

Stormwater Rate Study and Implementation Services

City of Lee's Summit
City Council Briefing #1

February 28, 2023

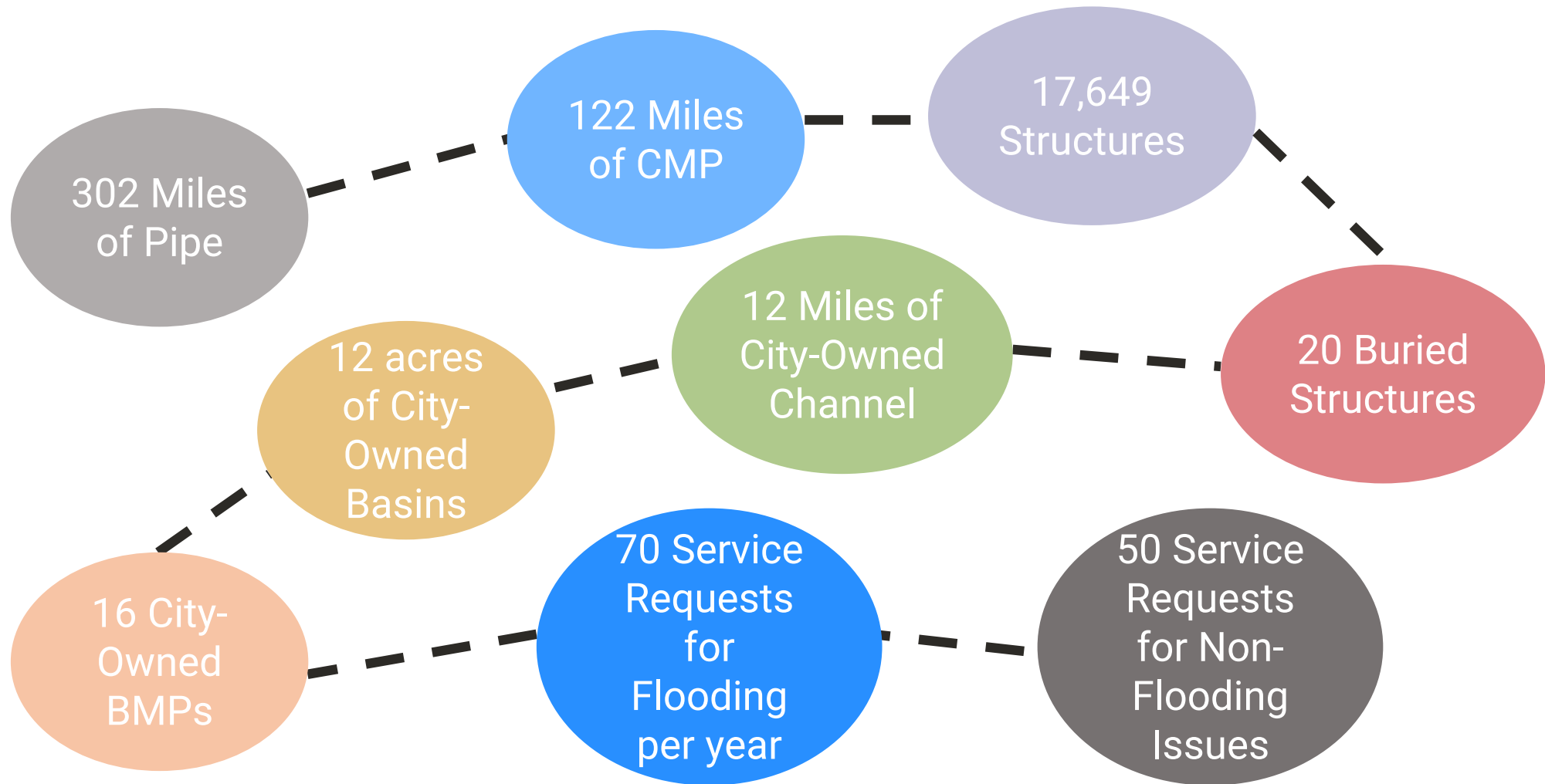


Our Discussion Today

- Current Stormwater Issues
- Historical Context Review of Previous Stormwater Mitigation Efforts
- Study Drivers and Scope
- Program Costs & Funding Gap
- Funding Approaches
- Impervious Surface Analysis
- Utility Rate Considerations
- Next Steps

Current Stormwater Issues

Current System



Recent Flooding Issues



Green Street



Oaks Ridge Meadows

Streambank Stability Issues



Ward & Persels:
exposed sewer main



Slope failure and
property damage
caused by streambank
erosion at bottom of
slope

