

Overview of Draft Infrastructure  
Masterplans and Capital Improvements  
Program Advisory Committee (CIPAC)  
Recommendations to City Council

October 2, 2023

# Presentation Outline



## **Overview of Draft Masterplans**

Water and Wastewater  
Mobility Plan

## **Overview of Impact Fees**

## **Capital Improvements Program Advisory Committee**

Role  
Work to date  
Recommendations to City Council

Section 1

# Water and Wastewater Masterplan Overview

Purpose

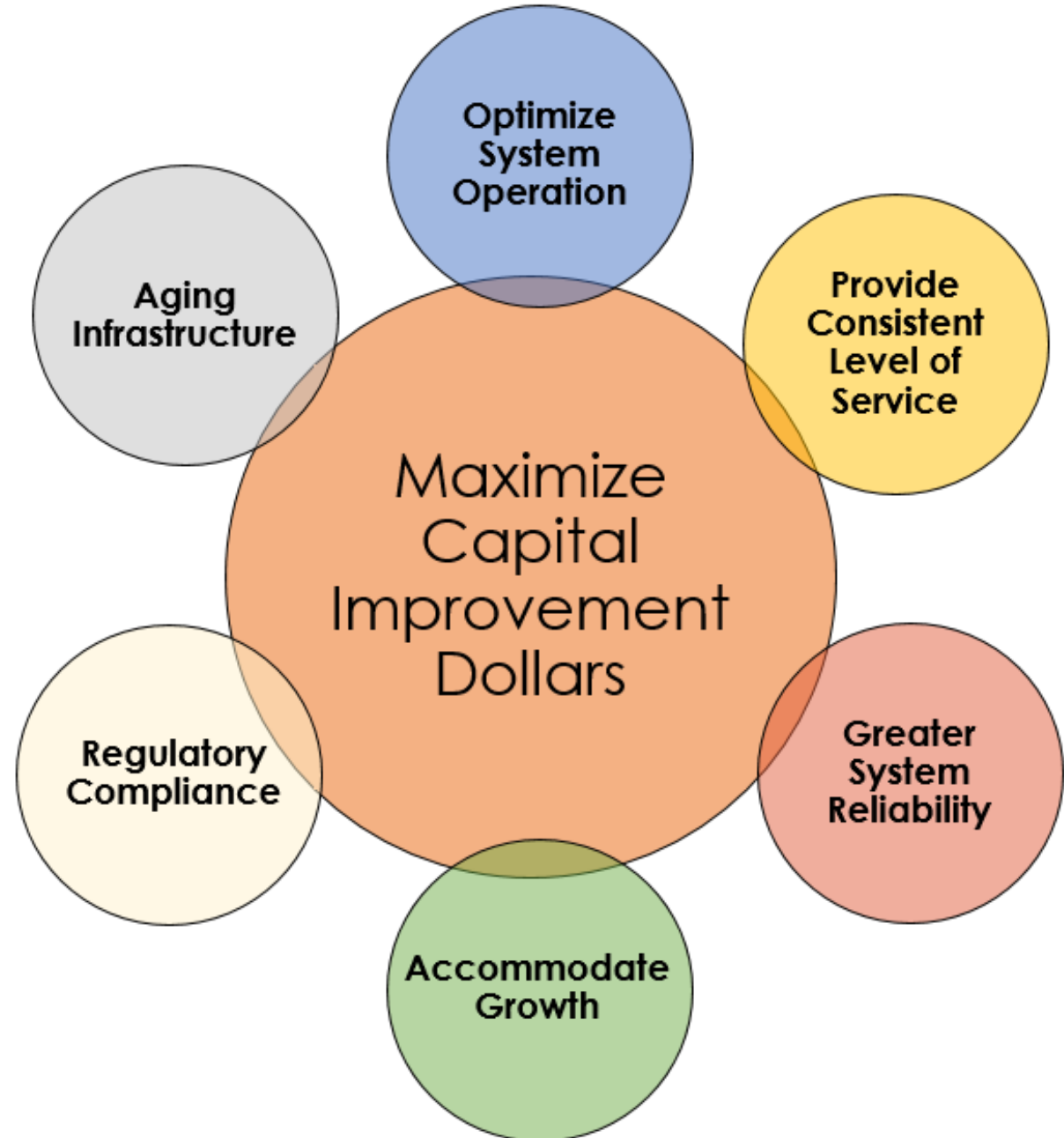
Land Use / Projected Growth

Water

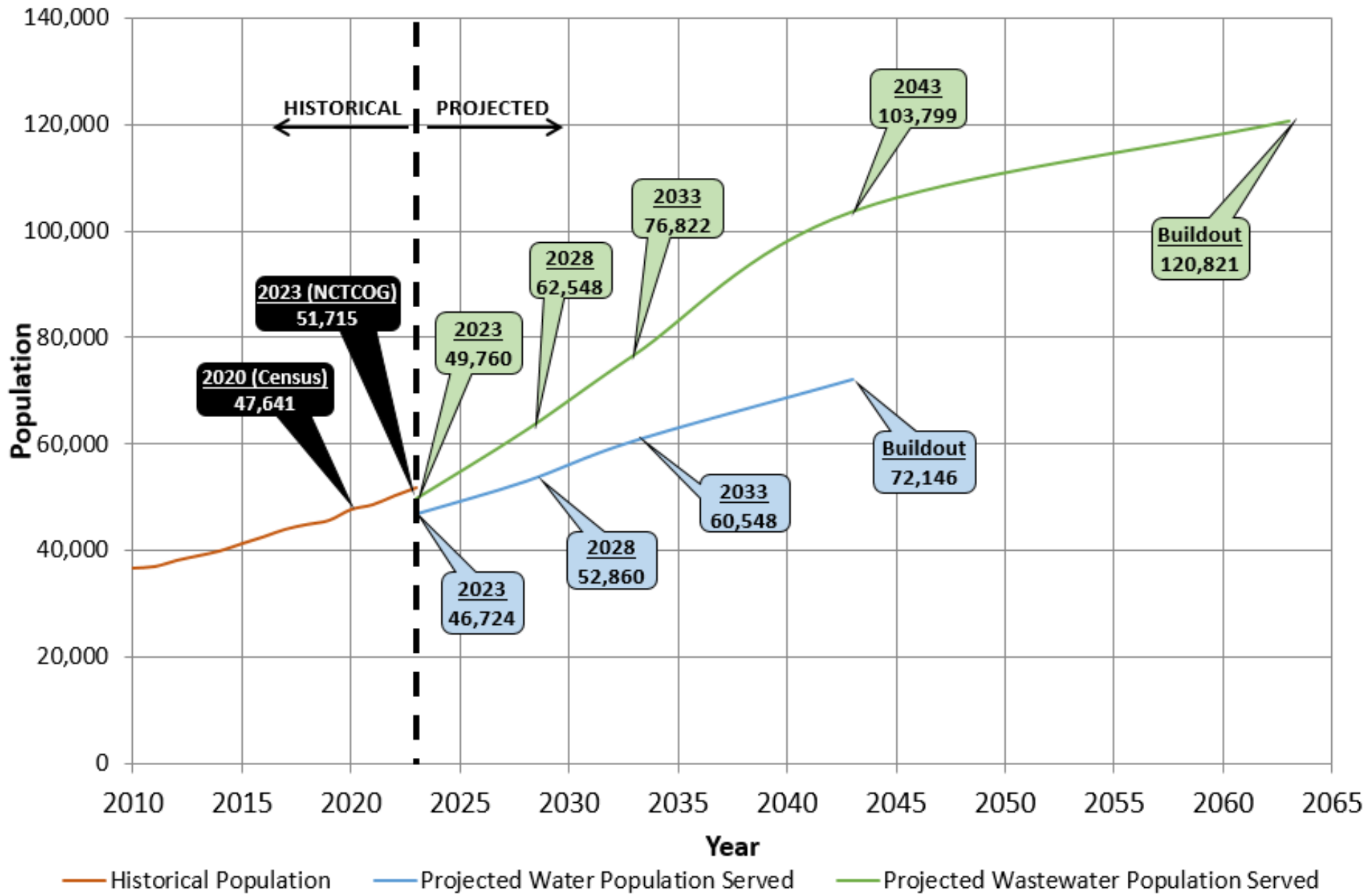
Wastewater

# MASTER PLAN GOALS AND DRIVERS

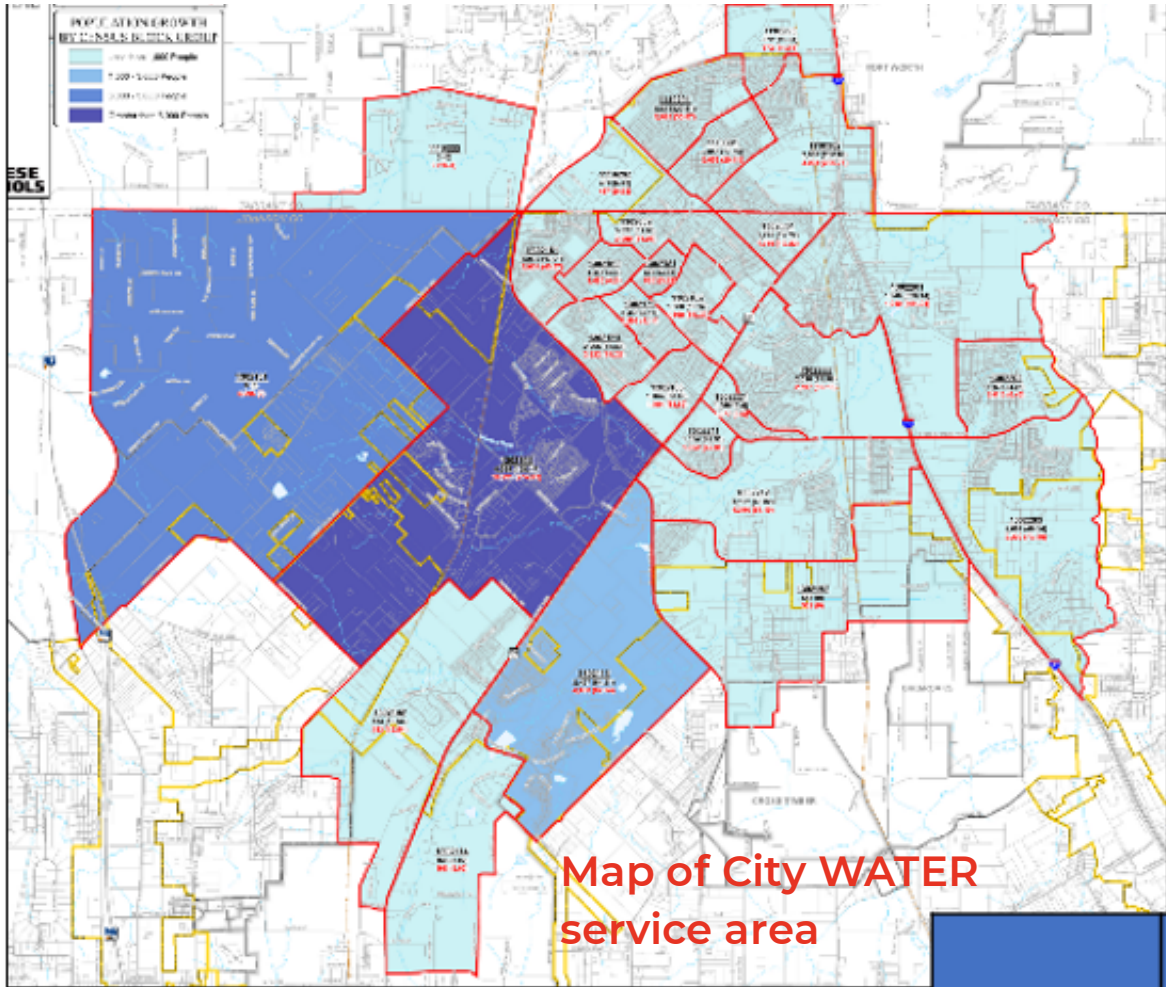
- Provide a roadmap for the future
- Identify existing system deficiencies and future needs
- Establish drivers for triggering CIP
- Master Plan CIP serves as the basis for the Impact Fee Eligible CIP



