# TECHNICAL MEMORANDUM



**TO:** Corey Driscoll Dunham, Chief Operating Officer, City of Syracuse

Neil Burke, Transportation Planner, City of Syracuse

FROM: Andrew Frasier, Transportation Analyst, SMTC

DATE: February 28, 2020

RE: Developing a Pilot Program for Prioritizing Pavement Maintenance on City Streets

**CC:** Sam Edelstein, Chief Data Officer, City of Syracuse

James D'Agostino, Director, SMTC Mario Colone, Program Manager, SMTC

#### **SUMMARY**

On behalf of the City of Syracuse, the Syracuse Metropolitan Transportation Council conducted an analysis of the City's road network to provide insight into prioritizing certain roads for pavement maintenance. The City was interested in determining roads where the investment of resources would be justified. This memo outlines the methods considered and the data included in this analysis, and an explanation of the final products.

Using available data, the SMTC developed a Priority Score on each applicable road segment. This score considered several variables, including pavement rating (collected by the SMTC in 2019), traffic volumes, and functional classification, among others.

The approach considered in this analysis is just one of several possible data-driven approaches. The approach utilized data accessible by the agency and seeks to create a repeatable process that stands on solid analytical ground. The processes performed as a part of this analysis are not a substitute for a complete, network-wide asset management system. The output suggests roads which should be considered reasonable candidates for reconstruction in the 2020-2021 City Fiscal Year.

#### Overview

Each program year, the Syracuse Metropolitan Transportation Council (SMTC) publishes a Bridge and Pavement Condition Management System (BPCMS) report to serve as a comprehensive clearinghouse for condition information on selected bridges and pavements throughout the Metropolitan Planning Area (MPA). Throughout its history, the BPCMS has contained different types of information varying in scope, depending on the needs of member agencies, federal regulations, and data collection methods. Most recently, the Pavement section of the report included condition information on all federal-aid eligible (FAE) roads in the MPA.

This year, in addition to compiling data on federal-aid eligible roads, the SMTC undertook a new effort – providing ratings on the entirety of the City of Syracuse's road system. In keeping with past data collection efforts by the City, roads were rated on a block-by-block basis.

Stemming from this data collection effort, the City expressed interest in working with the SMTC to develop a list of streets which should be prioritized for paving, based on a number of variables.

#### **Project Initiation**

After meeting with City of Syracuse staff, the SMTC agreed to assist in this effort as a pilot program this year, with an eventual goal of studying a more comprehensive asset management program for the City in the future. Initial discussions suggested the pilot program would provide the City with a list of approximately 15 miles of improved (i.e. curbed) City streets which would be priority candidates for maintenance in the coming construction year. As the City develops their 2020-2021 Reconstruction budget (which may

include pavement treatments other than full reconstruction), these priority candidates will provide a starting point for decision-making.

#### **Identification of Process**

SMTC staff explained, and the City of Syracuse acknowledged, that the limitations of the amount of data available would prevent the full analysis which an asset management program would normally entail. For example, the City does not have complete road inventory data which can be tied to a geographic centerline file via a unique identifier – thus, some roadway characteristics may be assumed or missing all together. The goal of this pilot program is to help develop a process which could be replicated (with adjustments as necessary) in the future as more data is gathered and becomes available. The City has shown interest in cataloging data digitally to as a part of their commitment to data-driven decision making processes.

A regular maintenance program already exists for the City's unimproved (i.e. non-curbed) streets. A slurry seal is overlaid on these streets approximately every four years. The current program currently covers about one quarter of the unimproved system each year, and the maintenance cost is added to abutting property owners' tax bills. As an established system, SMTC and City staff decided to leave this scheduled maintenance out of the pavement prioritization pilot and focus instead on the improved system, which has a separate budget.

In discussions with City staff, the SMTC identified the following variables as candidate for this prioritization process:

- Pavement condition
- Average Annual Daily Traffic (AADT)
- Functional Classification
- Prior maintenance

- Current planned other (non-paving)
  maintenance, such as work completed by
  National Grid or the City's water
  department
- Proximity to major institutions
- History of water main breaks
- Existence of other major planned reconstruction projects
- Emergency snow routes.

City staff also suggested that in addition to the identification of specific blocks, the prioritization process should suggest longer road segments, promoting economies of scale when paving.

#### **Description of Tasks**

#### Task 1: Data Collection

The goal of the project is to produce a series of filters that will eventually indicate potential priority road segments using the variables listed above. The SMTC will need to gather necessary data in order to achieve this goal. Some of the datasets live in-house at the SMTC, and others will have to be obtained through partnerships with the City of Syracuse or other entities. The table below illustrates the needed variables and the presumed entities.

Dataset	Agency
Pavement Condition	SMTC
AADT	SMTC, NYSDOT
Functional Classification	SMTC
Prior Maintenance	City of Syracuse
Current Planned	City of Syracuse,
Maintenance	National Grid
Major Institutions	SMTC
Water Main Breaks	City of Syracuse
Planned Reconstruction	SMTC, City of
Projects	Syracuse, NYSDOT
Emergency Snow Routes	City of Syracuse
Connectivity Score	SMTC

From a Geographic Information Systems (GIS) standpoint, the current pavement condition dataset is tied to the SMTC's MPA Roads geodatabase. This spatial data will serve as the base dataset for all other data points collected.

AADT, where it exists, will be used to determine the number of vehicles travelling on a segment, and thus, provide a sense of a road's importance to the overall network. Prior maintenance will help separate roads of similar ratings, and current planned maintenance and reconstruction (both paving related and nonpaving related) will help show roads that should not be prioritized this year. Water main breaks may be an additional indicator of road quality – a road segment with several breaks likely has several cuts in the pavement, which impairs condition over time. Major institutions, such as hospitals and large employers, would indicate both a necessity for good pavement and the importance of managing any construction disruptions. And finally, a "connectivity score" developed by the SMTC would indicate blocks near similarly rated blocks, allowing the paving crew to work on a longer stretch of road in one project.

#### Task 2: Weighting of Variables

The process of prioritization will occur in two stages. The first stage will operate as a filtering process to select which roads should *not* be included in prioritization calculations. Based on the data collected and conversations with the City, the roads with the following attributes will not be considered as a part of the program. Mileages are approximate.

#### Unimproved Streets (132 miles)

Unimproved (i.e. non-curbed) streets are already part of a routine maintenance program, and therefore are not being considered as a part of this analysis.

#### Unknown Street type (32 miles)

Given limitations in the data, some streets are of an unknown category. At this time, they will not be considered as a part of this analysis. If, through future data collection efforts, these streets can be identified as either improved or unimproved, they can be included in future analyses as appropriate.

#### Planned Reconstruction (26 miles)

Streets where there are planned reconstruction efforts in the near future will also not be considered as a part of this analysis. The two main types of situations included in this list are projects on the SMTC's Transportation Improvement Program (TIP) and other "special projects" planned to be completed by the City. An example of a special project is the Butternut Street Dig Once project scheduled for construction this summer.

Additionally, roads identified as in the project area of the upcoming Interstate 81 project (as noted in the Preliminary DEIS) were also removed from consideration. Although these roads are not being considered for this specific effort, maintenance may be required before the Interstate 81 project is complete given the condition of some of the network in this area.

## Planned Maintenance in Right-of-Way (29 miles)

Other, non-reconstruction work in the road right-of-way was also noted, and roads with maintenance plans in the immediate future were removed from consideration. The only data available under this category were streets where National Grid anticipates replacing gas lines in the years 2020-2023. This category may be filled out with additional information if it is made available – for example, planned water main or sewer maintenance.

#### Pavement Condition (204 miles)

Pavement scores of "Good" and "Excellent" were not considered as a part of this analysis, and were removed from consideration. Scores of "Fair" or "Poor" remained. Roads with a score of "Not Rated" were also removed.

After all filters were applied, the original 395 miles of City roads were reduced to approximately 103 miles for prioritization consideration. The second stage involved applying scores to the segments which remained based on other variables.

#### **Condition Rating**

The pavement condition was considered the most important variable, and as such, was given the largest weights of any variable.

<b>Condition Score</b>	Miles	Weight
3 (Very Poor)	0.26	8
4 (Poor)	12.0	8
5 (Poor)	47.98	6
6 (Fair)	45.55	4

#### **AADT**

Corridors which have higher traffic volumes are more likely to be traveled frequently by the public. Assigning these heavily-traveled corridors a higher weight helps ensure a better use of City resources, by spending limited reconstruction dollars on popular travel corridors. AADT is not known for all segments. However, AADT is generally not available on low-volume, residential streets — therefore, streets with an unknown AADT were given the same weight as those with low AADT.

AADT	Miles	Weight
Greater than 15,000	1.16	5
10,001 – 15,000	8.25	4
5,001 – 10,000	13.4	3
2,501 – 5,000	14.39	2
0 – 2,500	10.74	1
No Data	57.85	1

#### Nearby Water Main Breaks

The City's Office of Accountability,
Performance, and Innovation supplied data on
the location of water main breaks dating back
to 2004. Breaks did not always occur along the
road centerline, and SMTC staff wanted to
include breaks that may have occurred near the
roadway, but not directly underneath, as these
breaks may still have required a cut into the
pavement to fix. Several pavement cuts, over
time, will lead to condition degradation,
especially if filled incorrectly. As such, the
number of water main breaks could reasonably
be considered an important factor in prioritizing
pavement maintenance.

A 20 meter buffer was placed around each road centerline<sup>1</sup>, and the sum of the number of breaks in that buffer zone were added to each segment. The weights were assigned based on percentile values, and are shown below.

Water Main Breaks	Miles	Weight
4 – 25	18.37	5
2 – 3	24.46	3
1	22.3	2
0	40.65	0

#### Snow Emergency Routes

Roads considered snow emergency routes are of critical importance to the road network, either for the traveling public or for emergency services. As such, it is reasonable to attest that these roads should be maintained in a state of good repair.

