

# Surface Water Utility Rate Study -Update-

City Council Study Session  
September 5, 2017

Steve Leniszewski, PE Public Works Director

Cheryl Paston, PE Deputy Public Works Director

John Ghilarducci, FCS Group



# Discussion Topics

- Project Background
- Town Center Regional Stormwater Project Funding
- Scenarios and Proposed Rate Impacts
- Rate Credits
- Rate and Credit Recommendations
- Next Steps

# Project Background

- Last surface water utility rate model updated in 2012
  - Evaluated needs for 2012-2018
  - Council approved following rate increases:
    - 2013: 18% increase
    - 2014: 15% increase
    - 2015: 2.5% increase
    - 2016: 2.5% increase
    - 2017: 5% increase\*
    - 2018: 2.5% budgeted pending current rate study

\* Includes 2.5% increase initiated by Finance Committee in 2016

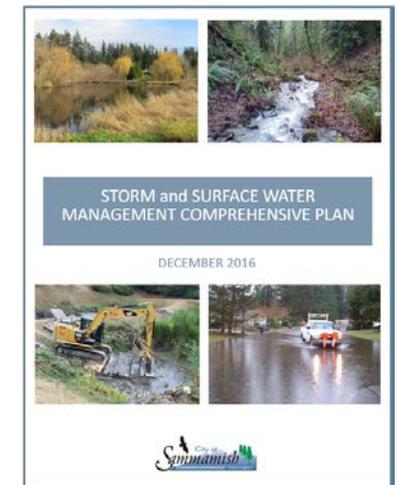
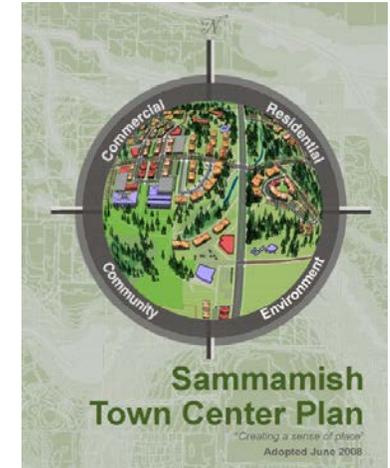
# Major Changes Since 2012

- Renewed National Pollutant Discharge Elimination System Permit
  - Unfunded mandates
  - More restrictive requirements to protect/enhance water quality
    - 2016 King County Surface Water Design Manual & Sammamish Addendum
    - 2016 Storm & Surface Water Management Comprehensive Plan
    - Low Impact Development Code revisions
    - Annual inspections of private Low Impact Development facilities
    - All transportation projects must comply with KCSWDM
- Sammamish's population increased ~31%
- Increase of \$24.4M (61.8%) added to city-owned inventory of stormwater capital assets



# Major Changes Since 2012 (cont)

- Proposed Town Center Regional Stormwater Facilities
- 2016 Storm and Surface Water Management Comprehensive Plan
  - Included 17 enhanced levels of service programs, activities and projects
    - Operations and Maintenance (4)
    - Development (1)
    - Capital Projects (8)
    - Public Education and Outreach (2)
    - Local and Regional Coordination (2)
  - Additional capital projects, basin plans, and FTEs
  - Incremental to 2017/2018 budgeted, phased over 10 years



# Recent Council Direction\*

- Cash Reserves (Operating, Capital, Debt, and Debt Service Coverage)
- Rate structure based on equivalent service units
- Continue surface water funding of stormwater-related transportation CIP components
- Include 2018-2023 Surface Water CIP in rate study