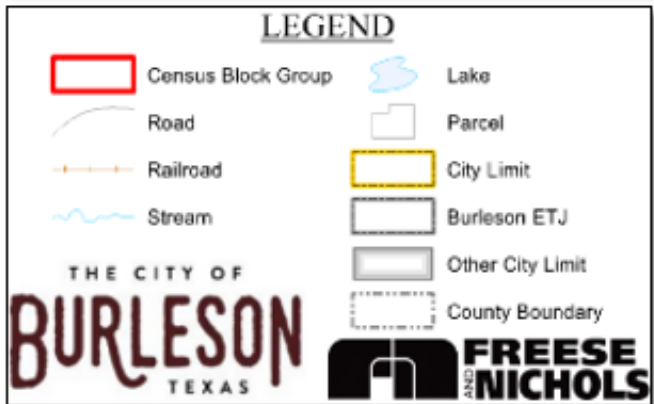
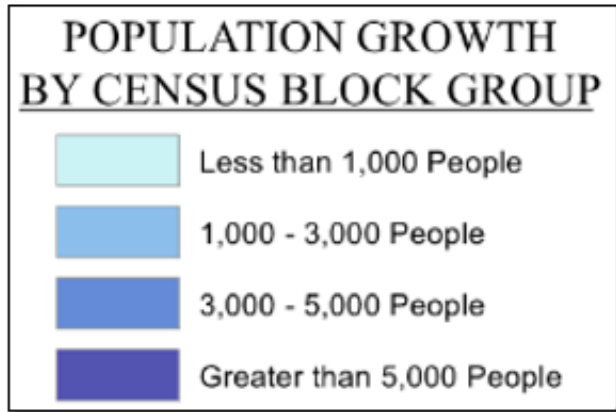
# POPULATION SERVED PROJECTIONS



# WATER SERVED LAND USE ASSUMPTION SUMMARY



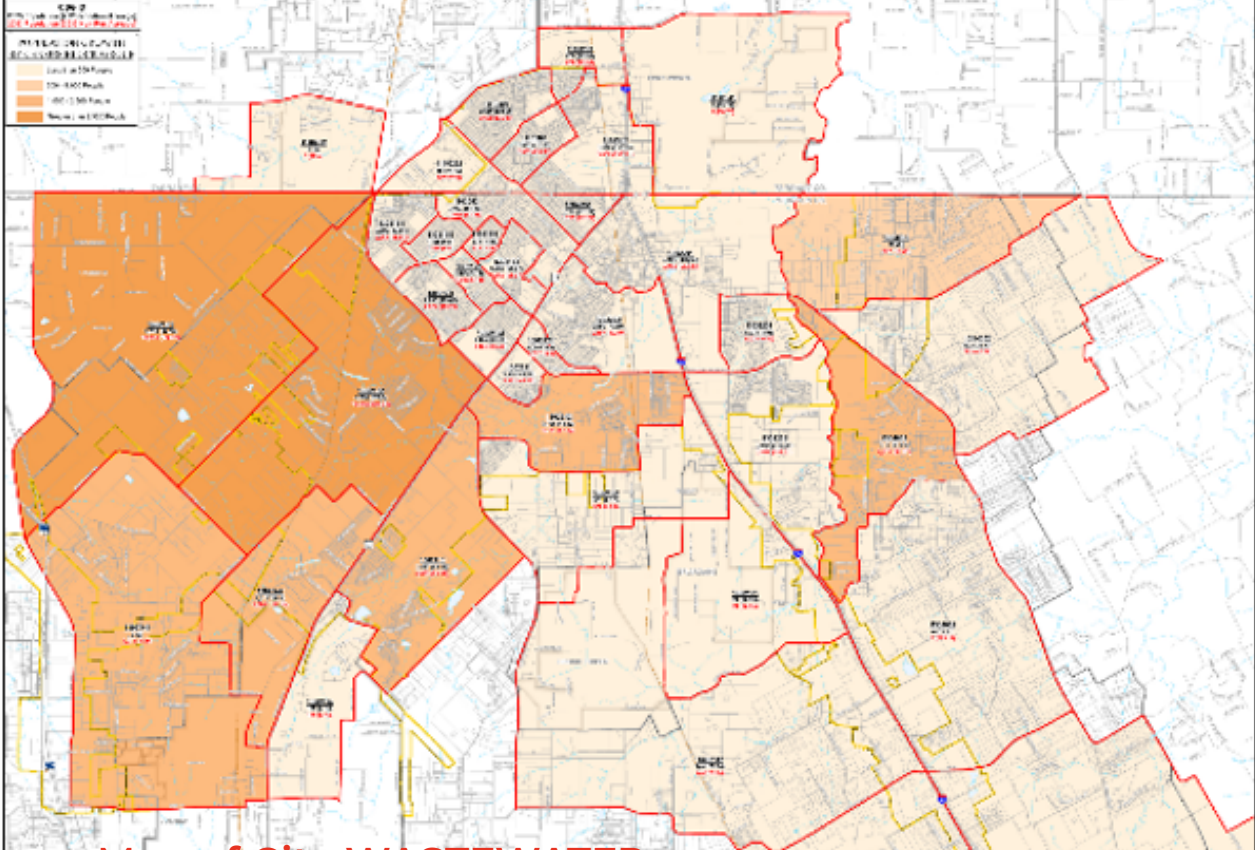
Map of City WATER service area



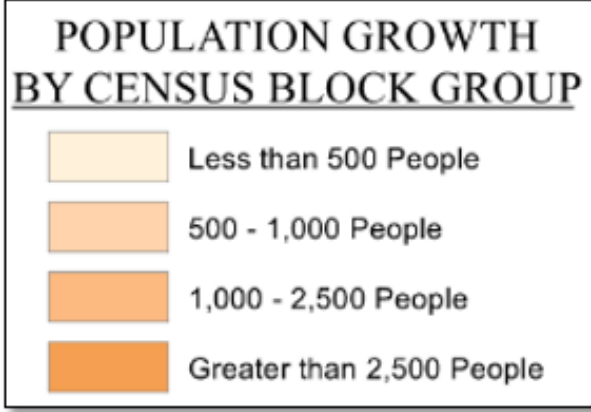
Year	Served Population	Served Non-Residential Acreage (Acres)
Existing	46,724	1,215
5-Year	52,860	1,465
<b>10-Year</b>	<b>60,548</b>	<b>1,717</b>
Buildout	72,146	2,000

\*Map showing 10-year projections

# WASTEWATER SERVED LAND USE ASSUMPTION SUMMARY



Map of City WASTEWATER service area



**LEGEND**

- Census Block Group
- Lake
- Road
- Parcel
- Railroad
- City Limit
- Stream
- Burleson ETJ
- Other City Limit
- County Boundary

THE CITY OF  
**BURLESON**  
TEXAS

Year	Served Population	Served Non-Residential Acreage (Acres)
Existing	49,760	1,795
5-Year	62,548	2,383
<b>10-Year</b>	<b>76,822</b>	<b>2,730</b>
20-Year	103,799	4,397
Buildout	120,821	6,523

\*Map showing 10-year projections

# WATER SYSTEM CIP

Project Driver	Water CIP Cost
Hydraulic Restriction	\$ 11,532,500
Growth/Development	\$ 24,662,000
Fire Flow/Looping	\$ 4,027,800
Regulatory/Operational	\$ 37,631,600
<b>TOTAL</b>	<b>\$ 77,853,900</b>

**LEGEND**

*Recommended Improvement by Driver*

- Regulatory / Operational
- Hydraulic Restriction
- Growth / Development
- Fireflow / Looping

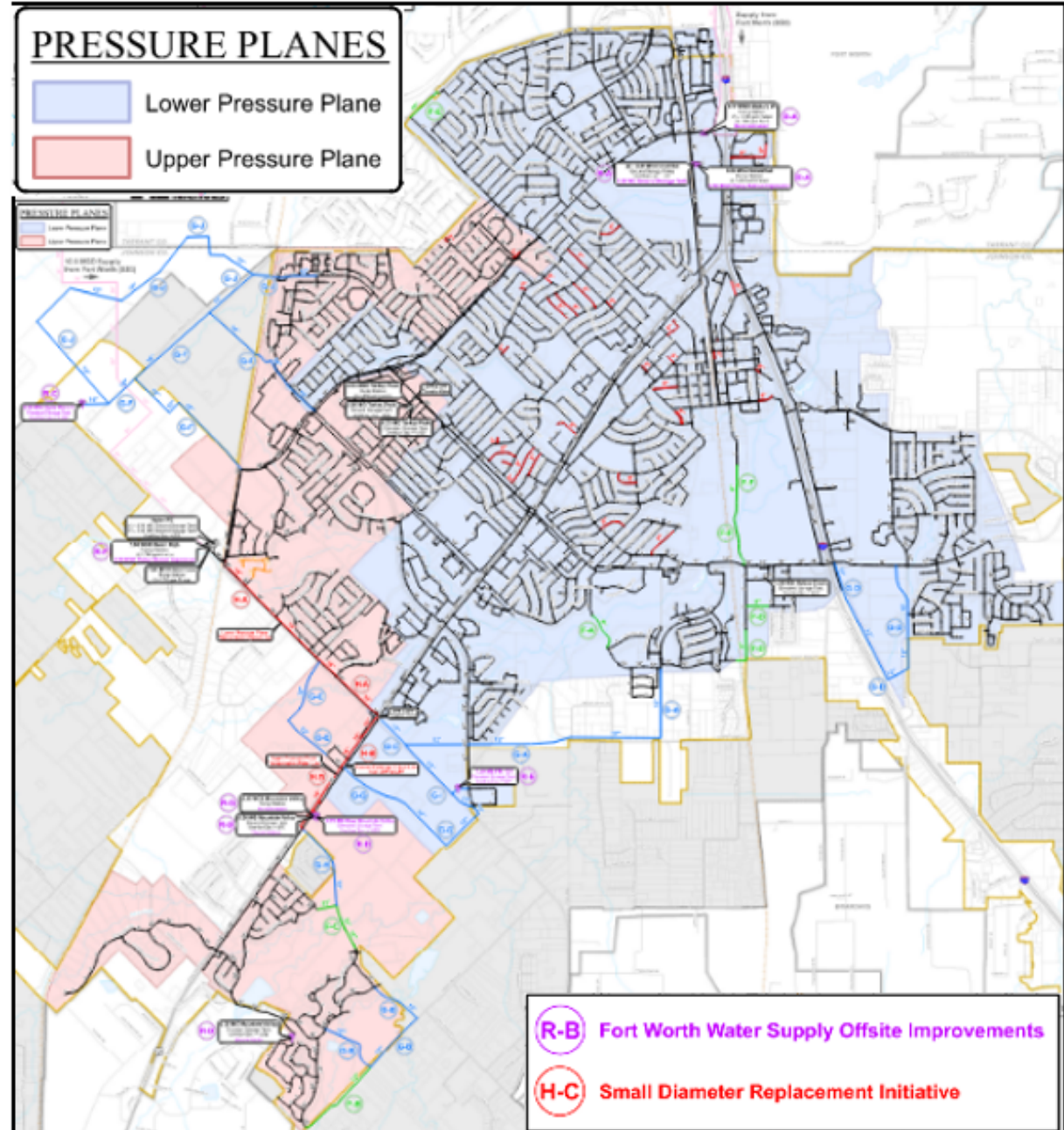
*Existing Water System*

- Transfer Valve
- Pump Station
- Ground Storage Tank
- Elevated Storage Tank
- Under Design/Construction Water Line

