



**City of Dallas**

# **Five-Year Infrastructure Management Program (IMP) FY 2022-2026**

**Transportation and Infrastructure  
Committee Briefing  
November 15, 2021**

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# Infrastructure Management Plan (IMP)



- Background
- Streets
- Sidewalks
- Alleys
- Bridges
- Discussion/Questions



# Five-Year IMP - Background



- In FY 2018, the Department of Public Works established the Five-Year Infrastructure Management Program (IMP).
- The IMP lists all of the streets, alleys, sidewalks, and bridges scheduled for maintenance over a five-year period (all work outside of Bond programs).
- The IMP is calibrated each year based upon the adopted budget and future budget assumptions.





# Five-Year IMP Background

- The FY 2022 IMP includes \$164.7M for streets, sidewalks, alleys, and bridges.

<i>Proposed Five-Year IMP Maintenance Program Budgets</i>						
<i>Program</i>	<i>FY22</i>	<i>FY23</i>	<i>FY24</i>	<i>FY25</i>	<i>FY26</i>	<i>Total</i>
<b>Streets</b>	\$153.8M	\$136.4M	\$149.5M	\$149.5M	\$149.5M	<b>\$738.8M</b>
<b>Bridges</b>	\$1.0M	\$1.0M	\$1.0M	\$1.0M	\$1.0M	<b>\$5.0M</b>
<b>Sidewalks</b>	\$6.3M	\$5.3M	\$5.3M	\$5.3M	\$5.3M	<b>\$28.5M</b>
<b>Alleys - Unimproved</b>	\$1.6M	\$1.6M	\$1.6M	\$1.6M	\$1.6M	<b>\$8.0M</b>
<b>Alleys - Improved</b>	\$2.0M	\$2.0M	\$2.0M	\$2.0M	\$2.0M	<b>\$10.0M</b>
<b>Total</b>	<b>\$164.7M</b>	<b>\$147.3M</b>	<b>\$159.4M</b>	<b>\$159.4M</b>	<b>\$159.4M</b>	<b>\$790.3M</b>

*Note: FY 2023 – FY 2026 will be adjusted based upon each fiscal year’s adopted budget.*

- Includes \$16.25M for 101 lane miles of street improvements in historically underserved areas.

*City of Dallas  
Five-Year  
Infrastructure  
Management  
Program (IMP)  
  
FY 2022 - 26*



# Five-Year IMP - Streets



City of Dallas PCI Ranges		
Rating	Ranking	PCI Range
A	Excellent	100-85
B	Good	70-84.9
C	Fair	55-69.9
D	Poor	40-54.9
E	Failed	0-39.9

- Each street segment in the City of Dallas has a Pavement Condition Index (PCI) Rating of “0-100.”
- Based upon current funding levels and increased contractual prices, the City’s street network will have an average PCI of 59.4 in FY 2022.



# Five-Year IMP - Streets



- Revised Paving Model
  - During the May 17, 2021, TRNI Committee meeting, PBW presented the revised paving model showing \$150M/year would increase PCI.
  - Recent increase in construction contractual costs and pre-programmed streets resulted in new Avg. PCI of 64.5 in 10 years.
  - Variable: flat unit cost throughout 10-year model (industry standard).