2nd Street:
undermining road
and exposed utilities



Siltation and CMP Degradation



Current Stormwater Work Flow & Level of Service

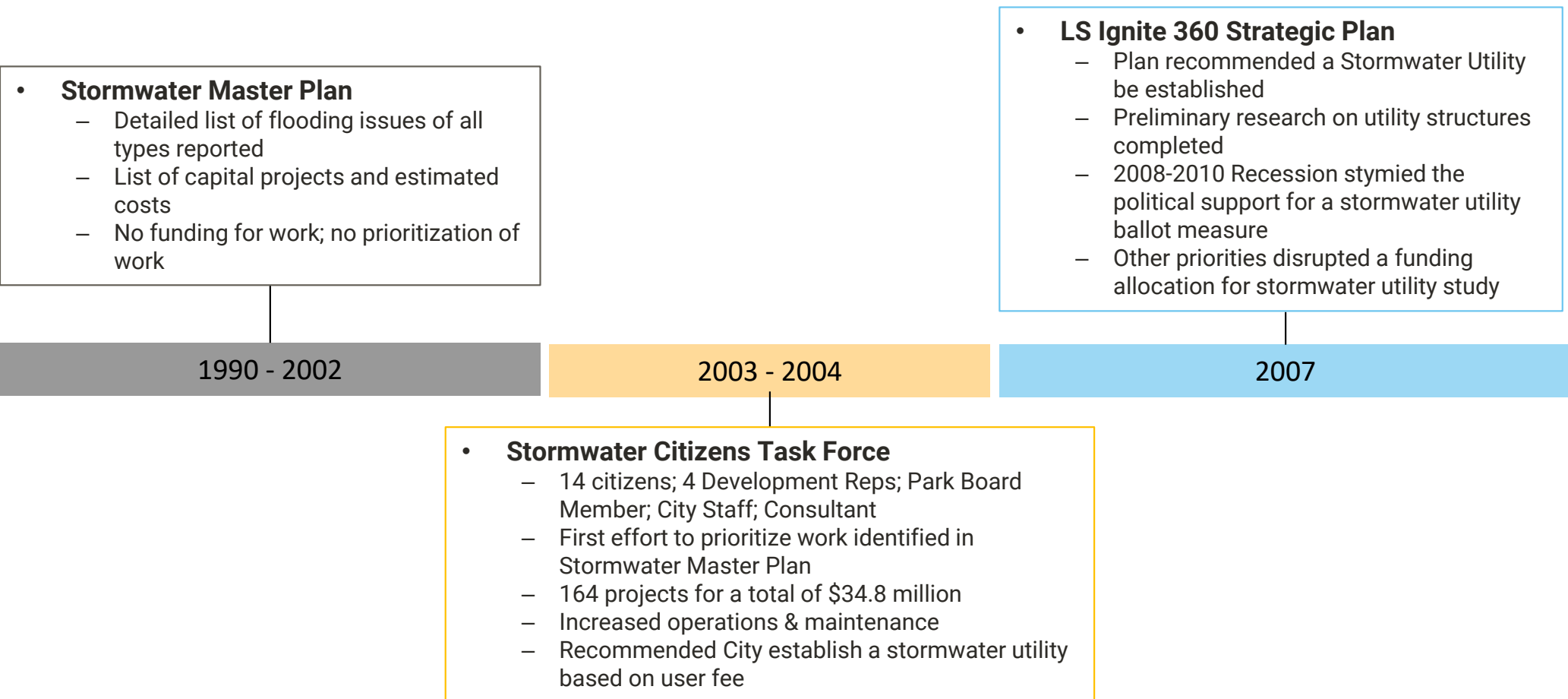
Competing Priorities

- Pothole patching
- ROW maintenance
- Public Safety (Police & Fire)
- Other General Fund Priorities

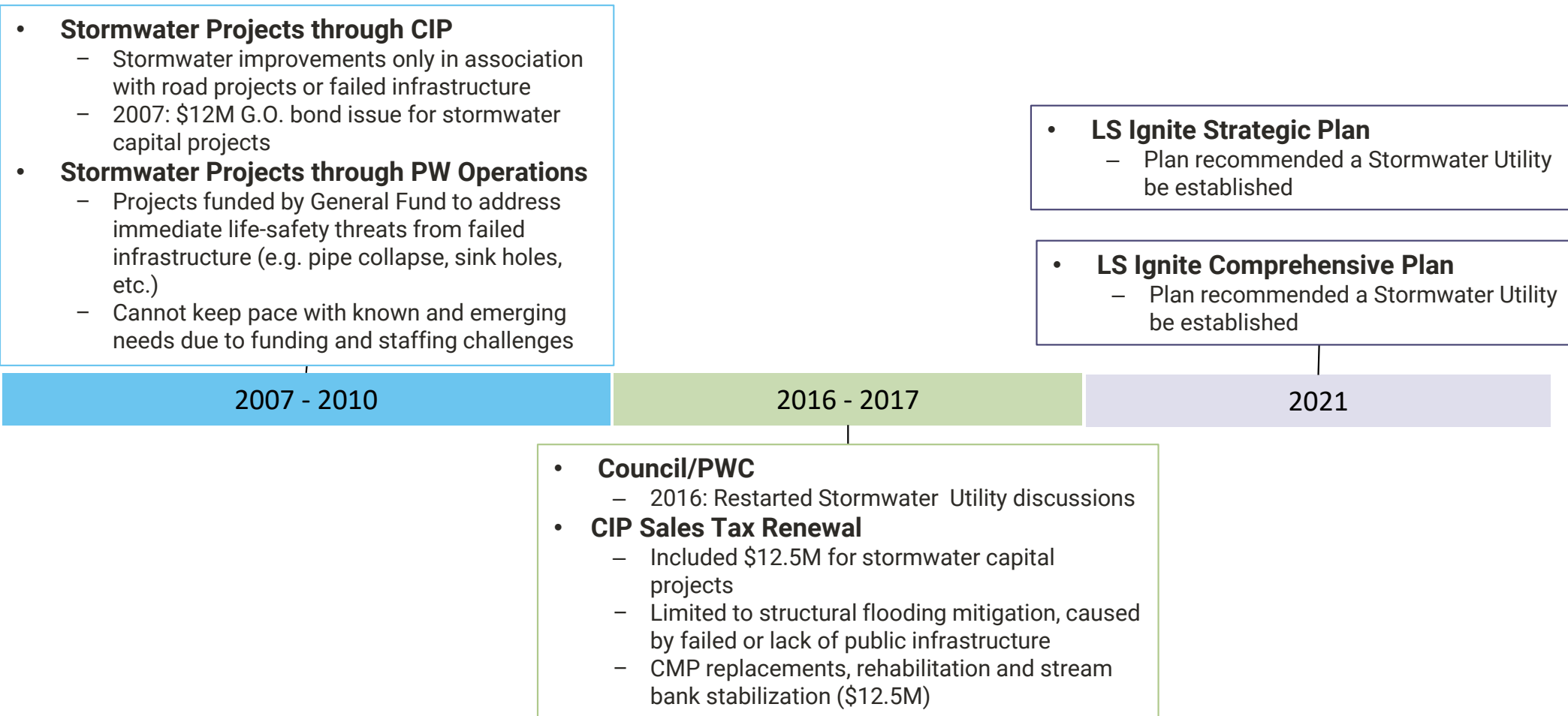


Stormwater Utility Historical Review

Stormwater Utility Historical Context Review (1999 – 2007)



Stormwater Utility Historical Context Review (2007 – 2021)



Ignite Strategic Plan and Ignite Comprehensive Plan

- Both Plans recommend the Creation of a Stormwater Utility as a sustainable funding source
- Support the following Essential Elements of Success and Critical Success Factors

