

City of Grosse Pointe

2019-2024

Street Capital Improvement Plan

December 17, 2018

Pavement Condition Survey

Conducted in October of 2018. The initial condition survey was conducted in December of 2006 and has been conducted annually since.

All surveys were completed using RoadSoft software and the PASER rating system consistent with state asset management requirements.

Pavement Condition Survey (cont.)

PASER rating system

- Good - Rating of 8-10
 - Little to no maintenance
- Fair – Rating of 5-7
 - Capital Preventative Maintenance (CPM)
- Poor - Rating of 1-4
 - Rehabilitation or Reconstruction Required

2018 Condition Survey Results

Federal Aid Streets

- Minor Arterial (Kercheval, Cadieux) – 1.745 miles
 - Average PASER Rating – 5.982 (6.023 in 2017)
- Major Collector (Waterloo, St. Clair) – 1.838 miles
 - Average PASER Rating – 6.220 (6.613 in 2017)

Local Streets – 14.840 miles

- Average PASER Rating 6.183 (5.96 in 2017)
 - Asphalt – 6.24 (5.84 in 2017)
 - Concrete – 6.16 (6.37 in 2017)
 - Brick – 2.0 (2.0 in 2017)

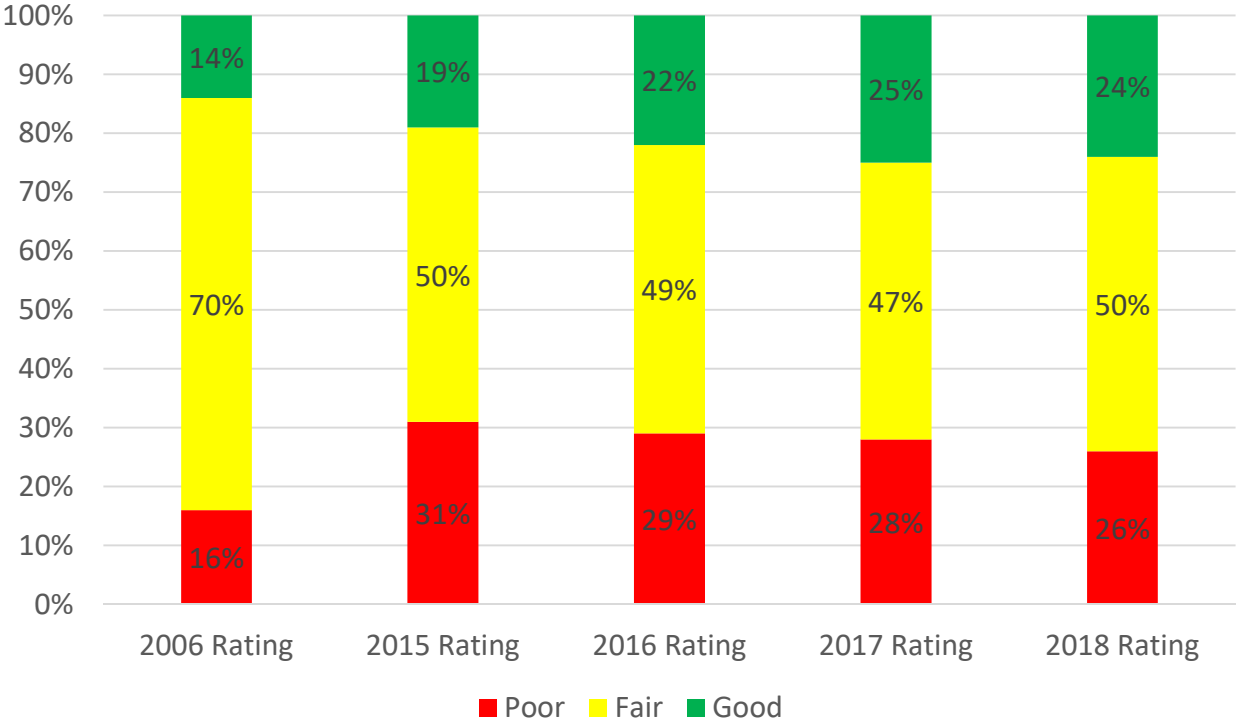
2018 PASER Ratings



2018 Condition Survey Results

Rating	Miles	% of System (2017 %)
10	0.79	4.3% (3.0%)
9	3.01	16.3% (12.8%)
8	0.94	5.1% (9.0%)
7	3.42	18.6% (15.8%)
6	3.19	17.3% (21.9%)
5	2.66	14.5% (9.2%)
4	2.33	12.6% (17.2%)
3	1.30	7.1% (6.9%)
2	0.78	4.3% (4.3%)
1	0	0