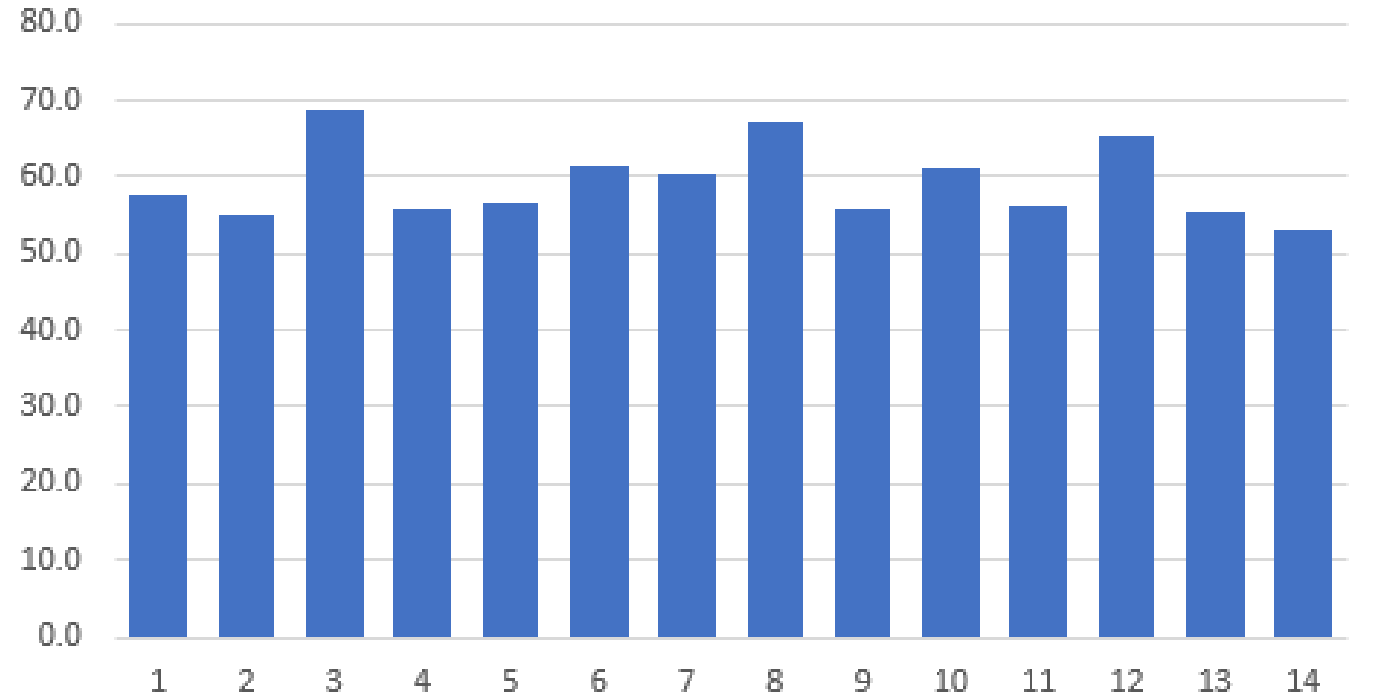


# Five-Year IMP - Streets



- PCI Trends
- Current PCI per district
- Future models considerations
  - Focus on each Council District min PCI of 60 then work on city wide goal of 70 over time