- Infrastructure & Resiliency to Reduce flood risk & damage to property
- Sustainable Environment to protect water quality
- Quality of Life (parks, recreation, health, safety)
- Resilient economy (sustainable revenues for operations & maintenance)
- Strong Neighborhoods (preserves property values)
- Land Use & Community Design (opportunity for watershed-based BMPs)
- Ensure Infrastructure is adequate for future growth
- Secure sustainable funding sources, including a Stormwater Utility



City Services and
Infrastructure



Quality of Life



Facilities & Infrastructure



Sustainable Environment



Land Use & Community Design

Study Drivers & Scope of Study

Key Drivers for Sustainable Stormwater Management

Key Drivers

Drainage Infrastructure

- Proactive management of infrastructure for community safety

Regulatory Compliance

- Improve water quality to comply with MS4* Permit compliance and community health

Enhance Levels of Service

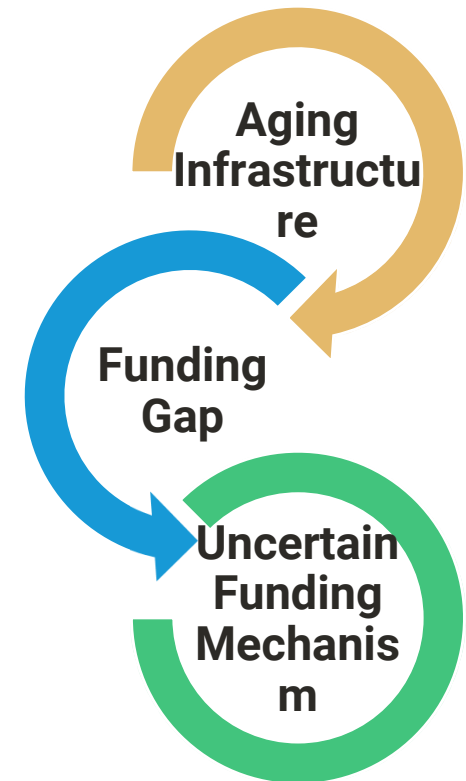
- Address deferred maintenance, known and emerging needs, and infrastructure integrity

