

State of Our Streets

All Streets	2001	2010	2013	2014	2015	2016	2017	2018
Total Miles	682.38	769.14	777.05	779.69	784.78	789.95	798.15	800.41
Total Lane Miles		1717.91	1750.20	1735.97	1752.04	1761.55	1779.15	1781.79
Average Surface Year	1982	1991	1993	1994	1994	1995	1996	1996
Average Curb Rating	6.86	7.19	7.29	7.28	7.28	7.30	7.36	7.43
Average Pavement Rating	6.53	6.90	6.85	6.60	6.64	6.63	6.59	6.77

All Streets by Class	2001	2010	2013	2014	2015	2016	2017	2018
Arterial Streets								
Total Miles	75.21	93.35	94.80	94.97	95.16	95.82	99.50	96.29
Total Lane Miles	312.57	328.81	324.00	325.74	327.56	334.92	326.95	
Average Surface Year	1986	1996	2001	2002	2002	2003	2003	2004
Average Curb Rating	7.64	7.37	7.65	7.66	7.60	7.58	7.68	7.71
Average Pavement Rating	6.85	7.32	7.37	7.00	6.90	6.95	6.79	7.02
Collector Streets								
Total Miles	153.99	166.48	167.13	168.00	169.38	169.68	171.83	172.55
Total Lane Miles	376.79	381.19	373.56	380.66	380.91	385.96	387.48	
Average Surface Year	1987	1996	1998	2000	2001	2002	2002	2002
Average Curb Rating	7.05	7.42	7.49	7.53	7.60	7.63	7.64	7.70
Average Pavement Rating	6.80	7.08	6.95	6.68	6.84	6.82	6.68	6.84
Local Streets								
Total Miles	453.18	509.31	515.12	516.72	520.24	524.45	526.81	531.57
Total Lane Miles	1028.54	1040.50	1038.41	1045.64	1053.08	1058.27	1067.36	
Average Surface Year	1980	1988	1990	1991	1992	1992	1994	
Average Curb Rating	6.67	7.09	7.16	7.13	7.12	7.14	7.20	7.29
Average Pavement Rating	6.39	6.76	6.73	6.51	6.53	6.51	6.52	6.70

780 miles of streets. Ave curb and pavement rating is 7

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Arterial, Collector and Local	2001	2010	2013	2014	2015	2016	2017	2018
% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Miles at or below Cond State 9	94.5%	97.4%	98.3%	98.5%	97.7%	97.9%	96.8%	94.7%
% Miles at or below Cond State 8	87.7%	89.9%	90.9%	92.2%	93.4%	94.1%	93.9%	91.9%
% Miles at or below Cond State 7	65.0%	53.2%	55.6%	68.2%	62.0%	57.6%	60.8%	51.9%
% Miles at or below Cond State 6	57.2%	37.4%	33.8%	38.4%	40.7%	42.6%	44.6%	43.1%
% Miles at or below Cond State 5	32.1%	25.0%	24.0%	25.2%	24.6%	26.5%	26.6%	24.8%
% Miles at or below Cond State 4	9.3%	6.5%	10.8%	13.9%	14.4%	15.4%	15.3%	13.6%
% Miles at or below Cond State 3	1.8%	0.7%	1.0%	3.1%	2.7%	2.8%	3.3%	2.9%
% Miles at or below Cond State 2	0.7%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%
% Miles at or below Cond State 1	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
% Miles at or below Cond State 0	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%

Goal (26%) is centered around the number of streets rated at or below 5.

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State of Our Arterial Streets

Arterial	2001	2010	2013	2014	2015	2016	2017	2018
% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Miles at or below Cond State 9	98.3%	92.0%	97.3%	97.6%	98.0%	97.9%	97.8%	95.1%
% Miles at or below Cond State 8	87.0%	76.0%	80.0%	84.7%	89.8%	89.7%	93.6%	90.7%
% Miles at or below Cond State 7	58.4%	47.0%	44.7%	60.4%	56.4%	46.1%	53.8%	42.5%
% Miles at or below Cond State 6	46.3%	28.2%	24.4%	32.7%	37.8%	38.9%	37.8%	36.5%
% Miles at or below Cond State 5	23.3%	15.8%	11.8%	16.5%	18.4%	23.0%	26.3%	24.6%
% Miles at or below Cond State 4	2.0%	8.1%	5.0%	6.3%	7.1%	7.5%	8.8%	6.9%
% Miles at or below Cond State 3	0.5%	0.8%	0.2%	1.9%	2.4%	2.3%	2.5%	1.6%
% Miles at or below Cond State 2	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Miles at or below Cond State 1	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Miles at or below Cond State 0	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Goal: less than 15% of total miles of arterial streets at or below 5

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State of Our Collector Streets

Collector	2001	2010	2013	2014	2015	2016	2017	2018
% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Miles at or below Cond State 9	94.2%	96.9%	98.8%	98.2%	96.4%	97.1%	96.7%	95.1%
% Miles at or below Cond State 8	86.1%	89.0%	90.9%	92.3%	90.8%	93.1%	93.0%	91.5%
% Miles at or below Cond State 7	58.3%	48.5%	51.4%	64.0%	58.8%	51.7%	61.5%	53.1%
% Miles at or below Cond State 6	48.6%	32.4%	33.1%	39.8%	39.0%	41.4%	44.3%	43.1%
% Miles at or below Cond State 5	27.8%	19.3%	21.1%	21.7%	18.9%	22.7%	23.1%	21.3%
% Miles at or below Cond State 4	6.0%	4.7%	9.1%	10.9%	9.1%	9.5%	10.2%	9.5%
% Miles at or below Cond State 3	0.3%	0.8%	1.0%	4.8%	2.9%	2.8%	3.2%	3.0%
% Miles at or below Cond State 2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
% Miles at or below Cond State 1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
% Miles at or below Cond State 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%