*FY 2022 Pavement Condition Index by Council District*



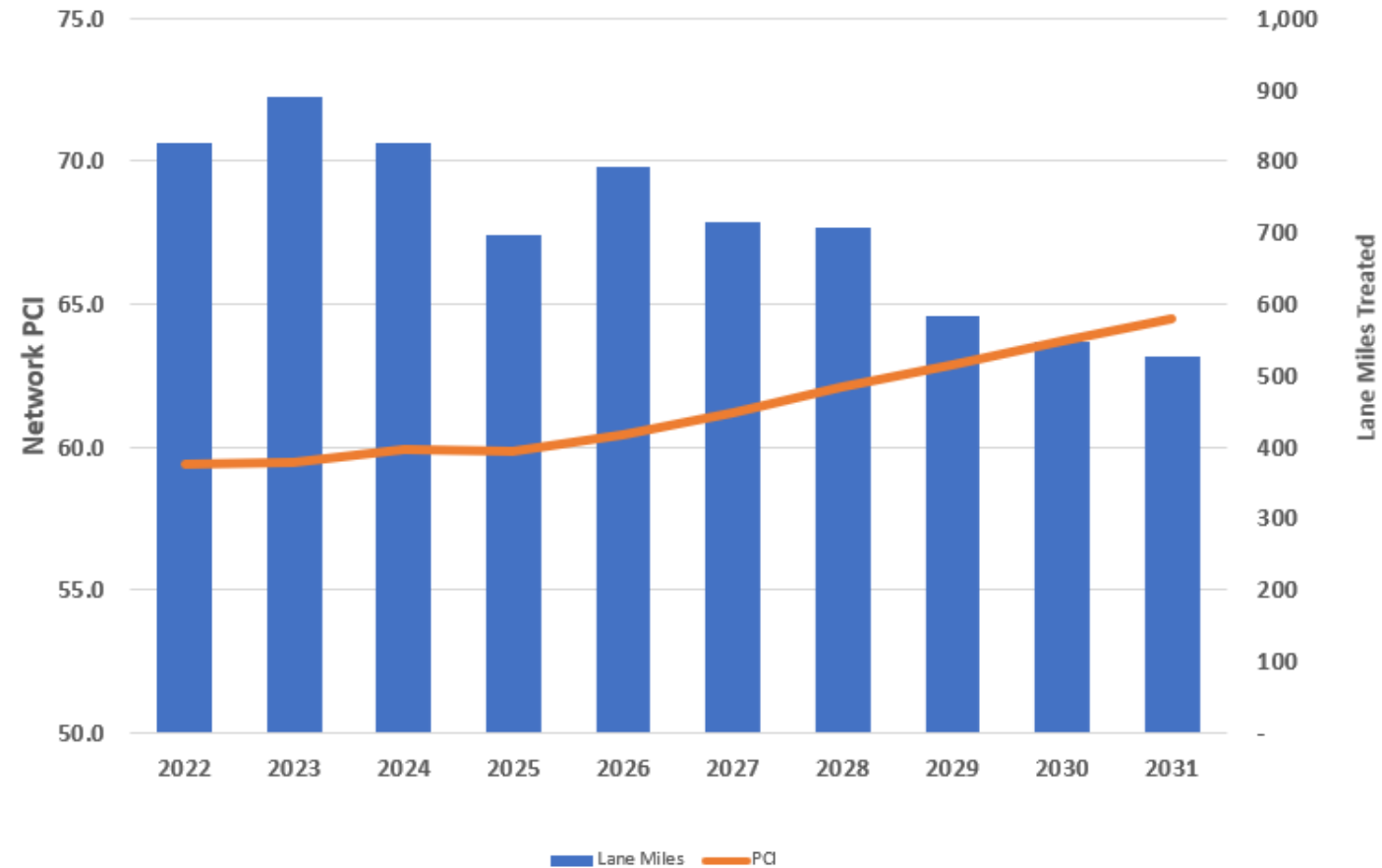
# Five-Year IMP - Streets



## PCI Trends

- Lane miles decrease in later years as preservation candidates decrease
- In later years, more maintenance type treatments will be performed
- Previous model showed -0.2 decrease per year, new model shows a 5.1 increase over 10-year period