<b>Snow Emergency Route</b>	Miles	Weight
Yes	65.94	2
No	39.84	0

#### **Major Institutions**

The City expressed interest in prioritizing routes near major institutions, defined as hospitals, universities, and large employers. In this case, SMTC used employment data to identify businesses with over 250 employees. Given that the major employers in our region are both the local universities and the hospitals, an institution was *not* counted more than once. For example, Upstate is both a large employer and a hospital, but it was counted once as an institution and not twice.

The employment data is susceptible to accuracy issues. One common example is the reporting of *all* employees in a company at a single location. To avoid these issues, staff used professional judgement to cull or alter the list of large employers where appropriate.

Distance to Institution	Miles	Weight
1/8 mile	8.31	3
1/4 mile	12.68	2
1/2 mile	26.26	1
Greater than 1/2 mile	58.53	0

any amount 1.5 times the interquartile range greater than the 75<sup>th</sup> percentile or less than the 25<sup>th</sup> percentile. Performing this calculation, staff were able to determine that most water main breaks occurred within 20 meters (approximately 60 feet) of the road centerline.

<sup>&</sup>lt;sup>1</sup> In search of an acceptable distance from the road centerline to search for water main breaks, SMTC staff calculated the distance, in meters, of each break to the nearest road segment centerline. Staff sought to remove outliers from the dataset before calculating an appropriate buffer distance. In statistics, a rule of thumb for calculating outliers is

#### **Prior Maintenance**

The City also provided data on the last pavement overlay on each segment, although data was incomplete and only as current as of 2015. More importance was placed on roads which had not been resurfaced recently. The City's Capital Improvement Program indicates that milling and filling can provide an approximate 10-15 years of life to a pavement segment, depending on the extent of the treatment. Roads with no data were scored higher than those newer roads with data, but not as highly as older roads with data.

Last Overlay	Miles	Weight
20+ Years	34.99	5
10-20 Years	44.33	4
Less than 10 Years	0.99	1
No Data	25.47	2

#### Task 3: Applying Score to Network

The maximum possible score for all of these variables is 30. Using GIS, the appropriate score for each individual variable was tied to each road segment. The sum of all these variables, the Priority Score, was calculated.

After a review of this initial scoring, the process showed that the output weighted heavily towards federal-aid eligible roads. Federal-aid eligible roads tend to be the most important part of a road network – logically, these roads would score highly using this system.

However, the City is interested in including lower-volume, residential streets as a part of the prioritization program. To achieve this, each segment's score was given a multiplier, based on functional classification. Through this process, roads functionally classified as "Local" were given a boost to help them stand out, and the importance of principal arterials was reduced slightly. This helped identify more local

roads and other lower-volume streets for prioritization consideration.

<b>Functional Classification</b>	Miles	Multiplier
Principal Arterial	7.55	0.9
Minor Arterial	18.22	1
Collector	17.58	1.1
Local	62.44	1.2

After application, the Priority Scores ranged from 8.4 to 26.4. These scores were divided into percentiles (by number of segments), with the idea that segments scoring higher than the 75<sup>th</sup> percentile would advance for prioritization consideration.

Category	Lower Bound	Upper Bound	Total Mileage in Category
Minimum to 25 <sup>th</sup> Percentile Score	8.40	13.20	30.15
25 <sup>th</sup> to Median Score	13.21	15.60	24.19
Median to 75 <sup>th</sup> Percentile Score	15.61	18.00	24.82
75 <sup>th</sup> to Maximum Score	18.01	26.40	24.10

#### Task 4: Identification of Priorities

Overall, any of the approximately 24 miles of road which fall above the 75<sup>th</sup> percentile of scores would be reasonable and prudent streets to include in the 2020 reconstruction list. Although greater than the original approximately 15 miles requested, having a larger pool to select from provides more options to the City, as needs may change throughout the development of the

reconstruction list. These roads are listed in Appendix A of this memo.

In addition to providing the prioritized road segments at the block level, the SMTC calculated a connectivity score along longer segments, to promote economies of scale when paving. This score, the Weighted Average Priority Score<sup>2</sup>, gives the City an idea of the general priority of a road.

The Weighted Average Priority Score was calculated in two different ways. For roads not on the federal-aid system, the score was calculated along each road, based on road name. For roads on the federal-aid system, the same score was also calculated, but instead of at the road name level, smaller segments were used based on the SMTC's City of Syracuse Traffic Count Program. Since FAE roads tend to be longer commuter routes, it did not seem practical to provide a Weighted Average Priority Score for the entirety of James Street, for example. These smaller subsections reflect segments which could be reasonably paved.

However, each of these new segments may still contain blocks which were filtered out of the process for a number of reasons (such as being unimproved, et cetera), so care should be taken in planning for reconstruction. These filtered blocks (with a score of 0, since they were removed prior to the scoring process) are still included in calculating the Weighted Average Priority Score – this allows a street's priority to drop if it contains several blocks not considered in the analysis.

Each road is listed with its Weighted Average Priority Score, its Weighted Average Pavement Rating, and the total segment length. City staff would be able to select which streets they are interested in including, based on total mileage. This list is included in Appendix B of this memo. Roads with a Weighted Average Priority Score of 0 were removed from the list for brevity.

#### Conclusion

Overall, the methodology described above is one of several possible approaches to developing a priority list of segments to include in the 2020 Reconstruction Budget. SMTC staff, through communication with City staff and based on available resources, developed a data-driven process which takes into account several variables considered important to a well-maintained road network. Based on feedback, an increase in available data, and other needs, this methodology can change in the future. As is the case with all SMTC products, this process is intended to be used as a planning tool only.

length. The formula  $\bar{P}=\frac{\sum p_i l_i}{\sum l_i}$  applies, where  $\bar{P}$  is the Weighted Average Priority Score,  $p_i$  is the Priority Score of the ith block on a segment, and  $l_i$  is the length of the ith block of a segment.

<sup>&</sup>lt;sup>2</sup> The Weighted Average Priority Score was calculated by taking the average of each block's score along a road (for non-FAE) or a count segment (for FAE), and weighting each block's score using its

## **APPENDIX A – Streets with scores above 75<sup>th</sup> Percentile (Value higher than 18)**

BPID	Street Name	From	То	Priority Score	Miles	Feet	2019 Rating	FAE
SYR3438	Townsend St S	Washington	Fayette	26.4	0.06	331.65	4	Yes
SYR2322	Meadowbrook Dr	Scott	Bradford	24.2	0.25	1341.09	4	Yes
SYR2544	Oak St	Lodi	Hawley	24.2	0.21	1120.14	5	Yes
SYR2548	Oak St	James	Highland Ave	24.2	0.13	678.51	5	Yes
SYR3172	Spencer St	Clinton	Solar	24.2	0.13	660.64	4	Yes
SYR2865	Rose Ave	Oakwood	S. McBride	24	0.09	488.53	4	No
SYR3175	Spencer St	Van Rennselaer	Hunter	24	0.17	900.44	5	No
SYR3211	Stadium Pl	Van Buren	Raynor	24	0.12	644.07	5	No
SYR3536	Van Rensselaer St	Erie Blvd.	Wilkinson	24	0.15	804.49	5	No
SYR3815	Wolf St	Lodi	N. Salina	24	0.09	474.59	4	No
SYR2318	Meadowbrook Dr	Nottingham / Dakota	Montana	23.1	0.34	1789.44	5	Yes
SYR2360	Midland Ave	Lincoln	Taylor	23.1	0.10	515.33	5	Yes
SYR3234	State St N	Ash	Division	23.1	0.10	510.13	3	Yes
SYR590	Catherine St	Hawley	James	22.8	0.13	687.84	5	No
SYR1105	Erie Blvd E	Salina	Warren	22.8	0.07	378.71	4	No
SYR1979	Kirk Ave	Midland	Kirk Park Dr.	22.8	0.22	1164.26	4	No
SYR2251	Marshall St	University	Walnut	22.8	0.11	592.84	5	No
SYR2285	McBride St N	James	Willow	22.8	0.07	349.09	5	No
SYR2598	Onondaga St E	Warren	Montgomery / Jeff	22.8	0.13	712.44	5	No
SYR8055	Plum St	Erie	Wilkinson	22.8	0.05	262.77	4	No
SYR442	Burnet Ave	Woodbine	Hillsdale	22	0.06	336.08	4	Yes
SYR2400	Midler Ave S	Burnet	Erie Blvd	22	0.35	1823.96	6	Yes
SYR2963	Salina St S	Minerva	Seeley Ave	22	0.06	340.02	5	Yes
SYR265	Bellevue Ave	Lincoln	South	22	0.10	522.85	5	Yes
SYR682	Clinton St S	Taylor	Tallman	22	0.19	977.12	4	Yes
SYR889	Crouse Ave S	Marshall	Waverly	22	0.07	389.77	5	Yes
SYR2321	Meadowbrook Dr	Scottholm Terr.	Scott	22	0.25	1295.29	4	Yes
SYR2323	Meadowbrook Dr	Bradford	Brookford	22	0.17	879.94	4	Yes
SYR2326	Meadowbrook Dr	Harrington	Hurlburt	22	0.14	731.31	4	Yes
SYR2545	Oak St	Hawley	Gertrude	22	0.07	381.00	5	Yes
SYR119	Ash St	Prospect	Townsend	21.6	0.07	382.63	5	No
SYR8046	Belden Ave E	Pearl	North State	21.6	0.04	223.63	5	No
SYR870	Croly St	Dakin	E. Fayette	21.6	0.16	846.18	5	No
SYR1645	Hawley Ave	Howard	N. Crouse	21.6	0.14	729.00	5	No
SYR2297	McBride St S	Taylor	Burt	21.6	0.07	384.12	5	No