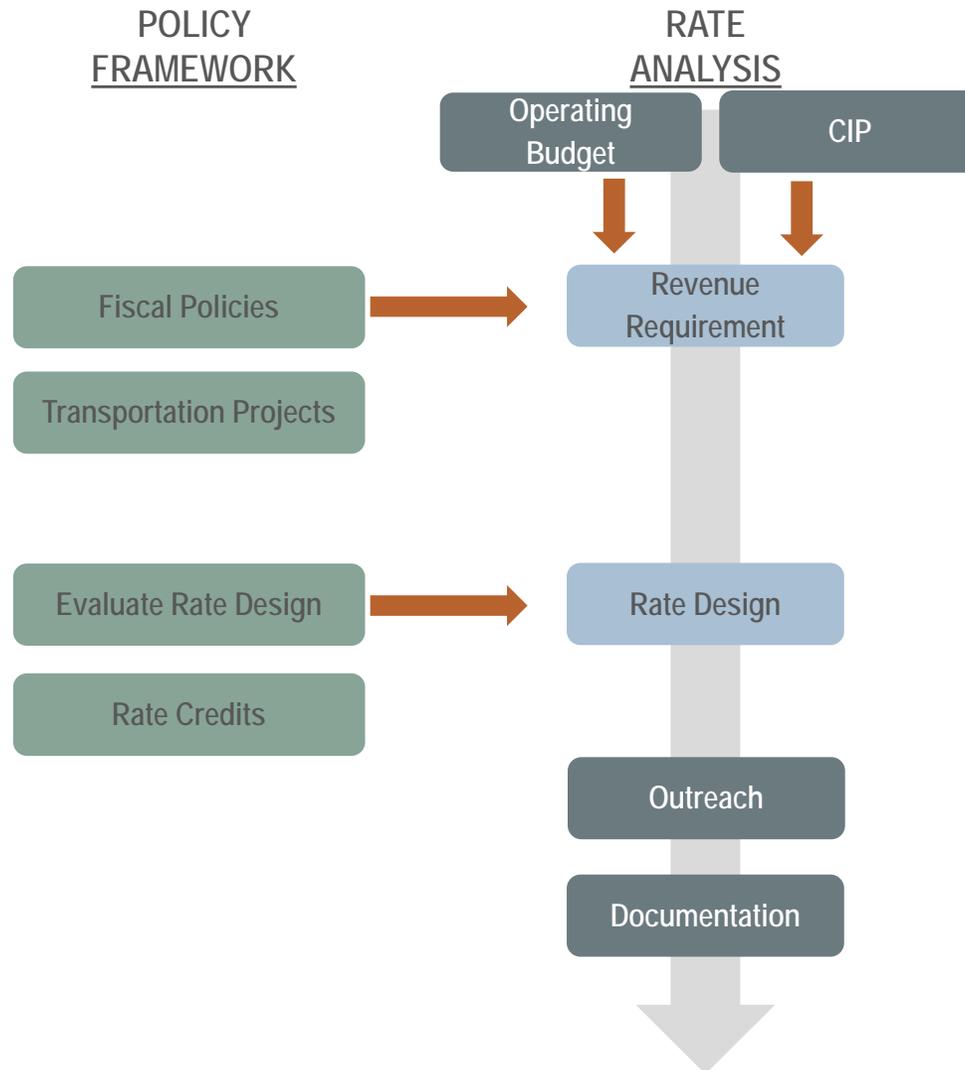
\*July 18, 2017 Council Meeting

# Recent Council Direction (cont)

Staff directed to develop following Town Center funding scenarios:

1. 75% developer funded
2. 90% developer funded
3. 100% developer funded
4. Not included in rate forecast

# Rate Study Process



# Key Assumptions

- **Annual Cost Inflation**

- General: 2.5% (Consumer Price Index)
- Labor: 3.0% (Employment Cost Index - Wages)
- Benefits: 5.8% (City)
- Construction: 3.0% (Engineering News Record Construction Cost Index)

- **New Debt Terms**

- Revenue Bonds
- Term: 20 years
- Interest Rate: 4.00%
- Issuance Cost: 1.00% of proceeds

- **Annual Customer Growth Rates**

- 1.5% based on comprehensive plan growth forecast

- **Operating Forecast**

- Generally based on 2017/2018 Biennial Budget
- Rate revenues include projected growth
- Taxes calculated on projected revenues
- Incorporate Stormwater Comprehensive Plan Enhanced Levels of Service