Pavement Network Analysis Comparisons



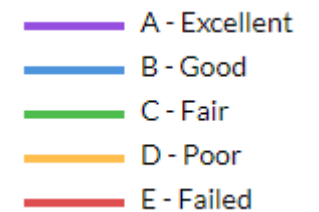
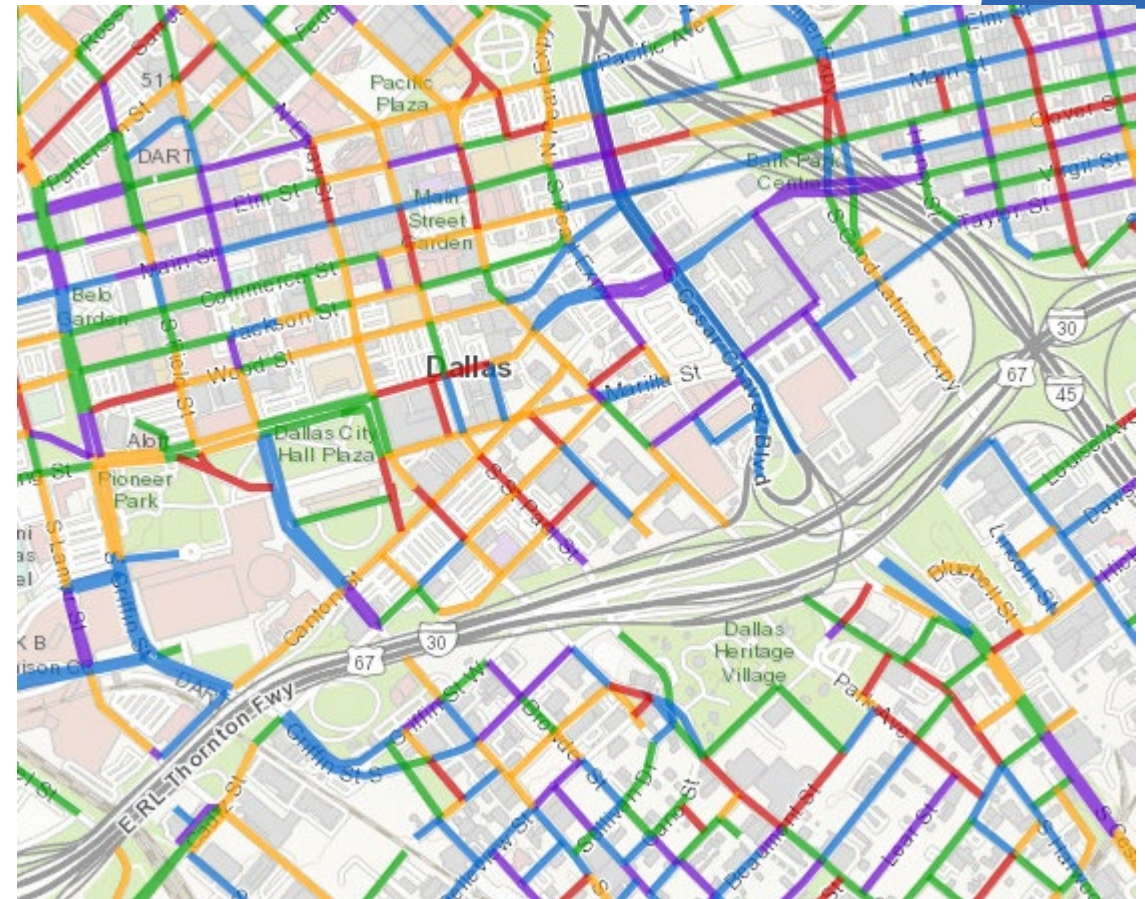


# Five-Year IMP - Streets



## Current Funds Analysis

- Projected PCI over the next 10 years through investing \$50M/year in resurfacing (“D” and high “E” streets) and preservation (“A” and “B” streets).
- A’s increase by 81%; 1,851 LM to 3,345 LM
- E’s decrease by 38%; 2,424 LM to 1,503 LM