10" and Smaller Water Line  
12" and Larger Water Line  
Fort Worth Supply Line  
Road  
Railroad  
Stream  
Lake  
Parcel  
City Limit  
Burleson ETJ  
Other City Limit  
County Boundary

THE CITY OF  
**BURLESON**  
TEXAS

**FREESE**  
**NICHOLS**





# WATER CIP SUMMARY

## Regulatory/Operational Improvements

- Offsite Fort Worth water supply improvements
- Industrial Pump Station rehabilitation / expansion
- Hulen Pump Station added pumping capacity
- Additional Elevated Storage



# WATER CIP SUMMARY - CONTINUED

- Hydraulic Restriction Improvements

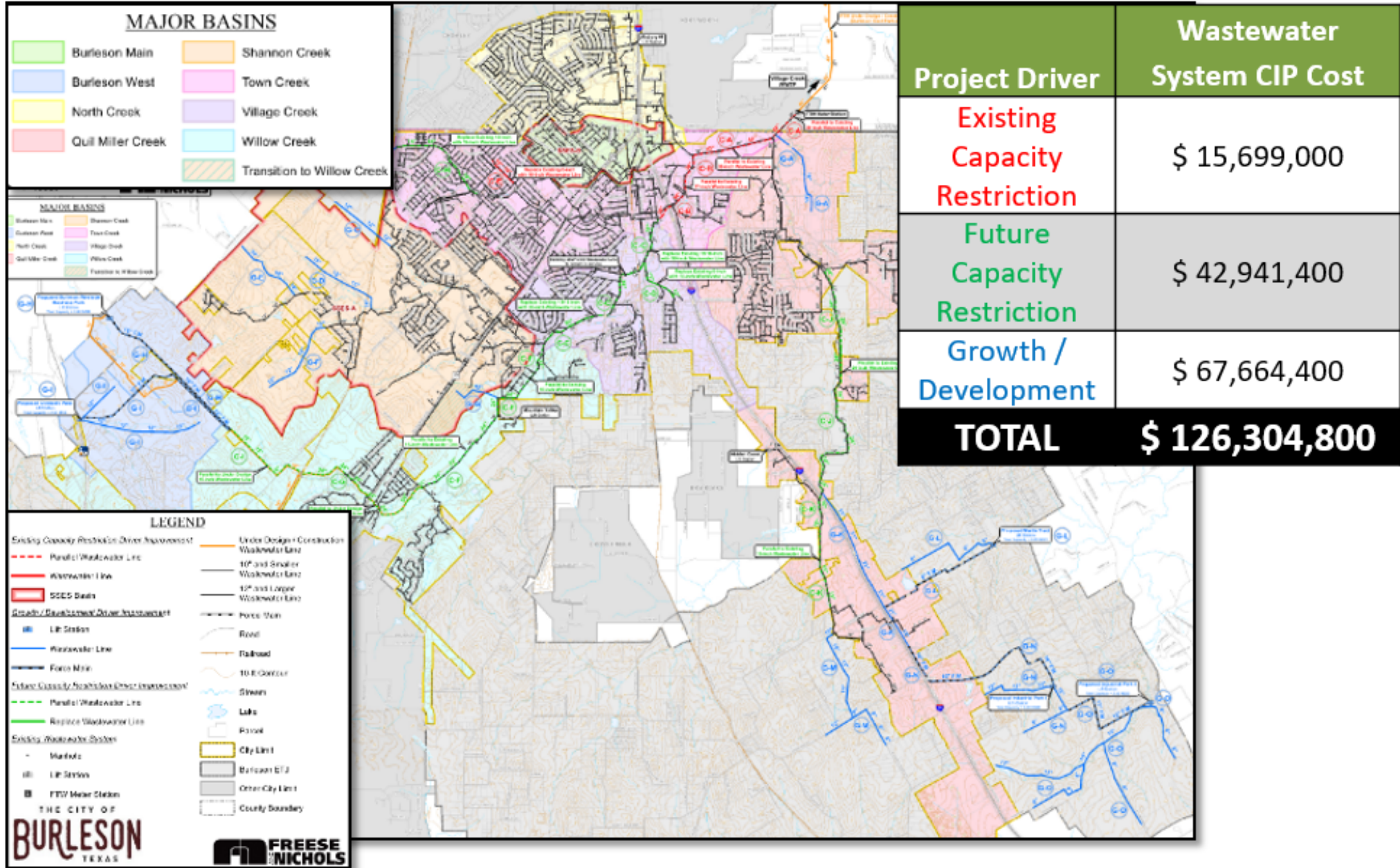
Hulen Street LPP 16-inch transmission main

- Growth/Development Improvements

Hyder Ranch extension



# WASTEWATER CIP (BUILDOUT)



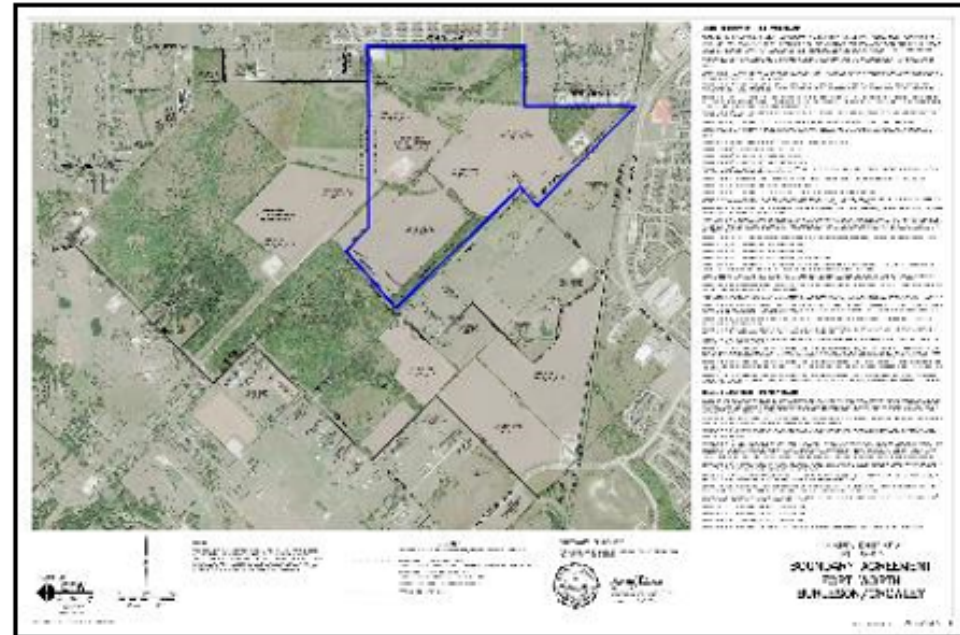
# WASTEWATER CIP SUMMARY

- Hydraulic Restriction Improvements

Village Creek Parallel Interceptor

- Growth/Development Improvements

Chisholm Summit / Craftmasters / Hyder Ranch service expansions



Section 2

# Mobility Plan Overview

Thoroughfares

Pedestrian Facilities

Bicycle Facilities

# What is the 2022 Mobility Plan?

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## **Draft 2022 Mobility Plan:**

- **Seeks to replace the “2015 Master Mobility Plan” (the last such plan adopted by Council)**
- **Retains and updates the "Thoroughfare Plan" component of the previous plan**
- **Provides a framework for and guidance on addressing multi-modal including pedestrian, bicycle, trail, and roadway mobility needs across Burleson**

# Mobility Plan Document Outline

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- **Chapter 1: Existing Conditions** contains a brief analysis of the current state of Burleson's roadway network and demographic makeup.
- **Chapter 2: Public Engagement** depicts the engagement throughout the duration of this project.
- **Chapter 3: Modeling and Mapping** provides an in-depth overview of the travel demand modeling process conducted for the Mobility Plan.
- **Chapter 4: Pedestrian Network** summarizes the status of Burleson's current pedestrian network.
- **Chapter 5: Bicycle and Trail Network** reviews Burleson's current bicycle and trail network and summarizes the updates recommended using a prioritization methodology.
- **Chapter 6: Implementation** summarizes the multimodal priority list including roadway, pedestrian, and bicycle/trail projects, policy guides; and specific strategies and actions the City of Burleson can implement to follow through on the 2022 Mobility Plan's recommendations.

# Modeling

## Scenario Modeling Overview

Scenario	Demographics Used	Roadways Used
Base Year Model	Existing (2020)	Previously adopted 2015 Master Mobility Plan
2015 Master Mobility Plan Build Out	Build Out Demographics	Previously adopted 2015 Master Mobility Plan
Build Out without ETJ Roads	Build Out Demographics	2022 Thoroughfare Plan with very limited ETJ roadway connections
2022 Thoroughfare Plan	Build Out Demographics	2022 Thoroughfare Plan with key ETJ connections added back in to the model



# Modeling: 2015 MTP

## 2015 MASTER THOROUGHFARE PLAN EXISTING CONDITIONS MODELING RESULTS

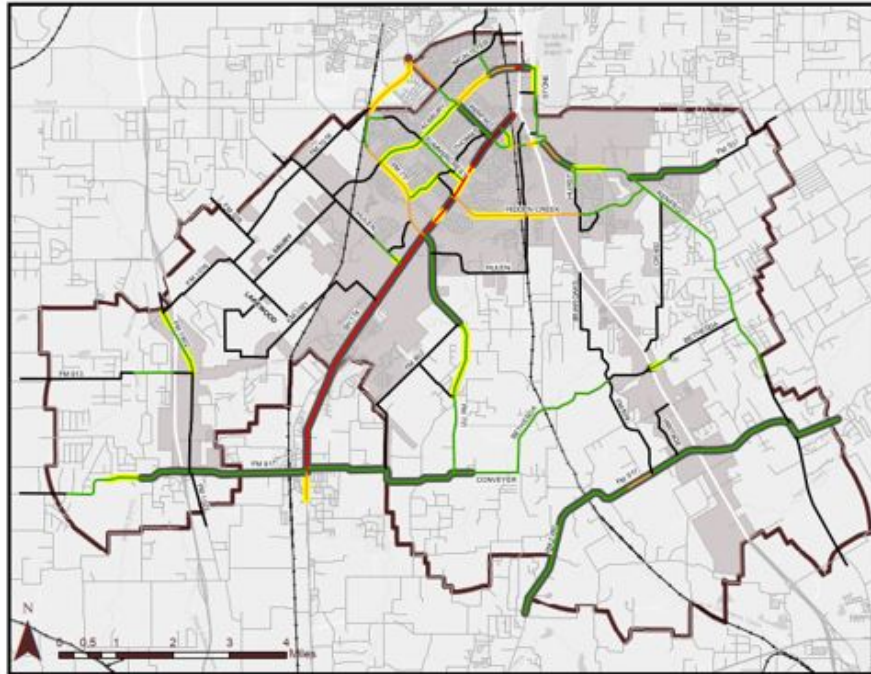
**LEGEND**

**DAILY VOLUMES**

- 0 to 4,999 Vehicles Per Day
- 5,000 to 14,999 Vehicles Per Day
- 15,000 to 24,999 Vehicles Per Day
- 25,000 to 39,999 Vehicles Per Day
- 40,000 or Greater Vehicles Per Day

