

City of Waco

UPDATE TO CITY ORDINANCES DESIGN STANDARDS AND POLICIES

City Council October 17, 2023



WHAT ARE WE GOING TO DISCUSS THIS AFTERNOON



What are we proposing to change?



Why are we proposing changes?



Where are we at in the process?



When are we getting this done?

WHAT

- Update design criteria for:
 - Parks and sidewalks
 - Utilities
 - Water and Sewer Design
 - Public Works
 - Street Design
 - Stormwater Design
- Remove design criteria from subdivision ordinance
- Continue process of updating subdivision ordinance

WHY

- Current standards allow for subdivisions that are not competitive with:
 - City Council Standards
 - Community Standards
 - The Market
 - Other Cities
- Current Standards allow for infrastructure that does not last and/or shifts the financial burden to existing residents to repair, replace or alter

WHY

➤ Current Standards are:

- Unclear

- Ambiguous

- Difficult to Administer

The City Plan

➤ Chapter 7, Livability

- Establish a Neighborhood and/or Community Park in the China Spring area
- Establish a Community Park in the West Waco area between Hewitt Dr. and Ritchie Rd.
- Create a more walkable and bike friendly city with the addition of sidewalks and bike lanes

➤ Chapter 3, Growth Management & Chapter 7, Livability

- Adopt a parkland dedication ordinance as a means of funding new parks either through dedication of land to be developed as a park or the payment of a fee in lieu of land, as deemed appropriate.

Areas Beyond Park Services
Public Lands
City of Waco System
Other Public Lands
Waco City Limits

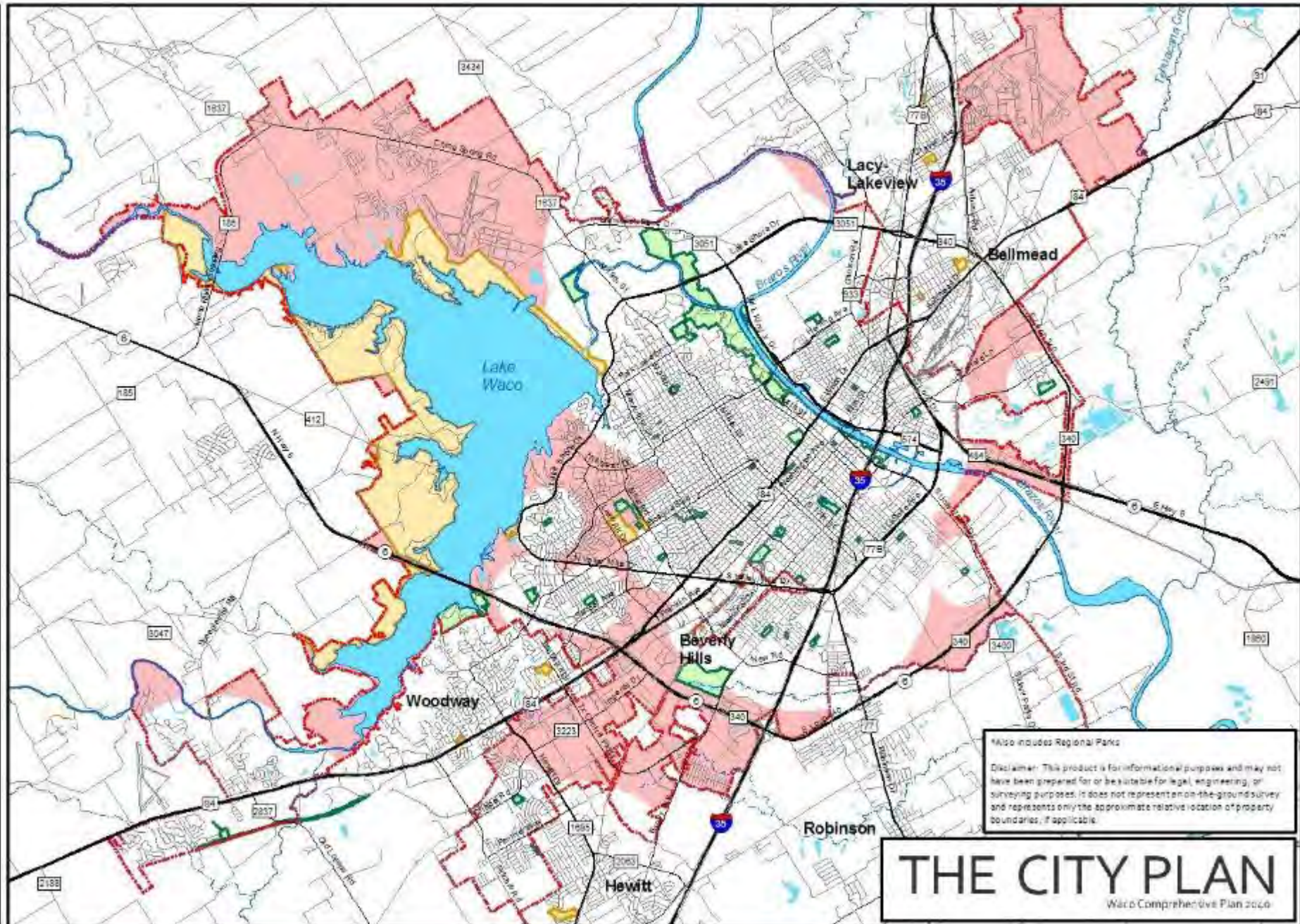


June, 2015

Map 7.2:
City of Waco
Areas Beyond Service Areas for
Neighborhood & Community* Parks