Surface Condition Trend



Proposed Treatment Types

Asphalt

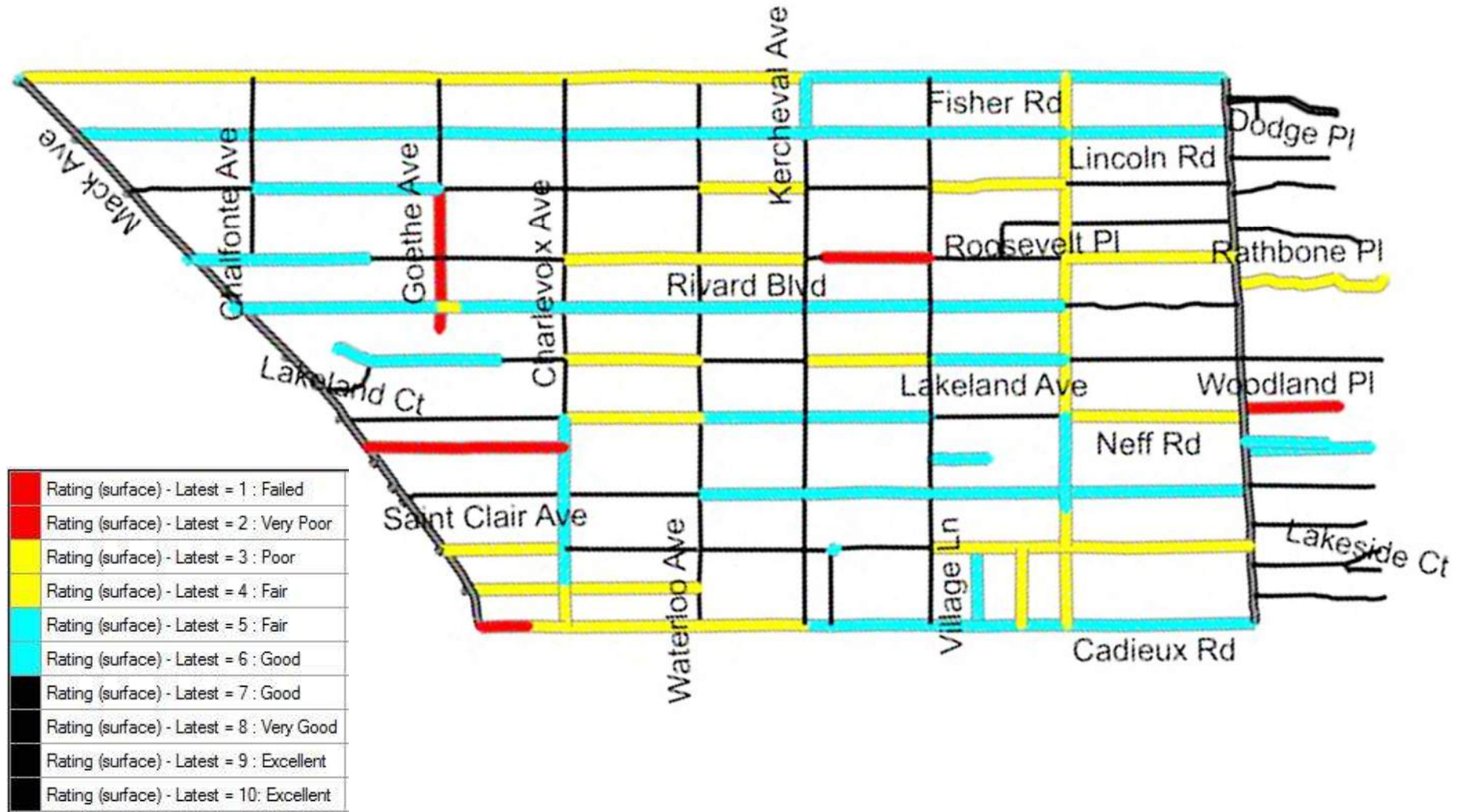
PASER	Min RSL	Max RSL	Treatment	Type	Cost/Syd	Cost/Mile	PASER Reset	Pre RSL	Post RSL	ESL
10	14	14	None - New Street							
9	13	13	None							
8	10	12	Crack Seal/Slurry Seal	CPM	\$ 2.86	\$ 46,980.27	8	10	12	2
7	6	9	Crack Seal/Slurry Seal	CPM	\$ 2.86	\$ 46,980.27	7	7	8	1
6	3	5	Mill & Resurf, 1-1/2" + Curb Cap	CPM	\$ 59.75	\$ 981,493.33	9	3	13	10
5	0	2	Mill & Resurf, 1-1/2" + Curb Cap	CPM	\$ 59.75	\$ 981,493.33	9	0	13	13
4	-3	-1	Mill & Resurf, 3" + Curb/Gutter	RH	\$ 97.00	\$ 1,593,386.67	9	-3	13	16
3	-6	-4	Mill & Resurf, 3" + Curb/Gutter	RH	\$ 97.00	\$ 1,593,386.67	10	-5	14	19
2	-10	-7	Reconstruction - 5" HMA/8" Agg	RC	\$ 142.00	\$ 2,332,586.67	10	-10	14	24
1	N/A	-10	Reconstruction - 5" HMA/8" Agg	RC	\$ 142.00	\$ 2,332,586.67	10	-14	14	28

