

# Memorandum



CITY OF DALLAS

DATE September 27, 2019

TO Honorable Mayor and Members of the City Council

SUBJECT **Infrastructure Management Program Updates and Public Works' FY 2020 Initiatives**

On Wednesday, October 2, 2019, the City Council will be briefed on accomplishments of the FY 19-23 Infrastructure Management Program (IMP), project updates of the FY 20-24 IMP, and Public Works' FY 20 Initiatives. The briefing material is attached for your review.

Please feel free to contact me if you have any questions or need additional information.

A handwritten signature in blue ink, appearing to read 'Majed Al-Ghafry'.

Majed Al-Ghafry, P.E.  
Assistant City Manager

[Attachment]

c: T.C. Broadnax, City Manager  
Chris Caso, City Attorney (Interim)  
Mark Swann, City Auditor  
Biliera Johnson, City Secretary  
Preston Robinson, Administrative Judge  
Kimberly Bizzor Tolbert, Chief of Staff to the City Manager  
Jon Fortune, Assistant City Manager

Joey Zapata, Assistant City Manager  
Nadia Chandler Hardy, Assistant City Manager and Chief Resilience Officer  
Michael Mendoza, Chief of Economic Development and Neighborhood Services  
M. Elizabeth Reich, Chief Financial Officer  
Laila Aleqresh, Chief Innovation Officer  
Liz Cedillo-Pereira, Chief of Equity and Inclusion  
Directors and Assistant Directors

# **Infrastructure Management Program Updates and Public Works' FY 2020 Initiatives**

**City Council Briefing**

**October 2, 2019**

**Robert M. Perez, Director  
Department of Public Works**



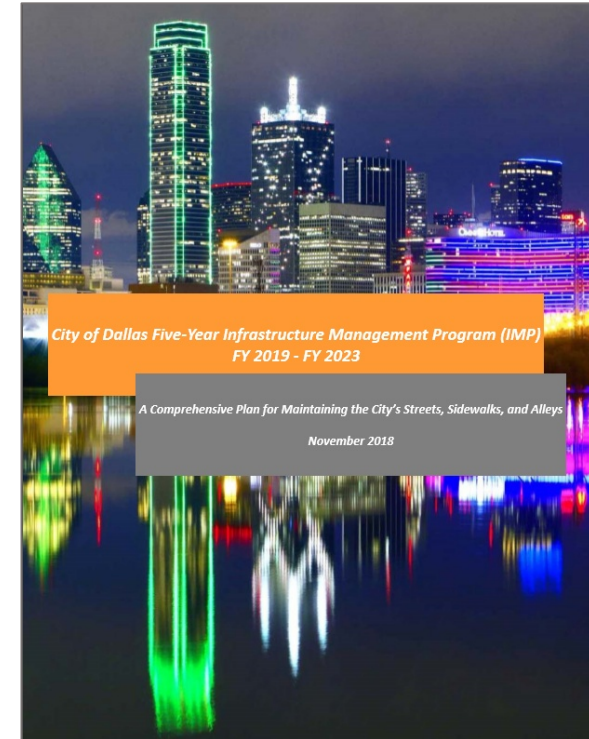
# Purpose of Briefing

- Highlight activities of the FY 2019-2023 Infrastructure Management Program (IMP)
- Project Updates of the proposed FY 2020-2024 IMP
- Discuss Public Works FY 2020 Initiatives

# FY 2019-2023 IMP Activities

# FY 2019-2023 IMP Activities

- City of Dallas' Public Works Department established a Five-Year Infrastructure Management Program (IMP) for FY 2019-2023
  - Listed the streets, alleys, and sidewalks programmed for maintenance outside of the Bond Program
  - Provided pavement condition assessment data
  - Used as a project coordination tool



# FY 2019-2023 IMP Activities

- The IMP and the project listings by Council District are posted on the Public Works' Pavement Management Website