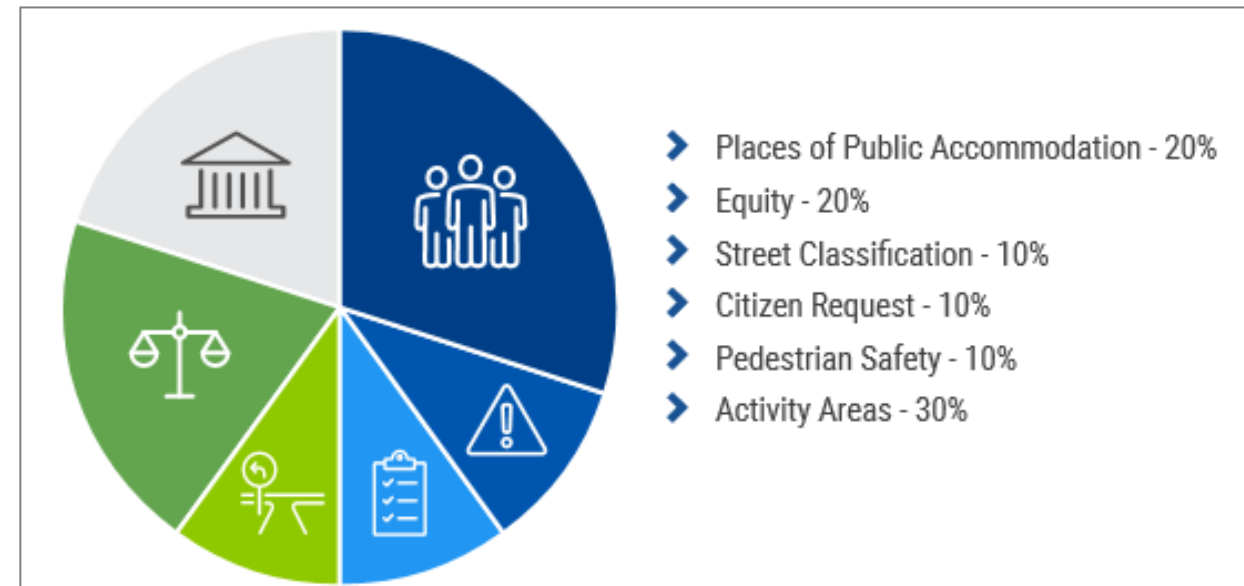


# Five-Year IMP - Sidewalks



- Sidewalk Program
  - In June 2021, Public Works completed the City's first Sidewalk Master Plan.
  - Through this work, a data driven system identified the most impactful projects to increase accessibility pedestrians throughout the City.

