



**City of Dallas**

# **2024 Bond Program Streets and Transportation Subcommittee Meeting**

June 13, 2023

**Meeting No.3  
Needs Inventory (Alleys, Sidewalks, and  
Bridges)  
City of Dallas**

# Overview



- Needs Inventory
- Criteria for Projects to be on the Needs Inventory
- Bond Program Projects Categories on the Needs Inventory
- Public Works Overall Needs
- Public Works Needs Inventory per Council District
- Alleys Needs Inventory Per Council Districts
- Unimproved vs Improved Alleys
- Citywide Projects
- City of Dallas Sidewalk Masterplan
- Bridge Priority List
- Proposed Budget Scenarios
- Questions & Answers



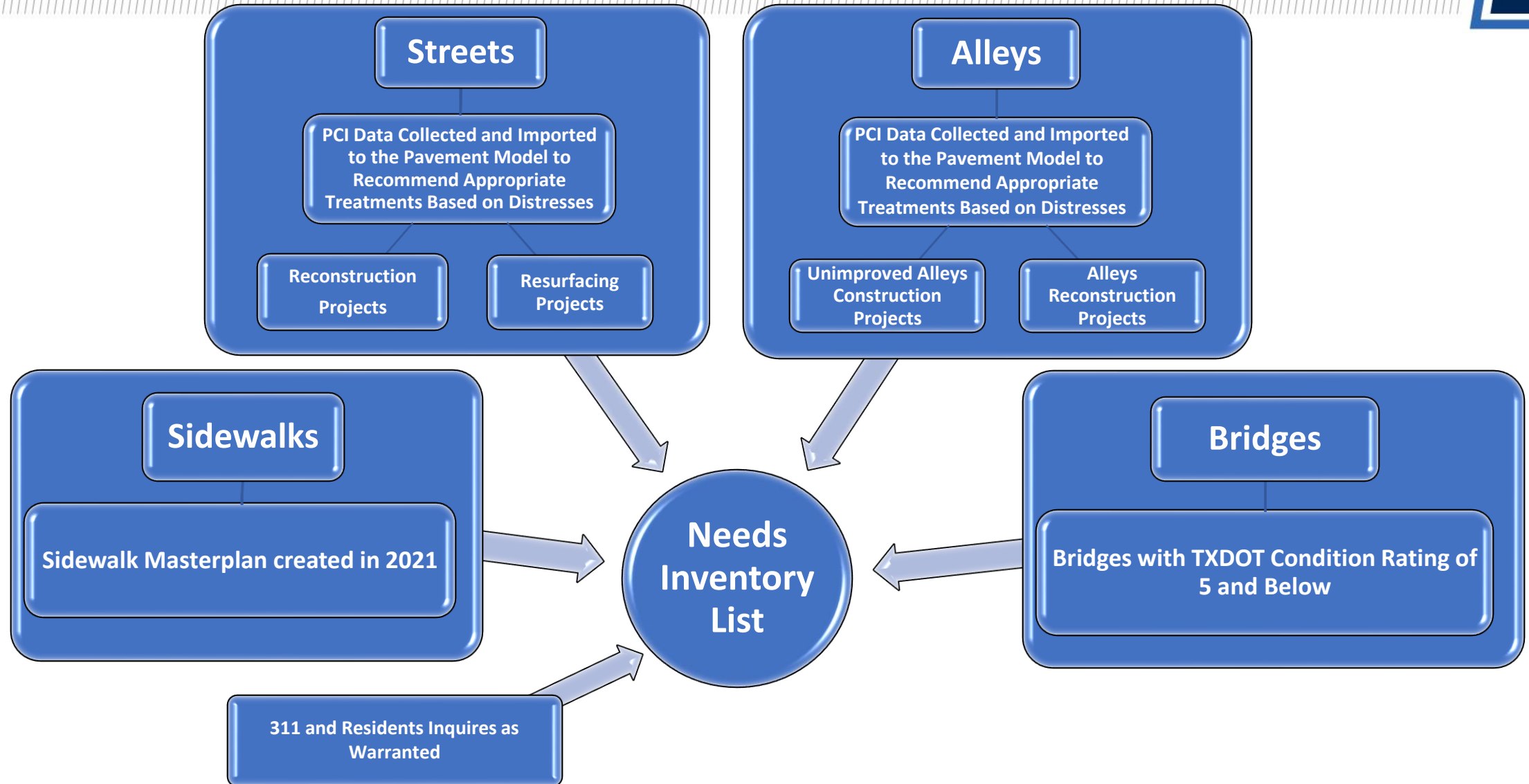
# Needs Inventory



- Needs Inventory is a living document that consists of Project Needs, and it is continuously being updated.
- Projects continue being added and costs and ranking continue being refined.
- Projects on the Needs Inventory are ranked based on the Technical Criteria Scoring (Appendix I)