# Town Center Regional Stormwater Facilities Capital Assumptions

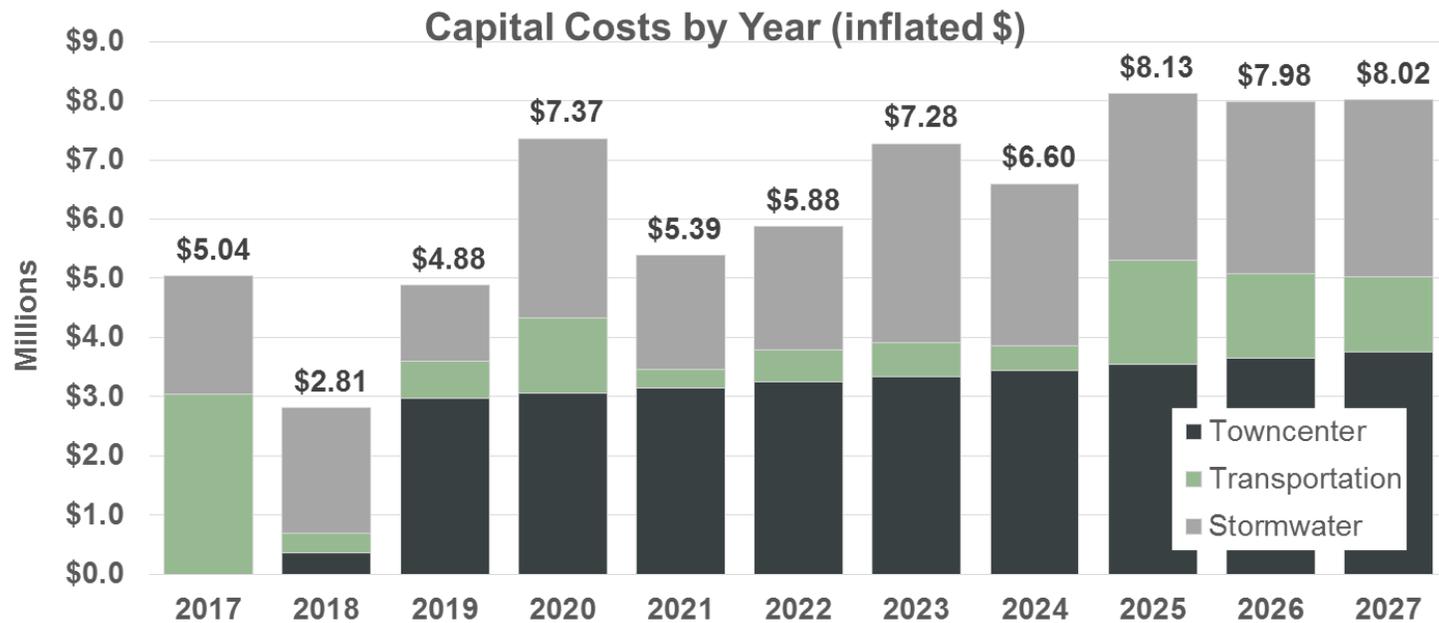
- \$34.4 million inflated total cost over 10 years (2019-2028)
  - \$2.8 million per year in current dollars
- Funding assumptions
  - 75%, 90%, 100% developer reimbursement scenarios
    - Reimbursements lag expenditure by 1-year
  - Remaining City share funded through revenue bonds
- Assumptions should be reviewed and adjusted as plan develops