Organizational Capacity

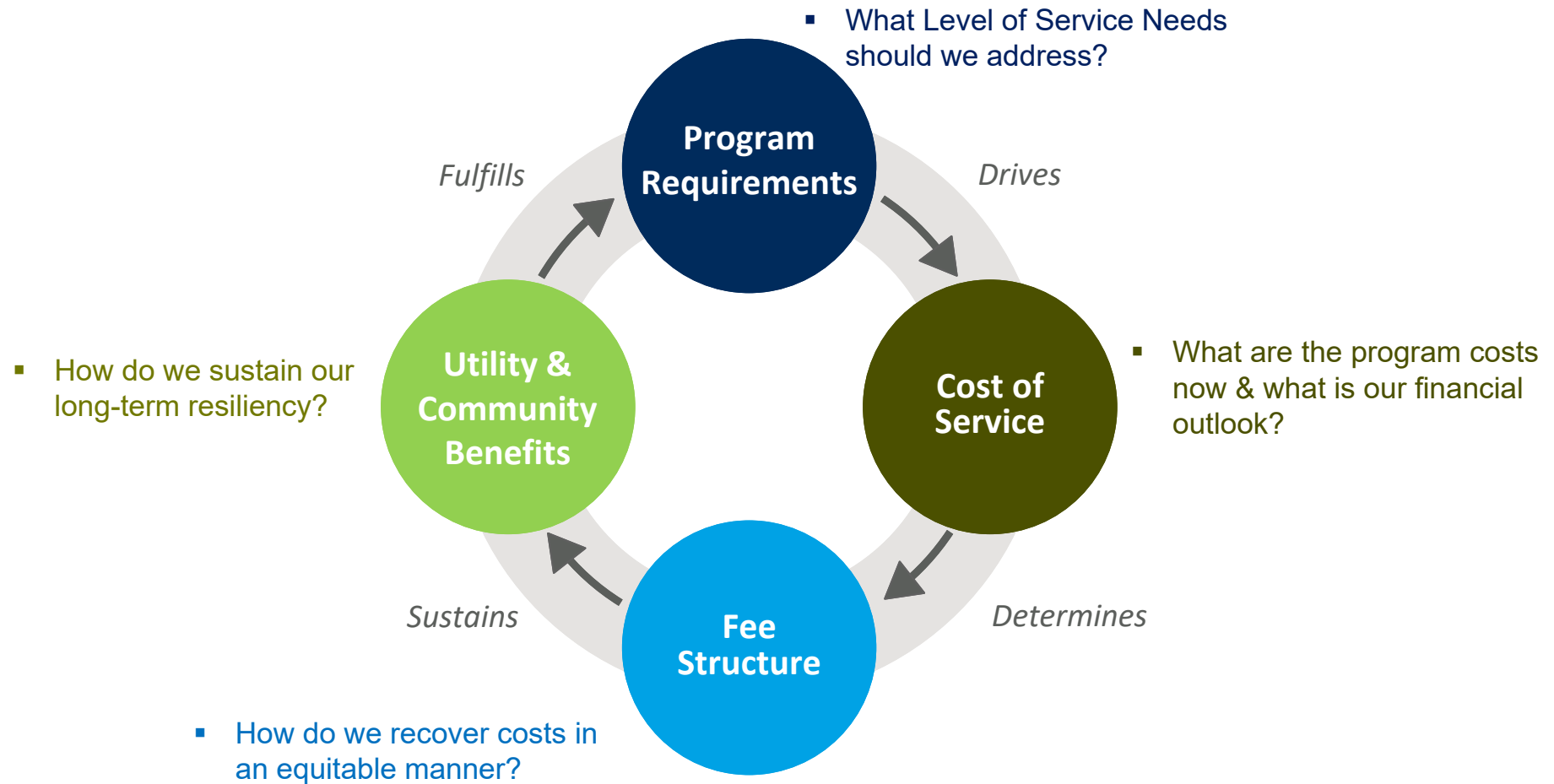
- Increase resources & funding capacity

*MS4 = Municipal Separate Storm Sewer Systems

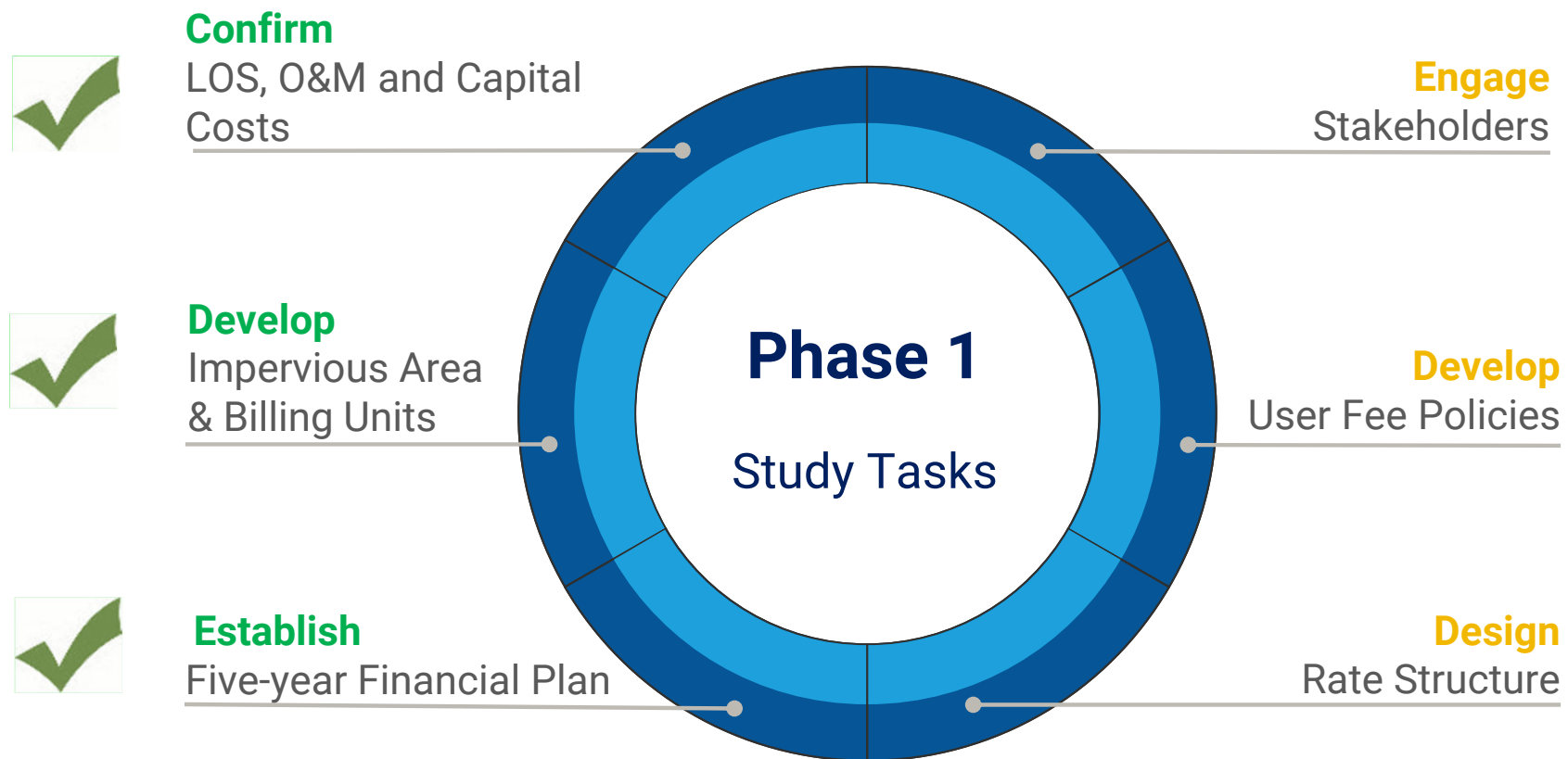
Current Challenges



The Principles of Alignment (Nexus)



Stormwater Utility Feasibility Study Components



Phase 2 Implementation involves the Business Aspects, Technology Aspects and Customer Aspects for implementing and launching the stormwater fee.

Program Needs & Funding Gap

Current Stormwater Level of Service (LOS)

Stormwater Program Element	Key Activities
System Maintenance	Routine preventative inspections, cleaning & repairs and reactive maintenance/repairs of stormwater conveyance inlets, catch basins, sewers, channels, ditches, detention basins, and other structures
Water Quality / Compliance	Public Outreach & Participation, Stormwater Plan Review, Construction inspections, Post-Construction BMP inspections, IDDE Program, Good Housekeeping, Compliance Reporting
Planning & Engineering	FPM Program, Operations, CIP and Development support
Stormwater Program Administration	Public Works management & administration, indirect costs

Current level of service costs are \$816,000 (2023)

Baseline Level of Service Program Need – Option 1

Stormwater Program Element	Baseline Improvements (1 Maintenance Crew of 5 people, plus Support Staff)	Benefit to Public
System Maintenance	New 5-person Crew; Transition CMP replacement program to O&M Additional vehicles, equipment, tools, materials, etc.	Reduces costly infrastructure failures and localized flooding
Water Quality / Compliance	2 additional FTEs	Compliance with MDEQ MS4 permit requirements
Planning & Engineering	New MS4 Manager, Sr Staff Engineer and GIS Analyst Professional Services: Stormwater Master Plan, Asset Management Program, and CRS support	Public safety and flooding mitigation through infrastructure integrity
Stormwater Utility	0.5 FTE Data analyst/utility billing support Stormwater User Fee Implementation	Sustainable funding that supports proactive stormwater management in the City
Stormwater Program Administration	Additional Stormwater Admin costs due to new 5-person crew	Helps support the stormwater program and enhance customer service