Public Works Street Maintenance Projects - FY 18					
Project Street	From Block	To Block	Project Description	Council District	Treatment Type
10TH ST (E)	300	300	Dead-end to Patton Ave (S)	1	Preservation
10TH ST (E)	800	900	Ewing Ave (S) to R.L. Thornton Serv W (S)	1	Maintenance
10TH ST (W)	2300	2300	Hollywood Ave to Tennant St (S)	1	Preservation
12TH ST (W)	1500	1600	Windomere Ave (S) to Rosemont Ave (S)	1	Maintenance
12TH ST (W)	2500	2600	Franklin St (S) to Superior St	1	Maintenance
5TH ST (W)	200	300	Zang Blvd (N) to Bishop Ave (N)	1	Preservation
6TH ST (E)	700	700	Lancaster Ave (N) to Ewing Ave (N)	1	Maintenance

<https://dallascityhall.com/departments/public-works/Pages/pavement-management.aspx>

# FY 2019-2023 IMP Activities

- Streets – Completed 822 miles of maintenance (Bond resurfacing and General Fund; Goal: 820 miles)
- \*Sidewalks – Completed 5 miles (Goal: 5 miles)  
\*Does not include Bond sidewalk projects or projects included in the Sidewalk for Seniors Program
- Unimproved Alleys – Completed 89 unimproved alleys (Goal: 79)



# FY 2020-2024 IMP Update



# FY 2020-2024 IMP Update

- FY 2020-2024 IMP will provide planned maintenance for:
  - Streets
  - *\*Bridges (new program in FY 2020 - \$1 million budgeted)*
  - Alleys
  - Sidewalks
  - Pavement markings (Transportation)
- Provides updated pavement condition assessment data (major vs. minor streets, heavily utilized streets)
- FY 2020-2024 IMP to be published in November 2019

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# FY 2020-2024 IMP Update

- The FY 2020-2024 IMP is programmed as follows:

<i>Proposed Five-Year IMP Program Budgets</i>						
<i>Program</i>	<i>FY 20</i>	<i>FY 21</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>Total</i>
<b>Streets</b>	\$52.6M	\$50.5M	\$50.5M	\$50.5	\$50.5M	<b>\$254.6M</b>
<b>Bridges</b>	\$1.0M	\$1.0M	\$1.0M	\$1.0M	\$1.0M	<b>\$5.0M</b>
<b>Sidewalks</b>	\$2.3M	\$2.2M	\$2.2M	\$2.2M	\$2.2M	<b>\$11.1M</b>
<b>Alleys</b>	\$1.6M	\$4.0M	\$4.0M	\$4.0M	\$4.0M	<b>\$17.6M</b>
<b>Total</b>	<b>\$57.5M</b>	<b>\$57.7M</b>	<b>\$57.7M</b>	<b>\$57.7M</b>	<b>\$57.7M</b>	<b>\$288.3M</b>

*\*Note: Grey-shaded fields indicate funds that will need to be identified during future budget deliberations. Only FY 20 is budgeted.*

# FY 2020-2024 IMP Update

- Between FY 2020-2024, \$526.0M is programmed for street projects between the IMP and Bond funds

<i>Projected Five-Year IMP and Bond Program Budgets - Streets</i>						
<i>Program</i>	<i>FY 20</i>	<i>FY 21</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>Total</i>
<b>IMP</b>	\$52.6M	\$50.5M	\$50.5M	\$50.5M	\$50.5M	<b>\$254.6M</b>
<b>Bond</b>	\$32.8M	\$113.0M	\$25.6M	\$50.0M	\$50.0M	<b>\$271.4M</b>
<b>Total</b>	<b>\$85.4M</b>	<b>\$163.5M</b>	<b>\$76.1M</b>	<b>\$100.5M</b>	<b>\$100.5M</b>	<b>\$526.0M</b>

# FY 2020-2024 IMP Update

- Street Maintenance Program – Pavement Condition Index (PCI) Ratings
  - All street segments issued a PCI Rating
  - “0” = failed street, “100” = brand new street
  - Average PCI of Dallas’ streets is 65.1 for FY 19 and is projected to be 64.6 for FY 2020

<i>City of Dallas PCI Ranges</i>	
Letter	PCI Range
A	100-85
B	70-84.9
C	55-69.9
D	40-54.9
E	0-39.9

