
					$1,705,264	1.938	2020
					$2,247,949	2.504	2021
					$5,822,911	6.360	2022
					$6,748,748	7.227	2023
					$4,239,852	4.451	2024
	RH (SI) Resurfacing Major - Mill & replace > 2" & < total)	3 - 4	9	$633,600.00			
					$5,374,956	8.483	2020
					$1,325,375	2.051	2021
					$1,823,472	2.766	2022
	PM (CPM) Cape Seal Major	5 - 6	8	$149,600.00			
					$1,466,140	9.800	2020
					$1,287,205	8.436	2021
					$955,482	6.139	2022
					$413,625	2.605	2023
					$1,326,902	8.194	2024
	PM (CPM) Crack Seal	7 - 7	8	$5,104.00			
					$146,209	28.646	2020
					$149,133	28.646	2021
					$150,000	28.248	2022
					$150,000	27.694	2023
					$150,000	27.151	2024
					$150,000	26.618	2025
	PM (CPM) Mill & Fill Major - < = 2" Thick	5 - 5	9	$296,208.00			
					$1,987,496	6.710	2021
					$413,638	1.316	2024

Strategy Comprehensive Report

Concrete-Standard	PM (CPM) Joint Repair	5 - 5	8	$22,440.00	$84,873	3.782	2021

Strategy Comprehensive Report

Cost Distribution

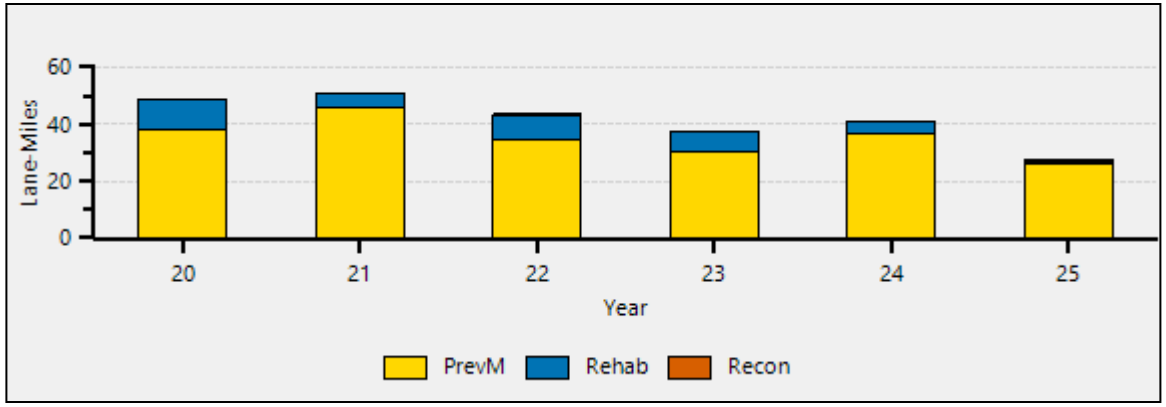


AACIPMajor

Maintenance Type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Prev Maint	$1,612,349	$3,473,090	$1,105,482	$563,625	$1,890,540	$150,000				
Rehab	$7,080,220	$3,573,324	$7,646,383	$6,748,748	$4,239,852	$0				
Recon	$0	$1,894,546	$0	$0	$0	$5,213,441				
Total	$8,692,569	$8,940,960	$8,751,865	$7,312,373	$6,130,392	$5,363,441				

Strategy Comprehensive Report

Maintenance Performed

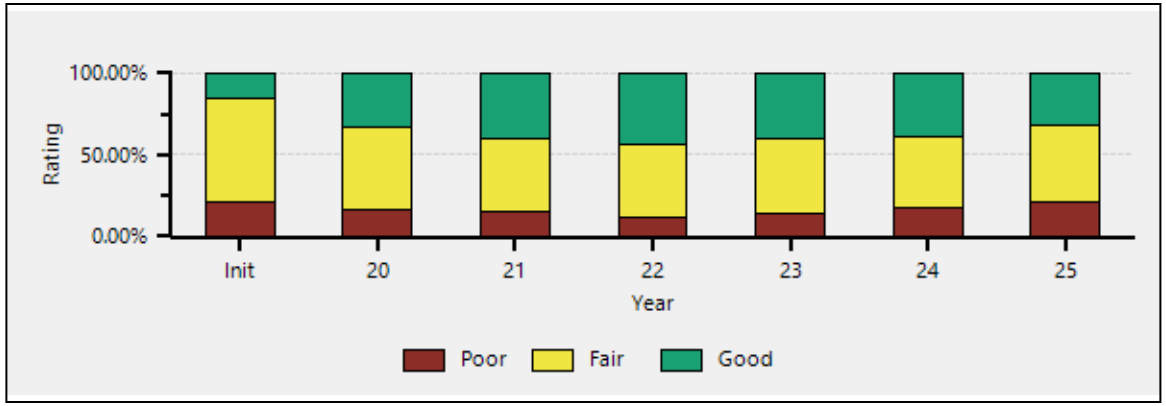


AACIPMajor

Maintenance Type in Lane Miles	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Prev Maint	38.446	45.986	34.386	30.299	36.661	26.618				
Rehab	10.421	4.555	9.126	7.227	4.451	0.000				
Recon	0.000	0.406	0.000	0.000	0.000	1.032				
Total	48.867	50.947	43.512	37.526	41.112	27.650				