## Sidewalk Project Scoring Criteria



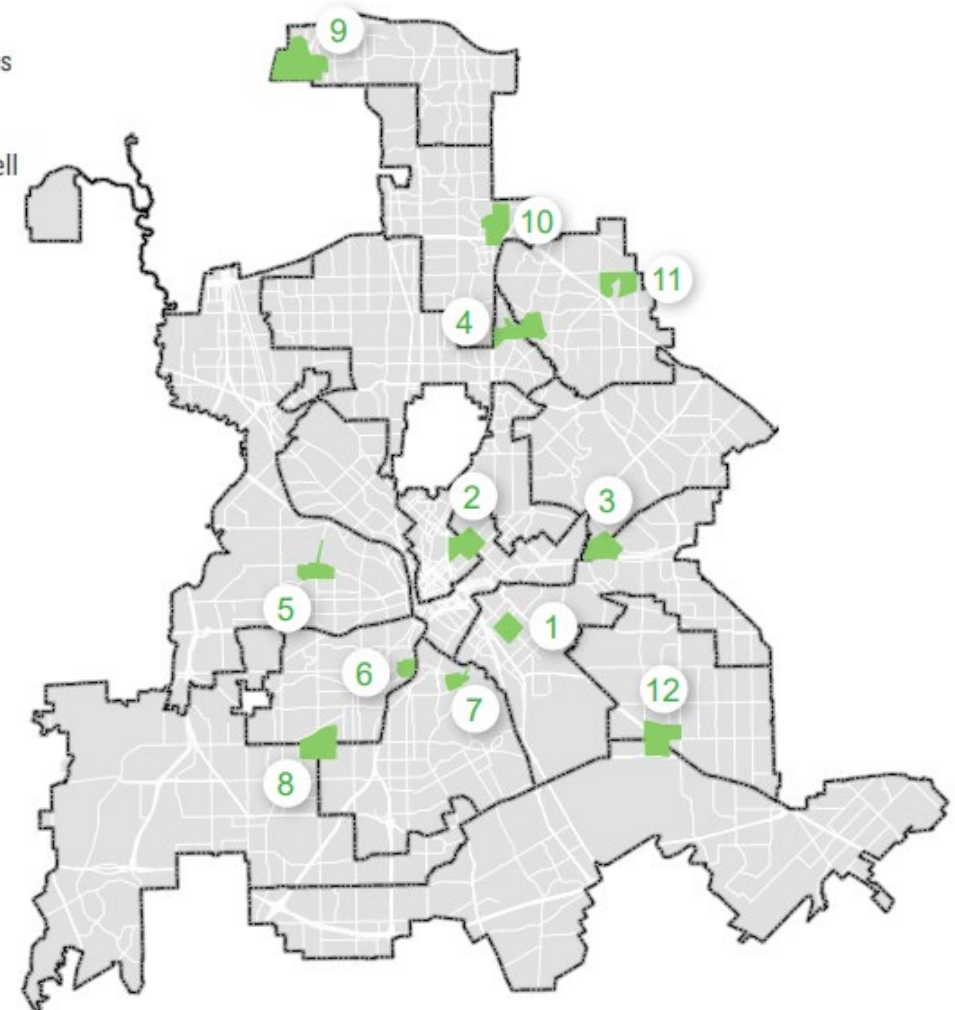
# Five-Year IMP - Sidewalks



- Sidewalk Master Plan identified 12 priority focus areas across all 14 Council Districts.
- The 12 focus areas include \$30M of identified projects to be completed.

All Focus Area Locations

- # Focus Area Numbers
  - Focus Areas
  - Council District Boundaries
1. Martin Luther King, Jr.
  2. Renaissance Oaks & Haskell
  3. Tenison Park East
  4. Fair Oaks
  5. Hampton Crossing
  6. Southern Gateway
  7. Cedar Creek
  8. Hampton & Illinois
  9. Denton County Gateway
  10. Coit & 635
  11. Woodridge
  12. Elam Creek



# Five-Year IMP - Sidewalks



- Over three years (FY21 23), a total of \$14.7M have been allocated towards the Sidewalk Master Plan's priority projects to complete 41 projects or 33 miles of sidewalks improvements.

*Table 12 - Proposed Five-Year IMP Sidewalk Maintenance Program Budgets*

Program	FY 22	FY 23	FY 24	FY 25	FY 26	Total
Sidewalk - Bond	\$1.0M	\$0.0M	\$0.0M	\$0.0M	\$0.0M	\$1.0M
Sidewalk – General Funds	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$1.5M
Sidewalk – Certificate of Obligation (CO)	\$5.0M	\$5.0M	\$5.0M	\$5.0M	\$5.0M	\$25.0M
<b>Funding Total</b>	<b>\$6.3M</b>	<b>\$5.3M</b>	<b>\$5.3M</b>	<b>\$5.3M</b>	<b>\$5.3M</b>	<b>\$27.5M</b>

Sidewalk Miles	13	11	11	11	11	57
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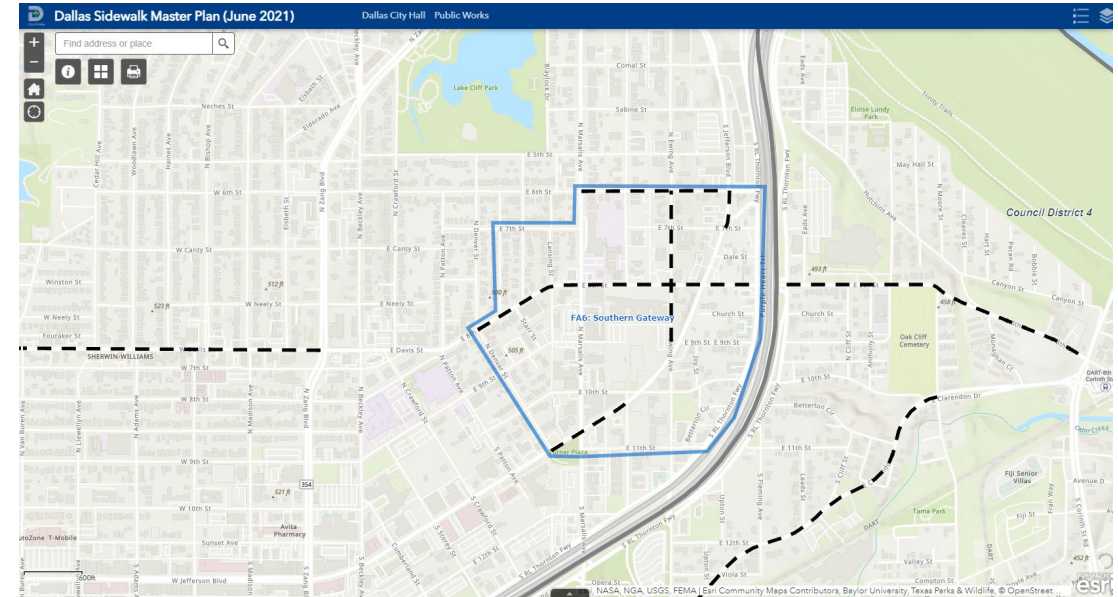
*Note: Greyed out boxes are subject to annual appropriations through the annual budget process.*



