

Revenue Needs and Rate Adjustments for Water and Sewer

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Introduction



Question:

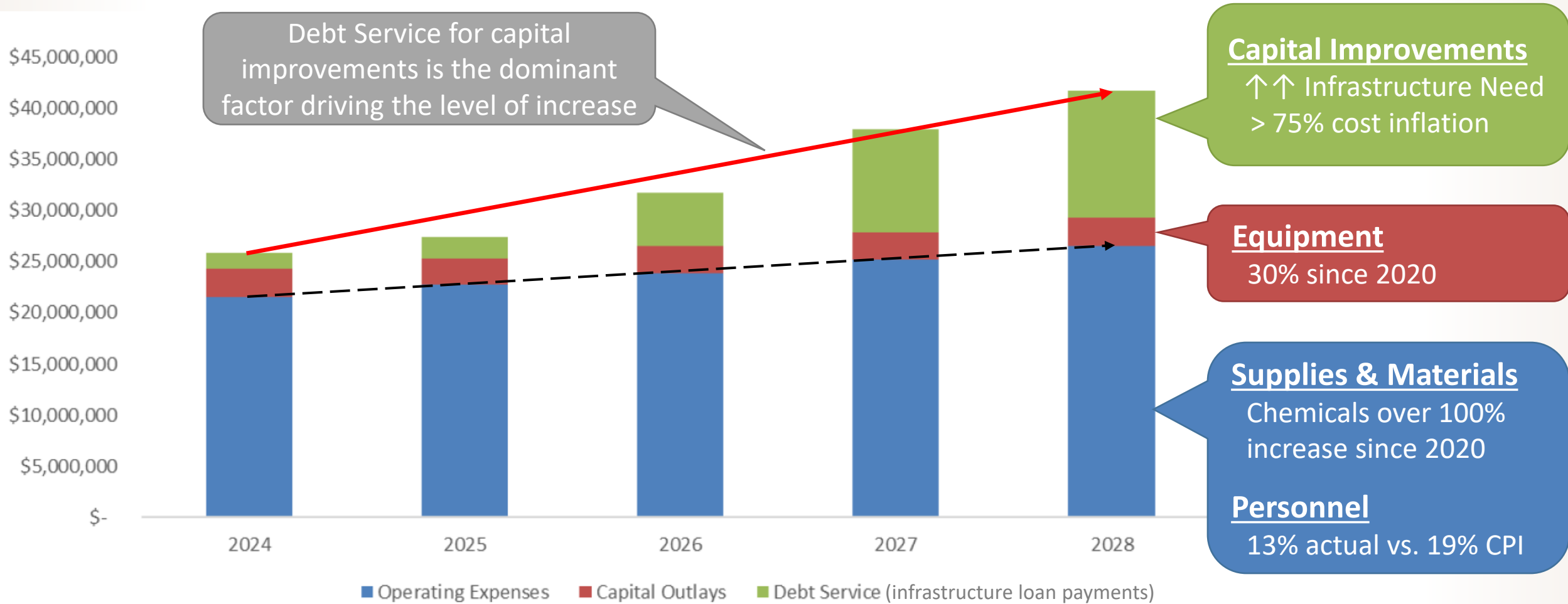
Do Harlingen city tax revenues help fund Waterworks' operations and infrastructure?



Primary reasons why additional revenue is needed:

- Increase in operating costs (inflation)
- Construction of long-overdue projects
 - solve severe capacity deficiencies
 - replace deteriorated infrastructure
 - provide capacity for the future

Factors Driving Rate Adjustment



Observational Infrastructure Need

- ▶ Water line break frequency
- ▶ Sewage overflows from manholes and backups
 - Manually cycling sewer pump stations on/off during storms
- ▶ Visible deterioration of infrastructure