Costs for Option 1 Level of Service needs are estimated at \$3.95M

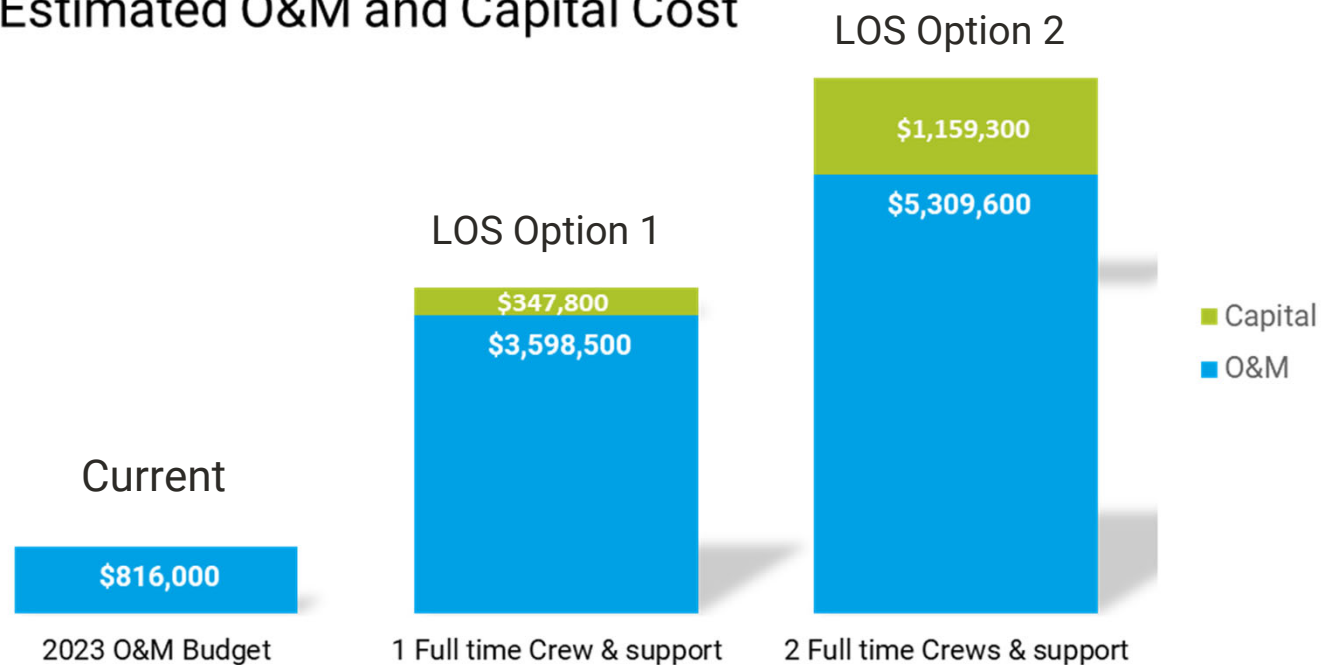
Enhanced Level of Service Program Needs – Option 2

Stormwater Program Element	Enhanced Improvements (Baseline +) (Increase to 2 Maintenance Crews for a total of 10 maintenance personnel plus Support Staff)	Benefit to Public
System Maintenance	Additional 5-person crew added in 2026 Additional \$500k annually for CMP replacement program	Further reduces costly infrastructure failures and localized flooding
Water Quality / Compliance	No Change	
Planning & Engineering	Enhanced contract services	Ensure adequate infrastructure for future growth Potential for Rain to Recreation projects and programs
Stormwater Utility	No Change	
Stormwater Program Administration	Additional Stormwater Admin costs due to new 5-person crew	Helps support the stormwater program