Concrete

PASER	Min RSL	Max RSL	Treatment	Type	Cost/Syd	Cost/Mile	PASER Reset	Pre RSL	Post RSL	ESL
10	20	23	None - New Street							
9	17	19	None							
8	13	16	None							
7	9	12	Joint and Crack Seal	CPM	\$ 0.77	\$ 13,552.00	7	9	12	3
6	6	8	Joint and Crack Seal	CPM	\$ 0.70	\$ 12,320.00	6	6	8	2
5	1	5	Minor Patch	CPM	\$ 25.75	\$ 453,200.00	8	1	16	15
4	-3	0	Major Patch	RH	\$ 37.00	\$ 651,200.00	8	-3	16	19
3	-8	-4	Major Patch	RH	\$ 55.75	\$ 981,200.00	10	-8	23	31
2	-13	-9	Reconstruction - 7" Conc/6" Agg	RC	\$ 152.00	\$ 2,675,200.00	10	-12	23	35
1	N/A	-14	Reconstruction - 7" Conc/6" Agg	RC	\$ 152.00	\$ 2,675,200.00	10	-14	23	37

2018 Candidate Projects

PASER 1-2 – Reconstruct – 0.78 Miles @ \$2,332,587/Mile = \$1,819,418
 PASER 3-4 – Heavy Rehabilitation (3" to 3-1/2") – 3.63 Miles @ \$1,593,000/Mile = \$5,782,590
 PASER 5-6 – CPM Resurfacing (1-1/2" to 2") – 5.85 Miles @ \$981,000/Mile = \$5,738,850



Proposed 6 Year CIP for Streets

Fiscal Year	Work Year	Street	From	To	2018 PASER	Cost	Description of Work
2019/20	2019	Maumee	Cadieux	St. Clair	4/6	\$ 189,078	1-1/2" Mill and Resurface, Curb Capping
	2019	Maumee	Neff	Fisher	4	\$ 485,734	1-1/2" Mill and Resurface, Curb Capping
	2019	Charlevoix	Cadieux	Lorraine	3	\$ 89,969	3-1/2" Mill and Resurface, New Curb & Gutter
	2019	Lincoln	Jefferson	N. of Maumee	5	\$ 244,992	1-1/2" Mill and Resurface, Curb Capping
Road Millage Amount		\$855,000	TOTAL			\$ 1,009,773	*\$154,773 from Highway fund

Fiscal Year	Work Year	Street	From	To	2018 PASER	Cost	Description of Work
2020/21	2020	Goethe	University	Washington	2	\$ 427,363	5" HMA on 8" Aggregate Base
	2020	University Pl	805 University	Goethe	3	\$ 30,070	3-1/2" Mill and Resurface, New Curb & Gutter
	2020	Maumee	St. Clair	Neff	5/6	\$ 109,752	1-1/2" Mill and Resurface, Curb Capping
	2020	Rivard	St. Paul	Kercheval	2	\$ 384,877	5" HMA on 8" Aggregate Base
Road Millage Amount		\$855,000	TOTAL			\$ 952,062	

Fiscal Year	Work Year	Street	From	To	2018 PASER	Cost	Description of Work
2021/22	2021	Neff	St. Paul	Kercheval	5	\$ 161,325	1-1/2" Mill and Resurface, Curb Capping
	2021	Rivard	Jefferson	Maumee	3	\$ 497,137	3-1/2" Mill and Resurface, New Curb and Gutter
	2021	Rivard	Waterloo	270' N of Waterloo	3	\$ 79,669	3-1/2" Mill and Resurface, New Curb & Gutter
	2021	Rivard	Kercheval	Waterloo	3	\$ 221,481	3-1/2" Mill and Resurface, New Curb and Gutter
Road Millage Amount		\$855,000	TOTAL			\$ 959,612	