BPID	Street Name	From	То	Priority Score	Miles	Feet	2019 Rating	FAE
SYR2298	McBride St S	Burt	Van Buren	21.6	0.06	328.46	5	No
SYR2299	McBride St S	Van Buren	Rose	21.6	0.06	291.06	5	No
SYR2796	Raynor Ave E	Stadium	Irving	21.6	0.06	331.37	6	No
SYR3173	Spencer St	Solar	Maltbie	21.6	0.23	1199.83	5	No
SYR3435	Townsend St N	Division	Catawba	21.6	0.10	516.11	5	No
SYR3436	Townsend St N	Catawba	Lodi / Pond	21.6	0.09	459.49	6	No
SYR3607	Walton St	Clinton	Franklin	21.6	0.10	524.32	4	No
SYR3608	Walton St	Franklin	Fayette	21.6	0.16	827.41	4	No
SYR429	Burnet Ave	N. Crouse	Lodi	21	0.19	1029.44	5	Yes
SYR822	Court St	Ross Park	Dale	21	0.07	366.67	6	Yes
SYR1130	Erie Blvd W	Clinton	Franklin	21	0.10	520.70	5	Yes
SYR1510	Grand Ave	Geddes	Cadwell	21	0.23	1225.74	5	Yes
SYR1511	Grand Ave	Cadwell	Herriman	21	0.08	420.97	5	Yes
SYR1512	Grand Ave	Herriman	Lydell	21	0.07	383.18	5	Yes
SYR1849	Irving Ave	Adams	Waverly	21	0.15	780.50	4	Yes
SYR1850	Irving Ave	University	Van Buren	21	0.12	653.78	4	Yes
SYR2120	Lodi St	Hawley	Crouse	21	0.10	506.17	6	Yes
SYR2398	Midler Ave S	Sunnycrest	Caleb	21	0.13	665.78	5	Yes
SYR3154	South Ave	Kirk	E. Bissell	21	0.12	652.25	5	Yes
SYR264	Bellevue Ave	Midland Av.	Lincoln	20.9	0.06	341.81	5	Yes
SYR288	Bellevue Ave	Winkworth Pkwy	City Line	20.9	0.11	600.60	5	Yes
SYR765	Comstock Ave	Colvin	Vincent	20.9	0.16	865.20	6	Yes
SYR1219	Fayette St E	Allen	Westmoreland	20.9	0.12	630.50	5	Yes
SYR2325	Meadowbrook Dr	Hatherly	Harrington	20.9	0.13	679.77	4	Yes
SYR2547	Oak St	Lincoln Pk. Dr.	James	20.9	0.11	601.72	6	Yes
SYR2599	Onondaga St E	Montgomery / Jeff	S. State	20.9	0.09	479.26	5	Yes
SYR2692	Park St	Pond	Kirkpatrick	20.9	0.19	1010.76	4	Yes
SYR3427	Townsend St N	Burnet	James	20.9	0.10	512.01	6	Yes
SYR1114	Erie Blvd E	University Ave	Walnut	20.7	0.11	592.01	5	Yes
SYR1135	Erie Blvd W	Van Rennselaer	Geddes	20.7	0.24	1250.24	5	Yes
SYR1417	Genesee St E	Deforest	Hillsboro Pkwy	20.7	0.23	1222.01	4	Yes
SYR120	Ash St	Townsend	McBride	20.4	0.07	357.33	4	No
SYR347	Brattle Rd	Sedgwick	Rugby	20.4	0.30	1596.66	5	No
SYR1034	East Ave	Salt Springs	Blossom Rd.	20.4	0.11	576.27	4	No
SYR1183	Fabius St	Wyoming	Niagara	20.4	0.08	418.36	4	No
SYR1565	Green St	Lodi	Oak	20.4	0.29	1534.36	5	No
SYR1600	Harbor St	Emerson	W. Fayette	20.4	0.12	608.40	5	No
SYR1622	Harrison St	Comstock	Ostrom	20.4	0.08	433.74	4	No
SYR1644	Hawley Ave	Catherine	Howard	20.4	0.15	806.38	6	No

BPID	Street Name	From	То	Priority Score	Miles	Feet	2019 Rating	FAE
SYR1646	Hawley Ave	N. Crouse	Lodi	20.4	0.08	430.72	5	No
SYR1648	Hawley Ave	Oak	Delhi	20.4	0.06	334.93	5	No
SYR1723	Hickory St	State	Prospect	20.4	0.08	401.26	5	No
SYR1737	Highland St	Willow	Highland Av.	20.4	0.06	321.22	5	No
SYR1851	Irving Ave	Van Buren	Raynor	20.4	0.12	644.40	4	No
SYR2019	Lakeview Ave	Liberty	Richmond	20.4	0.19	1017.04	5	No
SYR2191	Madison St	Onondaga / Warren	Montgomery	20.4	0.10	534.75	4	No
SYR2199	Madison St	Ostrom	S. Beech	20.4	0.17	872.41	5	No
SYR2300	McBride St S	Rose	Raynor	20.4	0.07	389.99	5	No
SYR2303	McClure Ave	S. Salina	S. State	20.4	0.10	549.21	4	No
SYR2447	Montgomery St	Burt	Raynor	20.4	0.19	997.01	4	No
SYR2562	Oakwood Ave	Taylor	Burt	20.4	0.07	388.41	5	No
SYR2793	Raynor Ave E	Oakwood	McBride	20.4	0.09	477.11	5	No
SYR3174	Spencer St	Maltbie	Van Rennselaer	20.4	0.15	772.80	5	No
SYR3544	Van Rensselaer St	Bear	Hiawatha	20.4	0.28	1491.13	6	No
SYR3638	Washington St E	Walnut	Pine	20.4	0.11	590.95	5	No
SYR3657	Water St W	Clinton	Franklin	20.4	0.10	519.96	6	No
SYR3731	Whittier Ave	Wilbur	Lowell	20.4	0.11	596.73	5	No
SYR3732	Whittier Ave	Lowell	Burnet Park Dr.	20.4	0.25	1328.55	5	No
SYR431	Burnet Ave	Elm	Mather	20	0.08	424.08	5	Yes
SYR432	Burnet Ave	Mather	Vine	20	0.16	860.06	5	Yes
SYR433	Burnet Ave	Vine	Sherwood	20	0.06	293.42	5	Yes
SYR756	Comstock Ave	E. Genesee	Madison	20	0.11	601.31	4	Yes
SYR763	Comstock Ave	Euclid	Stratford	20	0.16	845.39	5	Yes
SYR1516	Grand Ave	De Palma	Velasko / Avery	20	0.33	1752.93	5	Yes
SYR1618	Harrison St	Irving	Crouse	20	0.06	328.22	4	Yes
SYR1619	Harrison St	Crouse	University	20	0.11	589.14	4	Yes
SYR1620	Harrison St	University	Walnut	20	0.11	594.68	4	Yes
SYR2395	Midler Ave S	James	Northcliffe	20	0.17	908.90	5	Yes
SYR2396	Midler Ave S	Northcliffe	Glencove	20	0.16	828.15	5	Yes
SYR2911	Salina St N	Kirkpatrick	Danforth	20	0.11	555.16	5	Yes
SYR2912	Salina St N	Danforth	Court	20	0.11	556.53	5	Yes
SYR2960	Salina St S	W. Florence	W. Glen	20	0.11	579.06	5	Yes
SYR3167	South Ave	Armstrong	Mitchell	20	0.33	1750.56	5	Yes
SYR3230	State St N	Union Ave.	Laurel	20	0.17	903.00	6	Yes
SYR3816	Wolf St	N. Salina	Park	20	0.09	476.81	5	Yes
SYR34	Adams St W	Clinton	Onondaga / Oneida	19.8	0.10	514.84	4	Yes
SYR1115	Erie Blvd E	Walnut	Pine	19.8	0.12	609.66	5	Yes
SYR1863	James St	Townsend	McBride	19.8	0.09	457.90	6	Yes