Costs for Option 1 Level of Service needs are estimated at \$6.47M

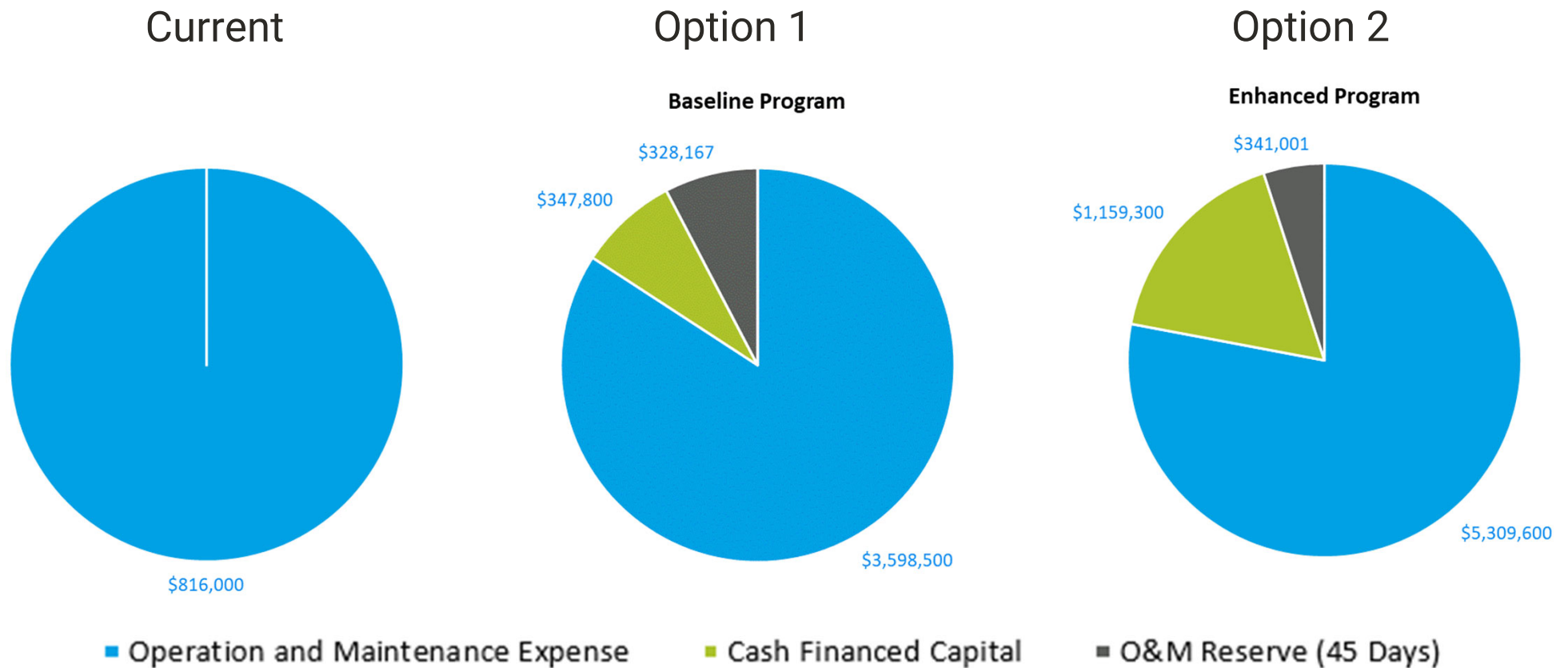
Annual Level of Service Funding Gap

Estimated O&M and Capital Cost



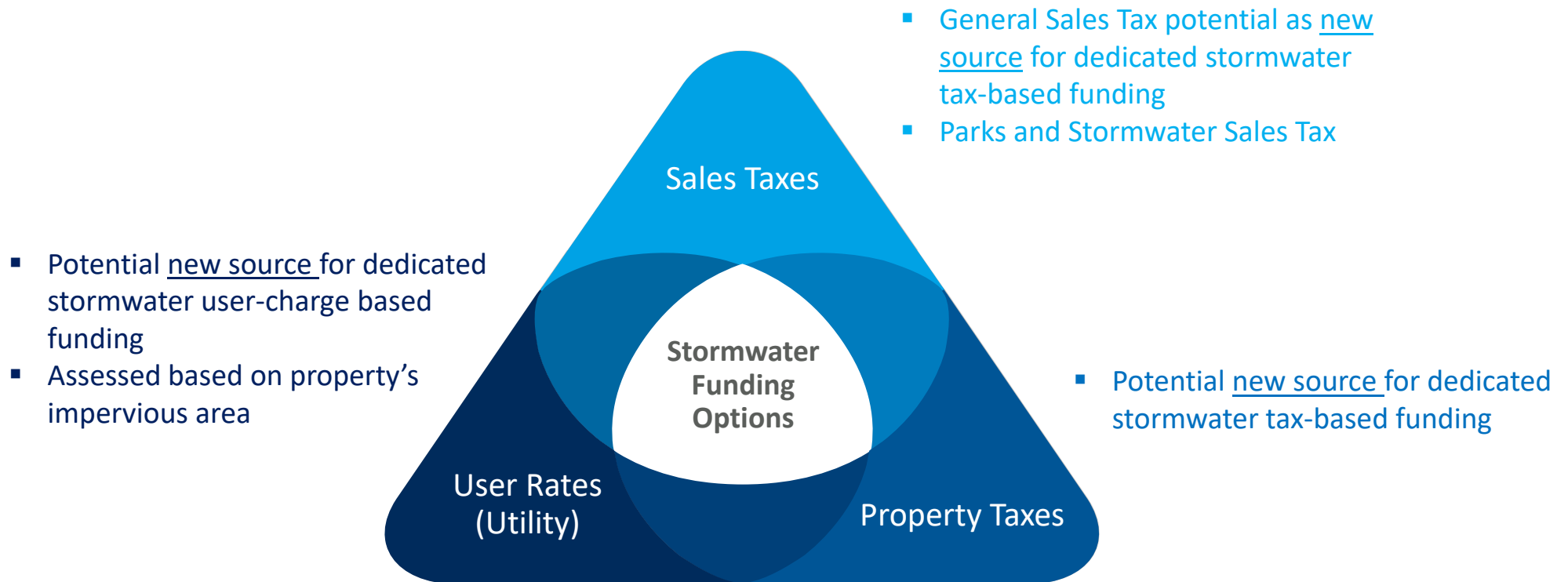
Current O&M funding is 21% to 13% of the funding needed for the current system

Stormwater User Charge Level of Service Funding



Funding Approaches

Stormwater Funding Options

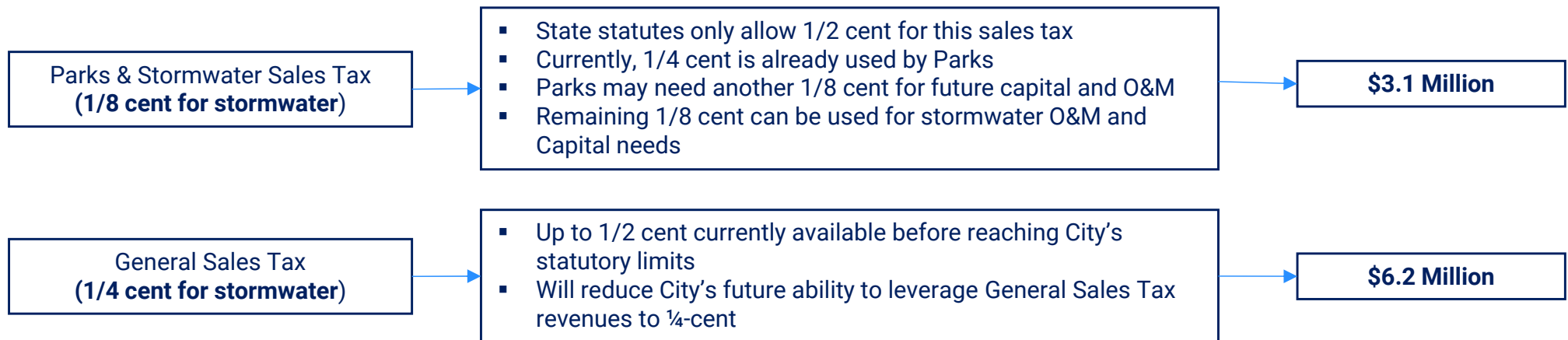


1. Sales Tax Funding Options

FUTURE SALES TAX SOURCES

KEY CONSIDERATIONS

POTENTIAL ANNUAL REVENUES (STORMWATER)



- Sales Tax revenues are subject to economic environment and market conditions

2. Property Tax Funding Option

- Potential new annual revenue source for stormwater
- Would provide a more stable source of revenue than the Sales Tax Option

Option 1: Baseline LOS

Property Tax
13.4 cents per \$100 assessed valuation
(For Stormwater)

- Will increase tax rate from \$1.4199 to \$1.5538 per \$100 assessed valuation
- A 13.4 cent levy increase would cost approximately \$89 per year for a median home with a market value of \$350,000