**VOLUME/CAPACITY**

- LOS A - C (< 0.65)
- LOS D (0.65 - 0.80)
- LOS E & F (> 0.80)
- Burlson City Limits
- Planning Area



*How congested is traffic today based on 2015 Thoroughfare Plan roadways?*

## 2015 MASTER THOROUGHFARE PLAN BUILD OUT MODELING RESULTS

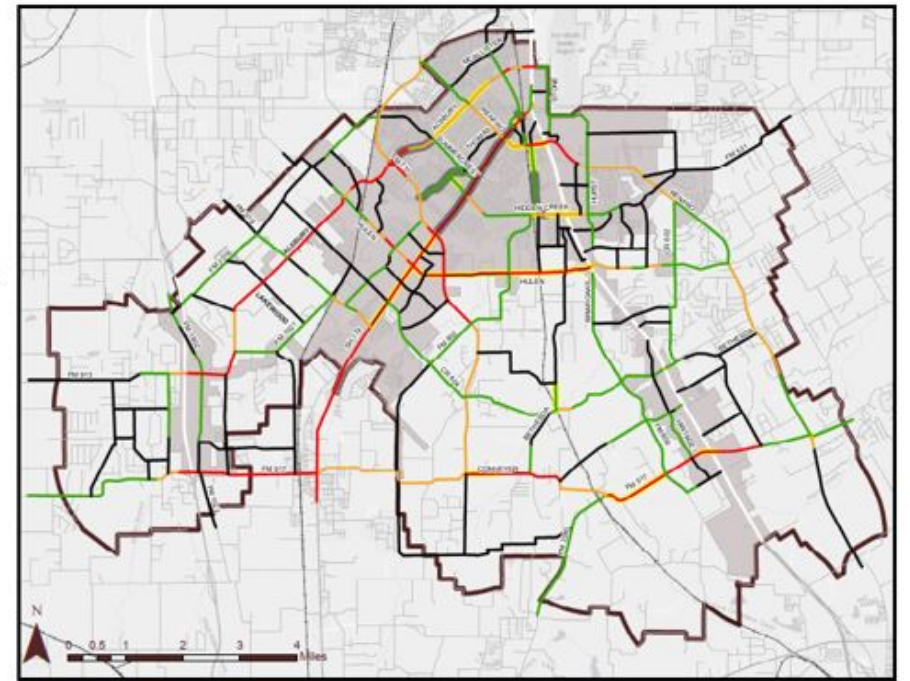
**LEGEND**

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**VOLUME/CAPACITY**

- LOS A - C (< 0.65)
- LOS D (0.65 - 0.80)
- LOS E & F (> 0.80)
- Burlson City Limits
- Planning Area



*How congested will traffic be at build out based on 2015 Thoroughfare Plan roadways?*

# Modeling: 2015 MTP Build Out: LOS D – F Roads

Road Segment	Limits	Volume	Capacity	Volume/ Capacity	LOS
Alsbury Boulevard	FM 731/John Jones Drive to Summercrest Boulevard	29,900	30,000	0.99	E/F
Alsbury Boulevard	Summercrest Boulevard to Hemphill Street	24,100	30,000	0.80	D
SH 174/Wilshire Boulevard	FM 919 to FM 731/John Jones Drive	38,600	51,000	0.76	D
SH 174/Wilshire Boulevard	FM 731/John Jones Drive to IH-35W	48,100	51,000	0.94	E/F
Hulen Street	SH 174/Wilshire Boulevard to IH-35W	40,300	51,000	0.79	D
Renfro Street	SH 174/Wilshire Boulevard to Stone Road	36,100	51,000	0.71	D
Hidden Creek Parkway	Dobson Street to Hurst Road	23,400	30,000	0.78	D
FM 917	FM 2280 to FM 809	35,400	51,000	0.69	D
Dobson Street	Renfro Street to Hidden Creek Parkway	6,800	8,500	0.80	E/F

***At build out, several corridors are projected to have significant congestion and traffic based on the 2015 Thoroughfare Plan roadways – additional thoroughfares will be needed***

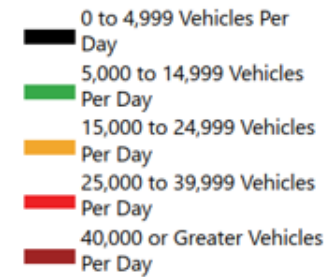
# Modeling: Key Recommendations

1. Hulen Street is critical for east/west traffic
2. Lakewood Drive/Alsbury Boulevard will operate at an acceptable LOS as a four-lane divided facility
3. North/south connection is needed between FM 913 and FM 917
4. North/south connection is needed between Bethesda Road and FM 917 east of IH-35
5. East/west connection is needed between FM 731/John Jones Drive and Bethesda Road west of IH-35

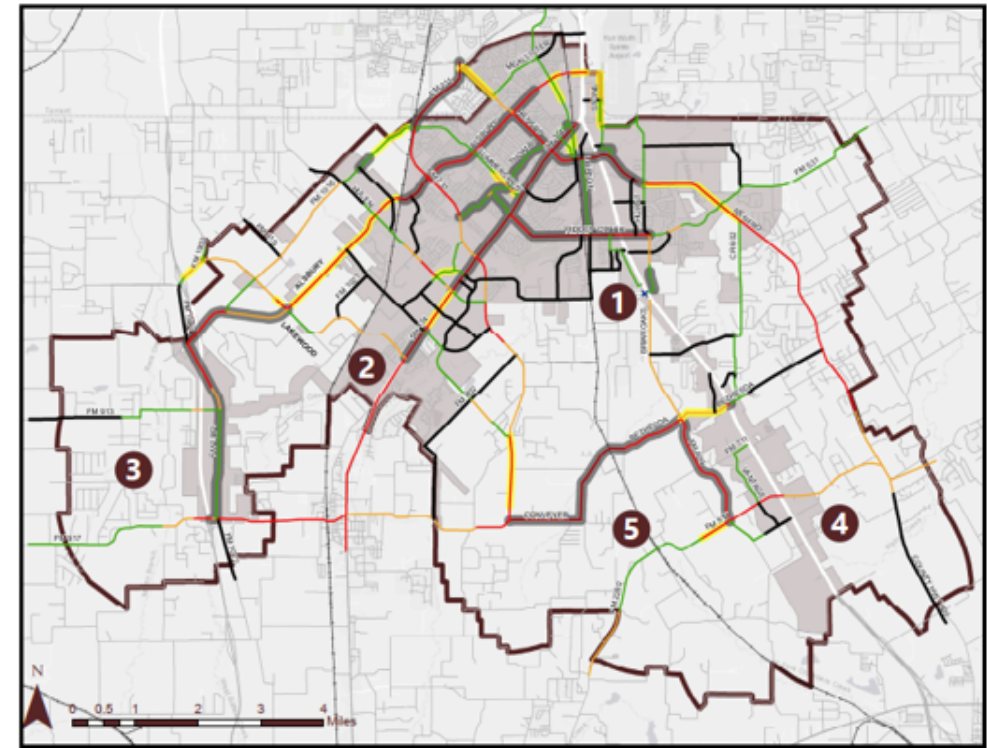
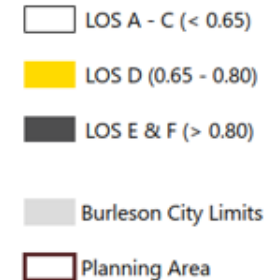
## 2022 MASTER THOROUGHFARE PLAN BUILD OUT WITHOUT ETJ MODELING RESULTS