Strategy Comprehensive Report

Rating Distribution



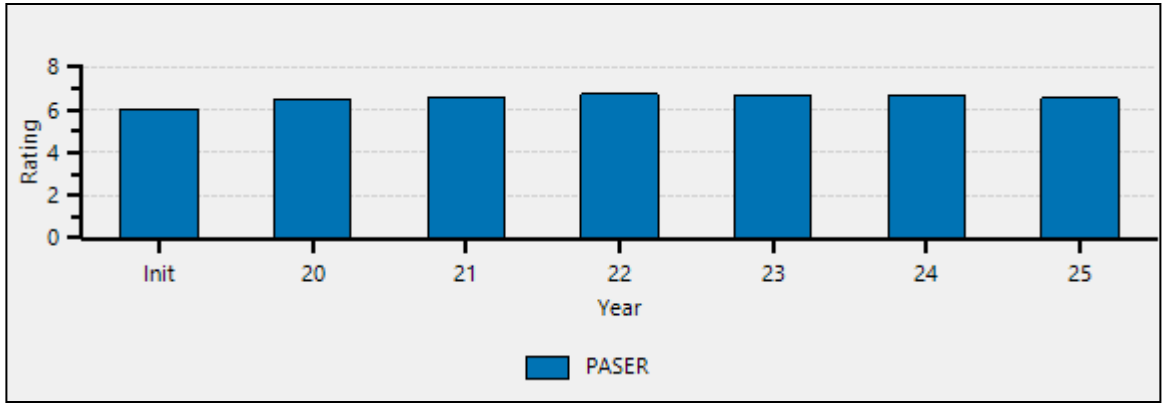
AACIPMajor

Initial Values

Lane Miles	%	Rating	2020		2021		2022		2023		2024		2025		2026	2027	2028	2029
42.868	15.7	Good	91.737	33.5	109.681	40.0	120.022	43.8	110.162	40.2	107.051	39.1	86.602	31.6				
174.607	63.8	Fair	136.161	49.7	121.788	44.5	120.573	44.0	126.601	46.2	120.036	43.8	130.332	47.6				
56.416	20.6	Poor	45.995	16.8	42.426	15.5	33.300	12.2	37.130	13.6	46.804	17.1	56.958	20.8				
273.891	100.0	Total																

Strategy Comprehensive Report

PASER Distribution



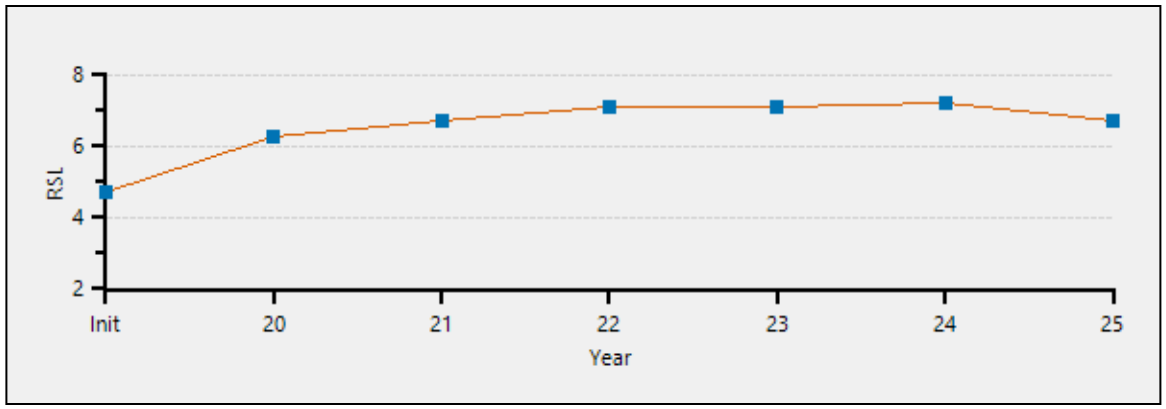
AACIPMajor

Initial Value

Lane Miles	PASER	2020	2021	2022	2023	2024	2025
2.484	10	4.422	2.910	6.360	7.227	4.451	1.032
2.553	9	11.036	13.443	5.936	6.360	8.543	4.451
37.831	8	76.279	93.328	107.726	96.575	94.057	81.119
88.279	7	59.633	62.457	67.381	84.695	101.187	120.023
62.647	6	62.647	42.135	24.718	3.912	2.954	5.600
23.681	5	13.881	17.196	28.474	37.994	15.895	4.709
32.047	4	32.047	19.190	10.503	12.449	26.574	36.368
11.710	3	3.227	15.425	21.346	23.493	18.024	10.729
11.569	2	9.631	6.623	0.263	0.000	1.018	9.705
1.090	1	1.090	1.188	1.188	1.188	1.188	0.156
6.025	Average	6.480	6.609	6.751	6.681	6.729	6.550

Strategy Comprehensive Report

RSL Distribution



AACIPMajor

Initial Value

Lane Miles	RSL	2020	2021	2022	2023	2024	2025
0.260	19	0.260	0.000	0.000	0.000	0.000	0.000
0.000	18	0.000	0.260	0.000	0.000	0.000	0.000
1.026	17	1.026	0.000	0.260	0.000	0.000	0.000
0.000	16	0.000	1.575	0.000	0.260	0.000	0.000
0.495	15	0.495	0.549	1.575	0.000	0.260	0.000
2.484	14	4.422	3.954	6.909	8.802	4.451	1.292
3.913	13	12.396	13.732	6.720	6.909	10.118	4.451
10.279	12	23.095	24.757	25.194	16.819	18.690	18.991
9.821	11	22.637	35.456	36.219	35.293	28.600	27.563
17.544	10	30.360	34.998	46.918	46.318	47.074	37.473
19.323	9	19.323	30.360	34.998	46.918	46.318	47.074
31.483	8	31.483	19.323	28.610	34.998	46.918	46.318
17.272	7	9.046	11.196	1.536	0.916	8.763	26.687
20.921	6	0.501	0.687	2.486	1.536	0.000	2.376
21.998	5	21.998	0.000	0.687	2.486	1.536	0.000
17.122	4	17.122	20.696	0.000	0.687	2.486	1.536
21.547	3	21.547	16.730	20.696	0.000	0.687	2.486
11.332	2	10.795	17.196	16.730	20.696	0.000	0.687
10.655	1	1.392	0.000	11.057	14.125	11.186	0.000
9.111	0	9.111	1.392	0.000	11.057	14.125	11.186
8.687	-1	8.687	9.111	1.392	0.000	11.057	14.125
14.023	-2	14.023	8.687	9.111	1.392	0.000	11.057
6.451	-3	3.453	14.023	8.687	9.111	1.392	0.000
2.951	-4	0.000	1.402	12.433	8.687	9.111	1.392
2.534	-5	0.000	0.000	0.226	5.469	8.687	9.111

Strategy Comprehensive Report

4.496	**-6**	4.496	0.000	0.000	0.226	1.018	8.687
0.872	**-7**	0.872	4.496	0.000	0.000	0.226	1.018
3.759	**-8**	3.759	0.872	0.263	0.000	0.000	0.226
0.000	**-9**	0.000	1.255	0.000	0.000	0.000	0.000
2.442	**-10**	0.504	0.000	0.000	0.000	0.000	0.000
0.000	**-11**	0.000	0.504	0.000	0.000	0.000	0.000
1.044	**-12**	1.044	0.000	0.504	0.000	0.000	0.000
0.000	**-13**	0.000	0.684	0.000	0.504	0.000	0.000
0.000	**-14**	0.000	0.000	0.684	0.000	0.504	0.000
0.000	**-15**	0.000	0.000	0.000	0.684	0.000	0.156
0.000	**-16**	0.000	0.000	0.000	0.000	0.684	0.000
0.000	**-17**	0.000	0.000	0.000	0.000	0.000	0.000
0.000	**-18**	0.000	0.000	0.000	0.000	0.000	0.000
0.000	**-19**	0.000	0.000	0.000	0.000	0.000	0.000
0.000	**-20**	0.000	0.000	0.000	0.000	0.000	0.000
0.000	**-21**	0.000	0.000	0.000	0.000	0.000	0.000
0.000	**-22**	0.000	0.000	0.000	0.000	0.000	0.000
0.046	**-23**	0.046	0.000	0.000	0.000	0.000	0.000
4.707	Average	6.250	6.749	7.110	7.115	7.196	6.723