BPID	Street Name	From	То	Priority Score	Miles	Feet	2019 Rating	FAE
SYR1864	James St	McBride	Catherine	19.8	0.09	459.21	6	Yes
SYR1867	James St	Highland	Oak	19.8	0.25	1316.71	6	Yes
SYR158	Avery Ave S	Tennyson	Bryant	19.8	0.06	332.37	5	Yes
SYR159	Avery Ave S	Bryant	Whittier / Salisbury	19.8	0.05	247.37	5	Yes
SYR1208	Fayette St E	Forman	Irving	19.8	0.11	591.75	5	Yes
SYR1320	Franklin St S	Washington	Fayette	19.8	0.06	333.77	5	Yes
SYR1647	Hawley Ave	Lodi	Oak	19.8	0.13	695.90	4	Yes
SYR2320	Meadowbrook Dr	Euclid	Scottholm Terr.	19.8	0.19	1025.49	5	Yes
SYR2696	Park St	Turtle	Bear	19.8	0.09	466.17	4	Yes
SYR3406	Thurber St	Brighton	Stevens	19.8	0.10	554.09	5	Yes
SYR3492	University Ave	Erie Blvd.	Washington	19.8	0.09	479.21	5	Yes
SYR44	Alexander Ave	Cortland	W. Castle	19.2	0.12	658.28	3	No
SYR71	Alvord St S	Butternut	John	19.2	0.18	970.70	5	No
SYR128	Ashworth Pl	University Av.	Walnut	19.2	0.11	594.51	5	No
SYR129	Ashworth Pl	Walnut	Pine	19.2	0.12	611.80	5	No
SYR328	Boyden St	Vine	Wilson	19.2	0.09	483.54	4	No
SYR394	Brookford Rd	E. Genesee	Meadowbrook	19.2	0.10	523.46	5	No
SYR871	Croly St	E. Fayette	E. Genesee	19.2	0.23	1212.51	4	No
SYR881	Crouse Ave N	Hawley	Lodi	19.2	0.06	340.02	5	No
SYR1094	Emerson Ave	Erie Blvd	Kane Rd.	19.2	0.10	518.84	5	No
SYR1312	Forman Ave	Fayette	Genesee	19.2	0.08	443.28	6	No
SYR1563	Green St	Hawley	Howard	19.2	0.13	689.55	5	No
SYR1611	Harrison Pl	Harrison St.	Adams	19.2	0.11	557.55	6	No
SYR1643	Hawley Ave	McBride	Catherine	19.2	0.09	465.81	6	No
SYR1732	Highland Ave	Highland St.	Graves	19.2	0.13	672.56	5	No
SYR1733	Highland Ave	Graves	Oak	19.2	0.13	662.65	4	No
SYR1798	Hood Ave	McChesney Pk.	Kirkpatrick	19.2	0.20	1074.48	5	No
SYR1837	Hurlburt Rd	Rockford	Brookford / Euclid	19.2	0.16	869.66	5	No
SYR1978	Kirk Ave	Landon	Midland	19.2	0.17	886.90	5	No
SYR2196	Madison St	University Av	Walnut Av	19.2	0.11	592.60	5	No
SYR2197	Madison St	Walnut Av	Comstock	19.2	0.08	403.29	5	No
SYR2198	Madison St	Comstock	Ostrom	19.2	0.08	434.01	6	No
SYR2403	Mildred Ave	James	George	19.2	0.22	1150.84	5	No
SYR2576	Oneida St	King	Tallman	19.2	0.10	546.75	6	No
SYR2795	Raynor Ave E	Henry	Stadium	19.2	0.06	330.84	6	No
SYR2840	Robineau Rd	Crossett	Strathmore / Colvin	19.2	0.35	1845.30	4	No
SYR2870	Ross Park	Court	Butternut	19.2	0.36	1884.45	5	No
SYR3103	Sherwood Ave	Burnet	Hawley	19.2	0.14	735.21	5	No
SYR3219	Standart St	Fineview	Stadium Pl.	19.2	0.13	706.53	4	No

BPID	Street Name	From	То	Priority Score	Miles	Feet	2019 Rating	FAE
SYR3316	Sumner Ave	Clarendon	Euclid	19.2	0.11	595.74	4	No
SYR3856	Tex Simone Dr	Hiawatha	P&C Pkwy	19.2	0.14	720.03	6	No
SYR7858	University Ave	Canal	Erie	19.2	0.03	161.08	6	No
SYR3543	Van Rensselaer St	Kirkpatrick	Bear	19.2	0.27	1427.86	5	No
SYR3658	Water St W	Franklin	West St.	19.2	0.18	930.12	6	No
SYR425	Burnet Ave	Townsend	McBride	19	0.09	457.49	5	Yes
SYR426	Burnet Ave	McBride	Catherine	19	0.09	462.05	5	Yes
SYR663	Clinton St N	Willow	Herald Pl.	19	0.07	343.99	6	Yes
SYR1372	Geddes St S	Twin Hills	Arden	19	0.29	1516.90	4	Yes
SYR1373	Geddes St S	Arden	Glenwood	19	0.15	771.50	6	Yes
SYR1515	Grand Ave	Holden	De Palma	19	0.06	314.38	5	Yes
SYR7841	Irving Ave	Waverly	University	19	0.08	405.91	5	Yes
SYR2397	Midler Ave S	Glencove	Sunnycrest	19	0.16	827.35	5	Yes
SYR2916	Salina St N	LeMoyne	Wolf	19	0.09	481.06	5	Yes
SYR3152	South Ave	Cortland	Kennedy	19	0.04	200.22	6	Yes
SYR3153	South Ave	Kennedy	Kirk	19	0.03	184.40	5	Yes
SYR3165	South Ave	Hutchinson	Lynch	19	0.11	577.54	5	Yes
SYR3818	Wolf St	Carbon	Spring	19	0.09	480.85	5	Yes
SYR1113	Erie Blvd E	S. Crouse	University Ave	18.9	0.11	594.21	5	Yes
SYR1416	Genesee St E	Albert Rd.	Deforest	18.9	0.09	471.82	5	Yes
SYR1862	James St	State	Townsend	18.9	0.15	770.79	6	Yes
SYR1868	James St	Oak	Dewitt	18.9	0.19	1029.60	6	Yes
SYR287	Bellevue Ave	Glenwood	Winkworth Pkwy	18.7	0.03	144.47	5	Yes
SYR1243	Fayette St W	Hamilton	W. Genesee	18.7	0.03	150.26	5	Yes
SYR1319	Franklin St S	Erie Blvd.	Washington	18.7	0.09	484.04	6	Yes
SYR1708	Hiawatha Blvd E	Grant Blvd.	Fourth North	18.7	0.09	499.09	5	Yes
SYR1709	Hiawatha Blvd E	Fourth North	Sixth North	18.7	0.19	1008.42	5	Yes
SYR2284	McBride St N	Hawley	James	18.7	0.07	358.97	6	Yes
SYR2319	Meadowbrook Dr	Montana	Euclid	18.7	0.24	1248.56	5	Yes
SYR2324	Meadowbrook Dr	Brookford	Hatherly	18.7	0.15	818.12	4	Yes
SYR2361	Midland Ave	Taylor	Tallman	18.7	0.14	731.26	6	Yes
SYR2363	Midland Ave	Bellevue	Blaine	18.7	0.07	362.46	5	Yes
SYR3357	Tallman St	Lincoln	South	18.7	0.09	490.30	6	Yes
SYR3695	Westcott St	E. Genesee	Hawthorne	18.7	0.10	551.28	5	Yes
SYR3696	Westcott St	Hawthorne	Dell	18.7	0.14	750.46	5	Yes

### **APPENDIX B – Street Segments ordered by Weighted Average Priority Score**

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Spencer Street	Solar	Genant	24.20	4.00	0.13	Yes
Rose Ave	Local Applicable Segment	See Map	24.00	4.00	0.09	No
Wolf St	Local Applicable Segment	See Map	24.00	4.00	0.09	No
Midler Avenue S	Erie (NYS 5)	Burnet	22.00	6.00	0.35	Yes
Oak Street	Burnet	James (NYS 290)	21.76	5.44	0.50	Yes
Spencer St	Local Applicable Segment	See Map	21.65	5.09	0.60	No
Belden Ave E	Local Applicable Segment	See Map	21.60	5.00	0.04	No
Walton St	Local Applicable Segment	See Map	21.60	4.00	0.26	No
Bellevue Avenue	South	Midland	21.57	5.00	0.16	Yes
Meadowbrook Drive	Nottingham	Euclid	21.29	5.00	0.58	Yes
Erie Boulevard West	Franklin	Clinton	21.00	5.00	0.10	Yes
Townsend Street N	Burnet	James (NYS 290)	20.90	6.00	0.10	Yes
Onondaga Street E	Jefferson	State (US 11)	20.90	5.00	0.09	Yes
Irving Avenue	Van Buren	Adams	20.56	4.22	0.35	Yes
Bellevue Avenue	City Line	Glenwood	20.47	5.00	0.14	Yes
Harbor St	Local Applicable Segment	See Map	20.40	5.00	0.12	No
Harrison St	Local Applicable Segment	See Map	20.40	4.00	0.08	No
McClure Ave	Local Applicable Segment	See Map	20.40	4.00	0.10	No
State Street N	I-81 Ramp	Spencer	20.31	4.52	0.20	Yes
Croly St	Local Applicable Segment	See Map	20.19	4.41	0.39	No
Harrison Street	Irving	University	20.00	4.00	0.17	Yes
Salina Street N	Kirkpatrick	Court (NYS 298)	20.00	5.00	0.21	Yes
Wolf Street	Salina	Park	20.00	5.00	0.09	Yes
<b>Grand Avenue</b>	City Line (Velasko)	Geddes	19.95	5.00	0.90	Yes
Adams Street W	Clinton	Onondaga / Oneida	19.80	4.00	0.10	Yes
Hawley Avenue	Lodi	Oak	19.80	4.00	0.13	Yes
Midler Avenue S	Burnet	James (NYS 290)	19.66	5.00	0.72	Yes
Alexander Ave	Local Applicable Segment	See Map	19.20	3.00	0.12	No
Ashworth Pl	Local Applicable Segment	See Map	19.20	5.00	0.23	No
Harrison Pl	Local Applicable Segment	See Map	19.20	6.00	0.11	No
Ross Park	Local Applicable Segment	See Map	19.20	5.00	0.36	No
Standart St	Local Applicable Segment	See Map	19.20	4.00	0.13	No
University Ave	Local Applicable Segment	See Map	19.20	6.00	0.03	No
Green St	Local Applicable Segment	See Map	19.17	5.00	0.52	No
Franklin Street S	Fayette	Erie	19.15	5.59	0.15	Yes
South Avenue	Kennedy (NYS 175)	Cortland	19.00	6.00	0.04	Yes
Park Street	Pond	Court (NYS 298)	18.99	4.99	0.38	Yes
James Street	State (US 11)	Lodi	18.91	6.00	0.49	Yes