Goal: less than 20% of total miles of collector streets at or below 5

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State of Our Local Streets

Local	2001	2010	2013	2014	2015	2016	2017	2018
% Miles at or below Cond State 10	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Miles at or below Cond State 9	93.9%	98.6%	98.3%	98.8%	98.1%	98.1%	96.6%	94.6%
% Miles at or below Cond State 8	88.3%	92.6%	92.9%	93.6%	94.9%	95.2%	94.3%	92.2%
% Miles at or below Cond State 7	68.2%	56.0%	59.0%	70.8%	64.1%	61.6%	61.8%	53.2%
% Miles at or below Cond State 6	61.8%	40.7%	35.8%	39.0%	41.8%	43.7%	45.9%	44.3%
% Miles at or below Cond State 5	34.9%	28.5%	28.1%	27.9%	27.6%	28.4%	27.8%	25.9%
% Miles at or below Cond State 4	11.6%	6.7%	12.4%	16.2%	17.5%	18.8%	18.2%	16.2%
% Miles at or below Cond State 3	2.4%	0.6%	1.1%	2.8%	2.7%	2.9%	3.5%	3.1%
% Miles at or below Cond State 2	0.9%	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%	0.2%
% Miles at or below Cond State 1	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Miles at or below Cond State 0	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Goal: less than 30% of total miles of arterial streets at or below 5

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Curb & Gutter

⇒ What is the purpose of curb & gutter?

- Drainage
- Define parking
- Keep terrace intact

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Selection Criteria

- ⇒ Look for 6 different types of problems in c&g:
- ⇒ Vertical Offset
- ⇒ Horizontal Offset
- ⇒ Water Ponding
- ⇒ Curb Head
- ⇒ Tipped Curb
- ⇒ Pitted Concrete

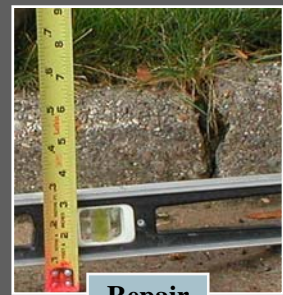
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Vertical Offset



Repair



Repair

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Horizontal Offset



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Cracks



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Water Ponding



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Curb Head



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Tipped Curb



Repair

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Pitted Concrete



Leave

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Assessments

- ⇒ Cost split with property owner and City
- ⇒ Curb & Gutter work associated with storm sewer inlets is not assessed to property owners
- ⇒ Public hearings at Board of Public Works and Common Council meetings
- ⇒ Pay assessment in full the year invoiced or pay installments over an eight year period

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CURB & GUTTER CONSTRUCTION



⇒ HAND PLACED C&G VS. MACHINE PLACED C&G

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STORM SEWER CONSTRUCTION

- ⇒ REBUILDING INLETS
- ⇒ INSTALLING NEW INLET AND PIPE

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UTILITY CASTING ADJUSTMENTS

- ⇒ ADJUSTING CASTING
- ⇒ ADJUSTING WATER VALVE BOX

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DRIVE APRON CONSTRUCTION

- ⇒ PARTIAL REPLACEMENT OF DRIVE APRON
- ⇒ FULL REPLACEMENT OF DRIVE APRON IN PHASES

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PAVEMENT PULVERIZING

- ⇒ ASPHALT AND GRAVEL BASE ARE PULVERIZED
- ⇒ NEW BASE IS GRADED AND COMPACTED
- ⇒ NEW BASE IS TEST ROLLED AND UNDERCUT
- ⇒ NEW BASE IS FINISHED ROLLED TO FINAL GRADE

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PAVEMENT PULVERIZING

- ⇒ ROLLED AND COMPACTED BASE
- ⇒ UNDERCUT SOFT AREA AFTER TEST ROLL

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PAVEMENT MILLING

- ⇒ MILLING OPERATION
- ⇒ SOFT AREA THAT WILL BE UNDERCUT OR BASE PATCHED

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PAVEMENT MILLING - UNDERCUT

- ⇒ TEST ROLL PAVEMENT
- ⇒ EXCAVATE SOFT AREAS
- ⇒ PLACE BREAKER RUN STONE OR ASPHALT

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ASPHALT PAVING

- ⇒ TACK COAT APPLIED TO LOWER ASPHALT LAYER
- ⇒ PAVING FINAL LIFT OF ASPHALT

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ASPHALT PAVING & RESTORATION



⇒ ASPHALT PAVING

⇒ RESTORATION OF TERRACES AFTER C&G INSTALLED

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City Engineering Division RESURFACING PROGRAM

- PUBLIC INFORMATION MEETINGS: Dec 13 & 14.
- TONIGHT IS THE APPROVAL OF 3 CONTRACTS
 - CURB AND GUTTER REPLACEMENT WITH RESURFACING
 - PULVERIZING & PAVING WITH RESURFACING
 - PATCHING
- PUBLIC HEARING ON ASSESSMENTS BPW JANUARY 9, 2019
- COMMON COUNCIL HEARING JANUARY 22, 2019
- SURFACE PAVING NEW PLAT PHASES: CITY COST SHARE FOR IMPROVEMENTS TO EXISTING STREETS
- PAVEMENT PATCHING/MILLING/OVERLAY CITYWIDE

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