EXHIBIT R

Locally Optimized Treatment and Funding Strategy:

Local Network

Strategy Comprehensive Report

Ann Arbor (CityVillage)

Report Module: Strategy Evaluation
Today's Date: Wednesday, August 19, 2020

AACIP_Local

Base Year: 2020
Percent Inflation: 2
Number of Years: 6
Optimized: No
Current Filter: 2020 Filter For Model Local
Evaluation Date: 5/19/2020

Strategy Comprehensive Report

AACIP_Local

Base Year	2020
Percent Inflation	2
Number of Years	6
Optimized	No
Current Filter	2020 Filter For Model Local

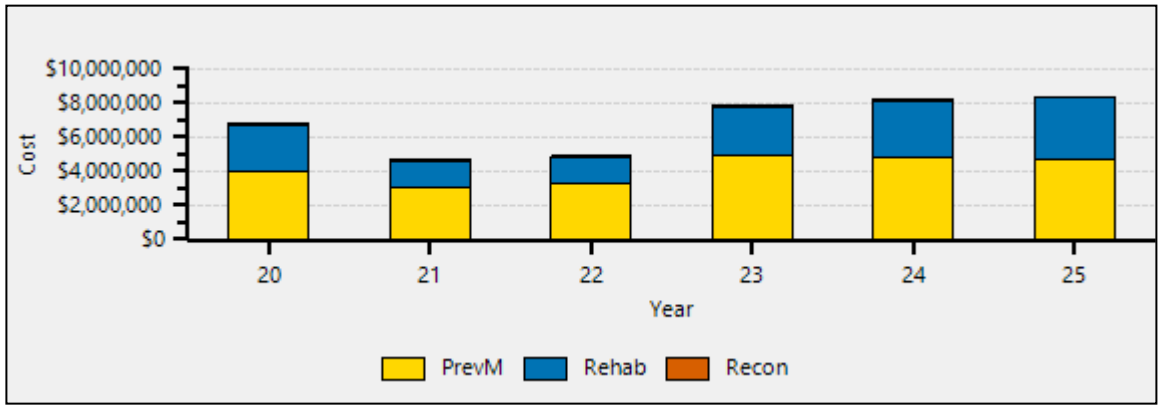
Subtype	Treatment	Trigger	Reset	Cost/Ln Mile	Budget	Lane Miles	Year
Asphalt-Standard	RH (SI) Rehabilitation Local (Remove & Replace full depth)	2 - 3	10	$748,000.00			
					$2,825,944	3.778	2020
					$1,647,765	2.160	2021
					$1,613,715	2.074	2022
					$2,958,193	3.727	2023
					$3,397,330	4.196	2024
					$3,721,126	4.506	2025
	PM (CPM) Cape Seal Local	5 - 6	8	$132,000.00			
					$601,392	4.556	2020
					$877,247	6.516	2021
					$1,204,999	8.774	2022
					$1,200,005	8.567	2023
					$550,006	3.849	2024
					$550,003	3.774	2025
	PM (CPM) Crack Seal	7 - 7	8	$5,104.00			
					$89,647	17.564	2020
					$100,000	19.208	2021
					$100,000	18.832	2022
					$100,000	18.462	2023
					$100,000	18.100	2024
					$100,000	17.746	2025
	PM (CPM) Microsurface, Single Course - Local	6 - 6	8	$88,000.00			
					$58,696	0.667	2020
					$59,870	0.667	2021

Strategy Comprehensive Report

PM (CPM)	Mill & Fill Local - < = 2" Thick	4 - 5	9	$369,600.00			
					$3,229,195	8.737	2020
					$2,013,891	5.342	2021
					$1,972,418	5.129	2022
					$3,615,507	9.218	2023
					$4,152,295	10.379	2024
					$3,998,008	9.797	2025

Strategy Comprehensive Report

Cost Distribution

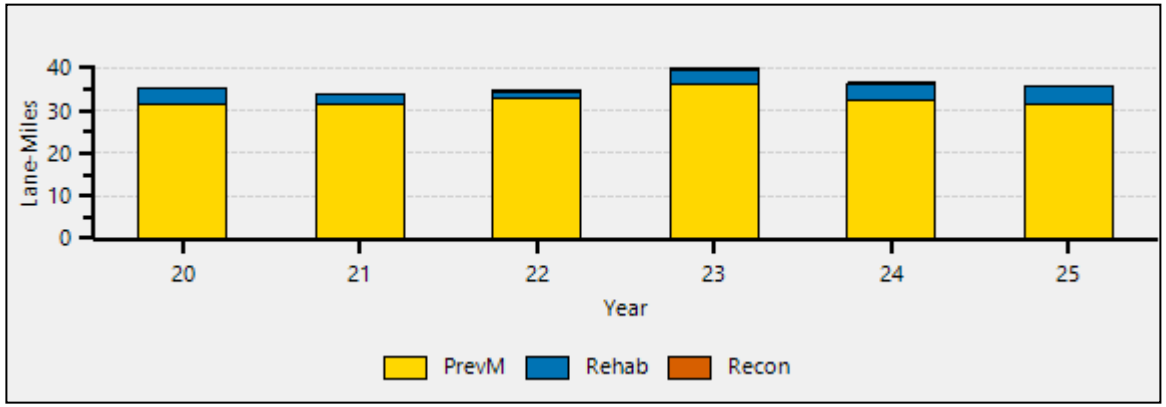


AACIP_Local

Maintenance Type	2020	2021	2022	2023	2024	2025
Prev Maint	$3,978,930	$3,051,008	$3,277,417	$4,915,511	$4,802,301	$4,648,011
Rehab	$2,825,944	$1,647,765	$1,613,715	$2,958,193	$3,397,330	$3,721,126
Recon	$0	$0	$0	$0	$0	$0
Total	$6,804,874	$4,698,773	$4,891,132	$7,873,704	$8,199,631	$8,369,137