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
South Avenue	City Line	Glenwood	18.66	5.00	0.71	Yes
Raynor Ave E	Local Applicable Segment	See Map	18.64	5.49	0.39	No
Tex Simone Dr	Local Applicable Segment	See Map	18.54	6.00	0.31	No
East Ave	Local Applicable Segment	See Map	18.44	4.00	0.24	No
Harrison Street	University	Comstock	18.30	4.42	0.20	Yes
Hiawatha Boulevard E	Grant	7th North	18.03	5.30	0.41	Yes
University Avenue	Fayette	Erie (NYS 5)	18.01	5.41	0.15	Yes
Velasko Road	Onondaga Street	Grand	18.00	6.00	0.21	Yes
Salina Street N	Wolf	Hiawatha	18.00	4.00	0.11	Yes
C-D Rd	Local Applicable Segment	See Map	18.00	6.00	0.11	No
Exchnage Pl	Local Applicable Segment	See Map	18.00	4.00	0.09	No
Henderson St	Local Applicable Segment	See Map	18.00	6.00	0.08	No
Milton Ave Extension	Local Applicable Segment	See Map	18.00	6.00	0.04	No
Townsend PI	Local Applicable Segment	See Map	18.00	4.00	0.10	No
Van Buren St	Local Applicable Segment	See Map	18.00	6.00	0.09	No
Brattle Rd	Local Applicable Segment	See Map	17.97	5.36	0.85	No
Forman Ave	Local Applicable Segment	See Map	17.79	6.00	0.24	No
Townsend Street S	Harrison	Genesee (NYS 92)	17.60	6.00	0.26	Yes
Salina Street N	Court (NYS 298)	Wolf	17.51	5.25	0.36	Yes
Douglas St	Local Applicable Segment	See Map	17.43	4.53	0.48	No
Fillmore Ave	Local Applicable Segment	See Map	17.38	5.00	0.26	No
Park Street	Butternut	Oak	17.32	4.13	0.40	Yes
Comstock Avenue	Adams	Harrison	17.00	5.00	0.11	Yes
Wolf Street	Park	Grant	16.98	5.00	0.47	Yes
Wolf Street	Grant	7th North	16.98	5.25	0.39	Yes
Alvord St S	Local Applicable Segment	See Map	16.92	5.18	0.38	No
Beard Ave E	Local Applicable Segment	See Map	16.80	4.00	0.10	No
Fayette St W	Local Applicable Segment	See Map	16.80	6.00	0.33	No
Gebhardt Ave	Local Applicable Segment	See Map	16.80	4.00	0.10	No
Linden St	Local Applicable Segment	See Map	16.80	5.00	0.12	No
Pleasant Ave E	Local Applicable Segment	See Map	16.80	4.00	0.03	No
Slocum Ave	Local Applicable Segment	See Map	16.80	5.00	0.20	No
Hood Ave	Local Applicable Segment	See Map	16.73	5.13	0.42	No
Milton Avenue	Willis	City Line	16.64	6.00	0.14	Yes
Whittier Ave	Local Applicable Segment	See Map	16.52	5.00	0.69	No
Oak Street	James (NYS 290)	Grant	16.52	5.57	0.93	Yes
James Street	Lodi	Teall	16.41	6.00	1.08	Yes
Erie Boulevard West	Geddes	West	16.41	5.75	0.63	Yes
Kirk Ave	Local Applicable Segment	See Map	16.34	4.63	0.59	No

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Adams Street W	Salina	Clinton	16.20	5.00	0.07	Yes
Westminster Ave	Local Applicable Segment	See Map	16.11	5.57	0.24	No
Highland Ave	Local Applicable Segment	See Map	16.11	5.15	0.44	No
Franklin Street S	Jefferson	Fayette	16.07	6.00	0.08	Yes
New St	Local Applicable Segment	See Map	16.05	6.00	0.16	No
Henry St	Local Applicable Segment	See Map	16.01	5.66	0.19	No
Old State Fair Boulevard	Spencer	I-690 Ramp	16.00	4.00	0.34	Yes
Court Street	Sunset	Salina (US11)	16.00	5.00	0.15	Yes
Mildred Ave	Local Applicable Segment	See Map	15.99	5.00	0.39	No
Hurlburt Rd	Local Applicable Segment	See Map	15.97	4.85	0.36	No
Gordon Ave	Local Applicable Segment	See Map	15.97	4.00	0.24	No
Walnut Street	Waverly	Adams	15.96	4.49	0.15	Yes
Sherwood Ave	Local Applicable Segment	See Map	15.82	5.00	0.32	No
Water St W	Local Applicable Segment	See Map	15.70	4.80	0.34	No
Hatherly Rd	Local Applicable Segment	See Map	15.69	5.00	0.24	No
McBride Street N	Burnet	James (NYS 290)	15.67	6.00	0.15	Yes
Leon St	Local Applicable Segment	See Map	15.60	5.00	0.17	No
Oak Pl	Local Applicable Segment	See Map	15.60	5.00	0.06	No
Schneider St	Local Applicable Segment	See Map	15.60	5.00	0.12	No
Strathmore Park Dr	Local Applicable Segment	See Map	15.60	5.00	0.08	No
White St	Local Applicable Segment	Ѕее Мар	15.60	6.00	0.14	No
Court Ter	Local Applicable Segment	See Map	15.60	6.00	0.18	No
Lodi Street	James (NYS 290)	Butternut	15.50	6.00	0.41	Yes
DeWitt Street	James (NYS 290)	Park	15.40	6.00	0.22	Yes
Walnut Avenue	Adams	Harrison	15.40	5.00	0.11	Yes
Wilbur Avenue S	Geddes	Grand	15.40	6.00	0.07	Yes
James Street	Teall	Grant	15.34	5.91	0.47	Yes
Solar Street	Plum	Bear (NYS 298)	15.31	5.53	0.70	Yes
Meadowbrook Drive	Euclid	Genesee (NYS 92)	15.30	4.98	1.81	Yes
Plum St	Local Applicable Segment	Ѕее Мар	15.30	5.79	0.47	No
Parkway Dr	Local Applicable Segment	Ѕее Мар	15.27	5.34	0.27	No
Park Street	Butternut	Pond	15.15	4.86	0.43	Yes
Hillview Ave	Local Applicable Segment	Ѕее Мар	15.15	4.21	0.31	No
Stadium Pl	Local Applicable Segment	Ѕее Мар	15.12	5.51	0.25	No
Bennington Dr	Local Applicable Segment	See Map	15.09	5.00	0.17	No
Park Street	Court (NYS 298)	Wolf (US 11)	15.04	4.92	0.28	Yes
Menlo Dr	Local Applicable Segment	Ѕее Мар	15.01	5.00	0.16	No
Burnet Avenue	Lodi	Teall	14.91	5.00	0.57	Yes
Madison St	Local Applicable Segment	Ѕее Мар	14.89	5.17	1.15	No

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Fayette Street W	Genesee (NYS 5)	Ulster	14.85	5.00	0.20	Yes
Catabwa Street	Salina (US 11)	Lodi	14.75	5.40	0.12	Yes
McBride St N	Local Applicable Segment	See Map	14.70	5.77	0.73	No
Seward St	Local Applicable Segment	See Map	14.66	5.56	0.23	No
State Street N	Willow	Salina	14.65	6.07	0.30	Yes
Shuart Ave	Local Applicable Segment	See Map	14.62	4.30	0.41	No
7th North Street	Lemoyne	Wolf (US 11)	14.51	5.00	0.17	Yes
Brighton Avenue E	Salina (US 11)	State	14.40	5.00	0.10	Yes
Hampshire Rd	Local Applicable Segment	See Map	14.40	5.00	0.16	No
Pattison St	Local Applicable Segment	See Map	14.40	5.00	0.18	No
University PI	Local Applicable Segment	See Map	14.40	5.00	0.08	No
Williston Ave	Local Applicable Segment	See Map	14.40	5.00	0.06	No
Dorset Rd	Local Applicable Segment	See Map	14.40	6.00	0.17	No
Maryland Ave	Local Applicable Segment	See Map	14.40	5.00	0.37	No
Whitwell Dr	Local Applicable Segment	See Map	14.40	6.00	0.08	No
Columbus Ave	Local Applicable Segment	See Map	14.39	4.00	0.29	No
Gifford Street	West	Clinton	14.37	5.00	0.23	Yes
Alanson Rd	Local Applicable Segment	See Map	14.37	5.86	0.52	No
Harding St	Local Applicable Segment	See Map	14.28	6.00	0.28	No
Dorchester Ave	Local Applicable Segment	See Map	14.11	5.00	0.26	No
Elk St	Local Applicable Segment	See Map	14.05	5.00	0.23	No
Marshall St	Local Applicable Segment	See Map	13.87	3.62	0.40	No
Teall Avenue	James (NYS 290)	Grant	13.86	5.55	0.50	Yes
Court Street	Salina (US 11)	Grant	13.80	6.00	0.58	Yes
Erie Boulevard West	Milton	Hiawatha	13.80	5.91	0.77	Yes
Park Street	Oak	DeWitt	13.77	5.52	0.12	Yes
Roosevelt Ave	Local Applicable Segment	See Map	13.75	5.00	0.44	No
Elizabeth St	Local Applicable Segment	Ѕее Мар	13.69	4.74	0.15	No
Jasper St	Local Applicable Segment	See Map	13.67	5.80	0.36	No
Fayette Street E	Almond	Columbus	13.65	5.92	1.05	Yes
Pond Street	Park	Grant	13.63	6.00	0.58	Yes
Montgomery St	Local Applicable Segment	See Map	13.63	5.37	0.45	No
Lakeview Ave	Local Applicable Segment	See Map	13.57	5.53	0.38	No
South Avenue	Onondaga Ave	Kennedy	13.53	5.68	0.24	Yes
McBride St S	Local Applicable Segment	See Map	13.40	5.80	0.49	No
Walnut Pl	Local Applicable Segment	See Map	13.39	5.71	0.25	No
Sedgwick Dr	Local Applicable Segment	See Map	13.30	5.44	0.72	No
Syracuse Street	Ultser	Fayette	13.20	5.00	0.26	Yes
Chatham Rd	Local Applicable Segment	Ѕее Мар	13.20	6.00	0.17	No