# Criteria for the Needs Inventory



# Needs Inventory Project Categories (Public Works)



## 1. Streets

- A. Street Reconstruction- Local
- B. Street Reconstruction- Thoroughfare
- C. Unimproved Streets Construction
- D. Street Resurfacing

## 2. Alleys

- A. Alley Reconstruction
- B. Unimproved Alley Construction

**Cost Estimate: Approximately \$350/Linear Foot**

## 3. Sidewalks

- A. Sidewalk Cost Share Program (Includes 50/50 Program and Senior Citizens Program)
- B. Sidewalk Masterplan

**Cost Estimate: Approximately \$120/Linear Foot**

## 4. Bridges

- A. Bridge Repair and Modification

**Cost Estimate: Varies per Bridge.**



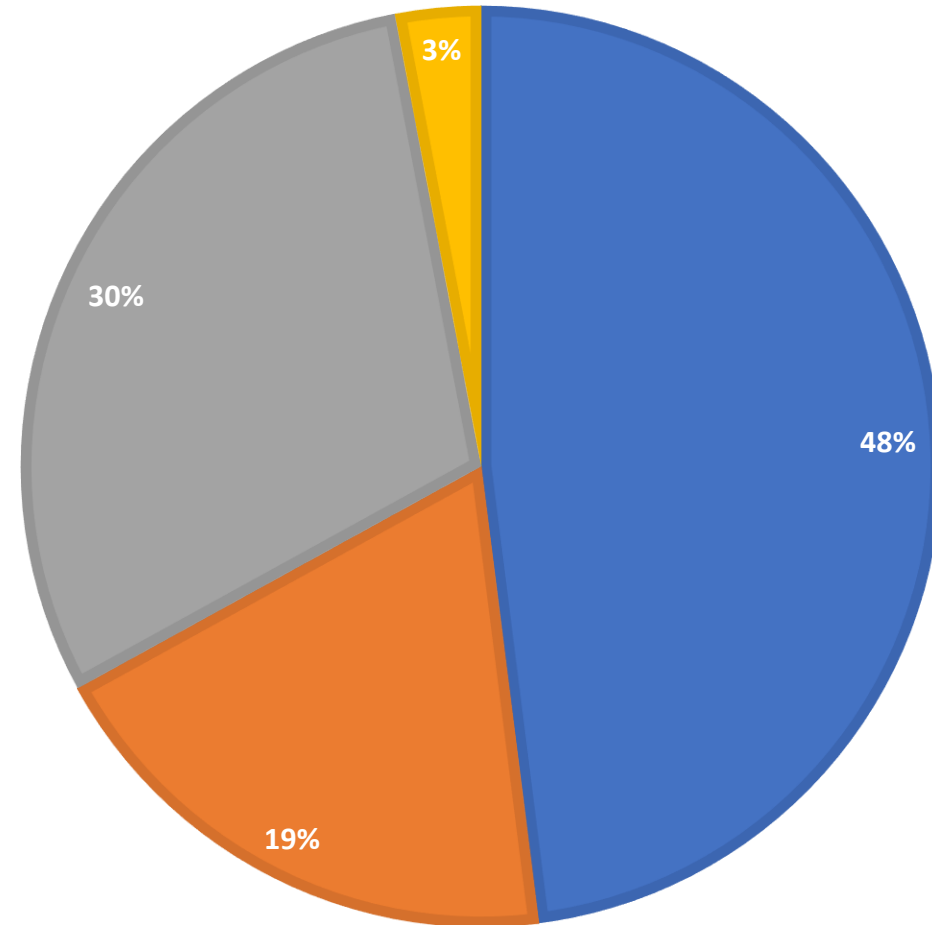
# Public Works Overall Needs



## NEEDS INVENTORY

■ Streets ■ Alleys ■ Sidewalk Masterplan ■ Bridges

Assets	Cost Estimate	Percentage
Streets	\$ 3,144,818,155	48%
Alleys	\$ 1,281,203,800	19%
Sidewalks	\$ 2,000,000,000	30%
Bridge	\$ 174,344,719	3%
Total	\$ 6,600,366,674	100%