### LEGEND

#### DAILY VOLUMES



#### VOLUME/CAPACITY



# Proposed Changes to the 2015 MMP

## LEGEND

### PROPOSED CHANGES

2015 MMP Roadway

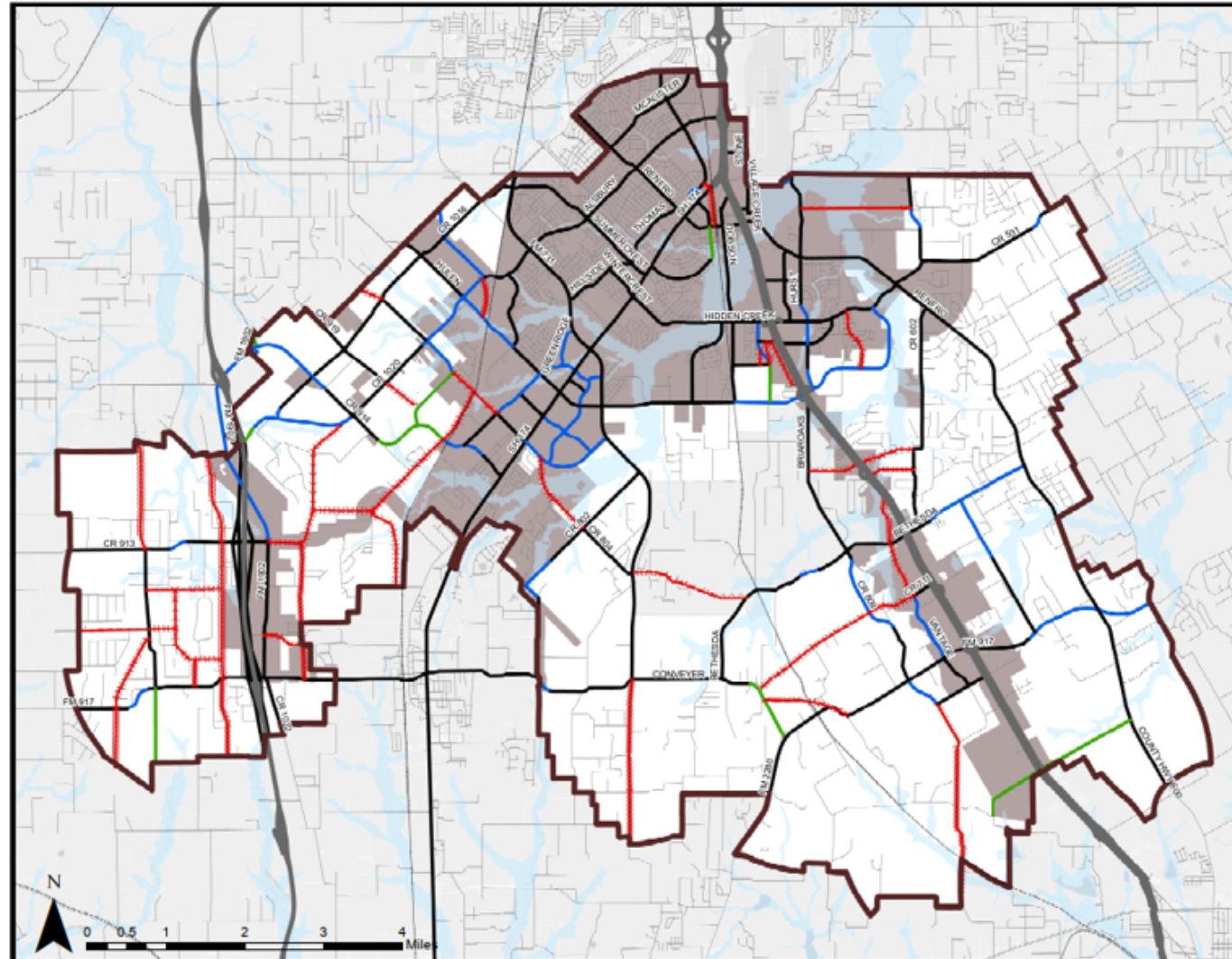
New

Removed

Floodplains

Planning Area

Burleson City Limits



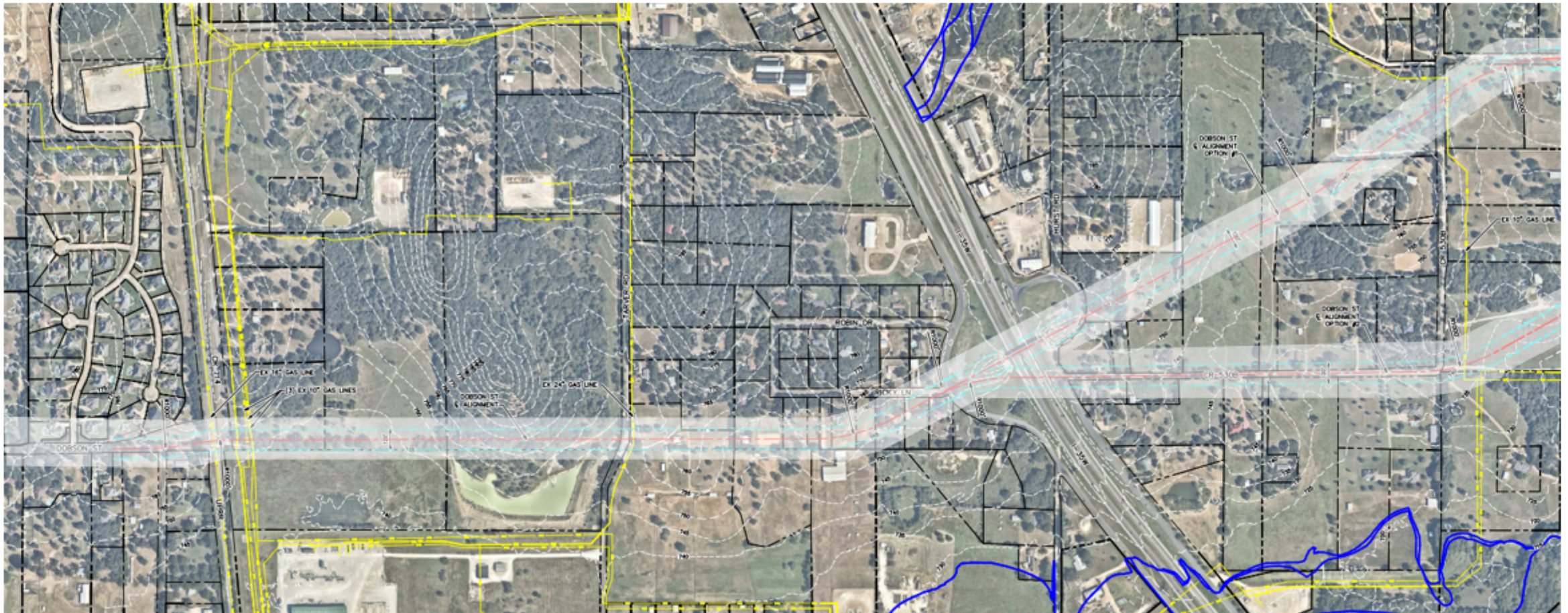
# Alignment Evaluation

Segment	Roadway	Limits
1	Lakewood Drive	From CR 1016 to Alsbury Boulevard
2	Wicker Hill Road	SH 174/Willshire Boulevard to FM 731/John Jones Drive
3	Greenridge Drive	From Hulen Street to Lakewood Drive
4	Hidden Creek Parkway	From Renfro Street to Houston Street
5	Alsbury Boulevard	From FM 731/John Jones Drive to Alsbury Court
6	Hulen Street	From Dobson Street to Hidden Creek Parkway/CR 602*
7	Hulen Street Bridge	BNSF Bridge Crossing

*Note: Not organized by priority*

# Example Alignment Evaluation

## Hulen Street



# 2022 Thoroughfare Plan

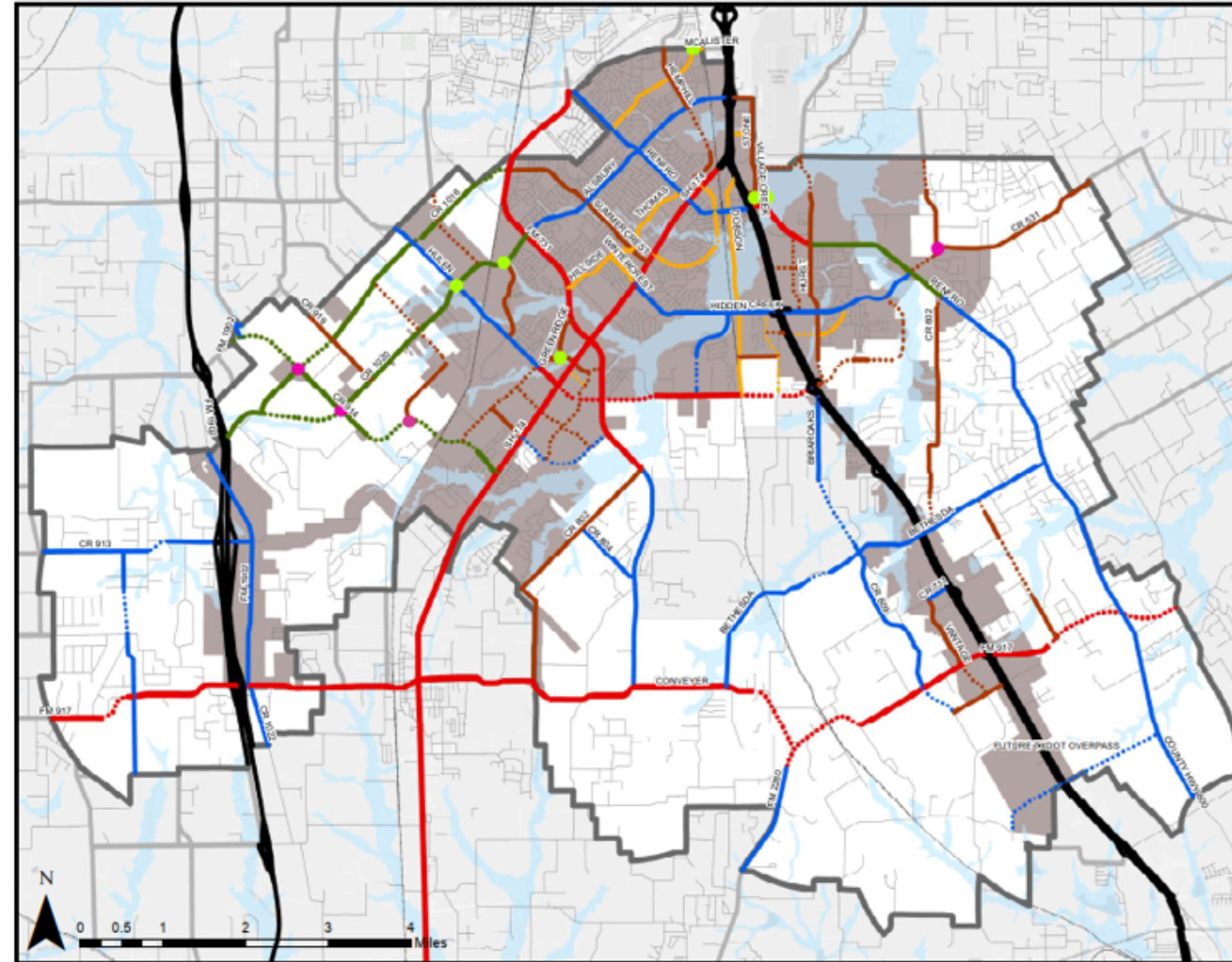
## LEGEND

### DAILY VOLUMES

- Freeway
- Principal Arterial
- Major Arterial
- Minor Arterial
- Major Collector
- Minor Collector

*Dotted lines indicate a future facility*

- Floodplains
- Planning Area
- Burleson City Limits
- Existing Roundabout
- Future Potential Roundabouts or Intersection Enhancements



# Priority Roadway Projects

PRIORITY ROADWAY PROJECT NAME	PROJECT LIMITS	PROJECT LENGTH
Hulen Street Realignment/Construction	From SH 174/Wilshire Boulevard to Hidden Creek Parkway	1.57 miles
Alsbury Boulevard Reconstruction	From FM 731/John Jones Drive to Alsbury Court	1.63 miles
Lakewood Drive	From CR 1016 to Alsbury Boulevard	1.50 miles
Hidden Creek Parkway	From Renfro Street to Houston Street (Existing Road Ending)	0.45 miles
Greenridge Drive	From Hulen Street to Lakewood Drive	1.30 miles
Wicker Hill Drive	From SH 174/Wilshire Boulevard to FM 731/John Jones Drive	1.29 miles

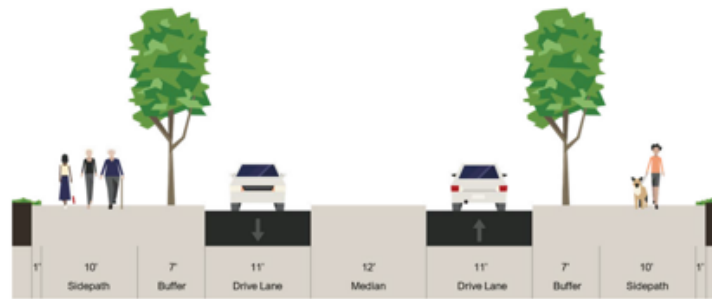


# Cross Sections

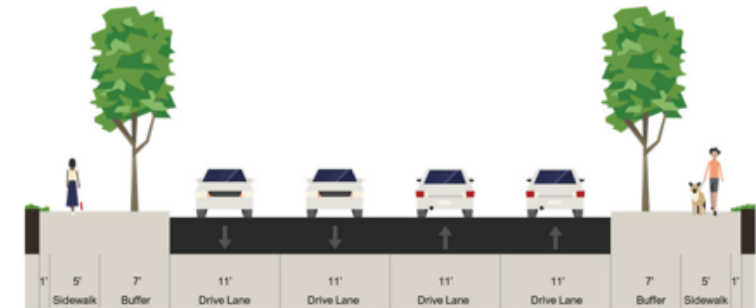
## Major Collectors

- Typical reduced to two lanes (previously four)
- Four lane option still exists (where vehicles per day exceeds 15,000)