Repairing an Active Leak



Clay Sewer Pipe Failure



Clearing a Sewer Backup

Master Planning Analysis of Need



Comprehensive Master Plan completed in 2022 for Water & Sewer



Use of calibrated hydraulic models to pinpoint capacity deficiencies



Analysis over a 20-year planning horizon considering 1.5% growth

Water System Analysis



Water system has no capacity deficiencies

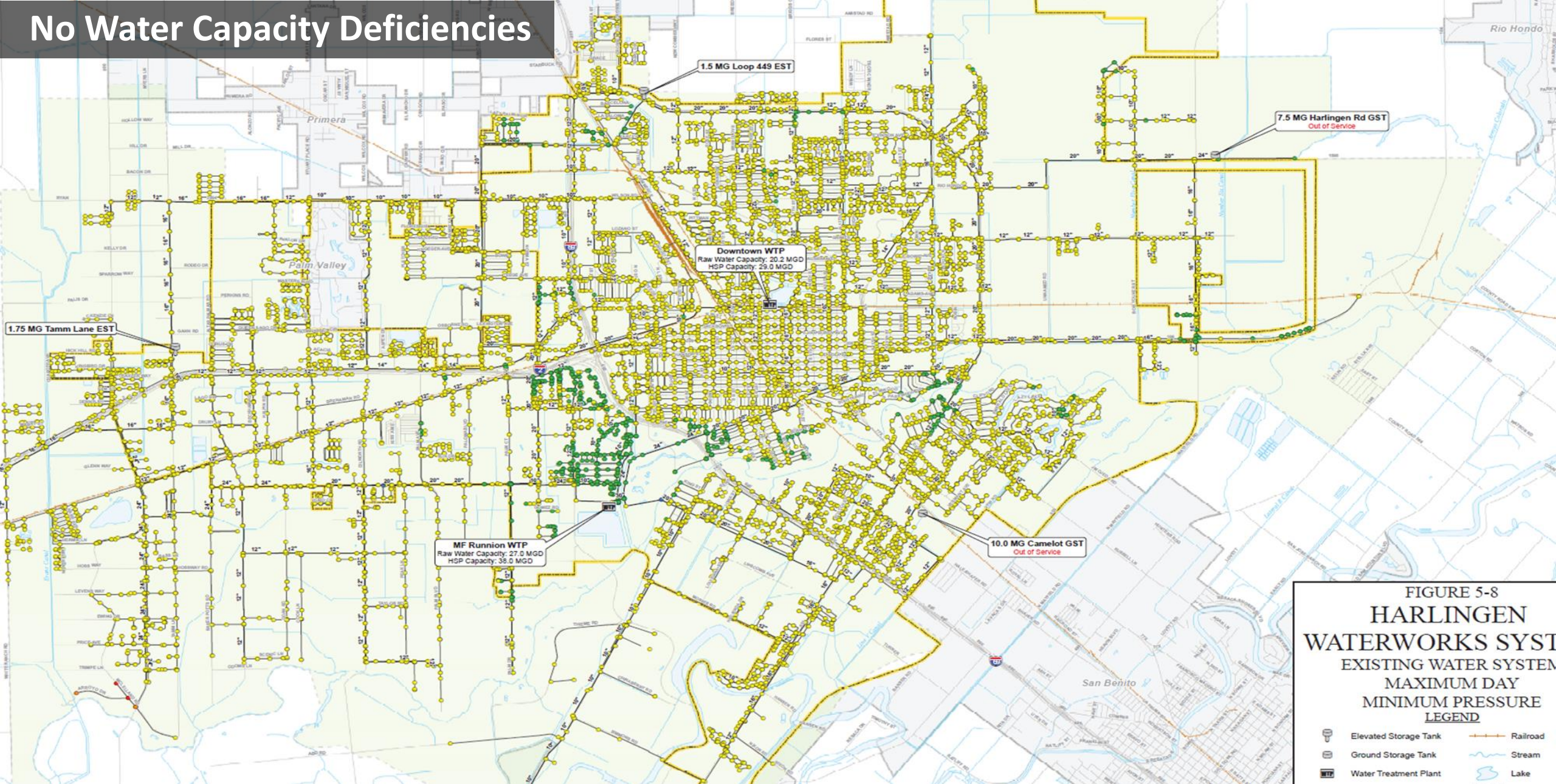


Asbestos Cement Pipe failing, will need replacement over time (30% of system)