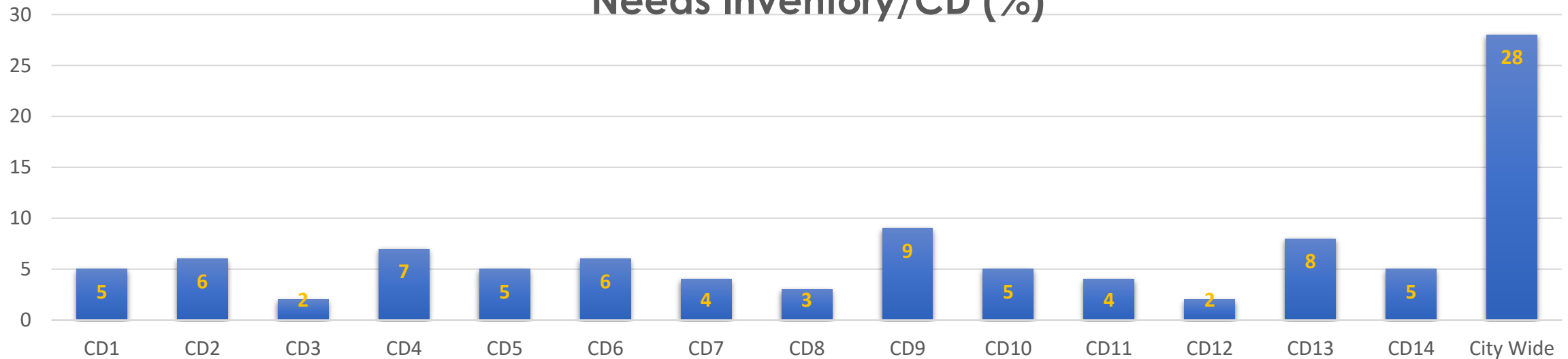


# Public Works Needs Inventory Per Council District



Cost Assets	CD1	CD2	CD3	CD4	CD5	CD6	CD7	CD8	CD9	CD10	CD11	CD12	CD13	CD14	City Wide	Total
Streets	\$143.5 M	\$208 M	\$49 M	\$215 M	\$136 M	\$243 M	\$133 M	\$104 M	\$241 M	\$110 M	\$96 M	\$34 M	\$156 M	\$172 M	\$1 B	\$3.1 B
Alleys	\$85.5 M	\$86 M	\$59 M	\$116 M	\$103 M	\$57 M	\$70 M	\$35 M	\$170 M	\$99 M	\$100 M	\$54 M	\$199 M	\$48 M	-	\$1.3 B
Sidewalks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$40 M	\$40 M
Bridges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$174M	\$174 M
Total	\$230 M	\$ 294 M	\$108 M	\$331 M	\$239 M	\$300 M	\$202 M	\$139 M	\$411 M	\$209.5 M	\$196 M	\$88 M	\$354.5 M	\$220 M	\$1.1 B	\$ 4.7 B
%	5%	6%	2%	7%	5%	6%	4%	3%	9%	5%	4%	2%	8%	5%	28%	100%

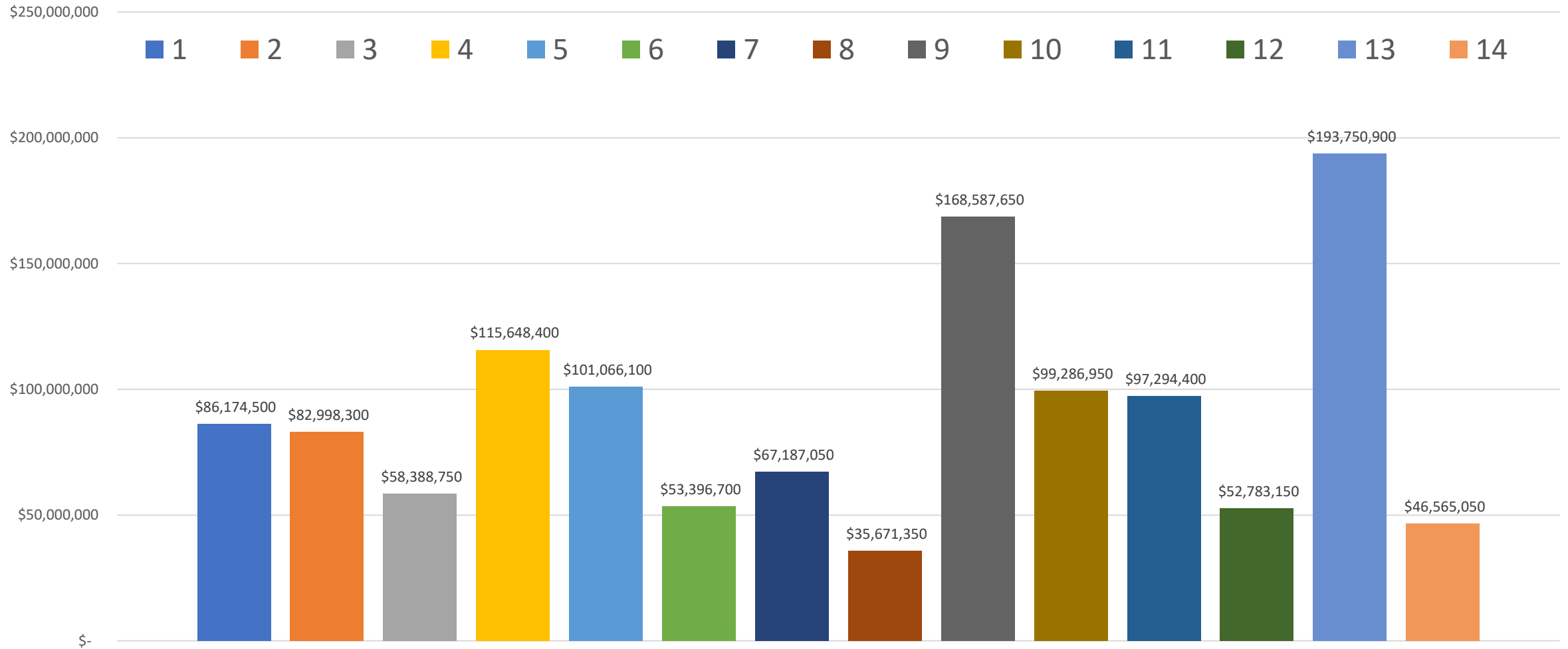
## Needs Inventory/CD (%)