Strategy Comprehensive Report

Maintenance Performed

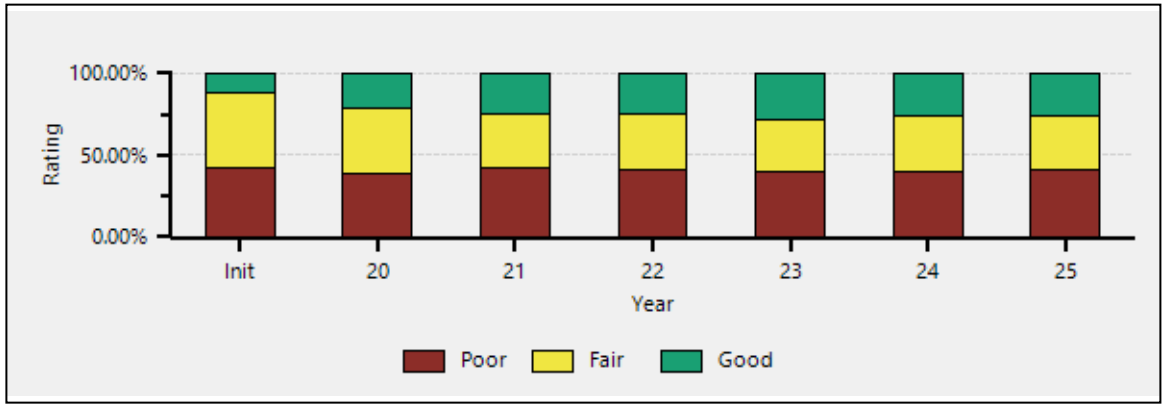


AACIP_Local

Maintenance Type in Lane Miles	2020	2021	2022	2023	2024	2025
Prev Maint	31.524	31.733	32.735	36.247	32.329	31.317
Rehab	3.778	2.160	2.074	3.727	4.196	4.506
Recon	0.000	0.000	0.000	0.000	0.000	0.000
Total	35.302	33.893	34.809	39.974	36.525	35.823

Strategy Comprehensive Report

Rating Distribution



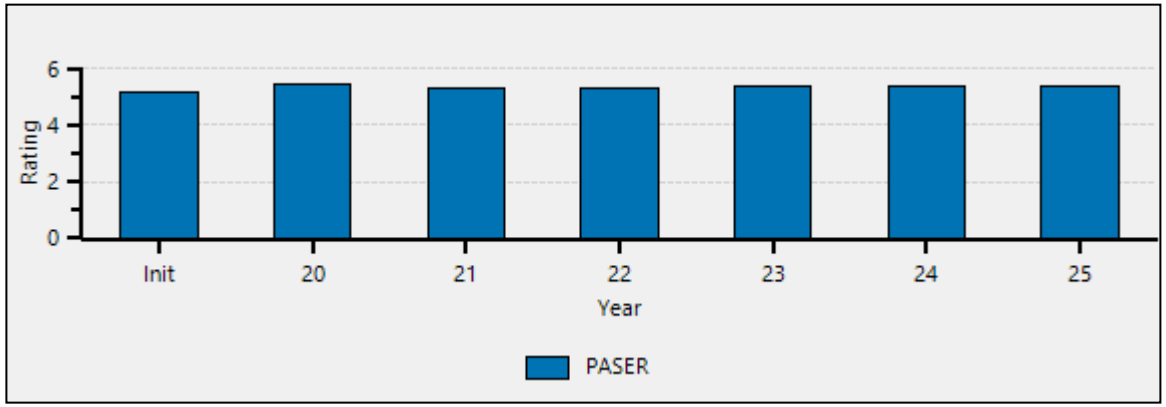
AACIP_Local

Initial Values

Lane Miles	%	Rating	2020		2021		2022		2023		2024		2025	
43.465	11.8	Good	78.768	21.4	90.743	24.7	92.821	25.2	102.503	27.8	96.770	26.3	96.347	26.2
170.115	46.2	Fair	147.328	40.0	119.555	32.5	122.517	33.3	118.544	32.2	125.921	34.2	121.519	33.0
154.613	42.0	Poor	142.098	38.6	157.896	42.9	152.857	41.5	147.149	40.0	145.503	39.5	150.328	40.8
368.193	100.0	Total												

Strategy Comprehensive Report

PASER Distribution



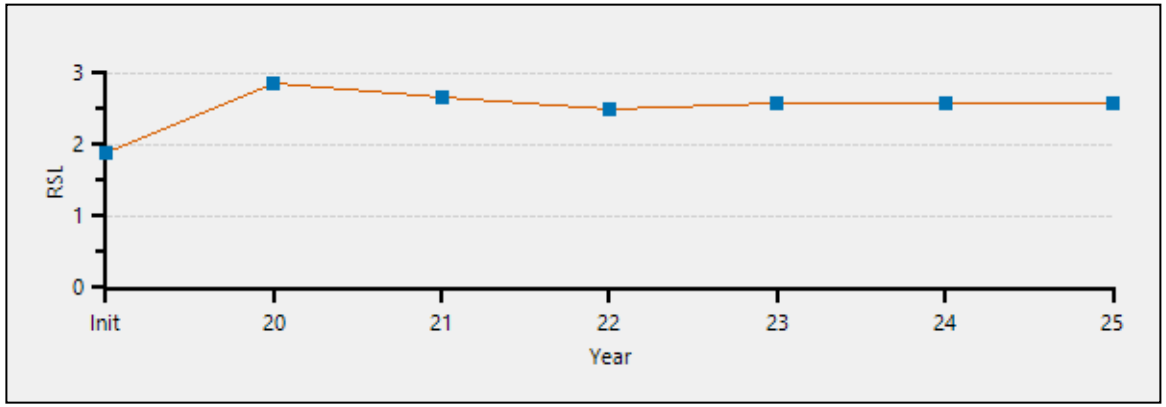
AACIP_Local

Initial Value

Lane Miles	PASER	2020	2021	2022	2023	2024	2025
1.597	10	5.375	2.160	2.074	3.727	4.196	4.506
6.510	9	15.247	10.717	7.289	11.292	14.106	13.993
35.358	8	58.146	77.866	83.458	87.484	78.468	77.848
71.762	7	54.198	56.836	70.735	77.776	101.931	120.431
61.818	6	61.151	44.545	23.049	4.862	4.790	1.088
36.535	5	31.979	18.175	28.733	35.906	19.200	0.000
76.901	4	68.164	46.775	34.971	23.482	11.951	21.281
28.896	3	28.896	60.182	60.192	57.693	32.428	23.590
46.235	2	42.457	38.880	45.635	48.938	84.089	72.575
2.581	1	2.581	12.059	12.059	17.036	17.036	32.882
5.168	Average	5.457	5.308	5.309	5.361	5.337	5.370