# FY 2020-2024 IMP Update

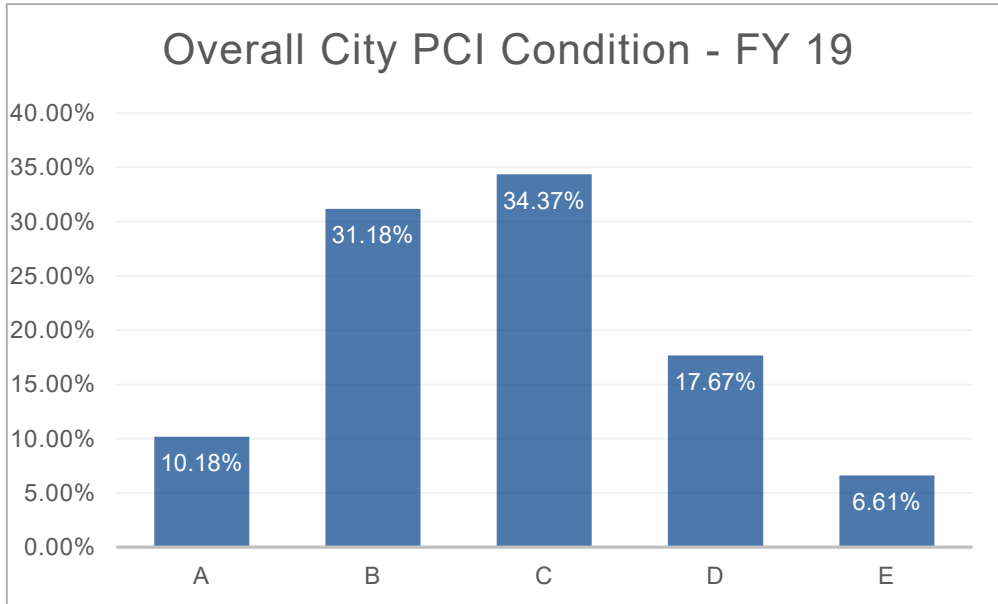
- Street Maintenance Program – Pavement Condition Index (PCI) Ratings
  - District PCI Ratings
  - Takes into account all work (Bond and maintenance) completed in FY 2019

<i>Street Lane Miles and Citywide and District Ratings - FY19</i>				
CD	Lane Miles	FY 18	FY 19	*FY 20
1	751	61.0	60.7	60.5
2	938	61.8	60.8	59.8
3	992	71.3	71.0	70.3
4	922	62.2	62.2	61.7
5	709	63.5	64.0	63.6
6	1,071	66.4	65.7	65.5
7	874	66.0	65.9	65.2
8	877	70.0	69.8	69.5
9	909	63.9	63.5	63.0
10	734	69.0	68.4	68.4
11	622	66.3	65.7	65.3
12	626	72.4	72.1	71.8
13	1,010	64.3	63.6	62.7
14	740	58.2	58.0	57.6
<b>Total</b>	<b>11,775</b>	<b>65.4</b>	<b>65.1</b>	<b>64.6</b>