# Alleys Needs Inventory Per Council District

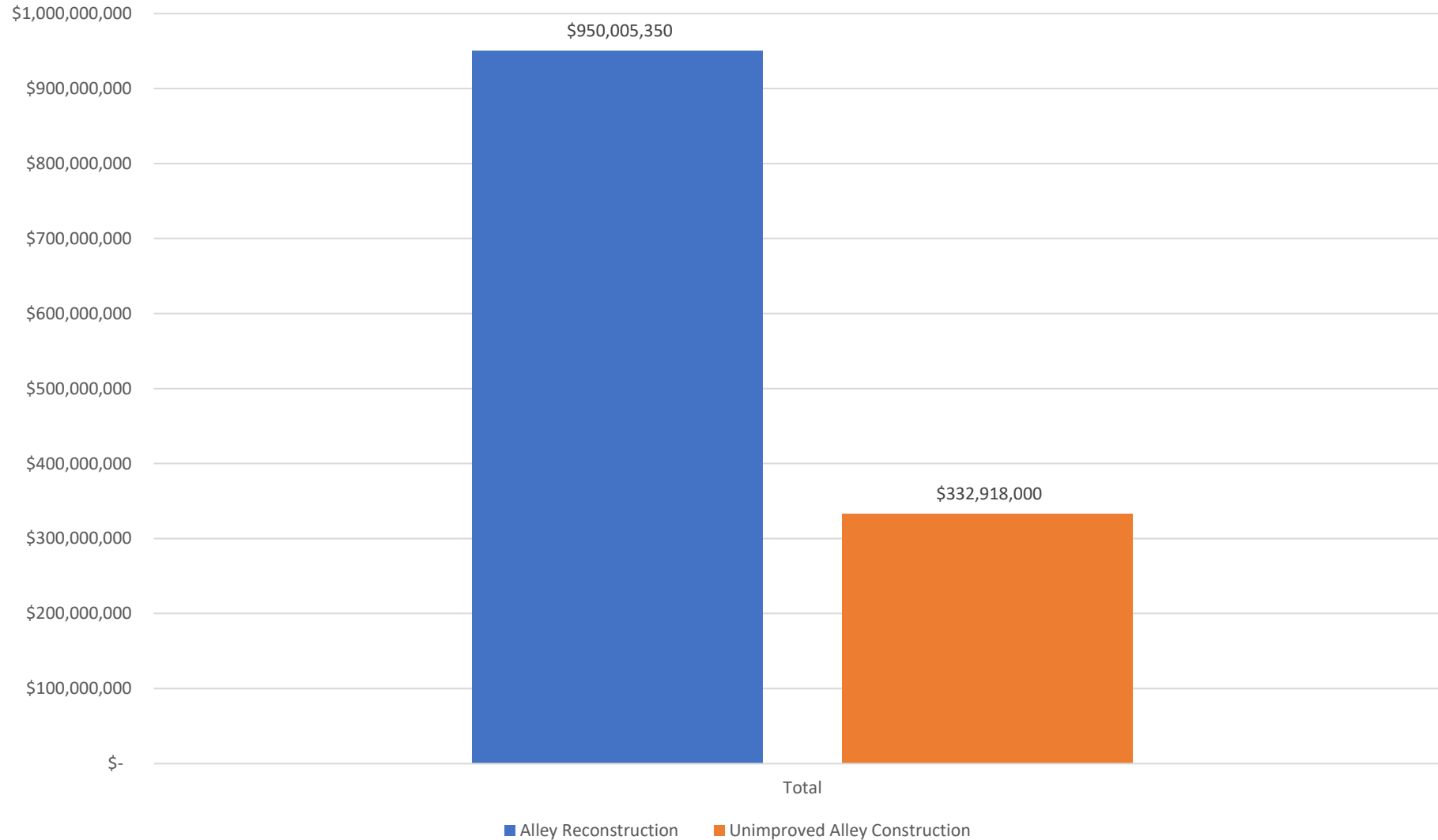


Estimated Cost by Council District





# Unimproved vs Improved Alleys





# Reference File: Alleys Needs Inventory List



# Citywide Projects



- On April 21, 2023, a memo was sent to the City council to outline the “Citywide” projects (*Reference File, Citywide Projects Memo*).
- For the 2024 Bond Program and future bond programs, Citywide projects will contain some or all the following attributes:
  - Regional impact,
  - Large parks or cultural institutions,
  - Major roadways,
  - Higher costs,
  - Projects or programs that serve multiple districts,
  - Citywide programs,
  - Specific site that is undetermined.



# Citywide Projects



- Considering the Citywide attributes listed in the previous slide, Citywide Projects for PBW Department will include:
  - Sidewalks
  - Bridges