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Dell St	Local Applicable Segment	Ѕее Мар	13.20	6.00	0.09	No
Euclid Ter	Local Applicable Segment	See Map	13.20	4.00	0.11	No
Garfield Pl	Local Applicable Segment	See Map	13.20	6.00	0.05	No
Jasper Pl	Local Applicable Segment	See Map	13.20	6.00	0.09	No
Oxford St	Local Applicable Segment	See Map	13.20	6.00	0.10	No
Paul Ave	Local Applicable Segment	See Map	13.20	6.00	0.33	No
Pershing Ave	Local Applicable Segment	See Map	13.20	6.00	0.08	No
Sedgwick Rd	Local Applicable Segment	See Map	13.20	5.00	0.10	No
Ostrom Ave	Local Applicable Segment	See Map	13.18	5.78	0.83	No
McKinley Ave	Local Applicable Segment	See Map	13.08	5.52	0.20	No
Court Street	Genant	Sunset	13.00	5.00	0.07	Yes
Erie Boulevard West	Hiawatha	Genesee (NYS 5)	13.00	6.00	0.28	Yes
Comstock Avenue	Waverly	Adams	12.99	5.51	0.15	Yes
Hier Ave	Local Applicable Segment	See Map	12.99	5.21	0.31	No
Washington St E	Local Applicable Segment	See Map	12.83	6.32	0.34	No
Onondaga St E	Local Applicable Segment	See Map	12.83	6.31	0.24	No
Borden Ave E	Local Applicable Segment	See Map	12.80	5.00	0.22	No
Clarendon St	Local Applicable Segment	See Map	12.70	4.09	0.47	No
Carbon St	Local Applicable Segment	See Map	12.66	5.18	1.25	No
Bear Street W	Solar	Van Rennselaer	12.60	5.00	0.29	Yes
Robinson St	Local Applicable Segment	See Map	12.58	4.40	0.48	No
Hawley Ave	Local Applicable Segment	See Map	12.56	5.67	1.26	No
Lancaster Ave	Local Applicable Segment	See Map	12.54	5.61	1.14	No
Carbon St S	Local Applicable Segment	See Map	12.26	4.52	0.19	No
McLennan Ave	Local Applicable Segment	See Map	12.22	4.86	0.34	No
Thurber Street	Brighton	Jamesville	12.22	7.08	0.36	Yes
University Avenue	Genesee (NYS 92)	Fayette	12.10	6.00	0.11	Yes
Eureka St	Local Applicable Segment	See Map	12.01	5.49	0.15	No
Eloise Ter	Local Applicable Segment	Ѕее Мар	12.00	6.00	0.09	No
Greenland Dr	Local Applicable Segment	See Map	12.00	5.00	0.19	No
Harold St	Local Applicable Segment	Ѕее Мар	12.00	5.00	0.18	No
Lawrence St	Local Applicable Segment	See Map	12.00	6.00	0.19	No
Merz Ave	Local Applicable Segment	See Map	12.00	5.00	0.08	No
Ostrander Ave E	Local Applicable Segment	See Map	12.00	5.00	0.08	No
Waverly Ave	Local Applicable Segment	See Map	12.00	6.00	0.08	No
Worden Ave	Local Applicable Segment	See Map	12.00	6.00	0.13	No
Water St E	Local Applicable Segment	See Map	11.87	4.55	0.81	No
Fabius St	Local Applicable Segment	See Map	11.87	6.38	0.41	No
Van Rensselaer St	Local Applicable Segment	See Map	11.85	6.18	1.23	No

			Weighted	Weighted		
Road Name	From	То	Average Priority Score	Average Pavement Rating	Miles	FAE
Marcellus St	Local Applicable Segment	Ѕее Мар	11.80	5.85	0.57	No
Willis Avenue	Milton	City Line	11.80	6.37	0.33	Yes
<b>Burnet Avenue</b>	State (US 11)	Lodi	11.76	5.17	0.79	Yes
Comstock Avenue	Harrison	Genesee (NYS 92)	11.76	5.65	0.19	Yes
Franklin Street N	Erie	Genesee (NYS 5)	11.70	6.00	0.07	Yes
Geddes Street S	Glenwood	Bellevue	11.67	5.81	0.93	Yes
Midland Avenue	Cortland	Onondaga Street	11.51	6.40	0.67	Yes
Mcallister Ave	Local Applicable Segment	See Map	11.45	4.46	0.14	No
Woodland Ave	Local Applicable Segment	See Map	11.41	5.37	0.17	No
Erie Blvd E	Local Applicable Segment	See Map	11.35	4.50	0.14	No
Landon Ave	Local Applicable Segment	See Map	11.14	6.00	0.27	No
State Street N	Sunset	Lodi	11.13	5.44	0.13	Yes
Robineau Rd	Local Applicable Segment	See Map	11.08	5.37	0.71	No
Lodi Street	Court (NYS 298)	Bear	11.01	5.50	0.18	Yes
Irving Ave	Local Applicable Segment	See Map	10.98	6.77	0.23	No
Crouse Avenue S	Waverly	Adams	10.93	7.52	0.15	Yes
Fitch St	Local Applicable Segment	See Map	10.92	7.08	0.67	No
Townsend Street S	Fayette	Erie (NYS 5)	10.84	4.59	0.15	Yes
Clairmonte Ave	Local Applicable Segment	See Map	10.80	6.00	0.35	No
Lorraine Ave N	Local Applicable Segment	See Map	10.80	5.00	0.10	No
Parkside Ave	Local Applicable Segment	See Map	10.80	6.00	0.21	No
Craton St	Local Applicable Segment	See Map	10.80	6.00	0.15	No
Glass Ter	Local Applicable Segment	See Map	10.80	6.00	0.04	No
Hartley St	Local Applicable Segment	See Map	10.80	6.00	0.07	No
Kirkwood Pl	Local Applicable Segment	See Map	10.80	5.00	0.10	No
Lafayette Ave E	Local Applicable Segment	See Map	10.80	5.00	0.06	No
Malcolm St	Local Applicable Segment	See Map	10.80	5.00	0.08	No
Morton Ave	Local Applicable Segment	Ѕее Мар	10.80	5.00	0.05	No
Newell St E	Local Applicable Segment	See Map	10.80	5.00	0.04	No
Randall Ave	Local Applicable Segment	Ѕее Мар	10.80	5.00	0.15	No
Redfield Pl	Local Applicable Segment	See Map	10.80	5.00	0.15	No
Wiman Ave	Local Applicable Segment	Ѕее Мар	10.80	6.00	0.21	No
Crouse Ave N	Local Applicable Segment	Ѕее Мар	10.74	5.42	0.24	No
Highland St	Local Applicable Segment	Ѕее Мар	10.61	5.16	1.01	No
Lynwood Ave	Local Applicable Segment	See Map	10.59	4.01	0.17	No
Comstock Avenue	Thurber	Colvin	10.58	7.98	0.32	Yes
Helen St	Local Applicable Segment	See Map	10.48	5.31	0.63	No
Newell St W	Local Applicable Segment	See Map	10.19	6.42	0.94	No
Grumbach Ave	Local Applicable Segment	See Map	10.09	5.60	0.25	No