*\*Projected*

# FY 2020-2024 IMP Update

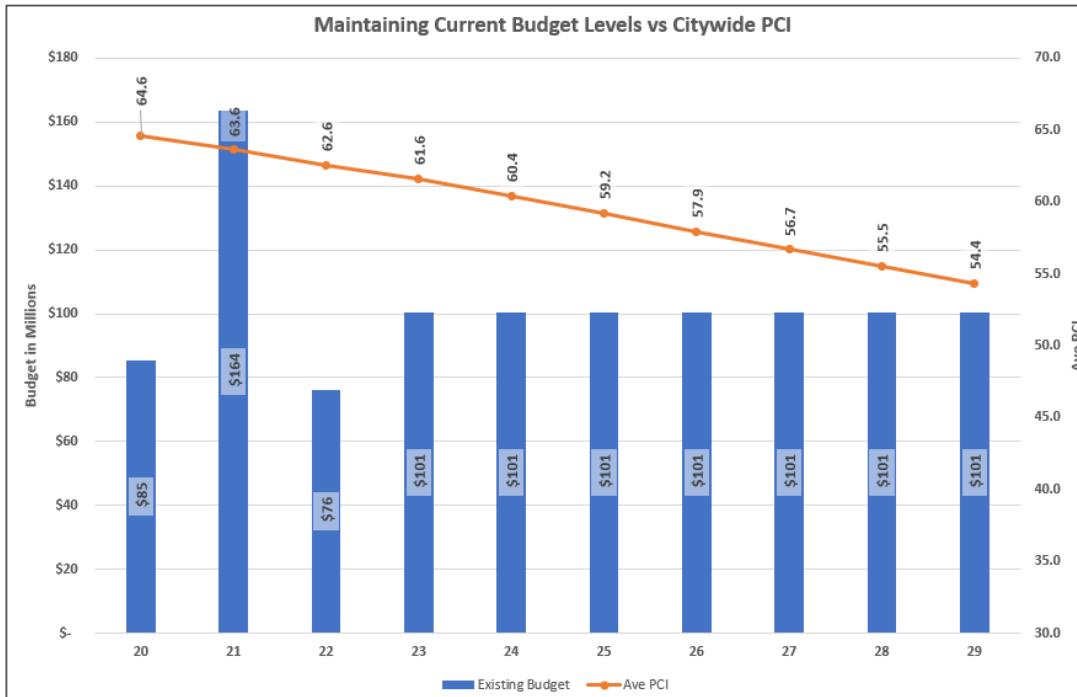
- Overall Pavement Condition and by Council District



CD	A	B	C	D	E
1	6.0%	24.4%	35.4%	24.3%	10.0%
2	5.9%	25.5%	36.1%	21.5%	11.1%
3	19.0%	36.5%	32.4%	8.8%	3.2%
4	7.5%	23.1%	39.0%	22.9%	7.5%
5	8.8%	28.3%	37.4%	17.7%	7.9%
6	9.6%	30.8%	38.5%	16.4%	4.8%
7	12.1%	31.7%	32.8%	17.8%	5.6%
8	22.6%	33.1%	24.9%	12.3%	7.1%
9	5.8%	28.6%	39.8%	22.7%	3.1%
10	10.6%	43.6%	30.5%	11.7%	3.6%
11	6.8%	36.4%	35.9%	15.9%	4.9%
12	15.0%	49.9%	24.7%	8.4%	1.9%
13	6.4%	29.9%	38.8%	18.2%	6.7%
14	5.3%	20.9%	30.4%	27.9%	15.5%

# FY 2020-2024 IMP Update

- Projected PCI's based on Existing Budgets (Maintenance and Bond)