Strategy Comprehensive Report

RSL Distribution



AACIP_Local

Initial Value

Lane Miles	RSL	2020	2021	2022	2023	2024	2025
1.597	**14**	5.375	2.160	2.074	3.727	4.196	4.506
6.510	**13**	15.247	10.717	7.289	11.292	14.106	13.993
4.698	**12**	12.294	24.044	19.919	16.299	18.608	21.279
16.338	**11**	23.934	21.091	33.246	28.929	23.615	25.781
14.322	**10**	21.918	32.731	30.293	42.256	36.245	30.788
11.296	**9**	11.296	21.918	32.731	30.293	42.256	36.245
27.409	**8**	27.409	11.296	21.918	32.731	30.293	42.256
15.421	**7**	15.421	23.622	11.296	14.752	29.382	30.293
17.636	**6**	0.072	0.000	4.790	0.000	0.000	11.637
22.977	**5**	22.977	0.072	0.000	4.790	0.000	0.000
22.163	**4**	22.163	22.977	0.072	0.000	4.790	0.000
16.678	**3**	16.011	21.496	22.977	0.072	0.000	1.088
8.679	**2**	8.679	16.011	21.496	22.977	0.072	0.000
27.856	**1**	23.300	2.164	7.237	12.929	19.128	0.000
14.637	**0**	14.637	23.300	2.164	7.237	11.951	19.128
14.180	**-1**	14.180	14.637	23.300	2.164	0.000	2.153
48.084	**-2**	39.347	8.838	9.508	14.082	0.000	0.000
12.007	**-3**	12.007	39.347	8.838	9.508	14.082	0.000
8.828	**-4**	8.828	12.007	39.347	8.838	9.508	14.082
8.061	**-5**	8.061	8.828	12.007	39.347	8.838	9.508
21.515	**-6**	21.515	8.061	8.828	12.007	39.347	8.838
2.254	**-7**	2.254	21.515	8.061	8.828	12.007	39.347
8.338	**-8**	8.338	2.254	21.515	8.061	8.828	12.007
0.872	**-9**	0.872	7.050	2.254	20.042	8.061	8.828
13.256	**-10**	9.478	0.000	4.977	0.000	15.846	3.555

Strategy Comprehensive Report

0.044	**-11**	0.044	9.478	0.000	4.977	0.000	15.846
0.293	**-12**	0.293	0.044	9.478	0.000	4.977	0.000
0.000	**-13**	0.000	0.293	0.044	9.478	0.000	4.977
0.000	**-14**	0.000	0.000	0.293	0.044	9.478	0.000
0.198	**-15**	0.198	0.000	0.000	0.293	0.044	9.478
0.000	**-16**	0.000	0.198	0.000	0.000	0.293	0.044
0.000	**-17**	0.000	0.000	0.198	0.000	0.000	0.293
0.000	**-18**	0.000	0.000	0.000	0.198	0.000	0.000
0.028	**-19**	0.028	0.000	0.000	0.000	0.198	0.000
0.000	**-20**	0.000	0.028	0.000	0.000	0.000	0.198
0.000	**-21**	0.000	0.000	0.028	0.000	0.000	0.000
0.338	**-22**	0.338	0.000	0.000	0.028	0.000	0.000
1.680	**-23**	1.680	0.338	0.000	0.000	0.028	0.000
0.000	**-24**	0.000	1.680	0.338	0.000	0.000	0.028
0.000	**-25**	0.000	0.000	1.680	0.338	0.000	0.000
0.000	**-26**	0.000	0.000	0.000	1.680	0.338	0.000
0.000	**-27**	0.000	0.000	0.000	0.000	1.680	0.338
0.000	**-28**	0.000	0.000	0.000	0.000	0.000	1.680
1.880	Average	2.859	2.656	2.494	2.573	2.585	2.575

EXHIBIT S

Lane Miles of Road Treated

2014-2020

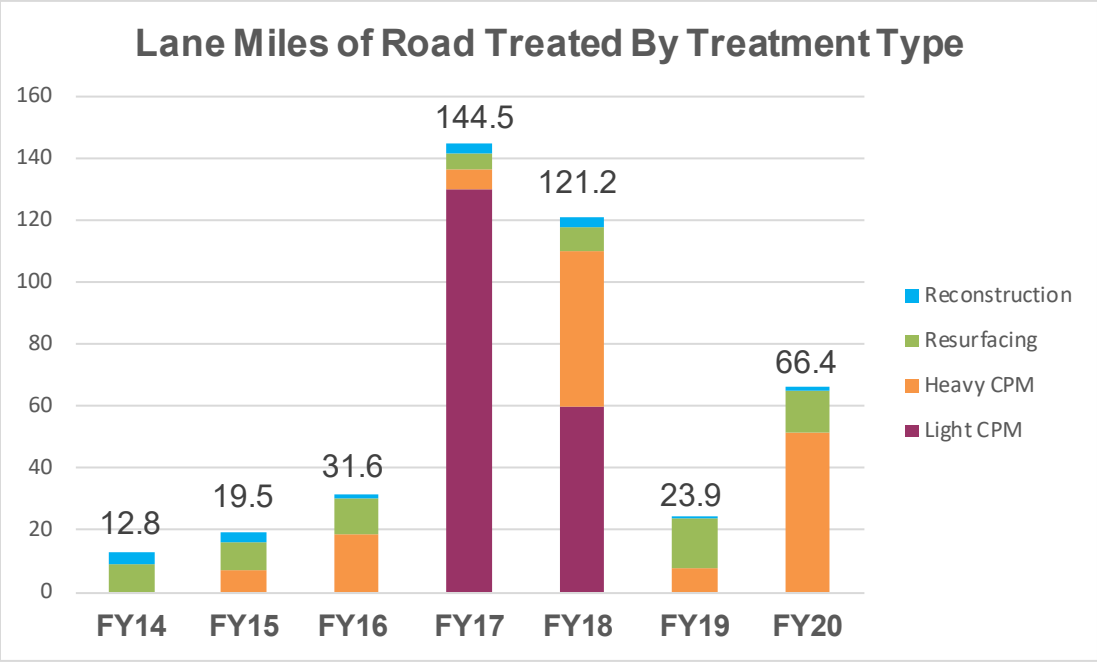

Lane Miles of Road Treated By Treatment Type
160
140
120
100
80
60
40
20
0
12.8
19.5
31.6
144.5
121.2
23.9
66.4
FY14
FY15
FY16
FY17
FY18
FY19
FY20
Reconstruction
Resurfacing
Heavy CPM
Light CPM