Fiscal Year	Work Year	Street	From	To	2018 PASER	Cost	Description of Work
2022/23	2022	Washington	Maumee	St. Paul	4	\$ 212,717	3-1/2" Mill and Resurface, New Curb & Gutter
	2022	Notre Dame	Village Lane	St. Paul	3	\$ 90,254	3-1/2" Mill and Resurface, New Curb & Gutter
	2022	Notre Dame	Maumee	Village Lane	3	\$ 177,549	3-1/2" Mill and Resurface, New Curb & Gutter
	2022	Notre Dame	Jefferson	Maumee	4	\$ 361,016	3-1/2" Mill and Resurface, New Curb & Gutter
Road Millage Amount		\$855,000	TOTAL			\$ 841,536	

Fiscal Year	Work Year	Street	From	To	2018 PASER	Cost	Description of Work
2023/24	2023	Neff	Waterloo	Charlevoix	3	\$ 283,623	3-1/2" Mill and Resurface, New Curb & Gutter
	2023	Lincoln	500' S. of St. Paul	Mack	5/6	\$ 571,000	concrete patch and joint seal
		Lakeland	350' N. of Charlevoix	Mack	6/7		concrete patch and joint seal
		Lakeland Ct.	Lakeland	End	6		concrete patch and joint seal
		University Place	Maumee	Mack	6		concrete patch and joint seal
Road Millage Amount		\$855,000	TOTAL			\$ 854,623	

Fiscal Year	Work Year	Street	From	To	2018 PASER	Cost	Description of Work
2024/25	2024	Grosse Pointe Ct.	Charlevoix	Mack	2	\$ 411,535	5" HMA on 8" Aggregate Base
	2024	Woodland Place	Jefferson	End	2	\$ 194,938	5" HMA on 8" Aggregate Base
		Lakeside Ct	Jefferson	End	7	\$ 250,000	concrete patch and joint seal
		Elmsleigh Ln.	Jefferson	End	7		concrete patch and joint seal
		Stratford Pl	Jefferson	End	7		concrete patch and joint seal
		Wellington Pl	Jefferson	End	6		concrete patch and joint seal
		Cameron Pl	Jefferson	End	7		concrete patch and joint seal
		Alger Pl	Jefferson	End	7		concrete patch and joint seal
		Dodge Pl	Jefferson	End	7		concrete patch and joint seal
	Road Millage Amount		\$855,000	TOTAL			\$ 856,473

Summary of changes

- 2019/20
 - Moved Notre Dame – Village Lane to St. Paul to 2022/23
 - Moved Maumee – St. Clair to Neff to 2020/21
 - Added Lincoln – Jefferson to N. of Maumee from 2020/21
- 2020/21
 - Moved University Place – 805 University to Goethe from 2022/23 to 2020/21
 - Moved Muamee – St. Clair to Neff from 2019/20
- 2021/22
 - Moved Washington – Maumee to St. Paul from 2021/22 to 2022/23
 - Moved Rivard – Waterloo to 270' N. from 2022/23 to 2021/22
 - Moved Neff – St. Paul to Kercheval from 2022/23 to 2021/22
- 2022/23
 - Moved Washington – Maumee to St. Paul from 2021/22 to 2022/23
 - Moved Notre Dame – Village Lane to St. Paul from 2019/20 to 2022/23
 - Added Notre Dame – Maumee to Village Lane

Summary of changes (continued)

- 2023/24
 - Added concrete patching of all concrete streets north of Jefferson
 - Added Neff – Waterloo to Charlevoix
- 2024/25
 - Added a 6th year to the CIP
 - Added Grosse Pointe Ct. – Charlevoix to Mack
 - Added Woodland Place – Jefferson to End
 - Added concrete patching of all public streets south of Jefferson

Proposed 6-Year Street CIP



Additional Items to Consider

- ▶ **Based on:**
 - Current Ratings and Projected Deterioration
 - Current Estimated Pricing
 - Selected Treatments
- ▶ **Review Ratings, Pricing, Treatments Annually**
- ▶ **Assumes Regular Joint & Crack Sealing**

2019-2024 Street Capital Improvement Plan

THANK YOU