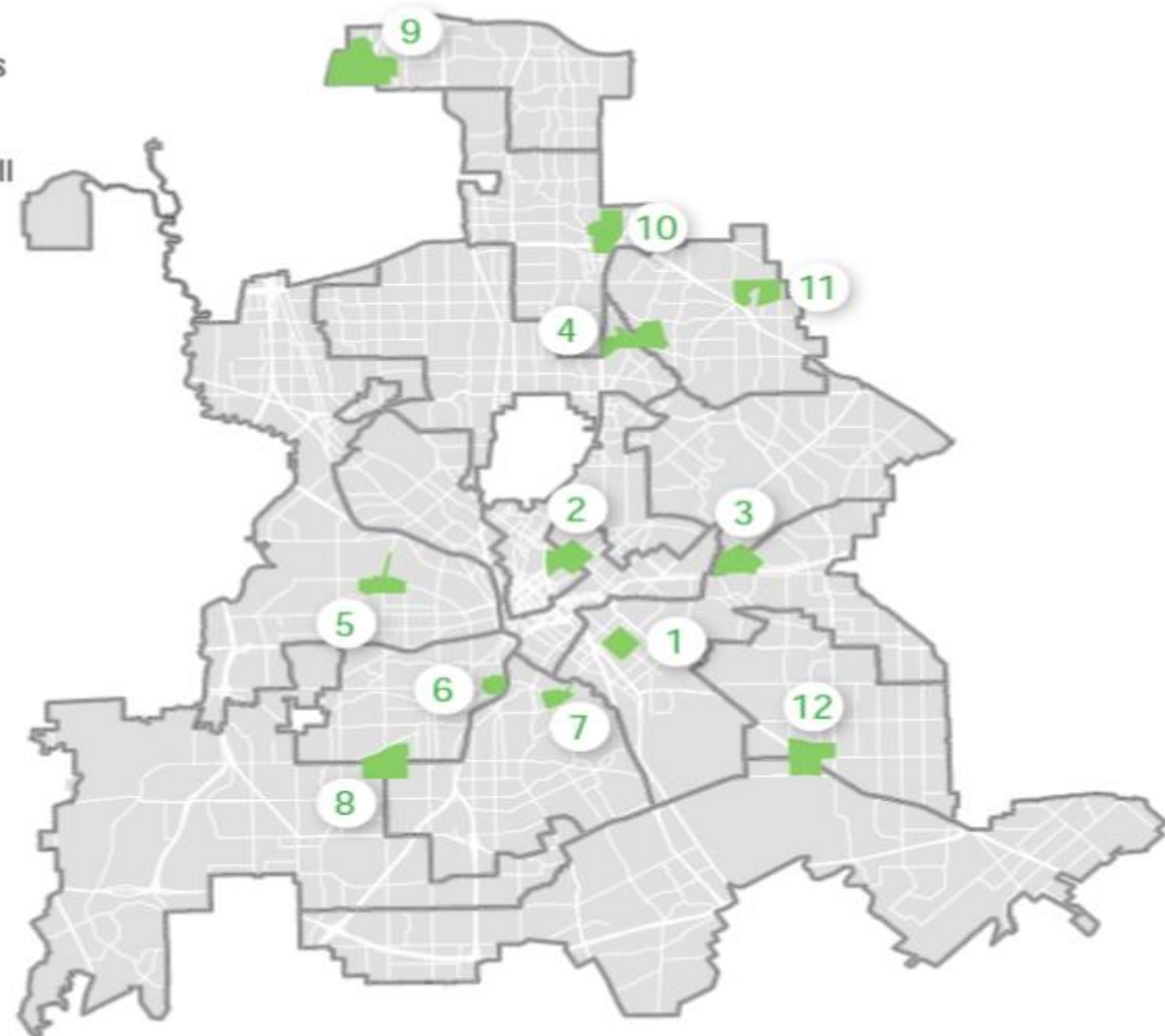
# City of Dallas Sidewalk Masterplan



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





# Reference File: Sidewalks Improvement Recommended List



# Bridge Priority List



- For the purpose of 2024 Bond Program, the top 4 bridges with the highest scores were recommended for improvements
- The following is the list of recommended bridges

No.	FACILITY	FEATURE	COUNCIL	BUILT	LENGTH (ft)	Total Point	Cost Estimate
1	Malcolm X Blvd	DART RR, Hickory St	7	1937	1235	69.98	\$17M
2	Irving Blvd (SH356)	Elm Fork Trinity River	6	1963	1500	67.72	\$21M
3	Westmoreland Rd NB & SB	Five Mile Creek	3	1960	121	62.98	\$1.7M
4	S Marsalis Ave NB & SB	Cedar Ck/Clarendon/RR/15	4	1956	1026	60.83	\$21M







# Reference File: Bridge Priority List



# Proposed Budget Scenarios



- 50M	Asset Type	Proposed Budget
	Alleys	\$ 75,000,000
	Streets	\$ 300,000,000
	Sidewalks	\$ 20,000,000
	Bridges	\$ 40,000,000
	<b>Total</b>	<b>\$ 435,000,000</b>

- 25M	Asset Type	Proposed Budget
	Alleys	\$ 80,000,000