CITY OF WACO



THE CITY PLAN
Waco Comprehensive Plan 2020

Current Subdivision Ordinance

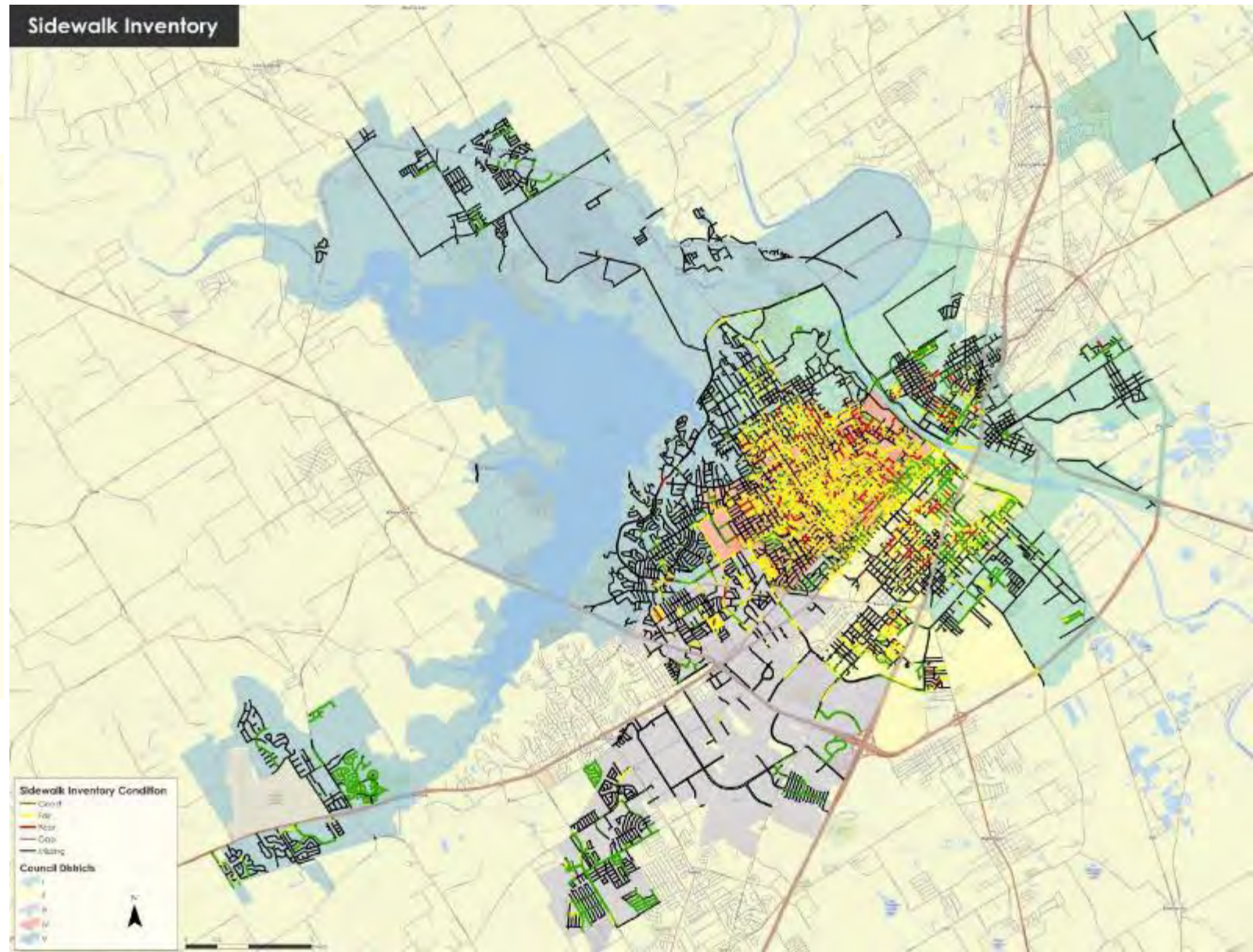
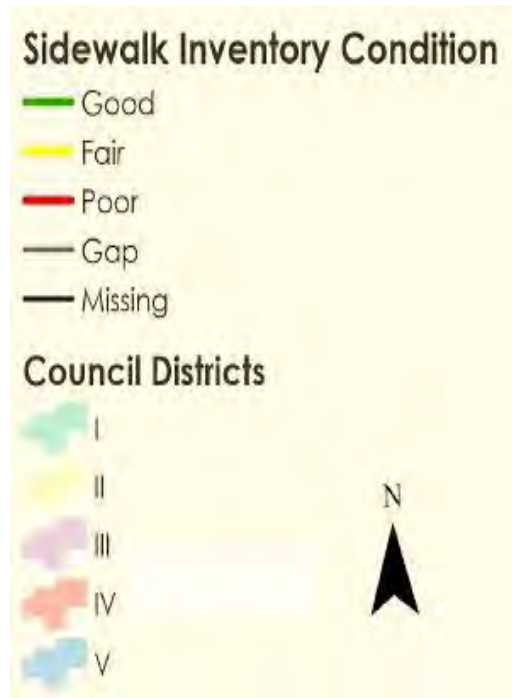
➤ Park Dedication

- Parks, Playgrounds and Recreational Areas: The City Council may require the dedication of up to five percent (5%) of the area of a subdivision for recreational purposes.
- Acceptance of formal offers of dedication of park land shall be by ordinance.