Some areas have insufficient fire flow – small pipes / too few fire hydrants

No Water Capacity Deficiencies



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Sewer System Analysis



Sewer System has major capacity problems, especially during heavy rainstorms

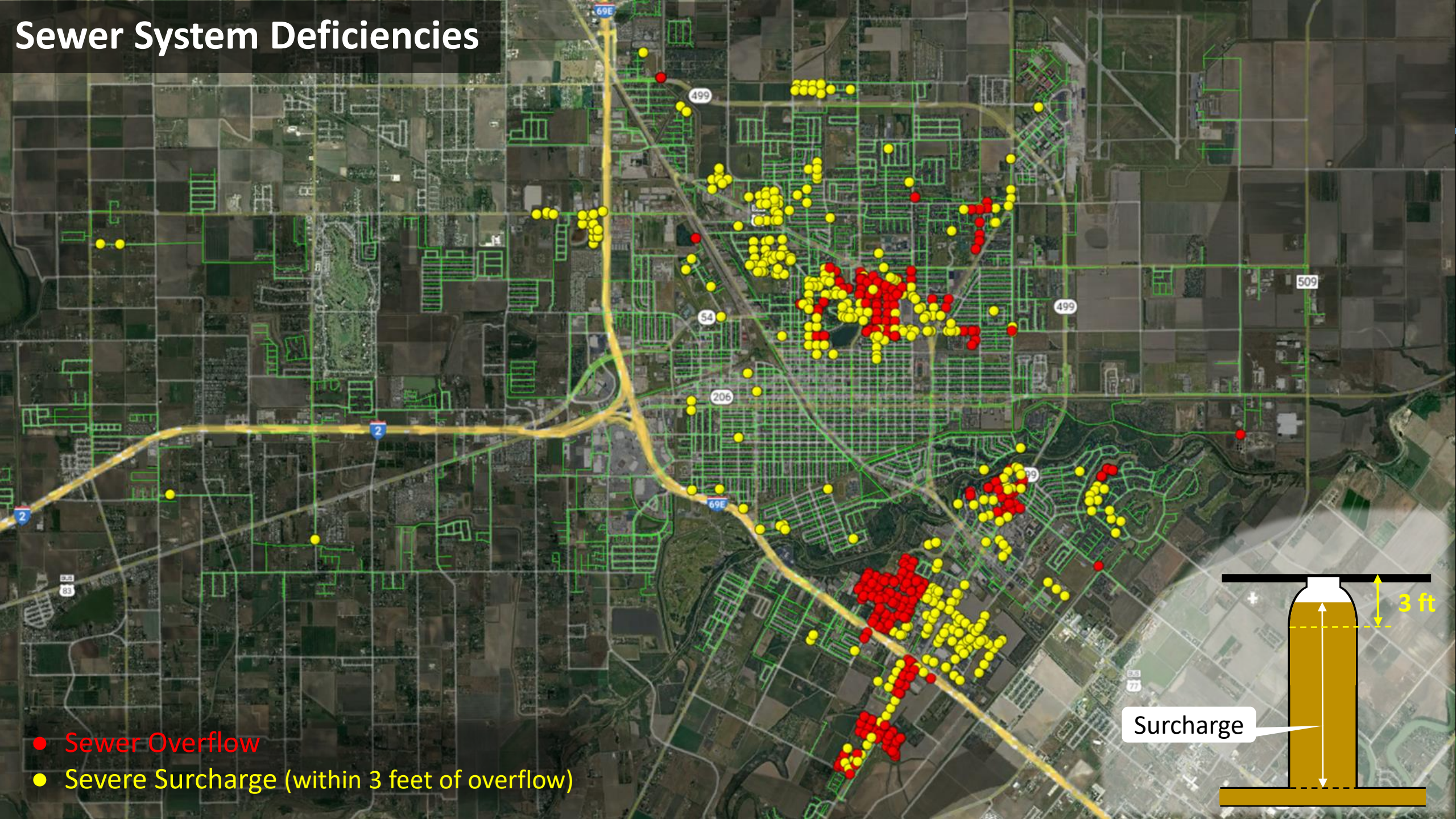


HWWS responds to approximately 600 sewer backups annually



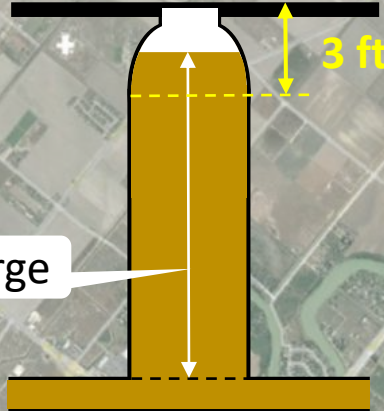
Many clay sewer mains, manholes, lift stations in failing condition

Sewer System Deficiencies



- Sewer Overflow
- Severe Surcharge (within 3 feet of overflow)

Surcharge



Capital Projects

Master Plan proposes infrastructure projects to:

Solve capacity deficiencies and Rehabilitate or Replace, deteriorated assets



Projects prioritized and scheduled when needed, not by affordability



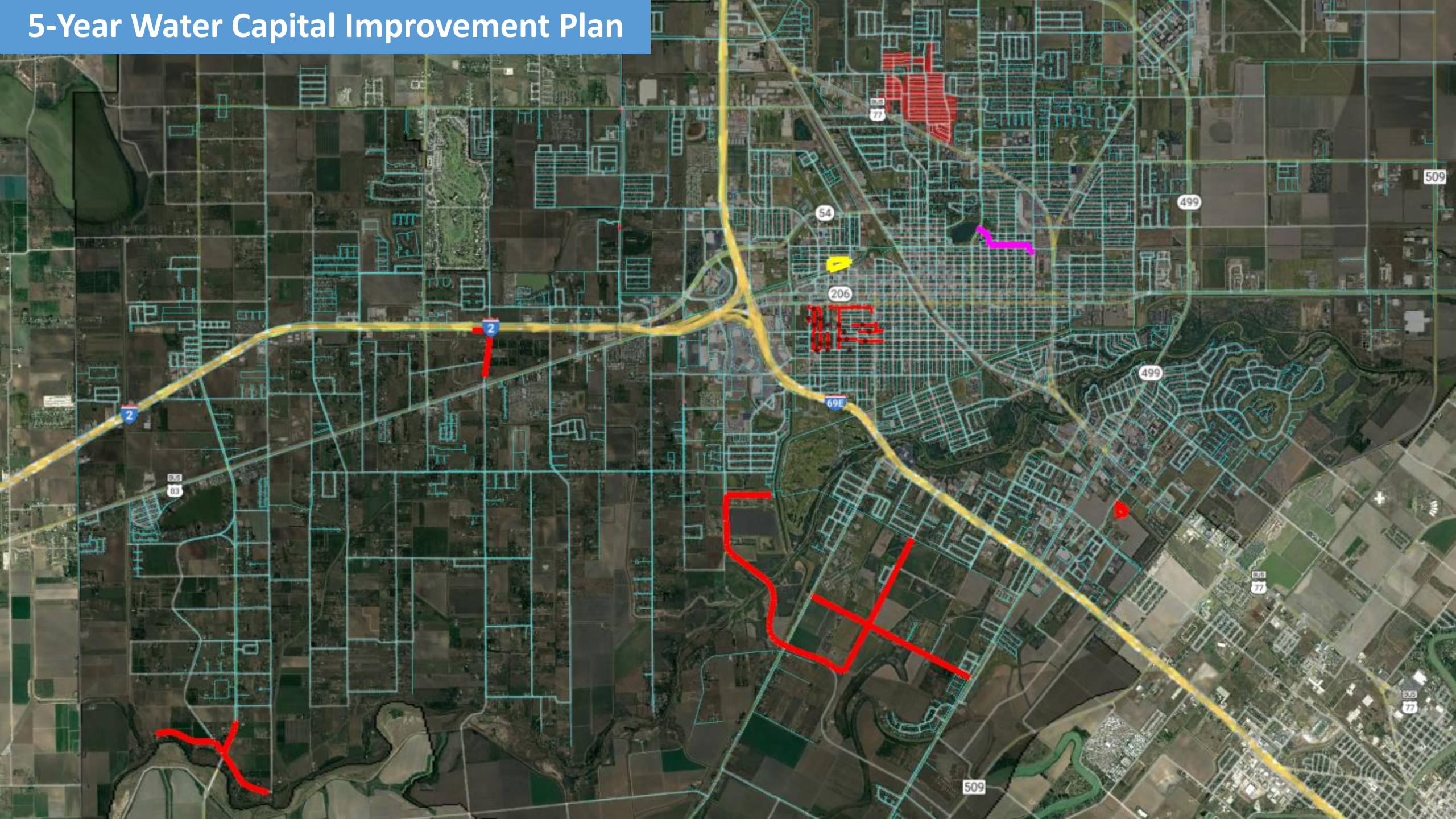
Capital Improvement Plan is heavily front-loaded in early years

Years 0-5: \$258 million
(68% sewer projects)