	Streets	\$ 320,000,000
	Sidewalks	\$ 20,000,000
	Bridges	\$ 40,000,000
	<b>Total</b>	<b>\$ 460,000,000</b>

Anticipated Funding	Asset Type	Proposed Budget
	Alleys	\$ 80,000,000
	Streets	\$ 320,000,000
	Sidewalks	\$ 25,000,000
	Bridges	\$ 60,000,000
	<b>Total</b>	<b>\$ 485,000,000</b>

+ 25M	Asset Type	Proposed Budget
	Alleys	\$ 85,000,000
	Streets	\$ 340,000,000
	Sidewalks	\$ 25,000,000
	Bridges	\$ 60,000,000
	<b>Total</b>	<b>\$ 510,000,000</b>

+50M	Asset Type	Proposed Budget
	Alleys	\$ 90,000,000
	Streets	\$ 360,000,000
	Sidewalks	\$ 25,000,000
	Bridges	\$ 60,000,000
	<b>Total</b>	<b>\$ 535,000,000</b>

- \$485M was assumed for the initial budget scenario; however, 4 additional scenarios were analyzed with +/- \$25M increment
- The Sidewalk Improvement budget was set based on the remaining of Focus Area Recommended Projects and Cost Share Program Needs
- The allocated budget for bridges were estimated based on the top 4 priority list
- The remaining budget was allocated as follow:
  - 80% Street Improvement
  - 20% Alley Improvement