➤ Sidewalk Requirements

- Both sides of Arterials and Collectors, One side of neighborhood collectors

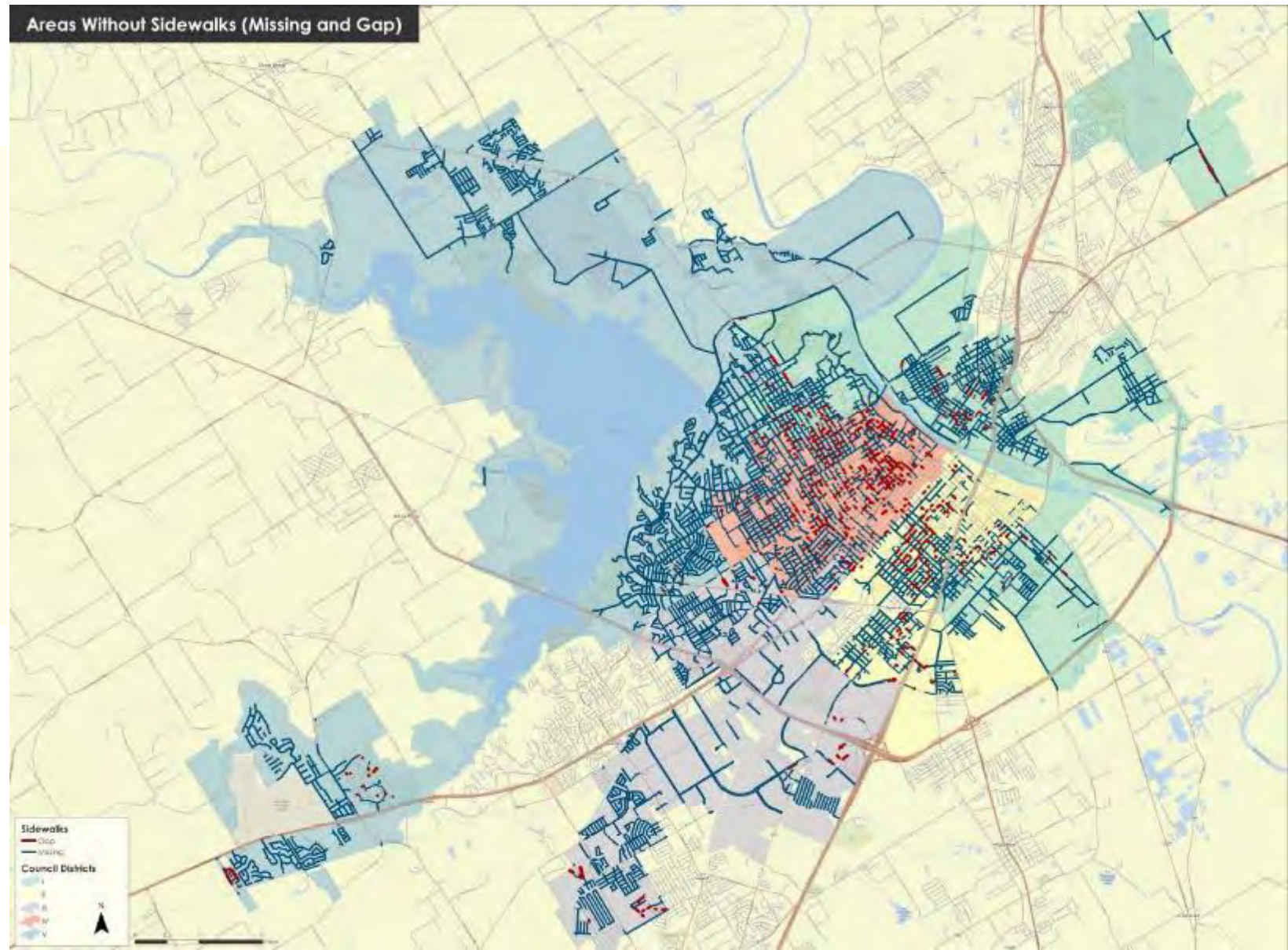
Sidewalk Condition Map



\$96 Million

SIDEWALK CONSTRUCTION (INCLUDES GENERAL INCIDENTAL COSTS)

Sidewalk Missing / Gap Map



\$57 Million

SIDEWALK CONSTRUCTION (INCLUDES GENERAL INCIDENTAL COSTS)

Ordinance Amendment Recommendations

➤ Park Dedication

➤ Strengthen parkland dedication requirement to include criteria for land and improvements of dedicated parks

- Acreage based on needed park improvements for newly developing areas of Waco

➤ Fee in lieu of parkland dedication

- \$ amount per housing unit based on needed park improvements for newly developing areas of Waco

➤ Sidewalk Requirements

- Both sides of all streets

CITY	Parkland Dedication/ Fee	Park Development Fee
Waco (Current)	Up to 5% of subdivision for recreational purposes	none
Waco (Proposed)	Parkland dedication with criteria or fee in lieu of dedication	none
Temple	1 acre per 133 DU or fee in lieu of dedication (\$225 per DU)	none
Bryan	SF: 1 acre for 74 DU or \$162 per DU MF: 1 acre for 90 DU or \$133 per DU	\$358/DU
College Station	SF: 1 acre for 48 DU or \$1,106 per DU MF: 1 acre for 83 DU or \$395 per Bedroom	SF: \$4,150/DU MF: \$1,486/BR
Wichita Falls	None	None
Austin*	SF: 1 acre for 37 DU or \$5,276 per DU MF: 1 acre for 62 DU or \$3,203 per BR	SF: \$985/DU MF: \$598/ BR
Denton	SF: 1 acre for 143 DU or \$162 per DU MF: 1 acre for 222 DU or \$133 per DU	SF: \$336/DU MF: \$216/ DU
Fort Worth*	SF: 1.12 acre for 100 DU or fair market value in lieu MF: .75 acre for 100 DU or \$133 per DU	None
Frisco	SF: 2.6 acres for 100 DU or fair market value lieu MF: 1.67 acre for 100 DU or fair market value in lieu	SF: \$1,661.46/DU MF: \$1,052.44/ DU
Mansfield	SF: 1 acre for 100 DU or \$1,000 per DU MF: 1 acre for 80 DU or \$1250 per DU	SF: \$1,900/DU MF: \$2,375/ DU
San Antonio*	SF: 1 acre for 70 DU or fair market value in lieu MF: 1 acre for 114 DU or or fair market value in lieu	None
Dallas*	SF: 1 acre for 100 DU or \$762 per DU MF: 1 acre for 255 DU or \$300 per BR	SF: \$403/DU MF: \$158/ BR