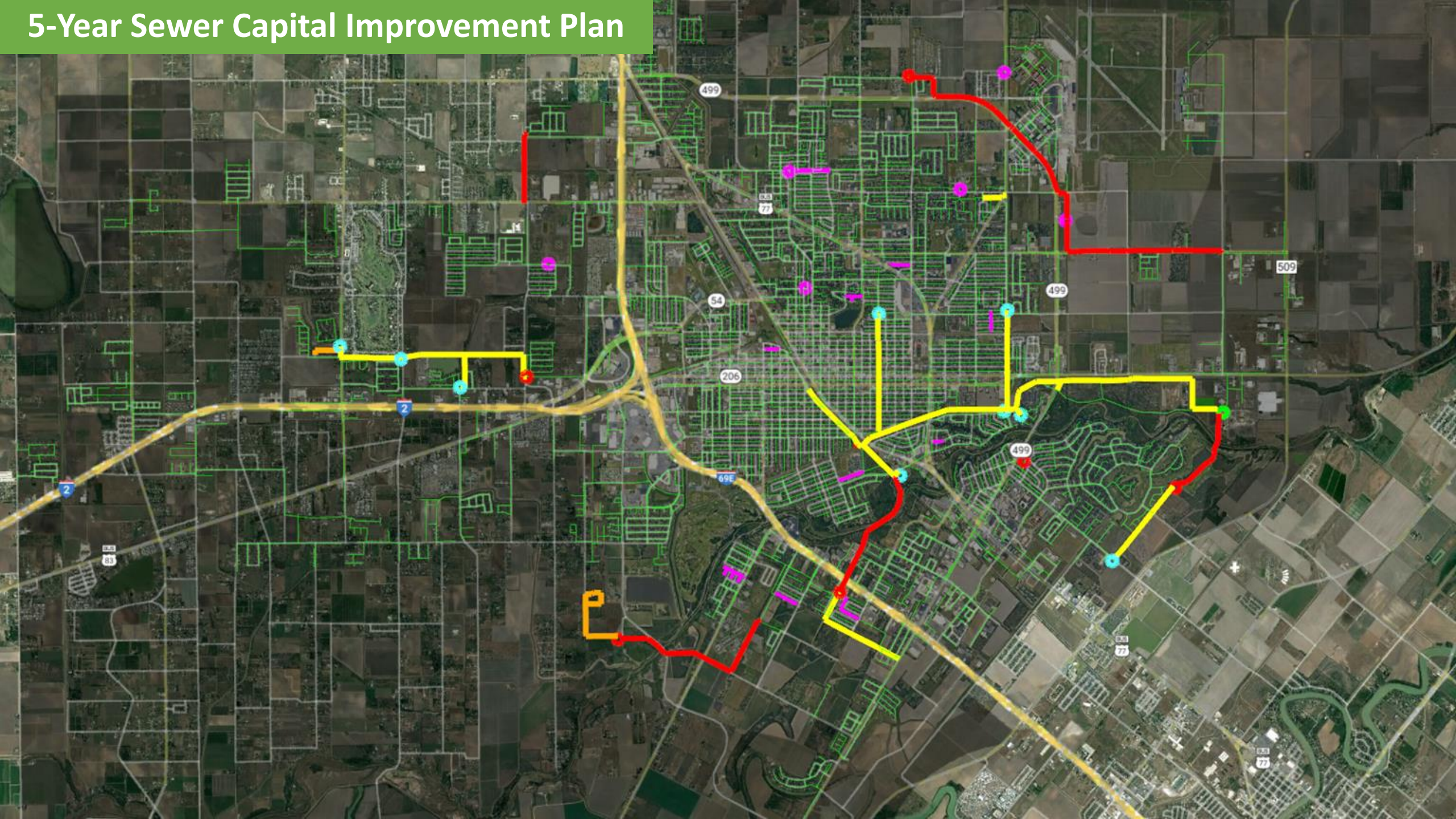
Years 6-10: \$62 million

Years 11-20: \$80 million

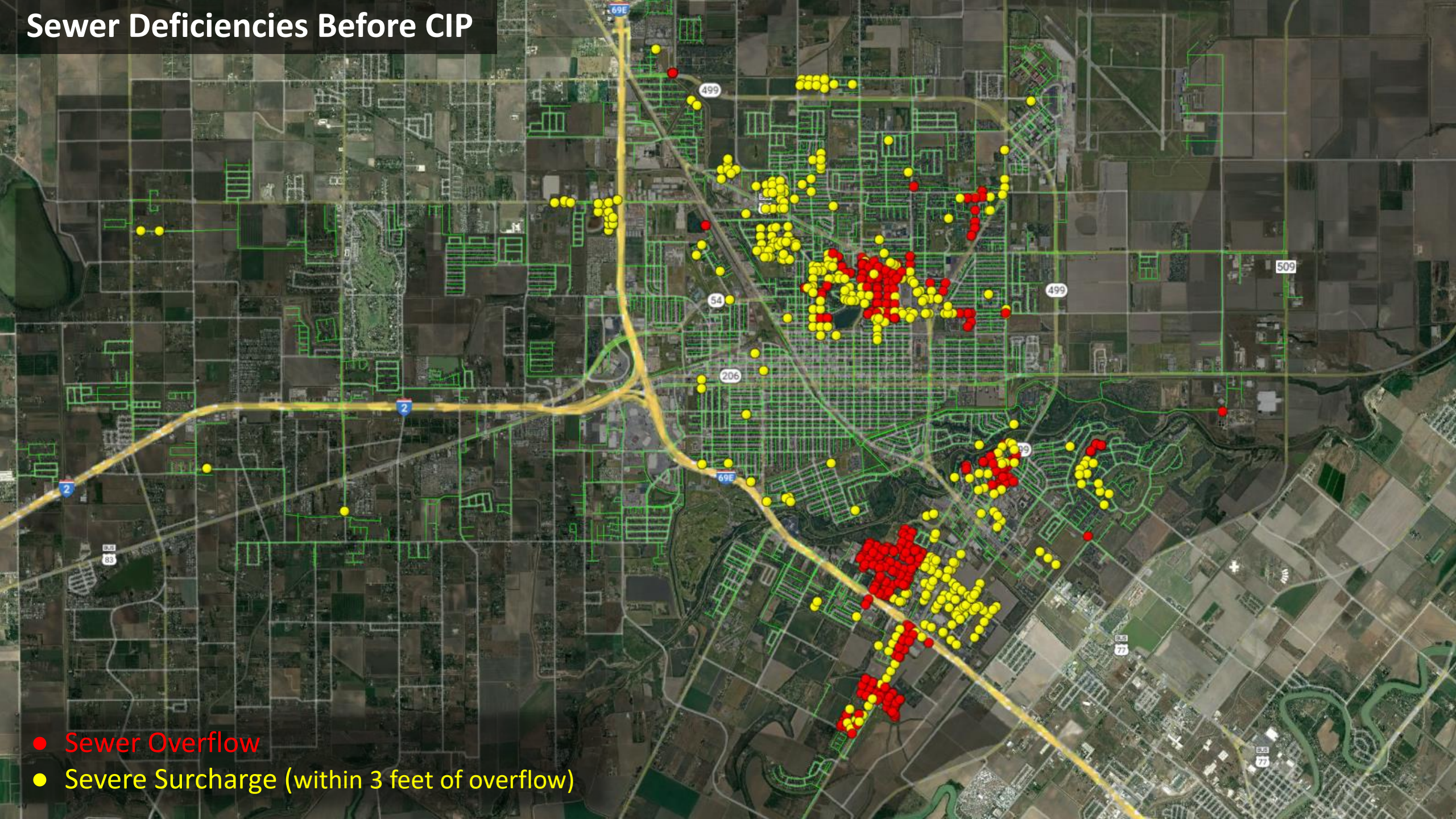
5-Year Water Capital Improvement Plan



5-Year Sewer Capital Improvement Plan



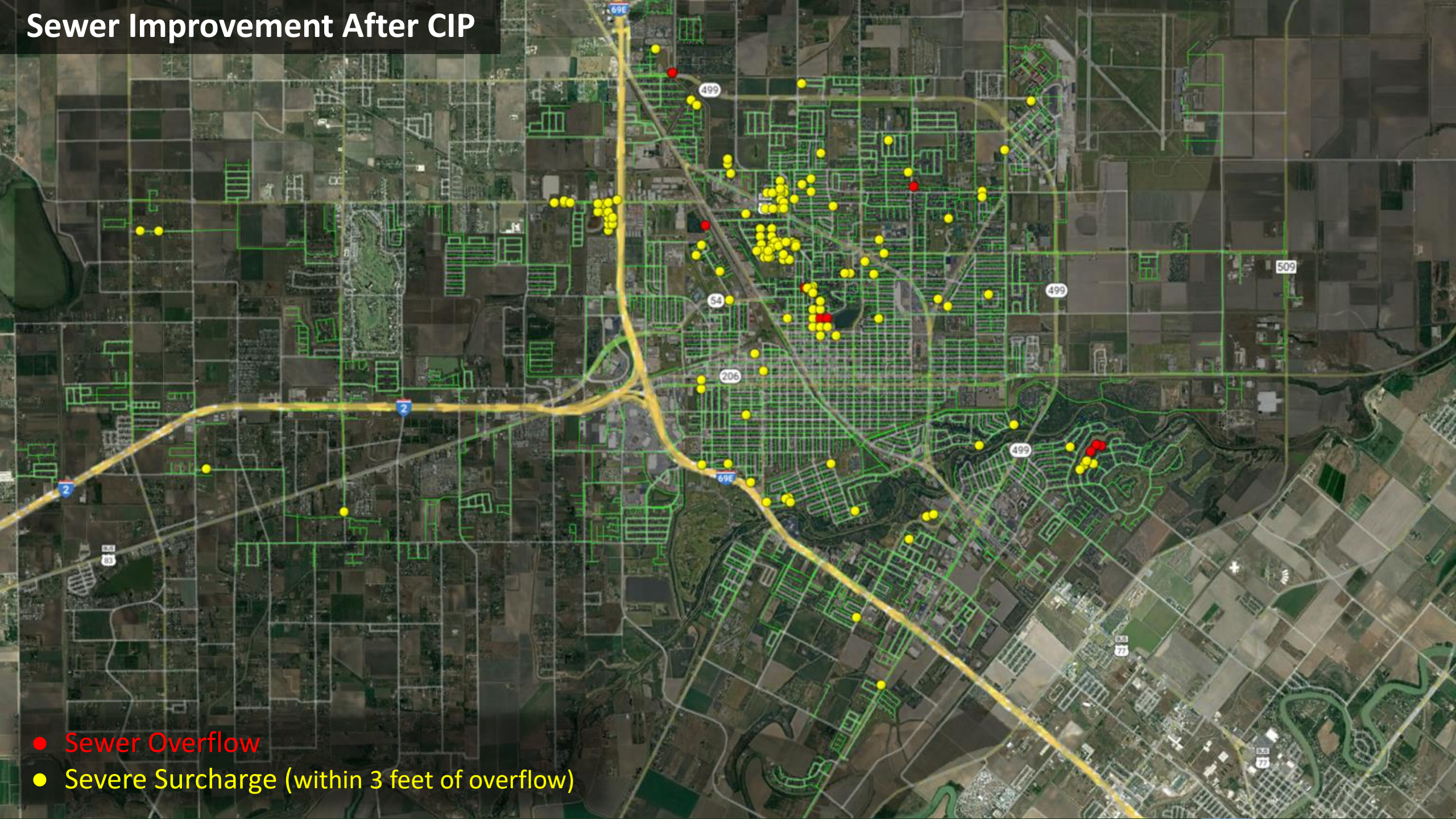
Sewer Deficiencies Before CIP



● Sewer Overflow

● Severe Surcharge (within 3 feet of overflow)

Sewer Improvement After CIP



● Sewer Overflow

● Severe Surcharge (within 3 feet of overflow)

Rate Study

- ▶ Engaged rate study consultant in 2023 – completion in February 2024
 - Analyzed operating costs and capital expenses
 - Considered rate structure and affordability
 - Developed Rate Plan Options
- ▶ How quickly to undertake capital projects? Three scenarios:

“On-Time”	“Moderate Delay”	“Long Delay”
\$258 million	\$182 million	\$137 million

Rate Study (cont'd)