# Questions & Answers



# **(Appendix I)**

# **Background Information on Scoring and Technical Criteria**

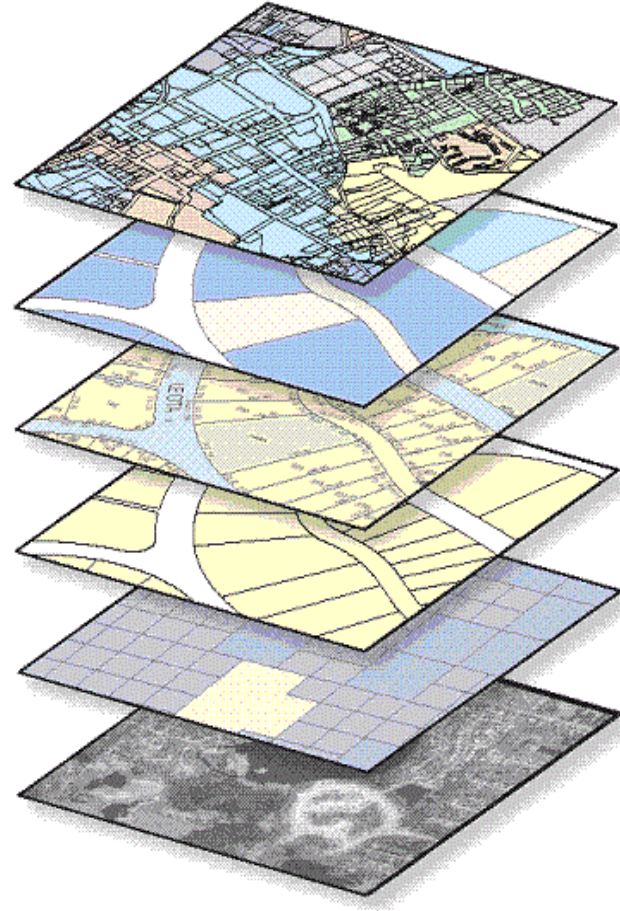
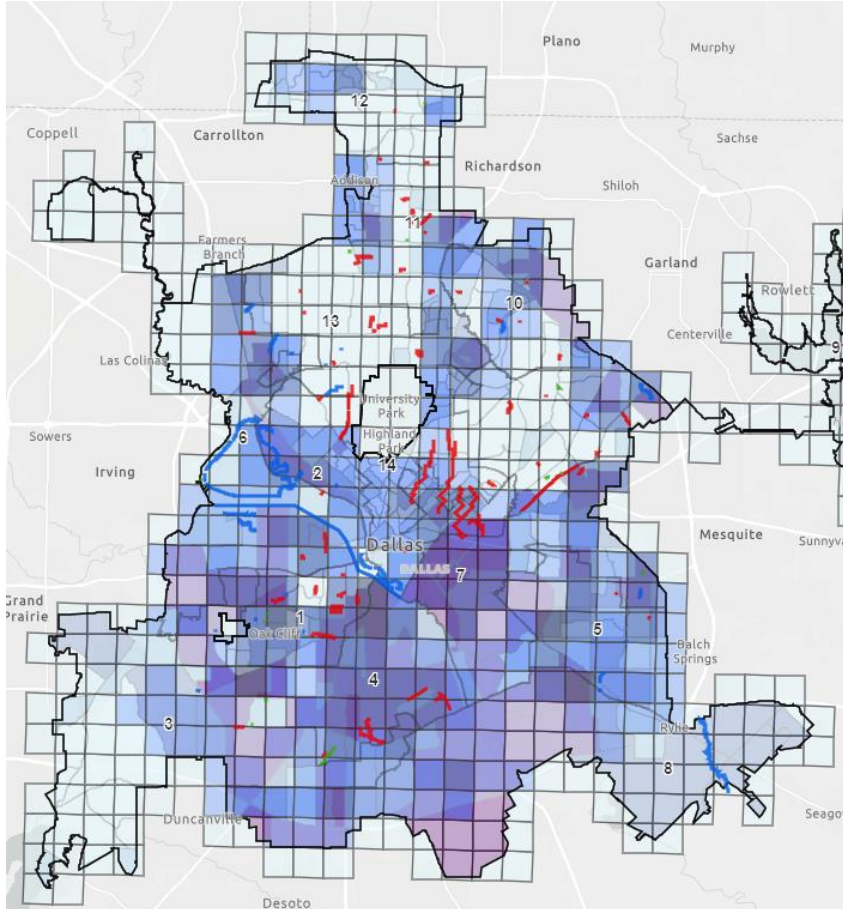
# Parameters Provided by the Bond Office:



- Technical Criteria: It is the scoring criteria used to rank the needs inventory projects to create priority list for the Bond Program selection.
- Departments score projects on the Needs Inventory with a maximum of an 80-point technical score.
- After the technical score has been assigned, the points for 'Priority Overlays' and Equity will be assigned by the Department of Data Analytics and Business Intelligence.
  - Up to 10 points for Priority Overlays
  - Up to 10 points for Equity



The priority areas were determined by overlaying multiple data layers (see image below)



## Priority Overlays

**(2 points each):**

1. High Crime Areas
2. TOD (DART sites)
3. Market Value Analysis
4. 311 Service Requests (calls for flooding, speeding, traffic calming, potholes, street resurfacing, and illegal dumping)
5. Project Overlaps





## Parameters Provided by the Bond Office:

- Equity Impact Assessment Score factors are based on the Racial Equity Plan. Each factor is worth 2 points.
  1. >70% of population is Black, Hispanic, or Native American
  2.  $\geq$ 15% of families at or below 100% of the federal poverty level
  3. <50% of households own the home they live in?
  4. Area rated “High” on the CDC’s Social Vulnerability Index
  5. >12% of the area’s residents are 65 or older?