*Fees will be reduced based on HB 1526

CITY	Sidewalk Location Requirement for New Subdivisions
Waco (Current)	Both side on arterials & collectors, one side of neighborhood collector streets
Waco (Proposed)	Both sides of all streets
Temple	Both sides arterials & one side of collector streets
Bryan	Both sides of arterials, collectors & urban residential streets
College Station	Both sides of all streets
Wichita Falls	Both sides of all streets
Austin	Both sides of all streets
Denton	Both sides of all streets
Fort Worth	Both sides of all streets
Frisco	Both sides of all streets
Mansfield	Both sides of all streets
San Antonio	Both sides of all streets
Dallas	Both sides of all streets



Street Design Criteria

PURPOSE OF THE STREET DESIGN CRITERIA

➤ Streets that are:

➤ Safe

- Riding surface, pavement markings, signage
- Design speeds
- Provide for all modes of travel

➤ Sustainable

- Useful life comparable to industry standards for Central Texas
- Adequate rights-of-way and parkways to provide for pedestrians and bicyclists

➤ Maintainable

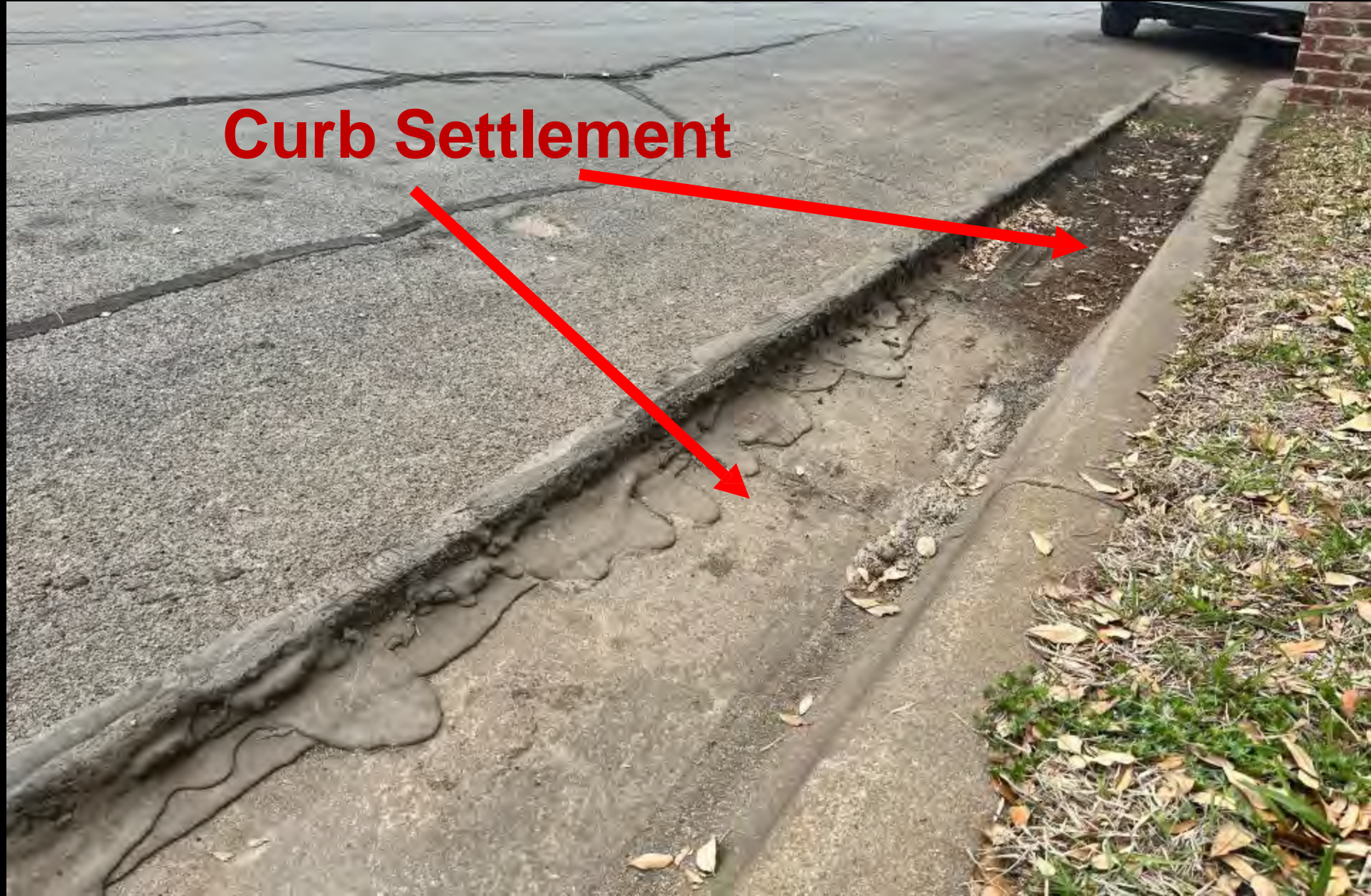
- Life cycle maintenance costs comparable to industry standards for Central Texas

Criteria developed by staff and consulting engineers, Walker Partners and Langerman Engineering.