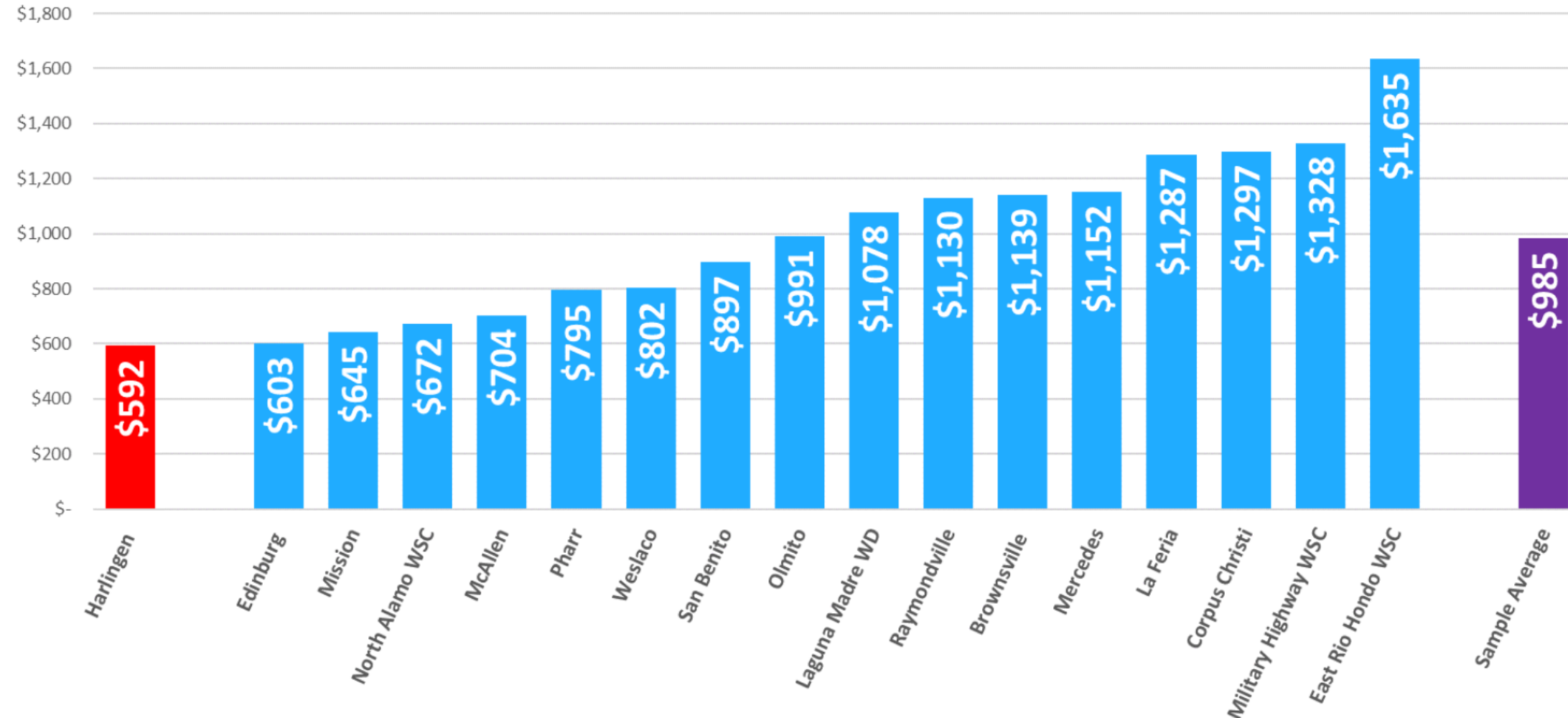
▶ Rate Structure:

CONSTANT RATE Current Approach	BLOCK RATE <u>Affordability and Conservation Focus</u>
Same rate for all consumption	0 – 3,000 gallons 3,000 – 10,000 gallons 10,000 – 20,000 gallons > 20,000 gallons

▶ 5-Year Phase-In: Rate adjustments in each of the next five years

Local Rate Comparison (Annual Total)

Total Annual Charges | Water & Wastewater Service
Typical Use Case (4Mo Low-Use | 5Mo Mid-Use | 3Mo High Use)



Other Funding Sources

▶ Grants & Low Interest Loans from Federal and State Government

- \$10 million subsidized, reduced-interest loan in November 2024
- \$9 million grant + \$9 million lower-interest loan pending
- \$875,000 grant + \$836,000 loan at 0% interest rate pending
- Annual funding applications will be submitted

Success with Federal and State funding programs will reduce rate adjustment

▶ General Revenue Bonds at Market Rate

Summary

- ▶ HWWS has not raised rates since 2014
- ▶ Steep inflation has greatly affected how much rates will need to be increased
- ▶ Large need for Capital Improvements result from insufficient investment in the past
- ▶ Rate plans aim to raise revenue efficiently and affordably as possible
- ▶ Increased revenue will fund elimination of deficiencies and provide future capacity to ensure safe and reliable service
- ▶ Harlingen rates have been historically lower than in neighboring communities – the adjustment will bring our rates in line with the surrounding area