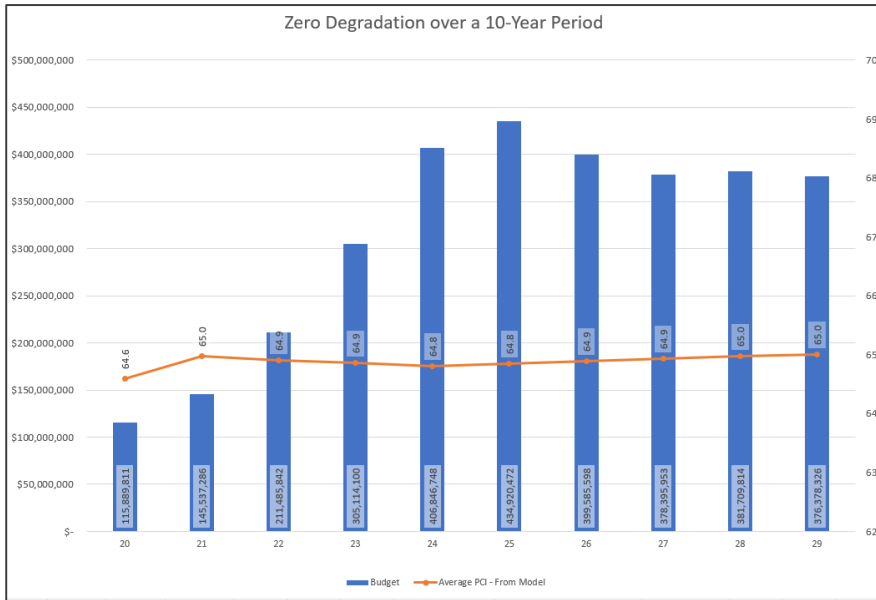


*Citywide PCI's Based on Existing Budgets*

FY	Funding	Avg. PCI
20	\$85M	64.6
21	\$164M	63.6
22	\$76M	62.6
23	\$101M	61.6
24	\$101M	60.4
25	\$101M	59.2
26	\$101M	57.9
27	\$101M	56.7
28	\$101M	55.5
29	\$101M	54.4

# FY 2020-2024 IMP Update

- Budget needed for Zero Degradation in PCI

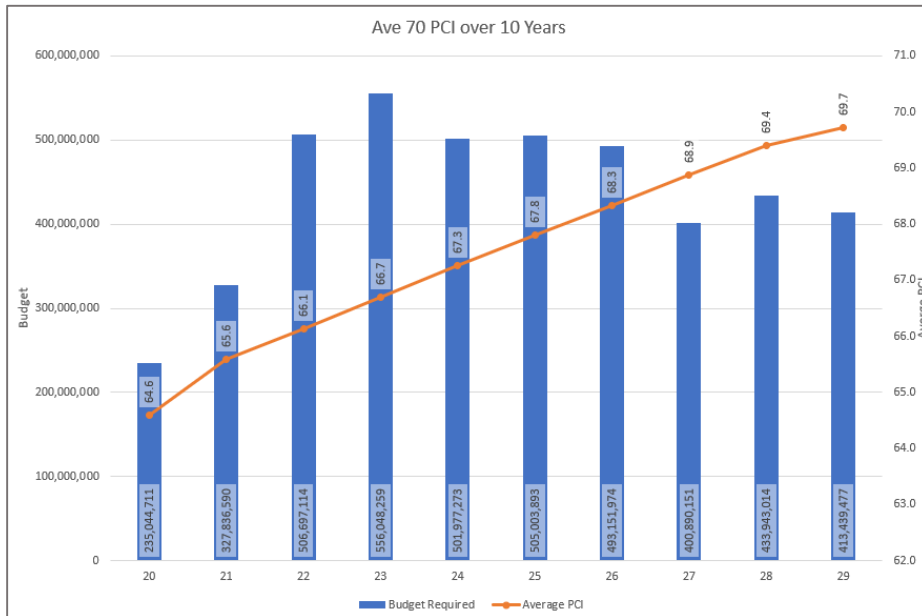


<i>Budget Needed – Zero Degradation</i>			
FY	Current Funding	Needed Budget	Variance
20	\$85M	\$115.9M	(\$30.9M)
21	\$164M	\$145.5M	\$18.5M
22	\$76M	\$211.5M	(\$135.5M)
23	\$101M	\$305.1M	(\$204.1M)
24	\$101M	\$406.8M	(\$305.8M)
25	\$101M	\$434.9M	(\$333.9M)
26	\$101M	\$399.6M	(\$298.6M)
27	\$101M	\$378.4M	(\$277.4M)
28	\$101M	\$381.7M	(\$280.7M)
29	\$101M	\$376.4M	(\$275.4M)
<b>Avg.</b>	<b>\$103.2M</b>	<b>\$315.6M</b>	<b>(\$212.4)</b>



# FY 2020-2024 IMP Update

- Budget needed to increase PCI by one point annually



FY	Current Funding	Needed Budget	Variance
20	\$85M	\$235.0M	(\$150.0M)
21	\$164M	\$327.8M	(\$163.8M)
22	\$76M	\$506.7M	(\$430.7M)
23	\$101M	\$556.0M	(\$455.0M)
24	\$101M	\$502.0M	(\$401.0M)
25	\$101M	\$505.0M	(\$404.0M)
26	\$101M	\$493.2M	(\$392.2M)
27	\$101M	\$400.9M	(\$299.9M)
28	\$101M	\$433.9M	(\$332.9M)
29	\$101M	\$413.4M	(\$312.4M)
<b>Avg.</b>	<b>\$103.2M</b>	<b>\$437.4M</b>	<b>(\$334.2M)</b>