EXHIBIT T

Streets Treated:

2017-Present

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2017									
	2017C CPM-01	Ann Arbor-Saline Rd (Eisenhower to S Main)	Asphalt-Standard	Microsurface, Single Course - Major	8		Complt	$0	$206,750
								Difference:	**$206,750**
	2017C CPM-08	Platt (Ellsworth to Packard)	Asphalt-Standard	Microsurface, Single Course - Major	8		Complt	$0	$257,400
								Difference:	**$257,400**
	2017C CPM-10	Catherine (Ingalls to Glen)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$0	$68,290
								Difference:	**$68,290**
	2017C CPM-11	Liberty (Scio Ridge to S Maple)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9	County Millage	Complt	$0	$264,642
								Difference:	**$264,642**
	2017C CPM-12	Miller (Maple west to City Limits)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$0	$284,221
								Difference:	**$284,221**
	2017C CPM-13	S University (E University to Washtenaw)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9	County Millage	Complt	$0	$53,451
								Difference:	**$53,451**
	2017C LSR-01	3rd (Madison to William)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$252,595	$255,089
								Difference:	**$2,494**
	2017C LSR-02	4th (Madison to William)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$313,174
								Difference:	**$313,174**
	2017C LSR-03	5th (Pauline to Davis)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$101,528
								Difference:	**$101,528**
	2017C LSR-04	5th (Princeton to Liberty)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$469,551
								Difference:	**$469,551**
	2017C LSR-05	6th (Madison to Jefferson)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$136,576
								Difference:	**$136,576**
	2017C LSR-06	Arella (Martha to Pauline)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$173,880
								Difference:	**$173,880**
	2017C LSR-07	High Orchard Dr (Geddes to City Limit)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9		Complt	$0	$35,436
								Difference:	**$35,436**
	2017C LSR-08	High Orchard Ct (all)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9		Complt	$0	$66,882
								Difference:	**$66,882**

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2017									
	2017C LSR-09	Island Dr (Canal to Wall)	Asphalt-Standard	Rehabilitation (Remove & Replace full depth)	10		Complt	$0	$85,000
								Difference:	**$85,000**
	2017C LSR-10	Davis (3rd to 7th)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$500,329
								Difference:	**$500,329**
	2017C LSR-11	Jefferson (7th to Main)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$631,373
								Difference:	**$631,373**
	2017C LSR-12	Wilder Pl (Hoover to Davis)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$89,935
								Difference:	**$89,935**
	2017C MSR-01	Catherine (Main to Ingalls)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9		Complt	$0	$537,093
								Difference:	**$537,093**
	2018 CPM-01	Liberty (Railroad to Main)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$0	$117,860
								Difference:	**$117,860**
	FY2017 CPM-5	FY2017 Crack Sealing - Local: Calendar 2017	Asphalt-Standard	Crack Seal	8		Complt	$0	$146,443
								Difference:	**$146,443**
	FY2018 CPM-1	FY2018 Crack Sealing - Major: Calendar 2017	Asphalt-Standard	Crack Seal	7		Complt	$189,761	$193,930
	Overband crack filling on major streets citywide							**Difference:**	**$4,169**
	FY2018 CPM-2	FY2018 Crack Sealing - Local: Calendar 2017	Asphalt-Standard	Crack Seal	8	FY2018 Bridge, Sidewalk, and Street Millage & FY2018 Major Street Fund	Complt	$112,328	$112,580
	Overband crack filling on local streets citywide							**Difference:**	**$252**
	FY2018 CPM-3	FY2018 Micro-Surface - Local	Asphalt-Standard	Microsurface, Single Course - Local	8		Complt	$0	$703,890
								Difference:	**$703,890**
	FY2018 CPM-5	Stadium Blvd (Hutchins Ave to S Main St)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$0	$176,776
								Difference:	**$176,776**
	TR-SC-09-03	Stadium (Main to Kipke)	Asphalt-Standard	Reconstruction (Major)	10		Complt	$5,223,000	$6,801,645
	Reconstruction							**Difference:**	**$1,578,645**
	TR-SC-12-13	Division (Packard to Huron)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9	0062	Complt	$1,090,000	$1,024,292
	Annual Resurfacing Program							**Difference:**	**-$65,708**
	TR-SC-16-03	Hill (Onondaga to Geddes)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9	0062	Complt	$400,000	$336,384
								Difference:	**-$63,616**

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2017									
	TR-SC-16-04 Annual Resurfacing Program	Arlington (Washtenaw to Heatherway)	Asphalt-Standard	Rehabilitation (Remove & Replace full depth)	10	0062	Complt	$975,000 **Difference: -$278,734**	$696,266
	TR-SC-16-05 Annual Resurfacing Program	Arlington (Geddes Ave to Heatherway)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9	0062	Complt	$230,000 **Difference: $68,400**	$298,400
	TR-SC-16-08 ASRP	Church (Geddes to S University)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9	0062	Complt	$242,000 **Difference: -$100,135**	$141,865
	TR-SC-16-18	Nixon/Green/Dhu Varren Intersection Area	Asphalt-Standard	Reconstruction (Major) New rounadbout constructed in this area; Dhu Varren west of Nixon was realigned	10	0062 and Developer or CMAQ and 0062	Complt	$2,125,000 **Difference: $391,434**	$2,516,434
	UT-WS-12-06	Crest-Buena Vista-W Washington Water	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$880,440 **Difference: -$293,040**	$587,400
	UT-WS-18-03	Maxwell, Wakefield, & Lutz	Asphalt-Standard	Rehabilitation (Remove & Replace full depth)	10		Complt	$0 **Difference: $162,900**	$162,900
	UT-WS-18-15	Plymouth/Green Area	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total) Did north lane only on Plymouth	9		Complt	$1,300,000 **Difference: $0**	$1,300,000
								Year 2017 Total Estimated Costs: $13,020,124	
								Year 2017 Total Costs: $19,847,665	
								Year 2017 Total vs. Estimated Costs: $6,827,541	
2018									
	2017C CPM-04	Stadium (Pauline to S Maple)	Asphalt-Standard	Microsurface, Single Course - Major	8		Complt	$407,484 **Difference: $108,476**	$515,960
	2017C CPM-06	Main (Ann Arbor-Saline to Stadium)	Asphalt-Standard	Microsurface, Single Course - Major	8		Complt	$0 **Difference: $308,600**	$308,600
	2017C CPM-07	Main (Stadium to William)	Asphalt-Standard	Microsurface, Single Course - Major	8		Complt	$346,038 **Difference: -$95,908**	$250,130
	2017C CPM-14	State (Ellsworth to I-94)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$422,307 **Difference: $250,193**	$672,500