# Five-Year IMP - Sidewalks



- Sidewalk Program – Dallas Sidewalk Master Plan Web Application
  - Project tracking system showing sidewalk improvements projects



<https://dallasgis.maps.arcgis.com/apps/webappviewer/index.html?id=7420defba9314eba94ab55641b895196>



# Five-Year IMP – Improved Alleys



*Proposed Five-Year IMP Improved Alley Maintenance Program Budgets*

<i>Program</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>FY 25</i>	<i>FY 26</i>	<i>Total</i>
<b>Funding Needed</b>	\$2.0M	\$2.0M	\$2.0M	\$2.0M	\$2.0M	\$10.0M
<b>Miles</b>	16	16	16	16	16	80

## • Improved Alleys

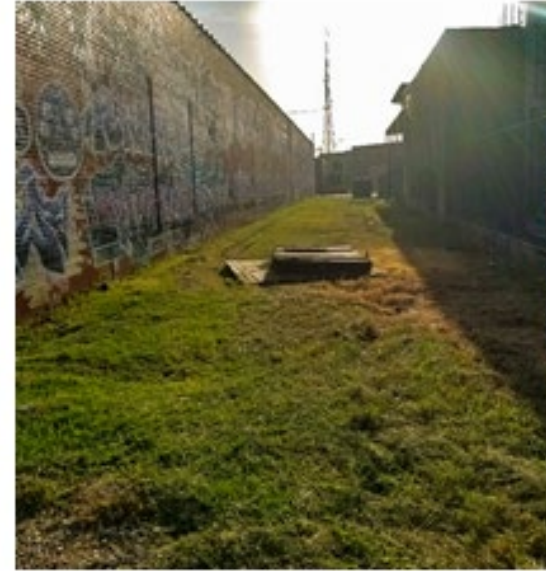
- Improved alleys are defined as alleys that have been constructed in concrete or asphalt.
- The projects included in the IMP were prioritized and selected based upon pavement condition and Sanitation routes.



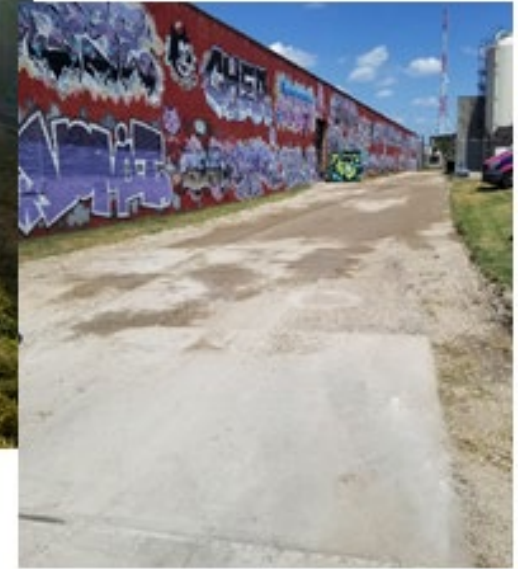
# Five-Year IMP – Unimproved Alleys



- Alleys- Unimproved
  - Began in FY 2019, to date completed 205 alley projects and improved 21.7 alley miles
  - The IMP assumes a program budget of \$1.6M to complete an average of 11 miles of maintenance.
  - Selected alleys are currently being used by Sanitation