# Public Works Department Technical Criteria



# Technical Criteria for Projects Scoring (Public Works)



## 1. Street Reconstruction Criteria:

#	Criteria	Maximum Points	Scoring Methodology
1	Pavement Condition Index	50	Based on Pavement Condition Index (PCI) Rating from 100 to 0 using formula $[(100-PCI)*0.5]$
2	Street Classification	15	Arterial Street is 15 points, Collector Street is 10 points, Residential Street is 5 points
3	Time in Needs Inventory	10	1 point per year up to 10 points for 10 or more years
4	DWU Work Plan Project	5	5 points if Yes, 0 points if No
	Total Score	80	



# Technical Criteria for Projects Scoring (Public Works)



## 2. Unimproved Street Construction Criteria:

#	Criteria	Maximum Points	Scoring Methodology
1	Pavement Condition Index	50	Based on Pavement Condition Index (PCI) Rating from 100 to 0 using formula $[(100-PCI)*0.5]$
2	SWMP High Priority Areas	15	15 points if Yes, 0 points if No
3	Time in Needs Inventory	10	1 point per year up to 10 points for 10 or more years
4	DWU Work Plan Project	5	5 points if Yes, 0 points if No
	<b>Total Score</b>	<b>80</b>	



# Technical Criteria for Projects Scoring (Public Works)



## 3. Street Resurfacing Criteria:

#	Criteria	Maximum Points	Scoring Methodology
1	Pavement Condition Index	50	Based on Pavement Condition Index (PCI) Rating from 100 to 0 using formula $[(100-PCI)*0.5]$
2	Street Classification	15	Arterial Street is 15 points, Collector Street is 10 points, Residential Street is 5 points
3	Time in Needs Inventory	10	1 point per year up to 10 points for 10 or more years
4	DWU Work Plan Project	5	5 points if Yes, 0 points if No
	Total Score	80	



# Technical Criteria for Projects Scoring (Public Works)



## 4. Alleys Reconstruction Criteria:

#	Criteria	Maximum Points	Scoring Methodology
1	Pavement Condition Index	30	Based on Pavement Condition Index (PCI) Rating from 100 to 0 using formula $[(100-PCI)*0.3]$
2	Time in Needs Inventory	10	1 point per year up to 10 points for 10 or more years
3	Alley used for Rear Entry	15	15 points if Yes, 0 points if No
4	Alley used for Garbage Pickup	15	15 points if Yes, 0 points if No
5	Availability of Existing Right-of-Way	10	10 points if existing ROW is at least 15 ft. wide, 0 points if Inadequate ROW
	Total Score	80	



# Technical Criteria for Projects Scoring (Public Works)



## 5. Unimproved Alleys Construction Criteria:

#	Criteria	Maximum Points	Scoring Methodology
1	Pavement Condition Index	30	Based on Pavement Condition Index (PCI) Rating from 100 to 0 using formula $[(100-PCI)*0.3]$
2	Time in Needs Inventory	10	1 point per year up to 10 points for 10 or more years
3	Alley used for Rear Entry	15	15 points if Yes, 0 points if No
4	Alley used for Garbage Pickup	15	15 points if Yes, 0 points if No
5	Availability of Existing Right-of-Way	10	10 points if existing ROW is at least 15 ft. wide, 0 points if Inadequate ROW
	Total Score	80	



# Technical Criteria for Projects Scoring (Public Works)



## 6. Sidewalks Improvement Criteria:

#	Criteria	Maximum Points	Scoring Methodology
1	Places of Public Accommodation	20	20 Points If a School within 0.5 Miles Radius, 15 points if by Major Public Destination like Government Facilities & Major Health Care Facilities & Transportation Centers, 10 points if by Bus Stops, 5 points if by Commercial Districts
2	Equity Index	20	20 points for Top 25%, 15 points for 2 <sup>nd</sup> Quartile, 10 points for 3 <sup>rd</sup> Quartile, and 5 points for Bottom 25%.
3	Pedestrian Safety	10	10 points if Specific Pedestrian Fatality, 5 points if on High Injury Network, 0 points if None
4	Street Classification System	10	10 points if Arterial, 5 points if Collector, 0 points if Residential
5	Citizen Request	10	10 points if 3+ years, 5 points if [1-3] years, 2 points if Less than a year
6	Activity Areas (DSMP Heat Map)	30	30 points for Top 25%, 20 points for 2 <sup>nd</sup> Quartile, 10 points for 3 <sup>rd</sup> Quartile, and 5 points for Bottom 25%.
	Total Score	100	







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