\$2.519 BILLION

STREET REPLACEMENT COST INCLUDING SIDEWALK

EXISTING DESIGN CRITERIA



Curb Settlement

EXISTING DESIGN CRITERIA



LACK OF DESIGN CRITERIA



Too flat = \$\$ to City

LACK OF DESIGN CRITERIA



Too flat = \$\$ to City

INADEQUATE STREET WIDTH



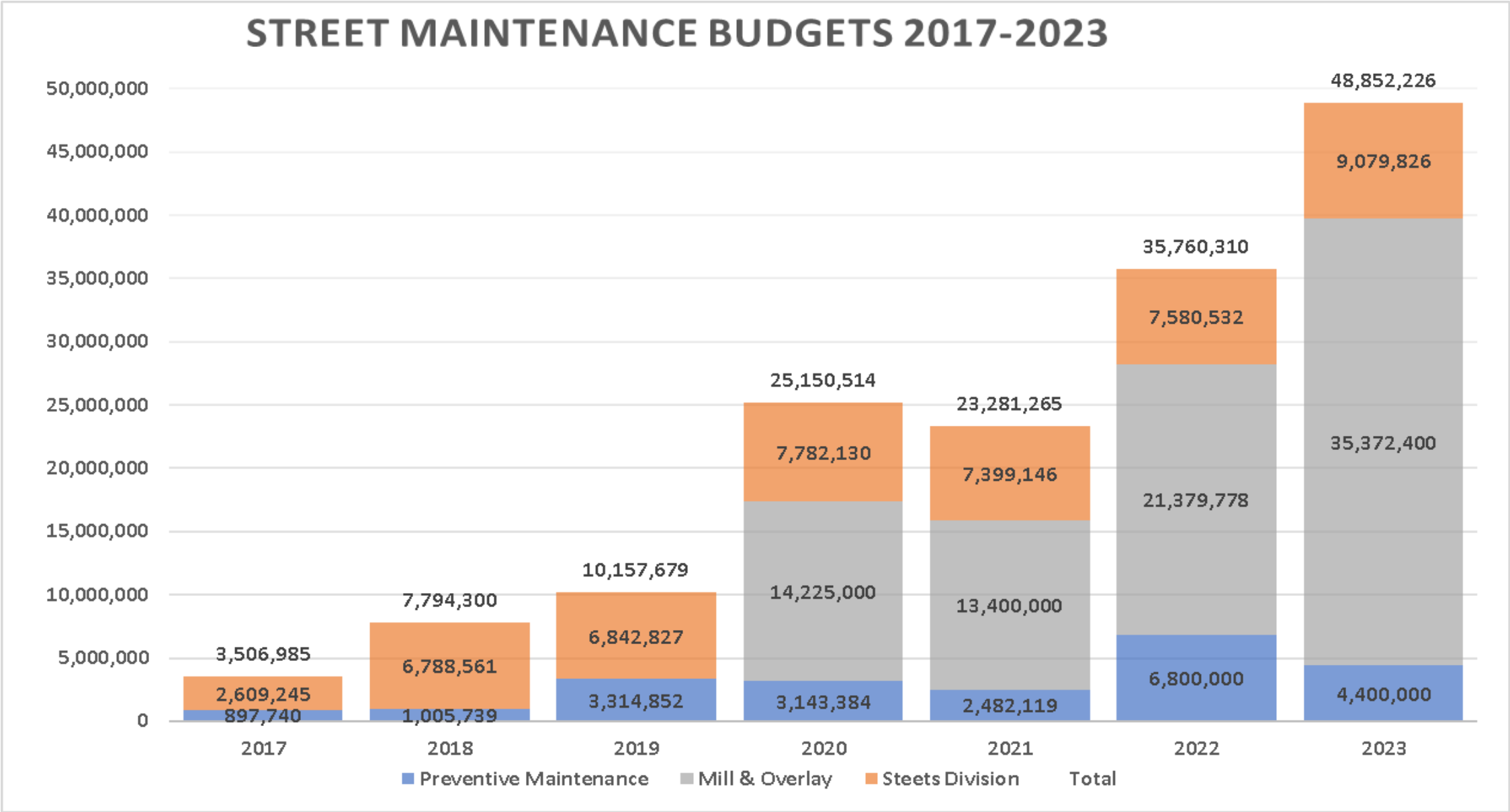
STREETS REQUIRING RECONSTRUCTION TOO EARLY

Date Range (Years)	Constructed Year Average	Number Street Segments	Length (FT.)	Condition	Reconstruction Costs	Council District(s)
0 to 20	2006	22	18,941	POOR	\$15 M	Citywide
0 to 30	1996	627	373,774	POOR	\$358 M	Citywide
0 to 40	1994	835	521,331	POOR	\$498 M	Citywide
ALL	ALL	1840	1,255,950	POOR	\$1,266 M	Citywide