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2018									
	2018C LSR-1	Bardstown Tr (Charter Pl to Middleton Dr)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$714,120	$745,450
									Difference: $31,330
	2018C LSR-11	Sturbridge Ct (Bardstown Trl to Westerly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$104,280	$70,525
									Difference: -$33,755
	2018C LSR-12	Sulgrave Pl (Barrister Dr to Westerly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$162,360	$229,100
									Difference: $66,740
	2018C LSR-13	W Dobson Pl (Wolverhampton Ln to Westerly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$271,920	$174,755
									Difference: -$97,165
	2018C LSR-14	Windemere Dr (Green Rd to Easterly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$689,040	$715,840
									Difference: $26,800
	2018C LSR-15	Wolverhampton Ln (Glazier Way to Northerly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$322,080	$224,794
									Difference: -$97,286
	2018C LSR-16	Wynnstone Dr (Folkstone Ct to Easterly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
									Difference: $0
	2018C LSR-17	Omlesaad (Dhu Varren to Foxway)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$40,840	$40,840
									Difference: $0
	2018C LSR-18	Seventh (Scio Church Rd to W Stadium Blvd)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$939,523	$703,000
									Difference: -$236,523
	2018C LSR-2	Barrister Dr (Windemere Dr to Larchmont)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$261,360	$282,200
									Difference: $20,840
	2018C LSR-3	East Dobson Pl (W Dobson Pl to Easterly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$250,800	$151,935
									Difference: -$98,865
	2018C LSR-4	Fairmount (Kipling Dr to Southerly end)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$188,531	$243,700
									Difference: $55,169
	2018C LSR-6	Kipling Dr (Earhart to Fairmont)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9		Complt	$98,841	$167,850
									Difference: $69,009
	2018C LSR-7	MacGregor Ln (Larchmont to Chatham)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$113,484	$217,400
									Difference: $103,916

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2018									
	2018C LSR-8	Prestwick Ct (MacGregor Ln to Westerly End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$43,560	$96,700
									Difference: $53,140
	2018C LSR-9	Severn Ct (Wynnstone to End)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$92,400	$147,750
									Difference: $55,350
	FY2018 CPM-4	Main St (W Eisenhower Pkwy to Ann Arbor-Saline Rd)	Asphalt-Standard	Cape Seal Major	9		Complt	$449,025	$758,950
									Difference: $309,925
	FY2018 CPM-6	Huron Pkwy (Washtenaw Ave to S End of Geddes Ave/Huron River Bridge)	Asphalt-Standard	Cape Seal Major	9		Complt	$1,026,086	$1,105,960
									Difference: $79,874
	FY2018 CPM-7	Maple (Dexter Ave to Foss St)	Asphalt-Standard	Cape Seal Major	9		Complt	$868,936	$570,060
									Difference: -$298,876
	FY2019 CSA-2L	FY2019 Cape Seal Area 2	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
									Difference: $0
	TR-SC-14-01 ASRP	Stone School Rd (Packard to Eisenhower)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9	0062	Complt	$210,000	$300,250
									Difference: $90,250
	TR-SC-14-07 (A)	Fifth (Kingsley to Catherine)	Asphalt-Standard	Reconstruction (Major)	10	0062 and DDA	Complt	$2,600,000	$1,046,500
									Difference: -$1,553,500
	TR-SC-14-07 (B)	Fifth (Kingsley to Beakes)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$67,795	$32,775
									Difference: -$35,020
	TR-SC-14-07 (C)	Kingsley (4th to Detroit)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$181,984	$183,350
									Difference: $1,366
	TR-SC-14-07 (D)	Detroit(Kingsley to Catherine)	Brick	Reconstruction	10		Complt	$0	$281,800
									Difference: $281,800
	TR-SC-14-07 (E)	Fifth (Catherine to Ann)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9		Complt	$40,000	$43,600
									Difference: $3,600
	TR-SC-14-09	Scio Church (Main to 7th)	Asphalt-Standard	Rehabilitation Major (Remove & Replace full depth)	10	0062 and STP-U	Complt	$1,800,000	$2,111,400
									Difference: $311,400
	TR-SC-14-12	Pauline (Stadium to 7th)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9	0062	Complt	$1,150,000	$1,686,800
									Difference: $536,800