\$3.48 Million

Option 2: Enhanced LOS

Property Tax
22.0 cents per \$100 assessed valuation
(For Stormwater)

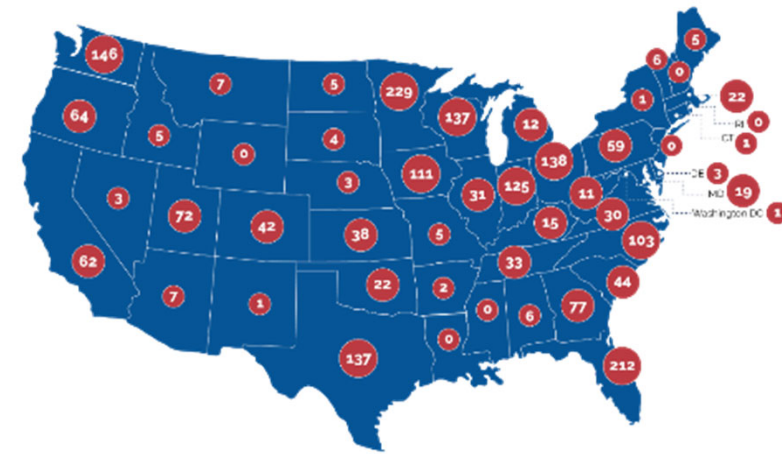
- Will increase tax rate from \$1.4199 to \$1.6394 per \$100 assessed valuation
- A 22.0 cent levy increase would cost approximately \$146 per year for a median home with a market value of \$350,000

\$5.20 Million

3. Impervious Area User Rate Funding Option

- Potential new dedicated and relatively stable annual funding source for stormwater, but most complex compared to other options
- Impervious area provides a reasonable approximation of stormwater runoff contribution from properties
- User fee funded stormwater utility is similar to water and sewer utilities
- User rates are typically designed to align with a utility's total annual revenue requirement
- User rates are typically adjusted to meet program's revenue requirement needs

Stormwater Utility Landscape



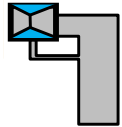
Currently, there are about 2,000 stormwater utility fee funded programs nation-wide

Source: 2021 Western Kentucky University Stormwater Survey

Stormwater Utility Rate Funding Approach



Five-year Stormwater Utility Financial Plan



Parcel level Impervious Area Units Aggregated to City-wide Total SWU Billing Units



System-wide SWU Rate used in designing the Rate Structure



Monthly Stormwater Charge Estimated for Each Parcel Inclusive of any Credits

Annual Stormwater Revenue Requirements (\$)

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System-wide SWU Billing Units
(*Impervious Area Based*)

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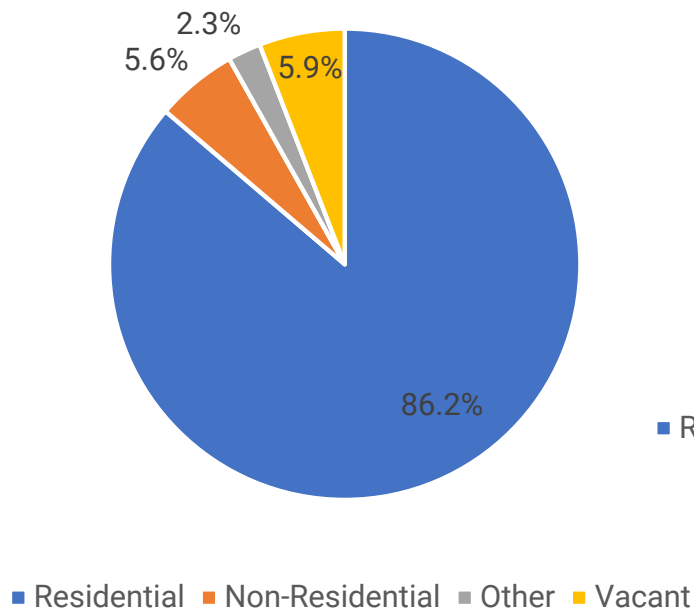
Stormwater User Fee Rate
(\$ / SWU)

Stormwater Charge

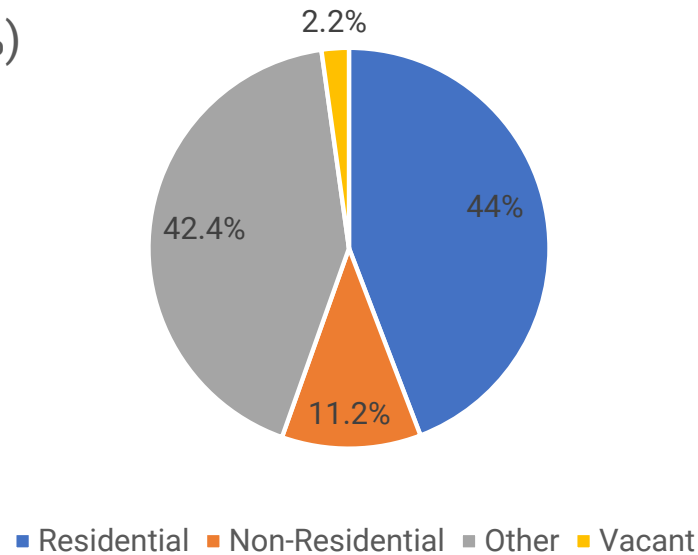
Impervious Surface Analysis

Parcel Count and Impervious Area Profile

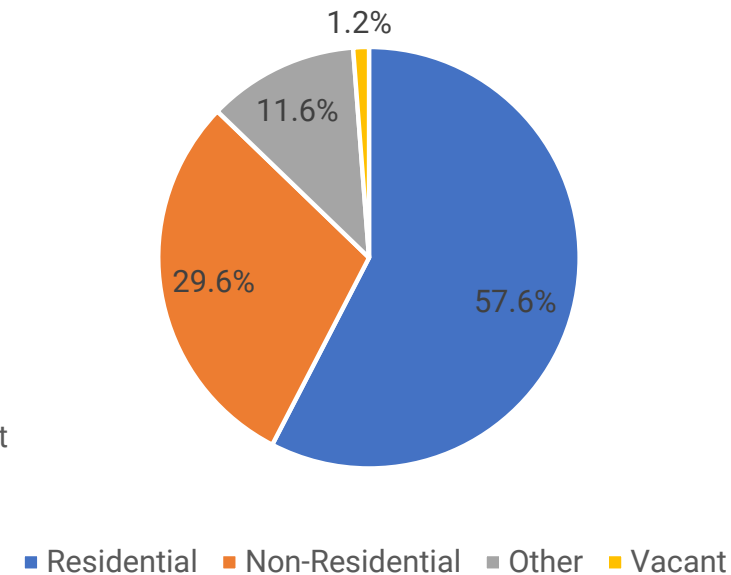
Parcel Count Distribution (%)