Based on Field Data Set Collected on February 2022



Street Maintenance Budgets 2017-2023

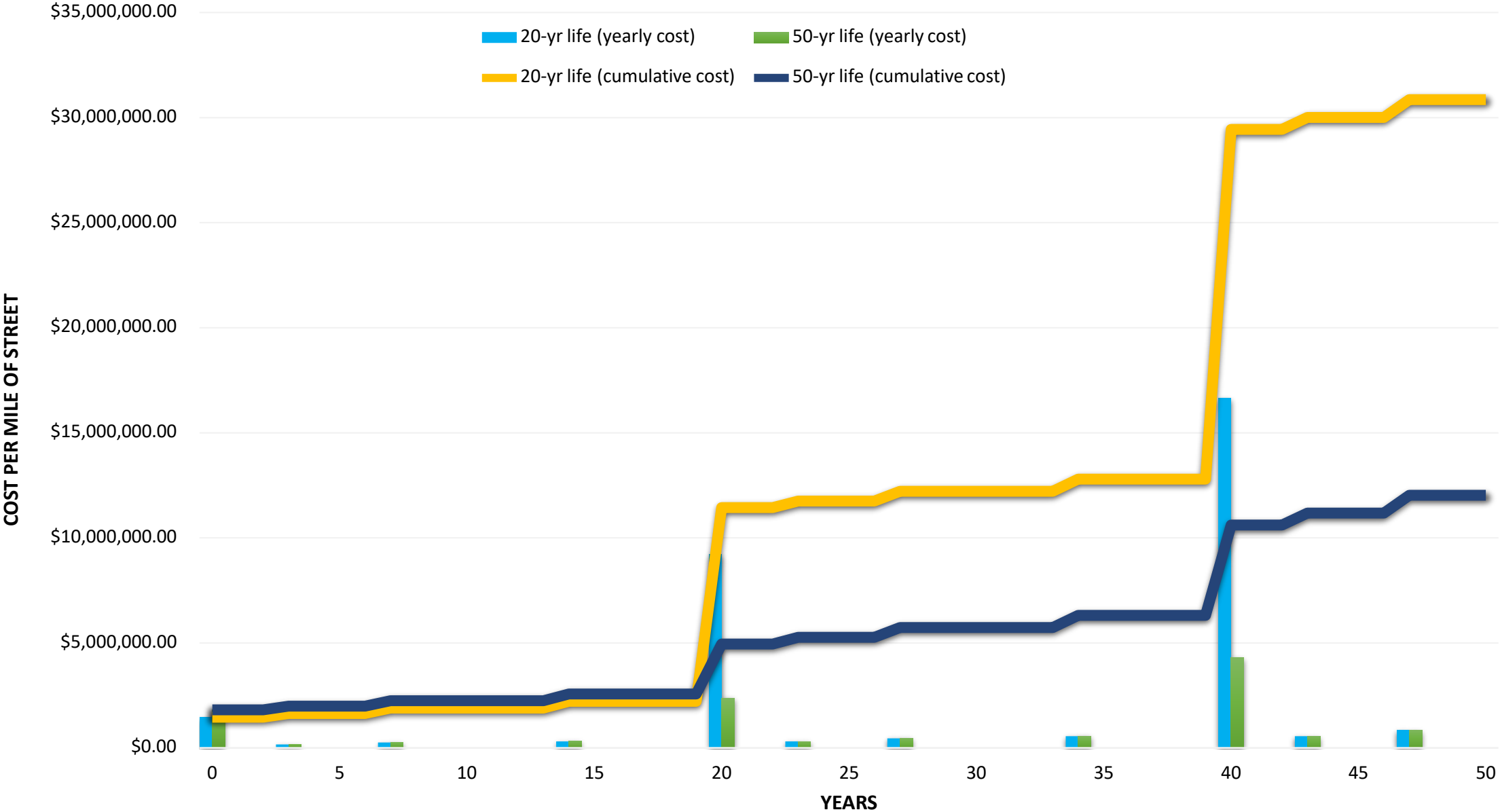


STREET DESIGN LIFE

Current Design Criteria < 20-year life

Proposed Design Criteria = 50-year life

STREET LIFE COST COMPARISON



\$11.861 BILLION

POTENTIAL SYSTEM-WIDE COST SAVINGS BETWEEN 20-YEAR AND 50-YEAR DESIGN LIFE

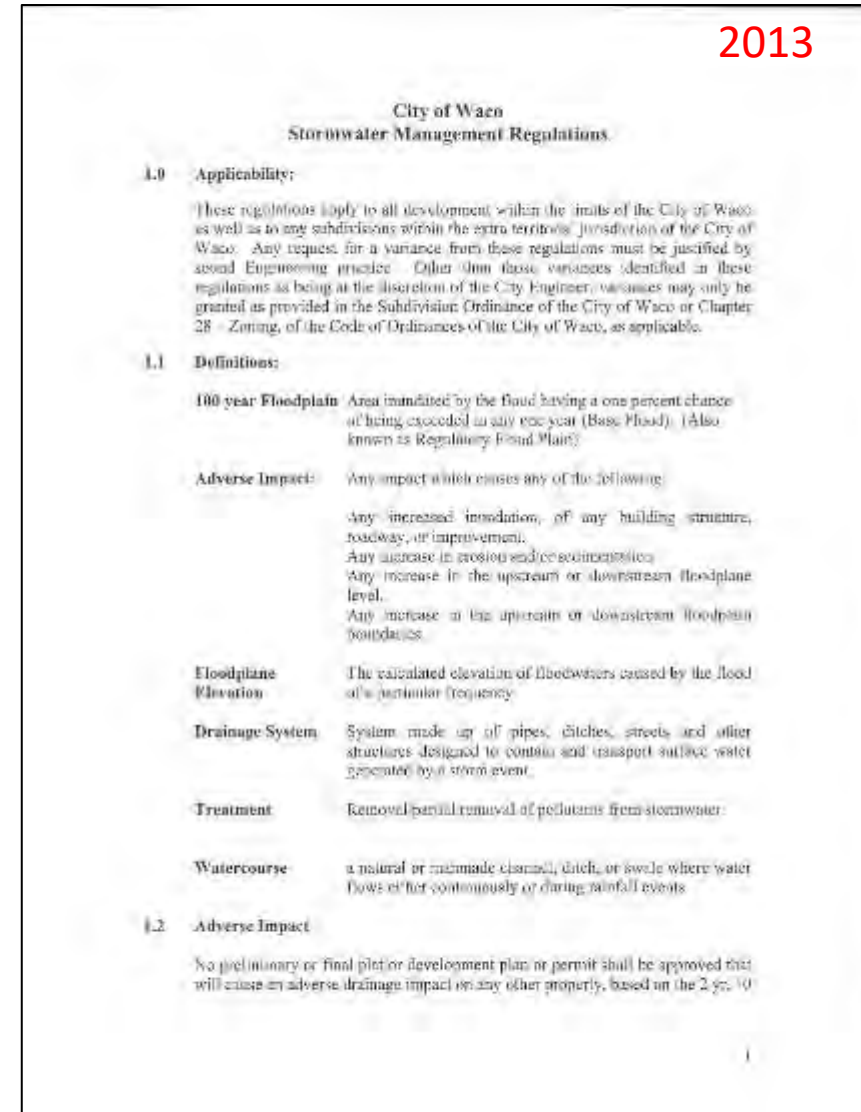
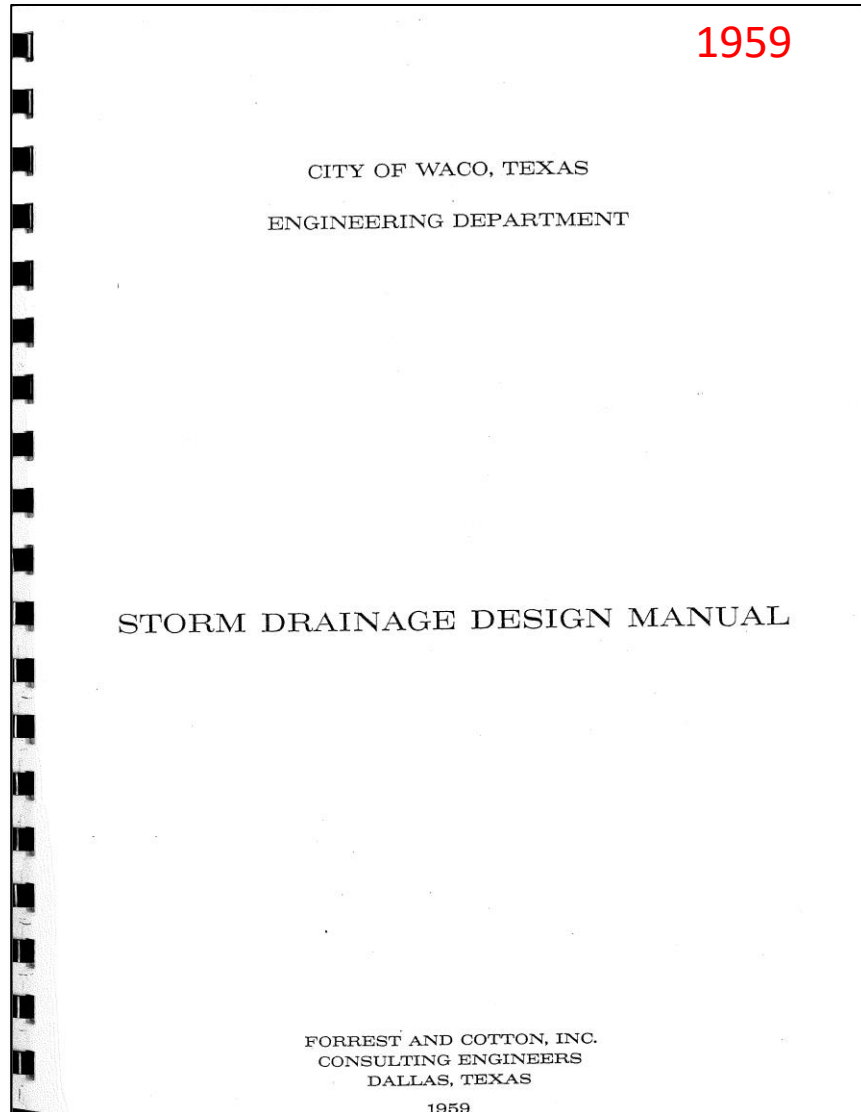
Stormwater Policy



PURPOSE OF THE STORMWATER MANAGEMENT POLICY

- *To preserve and protect the public's health, safety, and welfare;*
- *To prevent harm caused by flooding, including the loss of life and property;*
- *To protect and preserve the environment; and*
- *To promote the economic well-being of the City of Waco and to the region.*

HISTORY



\$965 Million

DRAINAGE SYSTEM REPLACEMENT COST (2023)

CONSTRUCTED IN 2014

5-YEAR DESIGN STORM



A background image showing a flooded street with several cars, including a police car, and a directional sign for various museums and centers. The title 'Stormwater Design Criteria' is overlaid in a large, bold, black serif font, with a horizontal gold bar underneath it.

Stormwater Design Criteria

PURPOSE OF THE STORMWATER DESIGN CRITERIA

- To protect lives and property.
- To protect the quality of local water resources; even more critical during drought.
- To facilitate uniformity of analysis and design.
 - Speeds the design review and approval process
- To minimize life-cycle costs and maximize value to the City and its residents
- To comply with State and Federal regulatory requirements.
- To provide equitable and sustainable drainage solutions throughout the City.
 - Taxpayers to not shoulder the burden of fixing flooding issues that can be prevented

Criteria developed by staff and consulting engineer, Walker Partners.

TEXAS CITIES' CRITERIA COMPARISON

DESIGN STORM REQUIREMENTS FOR INLETS AND STORM DRAINS

CITY	DESIGN STORM(S)
Waco (Current)	5-Year
Waco (Proposed)	25-Year
Temple	10 and 25-Year
Bryan/College Station	100-Year
Wichita Falls	100-Year
Austin	25-Year
Denton	100-Year
Fort Worth	25-Year
Frisco	100-Year
Mansfield	25-Year
San Antonio	25-Year
Dallas	100-Year