# Town Center Regional Stormwater Facilities Scenarios Summary

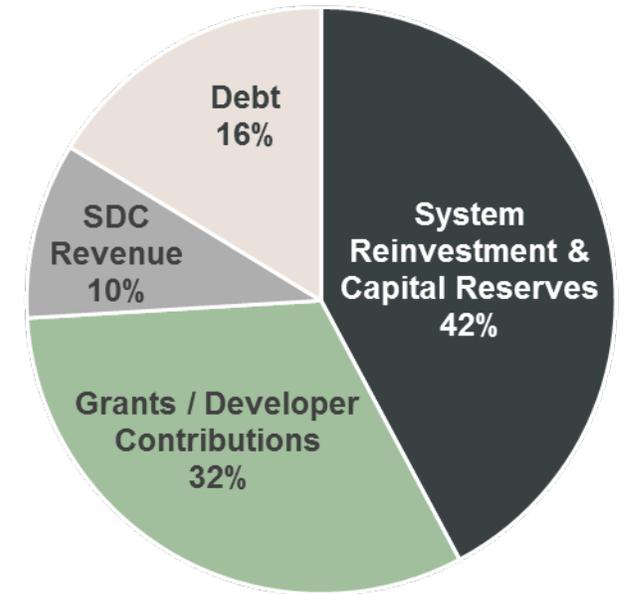
Scenario	Capital Funding		New Annual Debt Service	Annual Rate Increases	
	Developer Funded	Total Debt		2018-2020	2021 forward
1	75%    \$25.8 M	\$11,250,000	\$181 – 903 k	15%	3.50%
2	90%    \$31.0 M	\$6,650,000	\$181 – 534 k	15%	3.00%
3	100%    \$34.4 M	\$3,750,000*	\$181 - 301 k	15%	2.75%
4	No regional facility	\$0	\$0	15%	2.00%

