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- ✓ You may use the <u>"raise hand" option at the bottom if you have</u> something that required immediate clarification.
- ✓ Use "<u>chat</u>" option if you are having technical issues and a staff person can try to assist.
- Please use the "<u>Q&A</u>" option at the bottom of the screen to type your question. Questions will be answered at the end of the presentation. Inappropriate questions may be dismissed.
- ✓ If you cannot ask via typing your question, use the "raise hand" option and you will be unmuted when it is your turn.

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How to Participate

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Raise your hand to be unmuted **For comments or ask additional questions.**

How to Participate

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Use chat if you have technical issues or a question for the panelists

City Engineering Division RESURFACING PROGRAM

- Resurface about 1 mile of streets throughout the City
- Resurfacing program which includes resurfacing, crack filling, mill/overlay and seal coat is designed to improve the quality of the street and delay the need for total reconstruction
- Deficient C&G sections are replaced
- Some streets will have new storm sewer installed
- Terraces are restored (topsoil, seed & matting)
- Pavement is milled or pulverized
- New layer(s) of asphalt are paved

SELECTION PROCESS

How are streets selected for resurfacing? Streets rated bi-annually PASER Scale (UW-Madison) Coordination with other public works projects ⇒Group streets around City for cost/efficiency

BATING SYSTEM

PASER rates streets from 1 – 10
 Resurface streets with a pavement rating of 5 or less and a c&g rating of 6 or greater
 Reconstruct streets with lower ratings (these streets require extensive replacement and not cost effective for resurfacing)

State of Our Streets

All Streets:		2001	2010	2015	2016	2017	2018	2019	2020
Total	Miles	682.38	769.14	784.78	789.95	798.15	800.41	802.08	807.76
Total	Lane Miles		1717.91	1752.04	1761.55	1779.15	1781.79	1785.04	1796.14
Avera	age Surface Year	1982	1991	1994	1995	1996	1996	1997	1998
Avera	age Curb Rating	6.86	7.19	7.28	7.30	7.36	7.43	7.41	7.38
	age Pavement Rating	6.53	6.90	6.64	6.63	6.59	6.77	6.47	6.67
All Streets b	by Class	2001	2010	2015	2016	2017	2018	2019	2020
Arte	erial Streets								
	Total Miles	75.21	93.35	95.16	95.82	99.50	96.29	95.67	96.06
	Total Lane Miles		312.57	325.74	327.56	334.92	326.95	324.86	325.73
	Average Surface Year	1986	1996	2002	2003	2003	2004	2005	2005
	Average Curb Rating	7.64	7.37	7.60	7.58	7.68	7.71	7.68	7.61
	Average Pavement Rating	6.85	7.32	6.90	6.95	6.79	7.02	6.57	6.78
Coll	ector Streets								
	Total Miles	153.99	166.48	169.38	169.68	171.83	172.55	171.88	173.30
	Total Lane Miles		376.79	380.66	380.91	385.96	387.48	387.33	390.18
	Average Surface Year	1987	1996	2001	2002	2002	2002	2003	2003
	Average Curb Rating	7.05	7.42	7.60	7.63	7.64	7.70	7.68	7.58
	Average Pavement Rating	6.80	7.08	6.84	6.82	6.68	6.84	6.52	6.67
Loca	al Streets								
	Total Miles	453.18	509.31	520.24	524.45	526.81	531.57	534.61	538.40
	Total Lane Miles		1028.54	1045.64	1053.08	1058.27	1067.36	1072.85	1080.23
	Average Surface Year	1980	1988	1992	1992	1993	1994	1994	1995
	Average Curb Rating	6.67	7.09	7.12	7.14	7.20	7.29	7.28	7.28
	Average Pavement Rating	6.39	6.76	6.53	6.51	6.52	6.70	6.44	6.65

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

State of Our Streets

Arterial, Collector and Local	2001	2010	2015	2016	2017	2018	2019	2020
% 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%	97.7%	97.9%	96.8%	94.7%	96.0%	97.3%
% Miles at or below Cond State 8	87.7%	89.9%	93.4%	94.1%	93.9%	91.9%	92.9%	93.5%
% Miles at or below Cond State 7	65.0%	53.2%	62.0%	57.6%	60.8%	51.9%	78.4%	62.6%
% Miles at or below Cond State 6	57.2%	37.4%	40.7%	42.6%	44.6%	43.1%	44.4%	41.5%
% Miles at or below Cond State 5	32.1%	25.0%	24.6%	26.5%	26.6%	24.8%	25.6%	23.6%
% Miles at or below Cond State 4	9.3%	6.5%	14.4%	15.4%	15.3%	13.6%	13.1%	12.2%
% Miles at or below Cond State 3	1.8%	0.7%	2.7%	2.8%	3.3%	2.9%	2.4%	2.2%
% Miles at or below Cond State 2	0.7%	0.0%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%
% Miles at or below Cond State 1	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
% Miles at or below Cond State 0	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%