Lot Area Distribution (%)



Impervious Area Distribution (%)



Data source(s) used: City GIS Land Use; Impervious Raster Imagery; Parcel Polygon Layer

Impervious Area Utility Rate Billing Units Determination



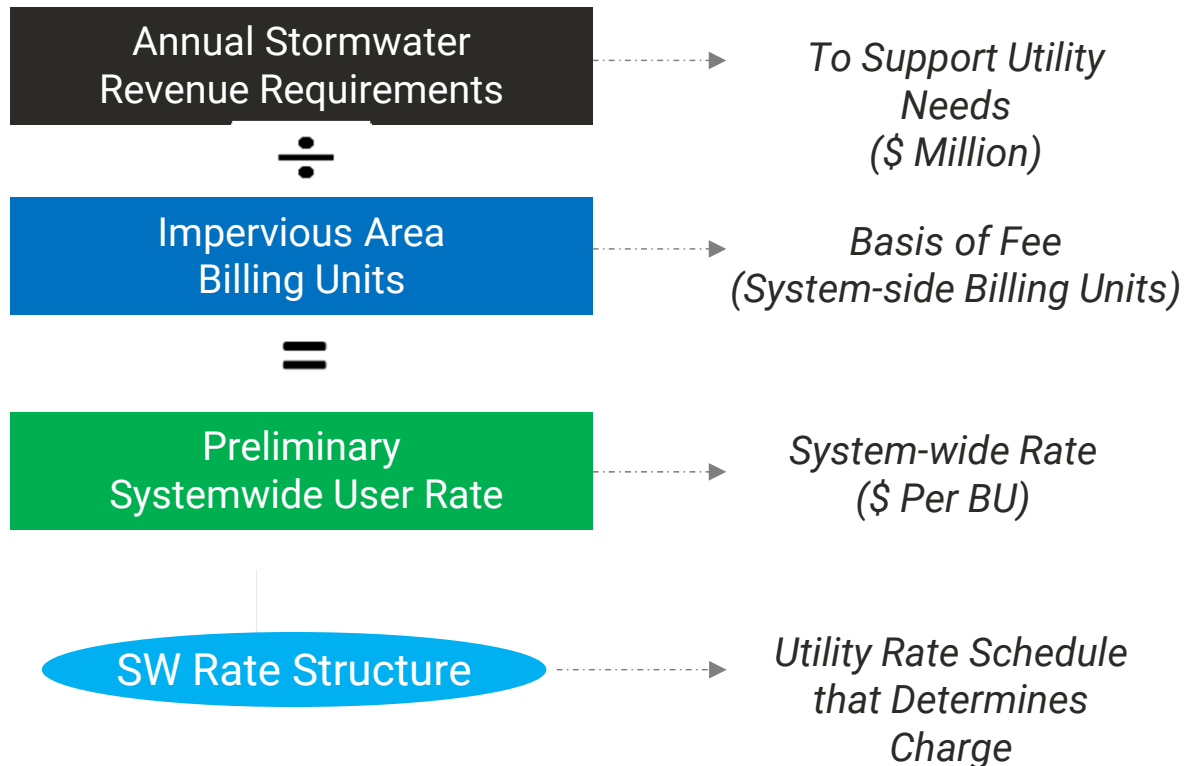
Example of Potential Exclusions:

- Exclusions: Tax-Exempt Properties, Vacant Land
- Adjustments: Stormwater Credits for private onsite stormwater management

1 BU = 500 square feet of impervious area

Utility Rate & Rate Structure Design Process

Stormwater Utility Rate Determination Process



1 BU = 500 square feet of impervious area

User Rate Determination Considerations

- 1 Are properties treated “Similarly” and “Proportionally”?
- 2 Does the structure support equitable cost recovery?
- 3 Is the rate structure easy to understand?
- 4 Is it feasible to implement and administer?
- 5 Does it support affordability and community well being?

Key Issues and Decisions for SWAC

Program Costs

- What LOS phase-in options should be evaluated?
- What are the benefits of action and risks of reactive approach?

Funding Options

- What potential mix of funding options should be considered?
- If tax funding what level of available funding be leveraged?
- What are the benefits/challenges of each funding option?

Fee Basis

- If a new dedicated tax, what should the tax rate be based on?
- If a new user rate, what should the user rate be based on?

- Should property exclusions be considered for any tax and/or user fee option?
- Should vacant land type properties be included?

- Should distinct user rate structure be considered for Residential vs Non-Residential type properties?
- Should fee adjustments be offered in the form of stormwater credits?
- Should there be a minimum charge?

- What are the billing system options for billing a tax?
- What are the billing system options for billing a user charge?
- What are the benefits / challenges of each option?

Potential Exclusions

Rate Structure

Billing Considerations

These types of issues and associated options will be discussed with the SWAC and with City Council for input

Stormwater Advisory Committee (SWAC)

Representatives from key stakeholders, such as:

- Educational Institutions
- Development Community
- Condo/Neighborhood Associations
- Faith Based Organizations
- Environmental Organizations
- Industrial Group
- Single-Family Residential Property Owners
- Multi-Family/Commercial Property Owners
- Major Hospitals
- Recreational

Roles & Responsibilities

- Participate in up to 3 working group meetings
 - *Financial Plan Overview*
 - *User Fee Policy Issues*
 - *Rate Structure and Bill Impact*
- Provide review and feedback

Next Steps:

- Design Impervious Area Rate Structures
- Complete Series of Stormwater Water Advisory Committee (SWAC) Sessions
- Presentation to Council



Discussion