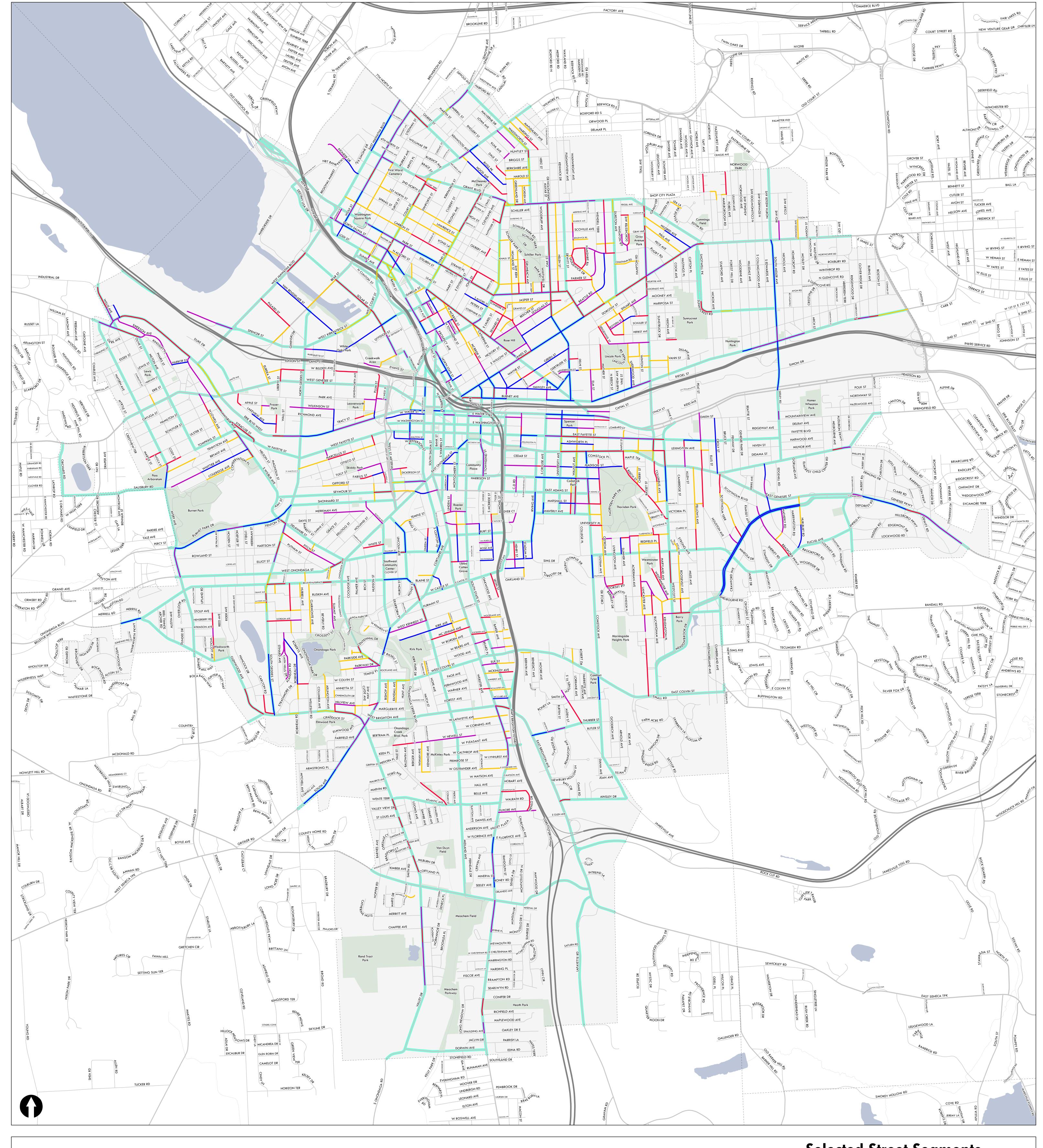
Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Bear Street W	Pulaski	Spencer	9.90	5.00	0.17	Yes
Seymour Street	West Onondaga	West Street	9.90	6.00	0.15	Yes
Ash St	Local Applicable Segment	See Map	9.86	5.85	0.42	No
Lodi Street	Butternut	Kirkpatrick	9.84	6.32	0.60	Yes
<b>Grant Boulevard</b>	Butternut	Teall	9.82	5.99	1.05	Yes
Emerson Ave	Local Applicable Segment	See Map	9.78	7.69	1.15	No
Walnut Avenue	Harrison	Genesee (NYS 92)	9.71	6.00	0.19	Yes
Columbus Avenue	Genesee (NYS 92)	Erie	9.69	6.94	0.22	Yes
Wyoming St	Local Applicable Segment	See Map	9.66	5.98	0.35	No
Kline St	Local Applicable Segment	See Map	9.61	6.00	0.13	No
Lea La	Local Applicable Segment	See Map	9.60	6.00	0.09	No
Westcott Street	Clarke	Genesee (NYS 92)	9.57	6.46	0.48	Yes
Boyden St	Local Applicable Segment	See Map	9.44	5.49	0.52	No
Pulaski St	Local Applicable Segment	See Map	9.35	6.35	0.43	No
Clinton Street S	Adams	Tallman	9.32	6.88	0.44	Yes
Gertrude St	Local Applicable Segment	See Map	9.31	6.05	0.36	No
Wolcott Ave	Local Applicable Segment	See Map	9.30	7.08	0.53	No
Glenwood Avenue	Geddes	South	9.23	6.16	0.68	Yes
Tompkins St	Local Applicable Segment	See Map	9.21	6.33	0.34	No
Geddes Street S	Bellevue	Grand	9.21	6.84	0.59	Yes
Wilkinson St	Local Applicable Segment	See Map	9.21	6.58	0.60	No
Lowell Ave N	Local Applicable Segment	See Map	9.16	6.85	0.54	No
Burnet Avenue	Midler (NYS 598)	City Line (Thompson)	9.13	6.02	0.95	Yes
Greenway Ave	Local Applicable Segment	See Map	9.07	5.76	0.17	No
Genesee Street E	Irving	Teall	9.06	6.57	0.85	Yes
Kensington Pl	Local Applicable Segment	See Map	9.01	5.56	0.39	No
Westcott Street	Genesee (NYS 92)	Fayette	8.95	5.00	0.19	Yes
Butternut Street	Lodi	Grant	8.91	6.28	0.94	Yes
Merriman Ave	Local Applicable Segment	See Map	8.90	6.88	0.54	No
Kensington Rd	Local Applicable Segment	See Map	8.84	5.61	0.42	No
Renwick Ave	Local Applicable Segment	See Map	8.82	5.90	0.18	No
Pond Street	Lodi	Park	8.74	6.28	0.20	Yes
Taylor St E	Local Applicable Segment	See Map	8.60	4.78	0.45	No
Wadsworth Street	Grant	Court (NYS 298)	8.48	6.25	0.63	Yes
Water Street E	State (US 11)	Almond	8.46	4.51	0.18	Yes
Summit Ave	Local Applicable Segment	See Map	8.43	6.04	0.59	No
Barker Ave	Local Applicable Segment	Ѕее Мар	8.42	5.36	0.11	No
Erie Boulevard East	Townsend	Lodi	8.41	5.65	0.80	Yes
Taft Ave	Local Applicable Segment	Ѕее Мар	8.33	5.42	0.22	No

Road Name	From	То	Weighted Average	Weighted Average	Miles	FAE
			Priority Score	Pavement Rating		
Bradford Pkwy	Local Applicable Segment	See Map	8.32	5.78	0.80	No
Valley Drive	Chaffee	Seneca (NYS 173)	8.31	6.99	0.30	Yes
Salina Street S	Seneca (NYS 173)	Calthrop (I-81 Access)	8.26	6.15	1.08	Yes
Genesee Street E	Salt Springs	City Line	8.24	6.48	1.91	Yes
Maple St	Local Applicable Segment	See Map	8.15	6.34	0.26	No
Cherry St	Local Applicable Segment	Ѕее Мар	8.15	6.25	0.30	No
Beecher St	Local Applicable Segment	See Map	8.13	6.00	0.34	No
Lemoyne Avenue	7th North	City Line	7.97	5.94	0.45	Yes
Sumner Ave	Local Applicable Segment	See Map	7.95	5.76	0.27	No
Berkeley Dr	Local Applicable Segment	See Map	7.89	5.18	0.36	No
Sedgwick St	Local Applicable Segment	See Map	7.84	6.46	0.25	No
Beech St S	Local Applicable Segment	See Map	7.76	6.46	0.90	No
Catherine St	Local Applicable Segment	See Map	7.75	6.62	0.69	No
Walnut Ave	Local Applicable Segment	See Map	7.65	6.10	0.29	No
Coleridge Ave	Local Applicable Segment	See Map	7.56	6.02	0.66	No
Ainsley Drive	Brighton	Game	7.52	6.86	0.13	Yes
Malverne Dr	Local Applicable Segment	See Map	7.48	6.55	0.39	No
Buckingham Ave	Local Applicable Segment	See Map	7.40	5.29	0.69	No
Townsend St N	Local Applicable Segment	See Map	7.35	6.74	0.78	No
Westcott Street	Broad	Euclid	7.34	6.69	0.44	Yes
Fellows Ave	Local Applicable Segment	See Map	7.31	5.35	1.01	No
Valley Drive	Dorwin	Chaffee	7.30	6.54	0.88	Yes
Mather St	Local Applicable Segment	See Map	7.18	4.46	0.38	No
Kennedy St W	Local Applicable Segment	See Map	7.15	7.57	0.66	No
Bellevue Avenue	Geddes	Onondaga Ave	7.11	5.92	0.53	Yes
Water Street E	Warren	State (US 11)	7.05	6.57	0.17	Yes
Wilbur Avenue S	Tompkins	Seymour	7.03	6.31	0.51	Yes
Belden Ave W	Local Applicable Segment	See Map	7.01	6.66	0.81	No
Tully St	Local Applicable Segment	See Map	7.00	5.81	0.43	No
Oneida St	Local Applicable Segment	See Map	6.83	7.36	0.42	No
Tennyson Ave	Local Applicable Segment	See Map	6.81	6.43	0.57	No
Rigi Ave	Local Applicable Segment	See Map	6.78	6.00	0.33	No
Old Colvin St	Local Applicable Segment	See Map	6.75	6.44	0.12	No
Elm St	Local Applicable Segment	See Map	6.72	6.20	0.57	No
Isabella St	Local Applicable Segment	See Map	6.70	6.49	0.15	No
Union Pl	Local Applicable Segment	See Map	6.68	5.58	0.18	No
State Street N	Spencer	Sunset	6.68	7.06	0.24	Yes
Carlton Rd	Local Applicable Segment	See Map	6.62	6.21	0.40	No
Lodi Street	Salina (US 11)	State	6.53	6.38	0.17	Yes