**Major Collector – 70' ROW**



**Major Collector Four-Lane Option – 70' ROW**

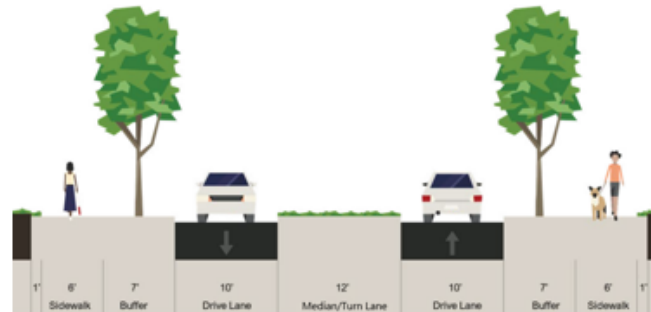


## Minor Collectors

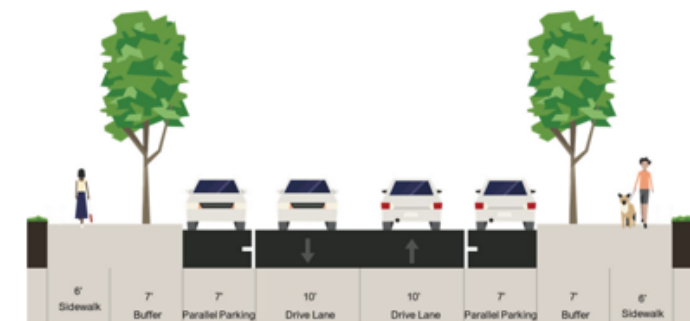
Context sensitive application

Two lanes, either with a median or parallel parking on either sides

**Minor Collector – 60' ROW**

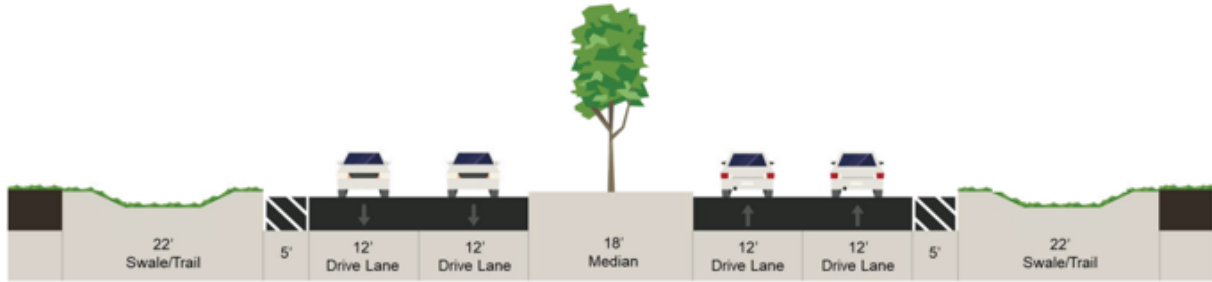


**Minor Collector with Parallel Parking – 60' ROW**

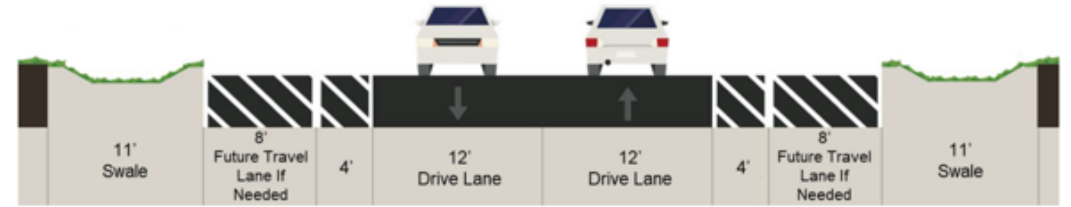


# Cross Sections – Rural Context

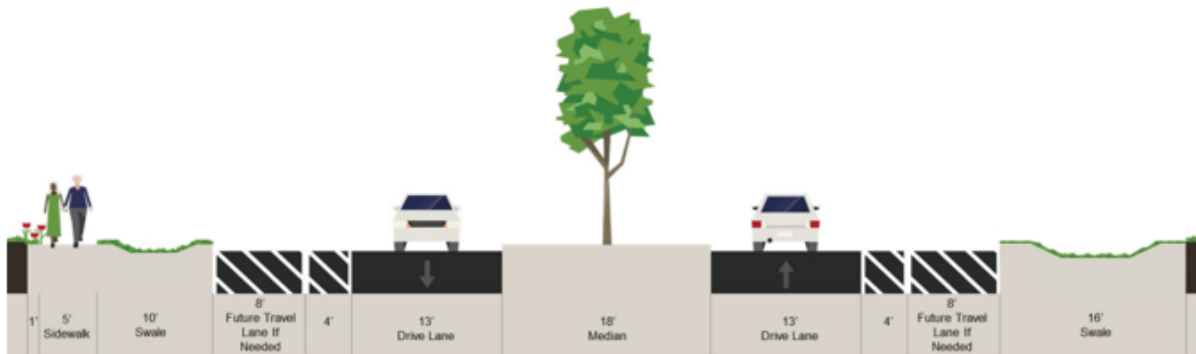
RURAL MAJOR ARTERIAL - 120' ROW



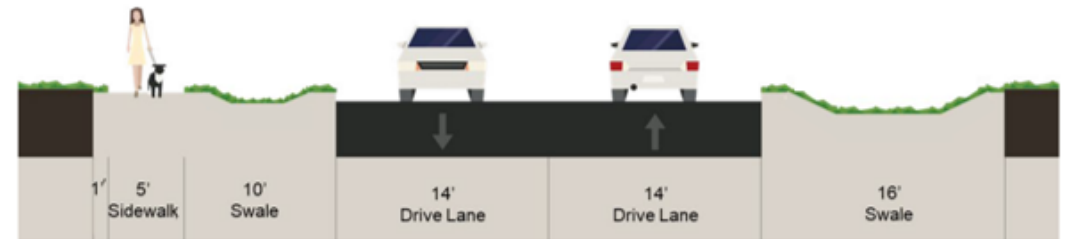
RURAL MAJOR COLLECTOR - 70' ROW



RURAL MINOR ARTERIAL - 100' ROW



RURAL MINOR COLLECTOR - 60' ROW



# Priority Pedestrian Projects

<b>PRIORITY PEDESTRIAN PROJECT NAME</b>	<b>PROJECT LENGTH</b>
Park Meadow Lane Sidewalk	0.49 miles
Rand Street/Newton Street/Cindy Lane Sidewalk	1.84 miles
Elk Drive Driveway Connection	0.21 miles
Clark Street Sidewalk	0.11 miles
Ellison Street Sidewalk	0.12 miles
Bransom Street Sidewalk	0.36 miles
Maple Avenue Sidewalk	0.17 miles
Vaughn Drive Sidewalk	0.58 miles
Hollow Creek Road Sidewalk	0.37 miles
Renfro Street Sidewalks	0.38 miles
Elk Drive Sidewalk	0.49 miles
FM 1902/CR 910 Sidewalks	0.47 miles

# Priority Bicycle Projects

<b>PRIORITY BICYCLE/TRAIL PROJECT NAME</b>	<b>PROJECT LENGTH</b>
Stone Road Shared Use Path	0.42 miles
Village Creek Trail Extension Shared Use Path	0.42 miles
Shannon Creek Trail Extension (North) Shared Use Path	0.8 miles
Shannon Creek Trail Extension (South) Shared Use Path	1.12 miles
Heberle Park Trail Shared Use Path	0.09 miles
Johnson Avenue/Tarrant Avenue/Miller Street Shared Use Path	0.34 miles
Hurst Road Shared Use Path	0.78 miles
Hemphill Street On-Street Bicycle Lane*	0.41 miles
Alsbury Boulevard Shared Use Path*	3.15 miles
Hulen Street Shared Use Path*	1.71 miles
Alsbury Boulevard Shared Use Path*	2.12 miles
Lakewood Drive/CR 914 Shared Use Path*	2.41 miles

*\*Project falls on a Thoroughfare Plan roadway. These projects will be completed simultaneously when the Thoroughfare Plan project is constructed.*

Section 3

# CIPAC Recommendations

State Law

Recent Collections

New Advisory Committee

Committee Recommendations

“Impact fee” means a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development.

- Chapter 395, Texas Local Government Code

# Chapter 395, Texas Local Government Code



- Establishes specific requirements for adoption of impact fees
  - ✓ Adopt land use assumptions
  - ✓ Adopt capital improvements plan
  - ✓ Establish "service units" using mathematical calculation
- Establishes procedures for adopting fees (notice, public hearings, appointed advisory committee, etc.)
- Establishes specific requirements for collection of impact fees (assessed when plat is recorded, collected at building permit issuance or connection to water/sewer system)
- Allows impact fees for water, sewer, drainage, and roadways (Burleson does not assess drainage impact fees)

# Burleson Collections Snapshot

Impact Fee Collections totaled \$10,417,436 between March 2019 and mid-September 2023



\*Does not include Fort Worth Impact Fees



# Capital Improvements Program Advisory Committee (CIPAC)

March 2023: City Council appointed new and expanded CIPAC of eight members

**Alexa Boedeker**

Chairwoman  
Place 7 - Real Estate

**Michael Humphries**

Vice-chairman  
Place 5 - Engineering /  
Development

**Jared Wesley**

Place 1 - Engineering /  
Development

**Justin French**

Place 2 - Urban /  
Regional Planning

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**Martin Scott**

Place 3 - Development

**James Wood**

Place 4 - Real Estate

**Mike Perdue**

Place 8 - Real Estate /  
Finance (ETJ)

**Trent Baker**

Place 9 - Real Estate  
(ETJ)

Melanie McAnally was appointed to fill Place 6 on September 9, 2023.

State law requires at least five (5) members and 40% of members from real estate, development, or building industry.



## Scope of the CIPAC

- File semi-annual reports on impact fee programs
- Review analyses of consultants responsible for impact fee studies at least every five years
  - Land Use Assumptions
  - Impact Fee Capital Improvement Programs
  - Calculated Maximum Assessable Fees
- **Provide recommendations to City Council for updates to impact fees**

# CIPAC Meetings

The new committee held five public meetings since April to thoroughly review topics in preparation for developing their recommendations to City Council

- Legal overview and framework for impact fees in Texas
- Land Use Planning and the Burleson Midpoint Update to the Comprehensive Land Use Plan
- Burleson infrastructure masterplans
- Previous semi-annual reports on the roadway, water, and wastewater impact fee reports
- 2023 Roadway Impact Fee Study by Kimley-Horn and Associates, Inc.
- 2023 Water / Wastewater Impact Fee Study by Freese and Nichols, Inc.