Alley in Deep Ellum



<i>Proposed Five-Year IMP Unimproved Alley Maintenance Program Budgets</i>						
<i>Program</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>FY 25</i>	<i>FY 26</i>	<i>Total</i>
<b>Funding</b>	\$1.6M	\$1.6M	\$1.6M	\$1.6M	\$1.6M	\$8.0M
<b>Miles</b>	9.2 miles	11 miles	11 miles	11 miles	11 miles	53.2 miles



# Five-Year IMP - Bridges



- Finalizing the development of a rolling 5-year Bridge Maintenance Program to address routine maintenance.
- Current Estimated backlog of \$31M for routine maintenance.
- Future budgets will request \$3.1M per year to address routine maintenance repairs

*Proposed Five-Year Bridge Maintenance Program Budgets*

<i>Program</i>	<i>FY 22</i>	<i>FY 23</i>	<i>FY 24</i>	<i>FY 25</i>	<i>FY 26</i>	<i>Total</i>
<b>Funding</b>	\$1.0M	\$1.0M	\$1.0M	\$1.0M	\$1.0M	\$5.0M
<b>Maintenance Program</b>	\$0.0M	\$3.1M	\$3.1M	\$3.1M	\$3.1M	\$12.4M
<b>Total Bridge Program</b>	\$1.0M	\$4.1M	\$4.1M	\$4.1M	\$4.1M	\$17.4M
<b>Bridges Impacted</b>	TBD	20	20	20	20	80+ Bridges

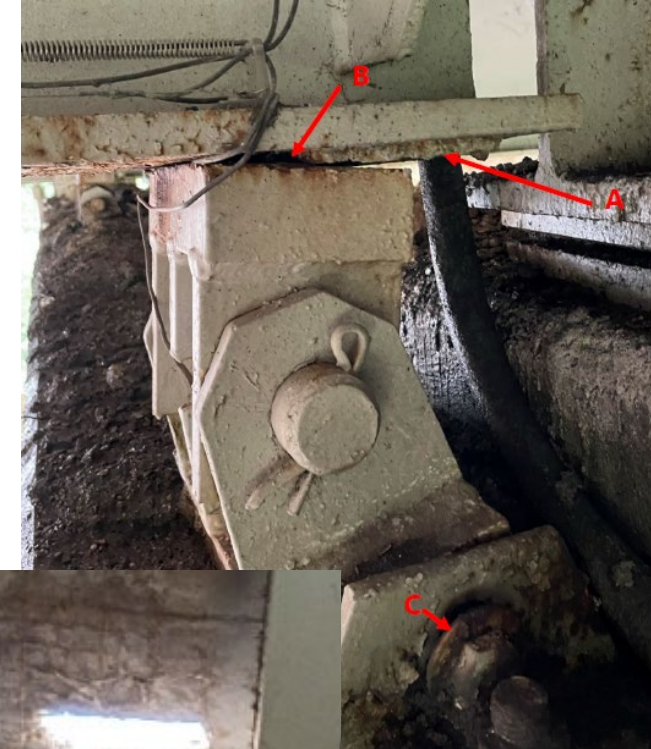




# Five-Year IMP - Bridges



- Example of types of Emergency Repairs being addressed that could be avoided by routing maintenance.
- Have completed over \$700k in emergency bridge repairs since November 2020.
- Currently working on second emergency repair on Marsalis Bridge.



Example of emergency repairs on the Marsalis Bridge





# Discussion/Questions





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