CONSTRUCTED IN 2007

No 100-YEAR FLOWPATH



No 100-YEAR FLOWPATH = BUYOUT



BUYOUT AND DEMO



\$270,000 +

No LOT-TO-LOT DRAINAGE



CAUSE

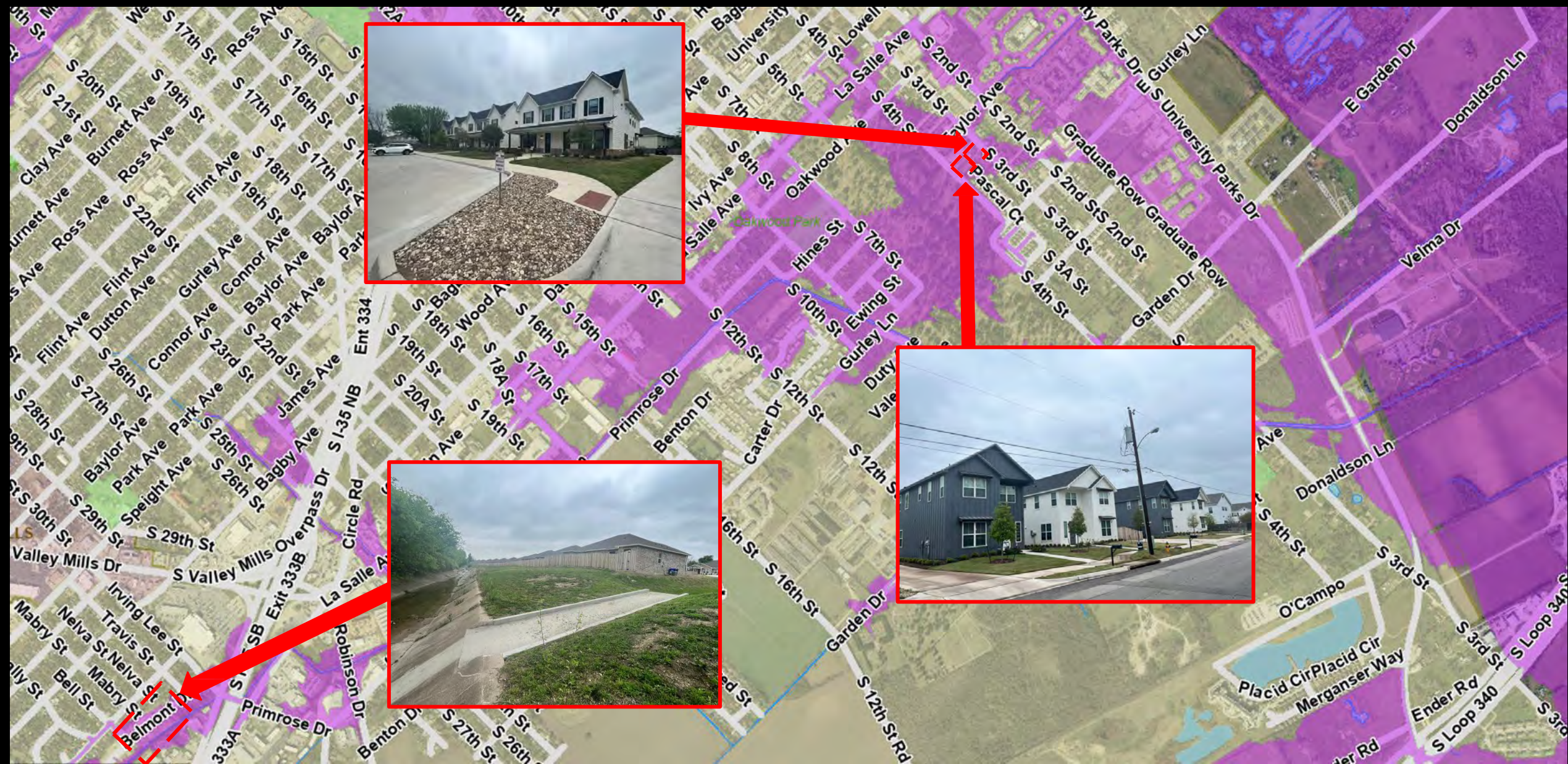


EFFECT

No DETENTION CRITERIA



RECENT HOMES CONSTRUCTED IN THE FLOODPLAIN



DRAINAGE PROBLEMS RELATED TO EXISTING CRITERIA



WHY STORMWATER QUALITY?

- Every watershed and watercourse within the City of Waco contributes to the regional water supply, which must be protected.
- Stormwater quality is potentially a catastrophic threat to Waco's water supply.
- Water supply capacity protection avoids or defers maintenance costs.
 - Dredging Lake Brazos
- Compliance with State and Federal Regulations

PROTECT OUR WATER SUPPLY!

BENEFITS OF PROPOSED CRITERIA

- **Reduces Flooding**
- **Enhances Safety and Mobility**
- **Utilizes Current Design Methods (Industry Standards)**
- **Sustainable Development for the City**
 - Reduces the costs to City, tax burden on residents and businesses
 - Increases equity
 - Fair and beneficial to all parties



Process to Date And Next Steps

EFFORTS TO DATE- WATER AND SEWER DESIGN

- Standards are in draft form
 - (AGC, HOTBA, ASCE/TSPE, monthly Developers' Meeting)
- Have been in use for more than a year

EFFORTS TO DATE- STREET & STORMWATER

- Multiple meetings with design community, development community, and construction community this year
 - (AGC, HOTBA, ASCE/TSPE, monthly Developers' Meeting)
- Website opened for comments for 3 months
- Prepared a response to each comment
 - Significant adjustments have been made where practical and appropriate

FUTURE EFFORTS

- Update fiscal impact of proposed revisions (initial review indicates some increases and some decreases).
- Host follow-up multiple meetings with design community, development community, and construction community to present adjustments made to comments received (AGC, HOTBA, ASCE/TSPE, monthly Developers' Meeting)
- Host individual meetings as requested
- Finalize the Policy and Design Criteria for Water, Sewer, Streets and Stormwater

TIMELINE

Next Steps	Date
Receive direction from Council	Today
Develop comprehensive implementation plan	October 2023
Provide the detailed response to engineering, development and construction communities on comments received	November 2023
Meet with stakeholders as needed	November-December 2023
Draft City Ordinances	January 2024
Submit ordinances to Council for approval	February 2024



QUESTIONS