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2018									
	TR-SC-16-19	State St (Packard to Hoover)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9	0062	Complt	$450,000	$168,550
								Difference:	**-$281,450**
	TR-SC-18-05	Jackson (Wagner to MDOT Jurisdiction)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9	County millage	Complt	$1,023,651	$861,500
								Difference:	**-$162,151**
	UT-SN-18-04	Lafayette-Lenawee Sanitary	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$277,200	$126,000
								Difference:	**-$151,200**
	UT-WS-13-03 (A)	Riverview (Geddes to Huntington Place)	Asphalt-Standard	Reconstruction (Local)	10		Complt	$0	$0
								Difference:	**$0**
	UT-WS-18-02	Sycamore Pl (White to E Park Pl)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$124,080	$56,400
								Difference:	**-$67,680**
	UT-WS-18-08	Brookwood (Packard to White)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth) Rehabilitation with water project	10		Complt	$176,880	$80,400
								Difference:	**-$96,480**
	UT-WS-18-12	Horman Ct	Asphalt-Standard	Reconstruction (Local)	10		Complt	$0	$0
								Difference:	**$0**
								Year 2018 Total Estimated Costs:	**$15,914,605**
								Year 2018 Total Costs:	**$15,373,324**
								Year 2018 Total vs. Estimated Costs:	**-$541,281**
2019									
	2019-CS-M1	Packard (Platt to Gross)	Asphalt-Standard	Cape Seal Major	9		Complt	$275,000	$307,000
								Difference:	**$32,000**
	2019C LDR-9	Felch (Spring to Ashley)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-1	Sheridan Drive (Washtenaw to Londonderry)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$472,300	$458,300
								Difference:	**-$14,000**
	2019C LSR-10	Fountain (Miller to Robin)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-11	Gott (Miller to Pearl)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2019									
	2019C LSR-12	Hillcrest (Summit to End of Cul-de-Sac)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-13	Hiscock (Spring to Summit & Wildt)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-14	Miner (Miller to Cressfield & Byddington)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-15	Pearl (Brooks to Miner)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-16	Summit (Brooks to Daniel)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-2	Brookridge Ct (Eyebrow)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-3	Bydding (Miner & Cressfield to Brooks)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-4	Charles (Daniel to Edward & Brookridge)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-5	Cressfield (Bydding & Miner to End of Cul-de-Sac)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-6	Daniel (Hiscock to Sunset)	Asphalt-Standard	Resurfacing Local - Mill & replace > 2" & < total)	9		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-7	Edward (Summit to Charles & Brookridge)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	2019C LSR-8	Felch (Gott to Fountain)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0
								Difference:	**$0**
	FY2019 CS-1M	Fuller (East End Bridge to Fuller Ct)	Asphalt-Standard	Cape Seal Major	9		Complt	$0	$0
								Difference:	**$0**
	FY2019 CSA-1L	FY2019 Cape Seal Area 1	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2019									
	FY2019 CSA-3L	FY2019 Cape Seal Area 3	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**
	FY2019 CSA-4L	FY2019 Cape Seal Area 4	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**
	FY2019 CSA-5L	FY2019 Cape Seal Area 5	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**
	FY2019 MS-2M	Green Rd (Plymouth Rd to Gettysburg/Burbank Dr	Asphalt-Standard	Cape Seal Major	9		Complt	$0	$0
				Southern 500' paved with Plymouth water project as resurfacing				**Difference:**	**$0**
	FY2020 CS-2M	Stadium (Henry & S Industrial & Park to Packard)	Asphalt-Standard	Cape Seal Major	9		Complt	$0	$0
								Difference:	**$0**
	FY2020 CSA-1L	FY2020 Cape Seal Area 1	Asphalt-Standard	Cape Seal Local	8		Complt	$0	$0
								Difference:	**$0**
	FY2020 CSA-2L	FY2020 Cape Seal Area 2	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**
	FY2020 CSA-3L	FY2020 Cape Seal Area 3	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**
	FY2020 CSA-4L	FY2020 Cape Seal Area 4	Asphalt-Standard	Cape Seal Local	8		Complt	$0	$0
								Difference:	**$0**
	FY2020 CSA-5L	FY2020 Cape Seal Area 5	Asphalt-Standard	Cape Seal Local	9		Complt	$0	$0
								Difference:	**$0**
	FY2020 MS-1L	FY2020 Microsurface Area 1	Asphalt-Standard	Microsurface, Single Course - Local	8		Complt	$0	$0
								Difference:	**$0**
	FY2020 MS-2L	FY2020 Microsurface Area 2	Asphalt-Standard	Microsurface, Single Course - Local	8		Complt	$0	$0
								Difference:	**$0**
	FY2020 MS-3L	FY2020 Microsurface Area 3	Asphalt-Standard	Microsurface, Single Course - Local	8		Complt	$0	$0
								Difference:	**$0**
	FY2020 MS-4L	FY2020 Microsurface Area 4	Asphalt-Standard	Microsurface, Single Course - Local	8		Complt	$0	$0
								Difference:	**$0**

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2019									
	TR-SC-16-07 ASRP	Hoover (Main to State)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total) Also portions of Greene and Hill	9	0062	Complt	$700,000	$0 **Difference: -$700,000**
	TR-SC-16-13	Division (Madison to Hoover)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick Need to add $	9		Complt	$0	$0 **Difference: $0**
	TR-SC-16-15 ASRP	Traverwood (Plymouth to Huron Pkwy)	Asphalt-Standard	Rehabilitation Major (Remove & Replace full depth)	10	0062	Complt	$810,000	$0 **Difference: -$810,000**
	TR-SC-16-20	Stone School Rd (Eisenhower to I-94)	Asphalt-Standard	Resurfacing- Mill & replace > 2" & < total)	9	0062	Complt	$525,000	$0 **Difference: -$525,000**
	TR-SC-18-11	State St (Stimson to Oakbrook)	Concrete-Standard	Joint Repair Need to add $	8		Complt	$400,000	$0 **Difference: -$400,000**
	TR-SC-18-14	Platt (Washtenaw to Huron Pkwy)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9		Complt	$458,200	$426,500 **Difference: -$31,700**
	TR-SC-20-05	Liberty (Stadium to Crest)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick Need to add $	9		Complt	$0	$0 **Difference: $0**
	TR-SC-20-13(A)	William (1st St to 4th Ave)	Asphalt-Standard	Mill & Fill Major - < = 2" Thick	9		Complt	$0	$0 **Difference: $0**
	TR-SC-20-13(B)	William (4th St to State)	Asphalt-Standard	Resurfacing Major - Mill & replace > 2" & < total)	9		Complt	$0	$0 **Difference: $0**
	UT-WS-04-07	Cedar Bend Lower (Fuller to Gravel)	Asphalt-Standard	Rehabilitation Local (Remove & Replace full depth)	10		Complt	$0	$0 **Difference: $0**
	UT-WS-18-01	Maywood and Avondale (Maywood to Westfield)	Asphalt-Standard	Reconstruction (Local)	10		Complt	$0	$0 **Difference: $0**
	UT-WS-18-04	Bucholz Ct	Asphalt-Standard	Reconstruction (Local)	10		Complt	$0	$0 **Difference: $0**

Year 2019 Total Estimated Costs: $3,640,500

Year 2019 Total Costs: $1,191,800

Year 2019 Total vs. Estimated Costs: -$2,448,700

2020

Projects By Year Report

Year	Project Number/ Description	Location	Surface SubType	Treatment/Memo	Reset Rating	Source of Funds	Status	Estimated Costs	Total Costs
2020									
	2020C LSR-16	Glen Leven (Greenview to Woodland)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	2020C LSR-22	Normandy (Mershon to Greenview)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	2020C LSR-3	Ardmoor (Avondale to Stadium)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	2020C LSR-36	Woodland (Glen Leven to Stadium)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	2020C LSR-39	Washington (Third to First)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	2020C LSR-5	Avondale (Maywood to Greenview)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	2020C LSR-6	Barnard (Mershon to Greenview)	Asphalt-Standard	Mill & Fill Local - < = 2" Thick	9		Complt	$0	$0
									Difference: $0
	FY2020 CS-1M	Eisenhower (Boardwalk to Stone School)	Asphalt-Standard	Cape Seal Major	9		Complt	$0	$0
									Difference: $0
	FY2020 CS-3M	Packard (Stadium to Anderson & Harpst)	Asphalt-Standard	Cape Seal Major	9		Complt	$0	$0
									Difference: $0
									Year 2020 Total Estimated Costs: $0
									Year 2020 Total Costs: $0
									Year 2020 Total vs. Estimated Costs: $0
									Total Costs: $36,412,789

EXHIBIT U

Bridge Asset Management Plan