# Individual Sentiments Expressed During CIPAC Deliberations on Recommendations

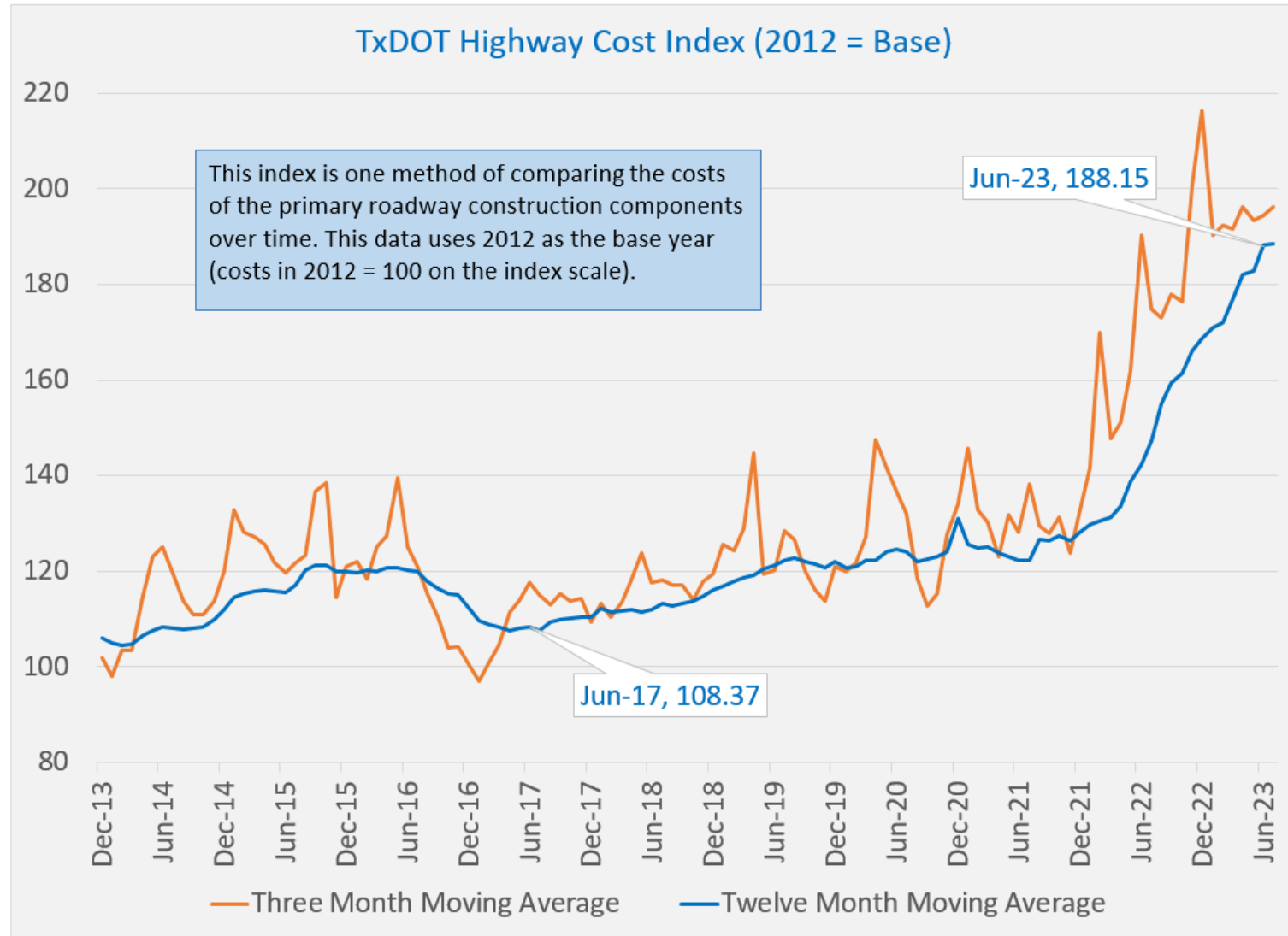
“Our recommendations need to be reflective of the current economy recognizing construction cost increases since the 2017 study.”

“Given that approximately \$10m in total impact fees (roadway, water, and wastewater) was collected over the previous four years, the recommended fees should increase and we should suggest that the City Council make the new fees effective as soon as possible.”

“The goal of the impact fees is to have development pay its fair share of infrastructure costs to support the development. Given that we can't consider 50% of the eligible project costs per state law, impact fees are already discounted even if we recommend the maximum.”

“If fees are not increased, it could put us further behind in regards to building the infrastructure for future growth.”

# Public Infrastructure Construction Continues to Get More Expensive



# Current and CIPAC-Recommended Roadway Impact Fees

Service Area	Maximum Allowable Fee (2017 Study / <b>2023 Study</b> )	Current / <b>Recommended</b> Assessed Fees		
		Residential	Non-residential	Industrial
A	\$771 / <b>\$1,632</b>	\$408 / <b>\$1,632</b>	\$300 / <b>\$1,632</b>	\$200 / <b>\$1,632</b>
B	\$657 / <b>\$703</b>	\$408 / <b>\$703</b>	\$300 / <b>\$703</b>	\$200 / <b>\$703</b>
C	\$1,152 / <b>\$1,954</b>	\$408 / <b>\$1,954</b>	\$300 / <b>\$1,954</b>	\$200 / <b>\$1,954</b>
D	\$976 / <b>\$1,365</b>	\$408 / <b>\$1,365</b>	\$300 / <b>\$1,365</b>	\$0 / <b>\$1,365</b>

Fees are per service unit

# Current and CIPAC-Recommended Water and Wastewater Impact Fees

Water		Wastewater	
Max Allowable Fees 2017 Study / <b>2023 Study</b>	Assessed Fees Current / <b>Recommended</b>	Max Allowable Fees 2017 Study / <b>2023 Study</b>	Assessed Fees Current / <b>Recommended</b>
\$2,624 / <b>\$2,492</b>	\$2,624 / <b>\$2,492</b>	\$1,312 / <b>\$1,731</b>	\$1,312 / <b>\$1,731</b>

Water and Wastewater Impact Fees are calculated for a 5/8" meter

# Current Service Unit Equivalent Max Allowable Water and Wastewater Impact Fees

Meter Size	Service Unit Equivalent	Current Rates at Max Allowable		Combined Total
		Water Impact Fee	Wastewater Impact Fee	
		City of Burleson - Maximum Allowable	City of Burleson - Maximum Allowable	
5/8"	1	\$2,624	\$1,312	\$3,936
3/4"	1.5	\$3,936	\$1,968	\$5,904
1"	2.5	\$6,560	\$3,280	\$9,840
1 1/2"	5	\$13,120	\$6,560	\$19,680
2"	8	\$20,992	\$10,496	\$31,488
3"	16	\$41,984	\$20,992	\$62,976
4"	25	\$65,600	\$32,800	\$98,400
6"	50	\$131,200	\$65,600	\$196,800
8"	80	\$209,920	\$104,960	\$314,880
10"	115	\$301,760	\$150,880	\$452,640



# CIPAC Recommended Service Unit Equivalent Max Allowable Water and Wastewater Impact Fees

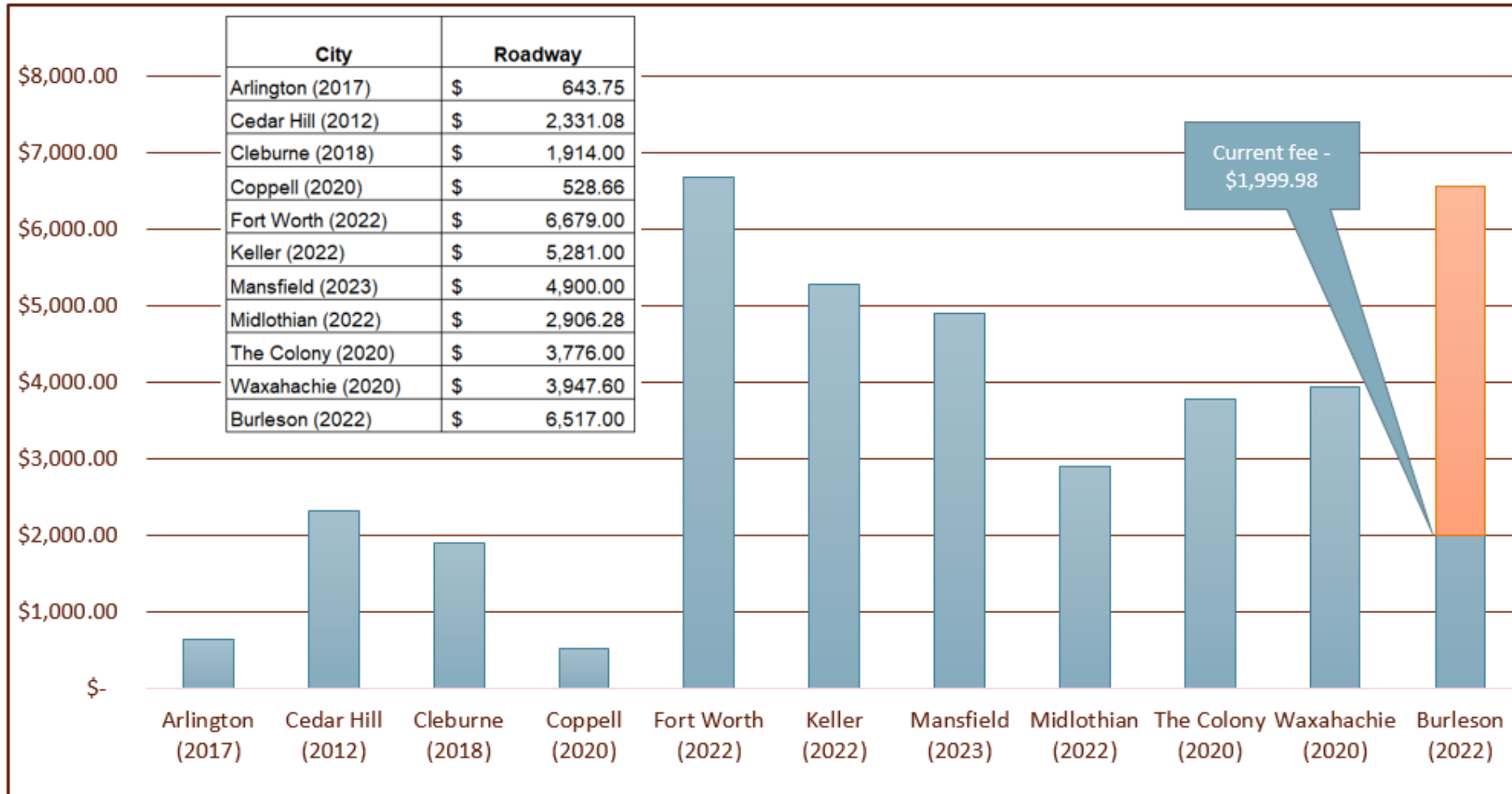
Meter Size	Service Unit Equivalent	CIPAC Recommended Rates		Combined Total
		Water Impact Fee	Wastewater Impact Fee	
		City of Burleson - Maximum Allowable	City of Burleson - Maximum Allowable	
5/8"	1	\$2,492	\$1,731	\$4,223
3/4"	1.5	\$3,738	\$2,597	\$6,335
1"	2.5	\$6,230	\$4,328	\$10,558
1 1/2"	5	\$12,460	\$8,655	\$21,115
2"	8	\$19,936	\$13,848	\$33,784
3"	16	\$39,872	\$27,696	\$67,568
4"	25	\$62,300	\$43,275	\$105,575
6"	50	\$124,600	\$86,550	\$211,150
8"	80	\$199,360	\$138,480	\$337,840
10"	115	\$286,580	\$199,065	\$485,645