# FY 2020-2024 IMP Development

- Sidewalk Maintenance Program
  - Program proposes 7–20 projects annually, depending on budget capacity (Avg. \$2.2M/year; \$11.1M over five years)
  - Projects focus on smaller-scale projects to fill-in gaps of missing sidewalk and broken panels
  - Public Works and Code Compliance to evaluate capacity for Sidewalks for Seniors in FY 2020

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# FY 2020-2024 IMP Development

- Unimproved Alley Maintenance Program:
  - Continues FY 2019 Pilot Program improvements in gravel alleys
  - Funded at \$1.6M for FY 2020
  - Program proposes 100 projects annually
- Bridge Maintenance Program:
  - Funded at \$1M in FY 2020
  - Will provide for design and repair of 2-4 bridges annually

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# Public Works FY 2020 Initiatives

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# Public Works FY 2020 Initiatives

- Continue quarterly reports of Council District construction projects
- Preventative treatment pilot programs
  - Concrete street joint seal
  - Onyx sealant in-house option
- Asphalt plant feasibility study and alternative construction/ resurfacing material
- Evaluation of lane closure fees and use of off-duty police officers for traffic control
- Pavement Management Services contract for review of models for paving treatments

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# Public Works FY 2020 Initiatives

- Coordination with Dallas County on cost-share maintenance work (arterial streets)
- Dallas County Major Capital Improvement Program (MCIP) – 7<sup>th</sup> Call for projects
  - \$270M Available – starting in FY2022
  - October 18, 2019 due date for submittal
- Collin County Call for City Projects
  - Collin County's 2018 Bond Program
  - \$36M Available – only one project funded per City
  - October 31, 2019 due date for submittal
- Call for project listings will be memorialized in memos to the Mayor and City Council before submission

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# Completed & Planned Work for the 2017 Bond Program

- Proposition A
  - FY2019 - Awarded 295/316 design projects (93/100 project groups)
  - FY2020
    - 48 expedited projects totaling ~\$30.6M starting construction in 1<sup>st</sup> Quarter of Calendar year 2020
    - 167 Projects to be bid/awarded for construction totaling ~\$95.1M
  - FY2021
    - 94 Projects to be bid/awarded for construction totaling ~\$76.5M
  - FY2022
    - 7 Projects to be bid/awarded for construction totaling ~\$33.9M (many interagency projects)
  - Resurfacing
    - Awarded construction for the last two years of program

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**City Council Briefing**

**October 2, 2019**

**Robert M. Perez, Director  
Department of Public Works**





# Appendix



# FY 2020-2024 IMP Update

- FY 2020-2024 Projected Maintenance and Bond street lane miles per district
- FY 2020 Street Goal: 710 lane miles

<i>Council District</i>	<i>FY 20 Lane Mile Distribution</i>	<i>FY 21 Lane Mile Distribution</i>	<i>FY 22 Lane Mile Distribution</i>	<i>FY 23 Lane Mile Distribution</i>	<i>FY 24 Lane Mile Distribution</i>
1	37.1	19.9	22.2	26.8	18.1
2	23.3	32.3	33.9	36.8	28.1
3	48.5	39.1	31.8	46.0	46.8
4	34.5	25.6	33.1	38.4	30.3
5	28.1	25.6	27.7	21.9	21.6
6	99.0	58.0	47.5	41.5	37.4
7	25.7	46.8	34.4	40.6	35.9
8	84.4	33.2	40.0	38.7	47.7
9	49.0	60.5	37.6	46.1	34.9
10	48.3	41.0	40.8	31.8	30.0
11	65.4	28.4	35.5	25.3	36.7
12	33.5	37.3	40.5	32.6	33.7
13	91.7	60.3	46.6	41.5	46.6
14	41.6	31.3	24.8	27.1	21.8
<i>Total</i>	<i>710.1</i>	<i>539.3</i>	<i>496.4</i>	<i>495.1</i>	<i>469.6</i>