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

State of Our Arterial Streets

100.0% 97.9% 89.7% 46.1% 38.9%	100.0% 97.8% 93.6% 53.8% 37.8%	100.0% 95.1% 90.7% 42.5% 36.5%	100.0% 95.1% 92.9% 78.9% 40.6%	100.0% 97.4% 91.8% 57.9% 39.9%
97.9% 89.7% 46.1%	97.8% 93.6% 53.8%	95.1% 90.7% 42.5%	95.1% 92.9% 78.9%	97.4% 91.8% 57.9%
89.7% 46.1%	93.6% 53.8%	90.7% 42.5%	92.9% 78.9%	91.8% 57.9%
46.1%	53.8%	42.5%	78.9%	57.9%
38.9%	37.8%	36.5%	40.6%	39.9%
23.0%	26.3%	24.6%	25.6%	25.8%
23.070	20.370	21.070	2010/0	
7.5%	8.8%	6.9%	8.6%	8.2%
2.3%	2.5%	1.6%	1.1%	1.2%
0.0%	0.0%	0.0%	0.0%	0.1%
0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%
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streets at or below 5.

State of Our Collector Streets

Collector	2001	2010	2015	2016	2017	2018	2019	2020
% 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%	96.4%	97.1%	96.7%	95.1%	96.1%	97.0%
% Miles at or below Cond State 8	86.1%	89.0%	90.8%	93.1%	93.0%	91.5%	92.8%	95.0%
% Miles at or below Cond State 7	58.3%	48.5%	58.8%	51.7%	61.5%	53.1%	78.0%	64.4%
% Miles at or below Cond State 6	48.6%	32.4%	39.0%	41.4%	44.3%	43.1%	46.5%	43.9%
% Miles at or below Cond State 5	27.8%	19.3%	18.9%	22.7%	23.1%	21.3%	25.0%	22.6%
% Miles at or below Cond State 4	6.0%	4.7%	9.1%	9.5%	10.2%	9.5%	8.4%	8.1%
% Miles at or below Cond State 3	0.3%	0.8%	2.9%	2.8%	3.2%	3.0%	1.8%	1.6%
% Miles at or below Cond State 2	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%
% Miles at or below Cond State 1	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%
% Miles at or below Cond State 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%
Goal less	$\frac{1}{2}$	$n^{0/2}$	of tota	al mi			locto	n r

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	2015	2016	2017	2018	2019	2020
% 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%	98.1%	98.1%	96.6%	94.6%	96.1%	97.4%
% Miles at or below Cond State 8	88.3%	92.6%	94.9%	95.2%	94.3%	92.2%	92.9%	93.4%
% Miles at or below Cond State 7	68.2%	56.0%	64.1%	61.6%	61.8%	53.2%	78.5%	62.9%
% Miles at or below Cond State 6	61.8%	40.7%	41.8%	43.7%	45.9%	44.3%	44.3%	41.1%
% Miles at or below Cond State 5	34.9%	28.5%	27.6%	28.4%	27.8%	25.9%	25.7%	23.5%
% Miles at or below Cond State 4	11.6%	6.7%	17.5%	18.8%	18.2%	16.2%	15.4%	14.3%
% Miles at or below Cond State 3	2.4%	0.6%	2.7%	2.9%	3.5%	3.1%	2.9%	2.6%
% Miles at or below Cond State 2	0.9%	0.0%	0.1%	0.2%	0.2%	0.2%	0.1%	0.3%
% 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 local streets at or below 5 12/14/2021

Curb & Gutter

What is the purpose of curb & gutter?
Drainage
Define parking
Keep terrace intact

Selection Criteria

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

Vertical Offset



Horizontal Offset



Bracks



Water Ponding



Curb Head



Tipped Curb



Pitted Concrete



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

CURB & GUTTER CONSTRUCTION



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

STORM SEWER CONSTRUCTION



REBUILDING INLETS INSTALLING NEW INLET AND PIPE

UTILITY CASTING ADJUSTMENTS





ADJUSTING CASTING ADJUSTING WATER VALVE BOX

DRIVE APRON CONSTRUCTION



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

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



ROLLED AND COMPACTED BASE UNDERCUT SOFT AREA AFTER TEST ROLL

PAVEMENT MILLING



MILLING OPERATION
 SOFT AREA THAT WILL BE UNDERCUT OR BASE PATCHED



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

ASPHALT PAVING



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

ASPHALT PAVING & RESTORATION





⇒ ASPHALT PAVING

RESTORATION OF TERRACES AFTER C&G INSTALLED

City Engineering Division RESURFACING PROGRAM

•PUBLIC INFORMATION MEETINGS: Dec 14. •BPW APPROVAL OF 3 CONTRACTS CURB AND GUTTER REPLACEMENT WITH RESURFACING •PULVERIZING & PAVING WITH RESURFACING •PATCHING •BPW PUBLIC HEARING ON ASSESSMENTS JANUARY 19, 2022 •COMMON COUNCIL HEARING FEBRUARY 1, 2022 SURFACE PAVING NEW PLAT PHASES: CITY COST SHARE FOR **IMPROVEMENTS TO EXISTING STREETS** PAVEMENT PATCHING/MILLING/OVERLAY CITYWIDE •RESURFACAING WEB SITE (SIGN UP FOR UPDATES) SCHEDULE WILL BE POSTED ON WEB SITE WHEN KNOWN