# Different between Current and CIPAC Recommended Max Allowable Water and Wastewater Impact Fees

Meter Size	Service Unit Equivalent	CIPAC Recommended W/WW Impact Fee Combined Total	Current Rates W/WW Impact Fee Combined Total	Difference
5/8"	1	\$4,223	\$3,936	\$287
3/4"	1.5	\$6,335	\$5,904	\$431
1"	2.5	\$10,558	\$9,840	\$718
1 1/2"	5	\$21,115	\$19,680	\$1,435
2"	8	\$33,784	\$31,488	\$2,296
3"	16	\$67,568	\$62,976	\$4,592
4"	25	\$105,575	\$98,400	\$7,175
6"	50	\$211,150	\$196,800	\$14,350
8"	80	\$337,840	\$314,880	\$22,960
10"	115	\$485,645	\$452,640	\$33,005

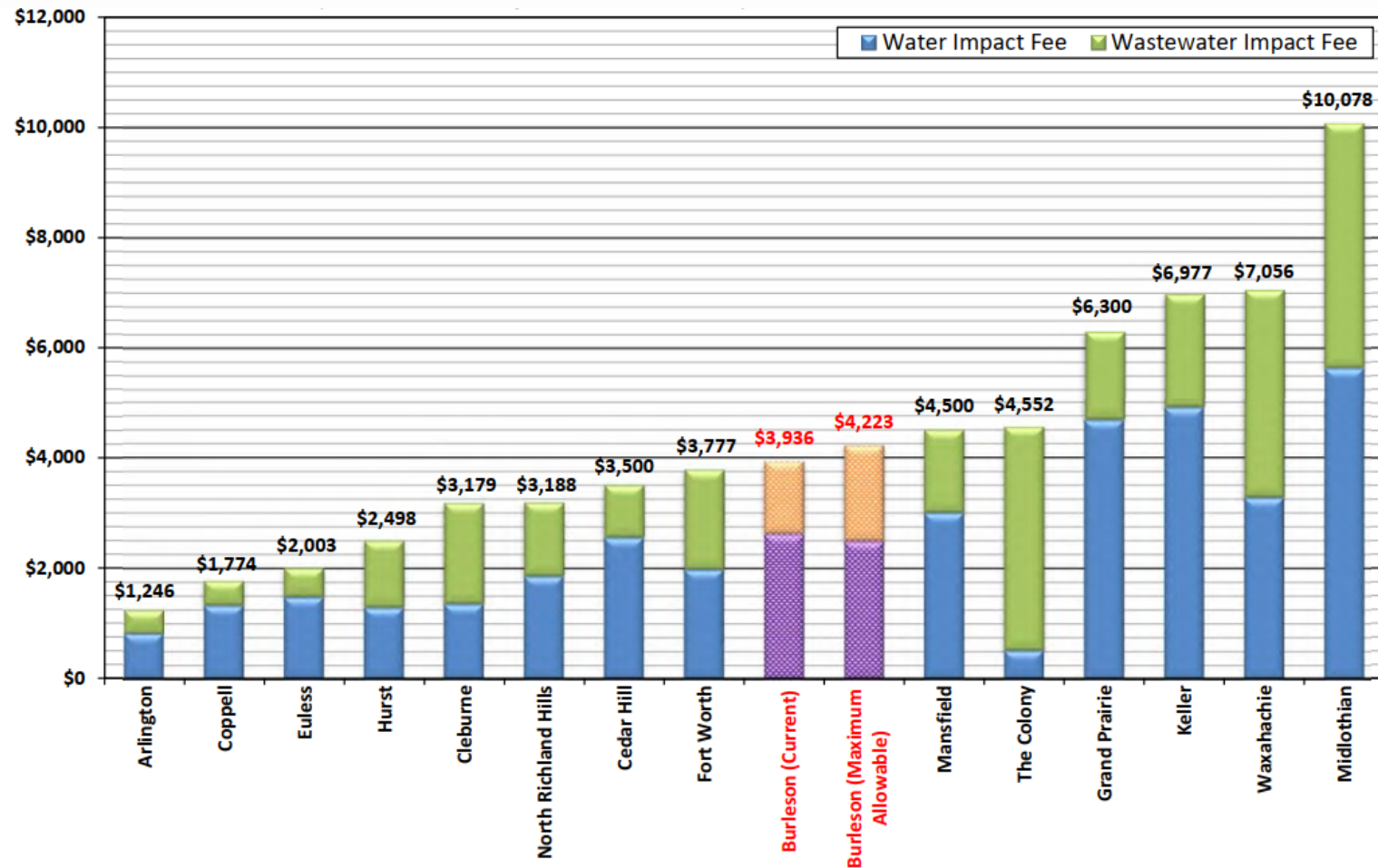
# Roadway Impact Fee Benchmarking

For a Single-family Residence - Assessed Fees Shown



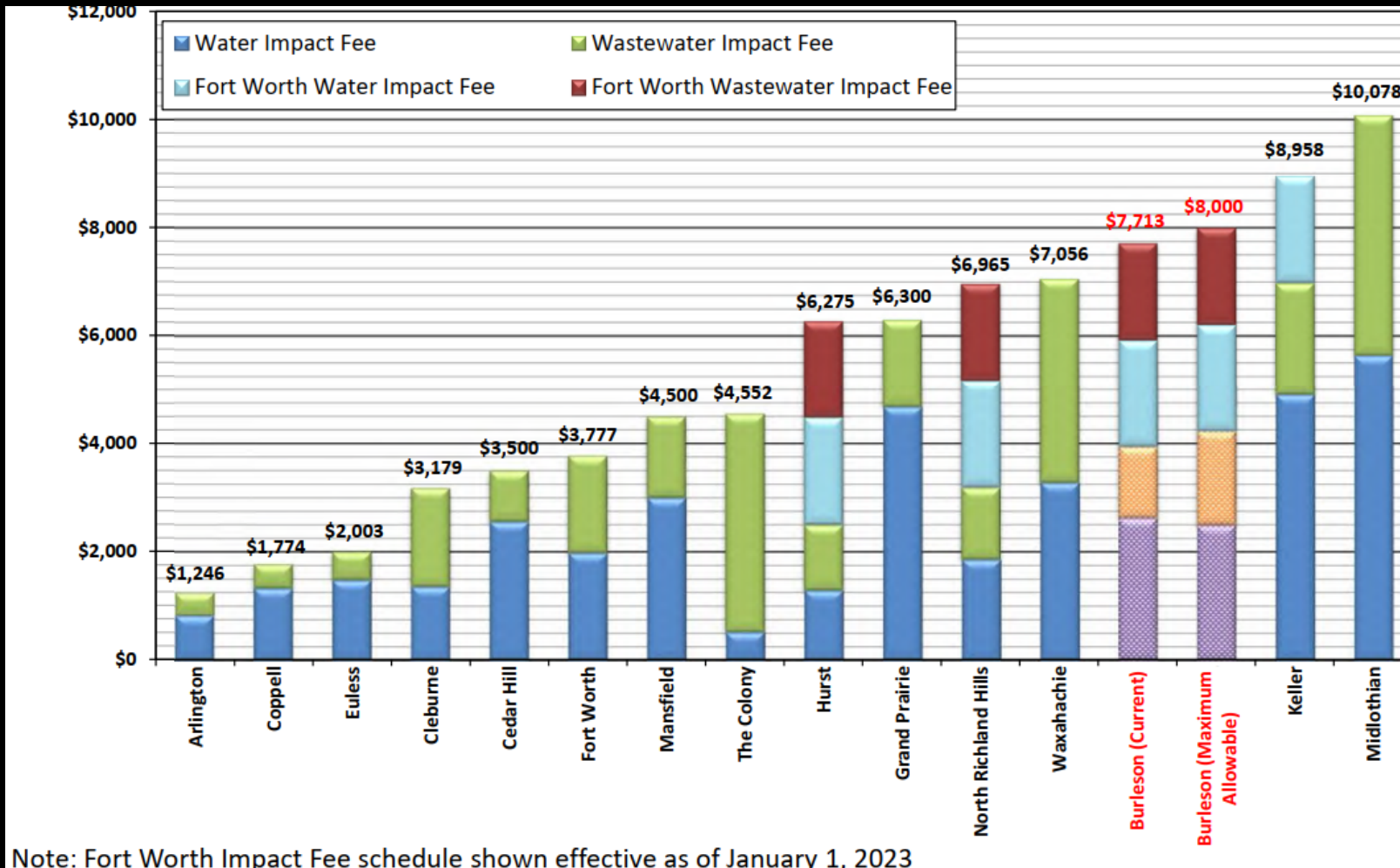
# Water / Wastewater Impact Fee Benchmarking

For a Single-family Residence - Assessed Fees Shown (except Burleson 2023 Max Allowable)



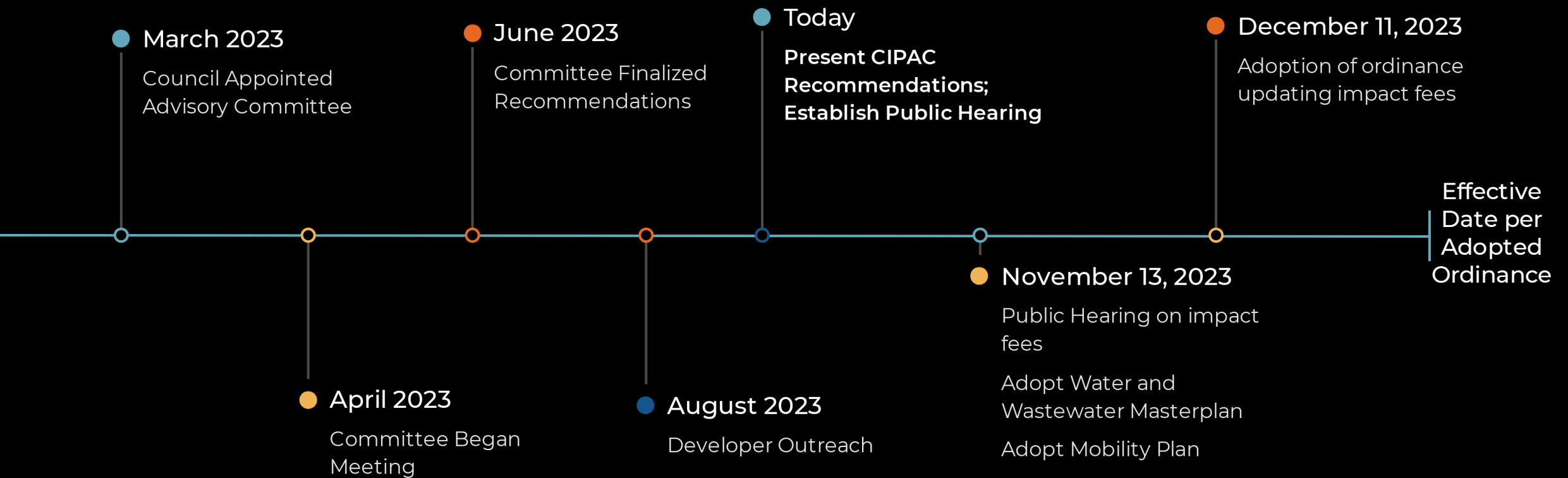
# Water / Wastewater Impact Fee Benchmarking

For a Single-family Residence Including Fort Worth Pass Through Impact Fees



Note: Fort Worth Impact Fee schedule shown effective as of January 1, 2023

# Capital Improvements Program Advisory Committee and Fee Update **Timeline and Next Steps**



**QUESTIONS  
AND  
DISCUSSION**