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Beacon Rd	Local Applicable Segment	Ѕее Мар	6.52	6.46	0.18	No
Berkshire Ave	Local Applicable Segment	Ѕее Мар	6.44	5.69	0.32	No
Salina Street S	Dorwin	Seneca (NYS 173)	6.42	6.40	1.06	Yes
Farmer St	Local Applicable Segment	See Map	6.37	5.55	0.42	No
Wendell Ter	Local Applicable Segment	See Map	6.35	6.85	0.56	No
Arlington Ave	Local Applicable Segment	See Map	6.33	5.26	0.26	No
Scottholm Ter	Local Applicable Segment	See Map	6.31	2.29	0.53	No
LaForte Ave	Local Applicable Segment	See Map	6.29	6.48	0.15	No
Tallman Street	Onondaga Street	Midland	6.22	7.09	0.43	Yes
Rugby Rd	Local Applicable Segment	See Map	6.19	6.20	0.88	No
Lexington Ave	Local Applicable Segment	See Map	6.16	6.44	0.55	No
Fobes Ave	Local Applicable Segment	See Map	6.11	6.31	0.41	No
Maplehurst Ave	Local Applicable Segment	See Map	6.03	7.63	0.32	No
Clinton Street N	Websters Landing	Genesee (NYS 5)	5.94	5.35	0.21	Yes
Dudley St	Local Applicable Segment	See Map	5.93	5.71	0.29	No
Vine St	Local Applicable Segment	See Map	5.89	5.74	0.54	No
Tracy St	Local Applicable Segment	See Map	5.80	6.53	0.31	No
Seneca St	Local Applicable Segment	See Map	5.64	8.32	0.21	No
Avery Avenue	Salisbury	Genesee (NYS 5)	5.54	4.74	0.59	Yes
Broad Street	Westcott	Nottingham	5.53	6.64	0.34	Yes
Erie Boulevard East	Lodi	Teall	5.53	6.84	0.35	Yes
Liberty St	Local Applicable Segment	See Map	5.42	6.80	0.58	No
Pine St	Local Applicable Segment	See Map	5.30	6.56	0.25	No
Roberts Ave	Local Applicable Segment	See Map	5.28	6.37	0.74	No
Calthrop Ave W	Local Applicable Segment	See Map	5.22	6.57	0.46	No
Kirkpatrick Street W	Geddes	Solar	5.19	6.88	0.54	Yes
Division St E	Local Applicable Segment	See Map	5.19	5.52	0.65	No
Danforth St	Local Applicable Segment	See Map	5.15	6.93	0.76	No
<b>Burnet Avenue</b>	Teall	Midler (NYS 598)	5.13	6.87	0.95	Yes
Wheaton Rd	Local Applicable Segment	See Map	5.06	6.28	0.35	No
Dale St	Local Applicable Segment	See Map	5.01	6.68	0.30	No
Evans St	Local Applicable Segment	See Map	4.99	7.39	0.41	No
Hickory St	Local Applicable Segment	See Map	4.93	6.77	0.48	No
Salina Street S	Calthrop (I-81 Access)	Kennedy	4.92	7.12	1.05	Yes
Westmoreland Ave	Local Applicable Segment	See Map	4.91	6.26	2.06	No
<b>Grant Boulevard</b>	Court (NYS 298)	Butternut	4.87	6.82	0.58	Yes
Temple St	Local Applicable Segment	See Map	4.82	7.12	0.27	No
Jamesville Ave	Local Applicable Segment	See Map	4.81	6.90	0.93	No
Sunset Avenue	State	Court	4.80	4.79	0.16	Yes

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Franklin Street N	Butternut	Plum	4.74	5.00	0.18	Yes
First North St	Local Applicable Segment	See Map	4.72	5.89	1.15	No
Bishop Ave	Local Applicable Segment	See Map	4.71	6.00	0.28	No
Lemoyne Ave	Local Applicable Segment	See Map	4.70	6.56	0.93	No
Erie Boulevard West	Genesee (NYS 5)	Geddes	4.60	6.71	0.68	Yes
<b>Grant Boulevard</b>	Wolf (US 11)	Court (NYS 298)	4.49	6.75	0.36	Yes
Sand St	Local Applicable Segment	See Map	4.43	7.48	0.33	No
Greenwood Pl	Local Applicable Segment	See Map	4.39	5.55	0.32	No
Fordham Rd	Local Applicable Segment	See Map	4.39	5.69	0.16	No
Apple St	Local Applicable Segment	See Map	4.34	6.00	0.20	No
Crawford Ave	Local Applicable Segment	See Map	4.29	5.77	1.01	No
Prospect Ave	Local Applicable Segment	See Map	4.28	5.40	0.33	No
Broad St	Local Applicable Segment	See Map	4.27	6.52	0.50	No
Mark Ave	Local Applicable Segment	See Map	4.20	6.50	0.11	No
South Avenue	Glenwood	Onondaga Ave	4.19	6.98	0.45	Yes
Lodi Street	Burnet	James (NYS 290)	4.10	6.80	0.49	Yes
Milton Avenue	Genesee (NYS 5)	Willis	4.03	6.09	0.64	Yes
Onondaga Avenue	South	Bellevue	4.03	8.79	0.69	Yes
Fayette Street E	Columbus	Seely	4.01	7.16	0.90	Yes
Willow St E	Local Applicable Segment	See Map	3.99	6.15	0.59	No
Salt Springs Road	Seeley	Springfield	3.96	6.75	0.50	Yes
Howard St	Local Applicable Segment	See Map	3.87	6.41	0.22	No
Valley Drive	Seneca (NYS 173)	South (NYS 175)	3.84	7.05	1.21	Yes
Allen St	Local Applicable Segment	See Map	3.82	5.51	0.78	No
John St	Local Applicable Segment	See Map	3.75	4.98	0.57	No
Niagara St	Local Applicable Segment	Ѕее Мар	3.73	6.17	0.32	No
Comstock Avenue	Colvin	Euclid	3.73	6.63	0.86	Yes
Glenwood Avenue	Velasko	Geddes	3.66	8.60	0.84	Yes
Onondaga Street W	Geddes	Tallman	3.65	6.67	0.54	Yes
Vann St	Local Applicable Segment	See Map	3.65	6.70	0.43	No
Sackett St	Local Applicable Segment	See Map	3.65	7.05	0.21	No
Spring St	Local Applicable Segment	See Map	3.64	6.71	1.22	No
Ackerman Ave	Local Applicable Segment	See Map	3.62	8.92	0.56	No
Kramer Dr	Local Applicable Segment	See Map	3.57	6.33	0.22	No
Hiawatha Boulevard W	Spencer	Solar	3.48	7.28	0.75	Yes
Canal St	Local Applicable Segment	See Map	3.44	5.97	0.76	No
Ostrander Ave W	Local Applicable Segment	See Map	3.44	6.62	0.65	No
Jackson St	Local Applicable Segment	See Map	3.34	4.25	0.18	No
Granger St	Local Applicable Segment	See Map	3.27	6.75	0.18	No

Road Name	From	То	Weighted Average Priority Score	Weighted Average Pavement Rating	Miles	FAE
Court Street	Grant	City Line	3.27	6.84	0.94	Yes
Knaul St	Local Applicable Segment	See Map	3.14	6.47	0.17	No
Teall Avenue	Burnet	James (NYS 290)	3.11	6.93	0.60	Yes
Hubbell Ave	Local Applicable Segment	See Map	3.04	6.18	0.35	No
Harvard Pl	Local Applicable Segment	See Map	3.03	6.77	0.26	No
Craddock St	Local Applicable Segment	See Map	3.01	5.12	0.24	No
Alvord St N	Local Applicable Segment	See Map	2.99	7.00	0.38	No
Onondaga Creek Blvd	Local Applicable Segment	See Map	2.94	6.67	1.18	No
Turtle St	Local Applicable Segment	See Map	2.85	6.67	1.02	No
Colvin Street W	Midland	South (NYS 175)	2.71	6.81	0.41	Yes
Warner Ave	Local Applicable Segment	See Map	2.65	6.24	0.40	No
Gifford St	Local Applicable Segment	See Map	2.61	7.90	0.66	No
Ulster St	Local Applicable Segment	See Map	2.54	8.23	0.64	No
Seymour Street	Geddes	West	2.50	6.68	0.69	Yes
Brookford Rd	Local Applicable Segment	See Map	2.42	6.86	0.79	No
Winton St	Local Applicable Segment	See Map	2.37	6.54	0.49	No
Oakwood Ave	Local Applicable Segment	See Map	2.31	8.45	0.65	No
Shotwell Park	Sunnycrest	James (NYS 290)	2.01	6.54	0.90	Yes
Hillside St	Local Applicable Segment	See Map	2.01	6.72	0.46	No
Sunnycrest Road	Shotwell	Midler (NYS 598)	1.94	6.56	0.46	Yes
Seeley Road	Salt Springs	Erie (NYS 5)	1.86	7.29	0.50	Yes
Stolp Ave	Local Applicable Segment	See Map	1.79	8.22	1.07	No
Lafayette Ave W	Local Applicable Segment	See Map	1.74	5.98	0.88	No
Park Ave	Local Applicable Segment	See Map	1.71	7.47	1.54	No
Midland Avenue	Brighton	Cortland	1.61	8.87	0.82	Yes
<b>Durston Avenue</b>	James (NYS 290)	Grant	1.56	7.62	0.68	Yes
Butternut Street	State	Lodi	1.42	6.98	0.32	Yes
Hazelhurst Ave	Local Applicable Segment	See Map	1.28	6.37	0.25	No
Stinard Ave	Local Applicable Segment	See Map	0.88	7.98	0.83	No
Willis Ave	Local Applicable Segment	See Map	0.84	7.96	1.20	No



# City of Syracuse Pavement Maintenance Prioritization Pilot Road Segments Overview

February 2020

On behalf of the City of Syracuse, the Syracuse Metropolitan Transportation Council developed a prioritization method to use as a tool in selecting streets for pavement maintenance and construction. Scores were generated from weighted variables, including pavement rating, traffic volumes, functional classification, last maintenance, water main breaks, emergency snow routes, and others. Additional information can be found in the Technical Memorandum produced as a part of this project.

Scores shown on this map were given at the block level. Blocks without any score shown were not considered as a part of this analysis, for reasons described in the Technical Memorandum.

Scores are broken into four categories - each represents a percentile, based on the number of segments (not total miles). Scores greater than 18 represent the top 25 percent of segments. These segments are the best candidates for prioritization.

Federal-aid eligible roads owned by the City are shown in the background in light blue.

THIS MAP IS FOR PLANNING PURPOSES ONLY. This map does not replace a comprehensive asset management system, and exists to assist officials in determining road segments to reasonably consider maintenance on. The outputs generated as a part of this process are just one of many data-driven options.

Data sources: SMTC, City of Syracuse, NYSDOT. This map is for planning purposes only. The SMTC does not guarantee the accuracy or completeness of this data.

# Selected Street Segments Considered for Analysis

**Prioritization Score** 

8.40 - 13.20

13.21 - 15.60

15.61 - 18.00

18.01 - 26.40 (Highest Priority)

City Federal-aid Eligible Roads