\* 1 year lag on developer funding, City issues debt to cover initial investment

# Capital Needs Forecast w/ Town Center

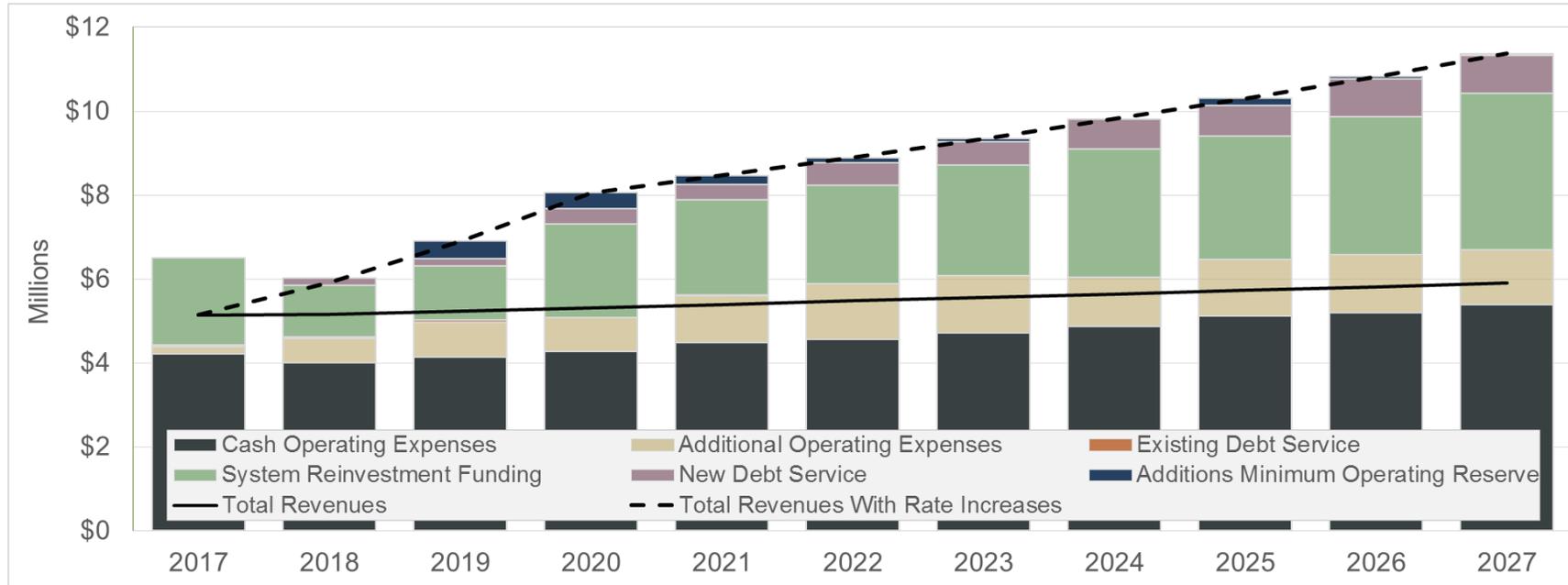


2017-2027 Inflated Capital Costs (\$69.4million)



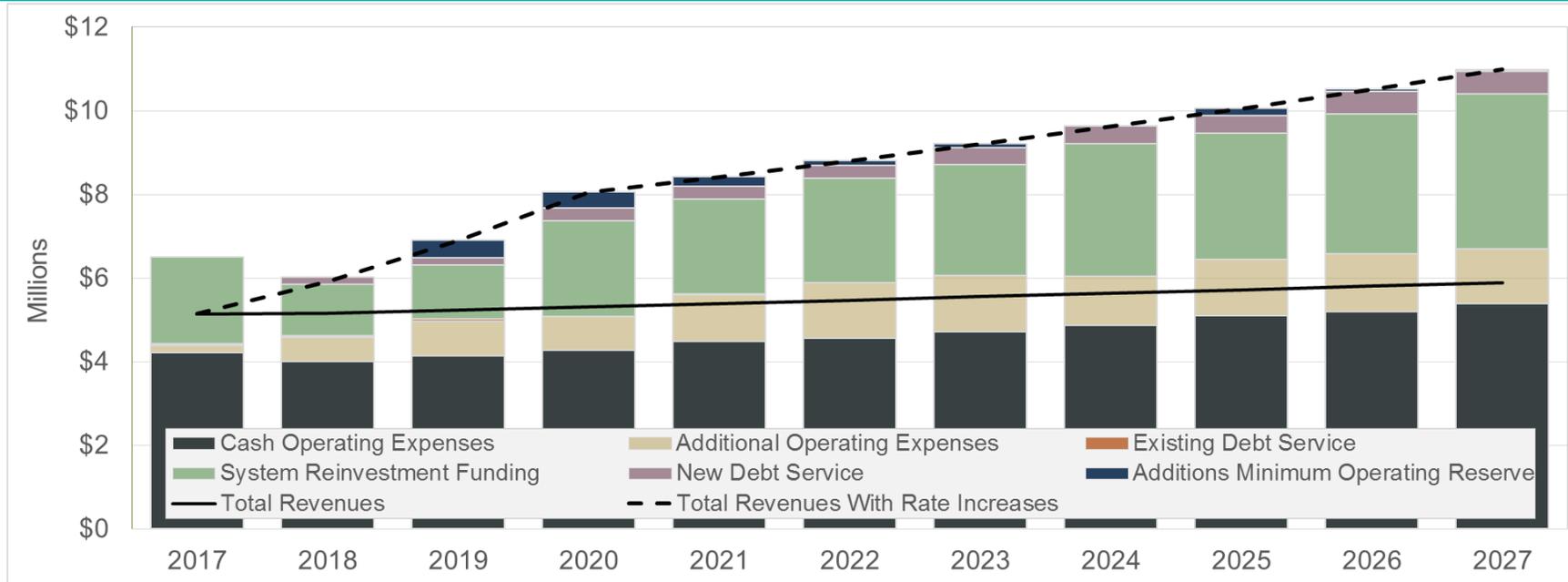
- \$69.4 million in capital costs (inflated) from 2017 – 2027
  - 10% SDCs, 16% Debt, 32% Developers/Grants, 42% Cash Funded
- Projects assumed to be paid for with debt
  - City's share of Town Center Regional Storm Facility (where applicable)
  - Two, large fish culvert projects (Ebright & George Davis Creek)

# Scenario 1: 75% Developer Funded



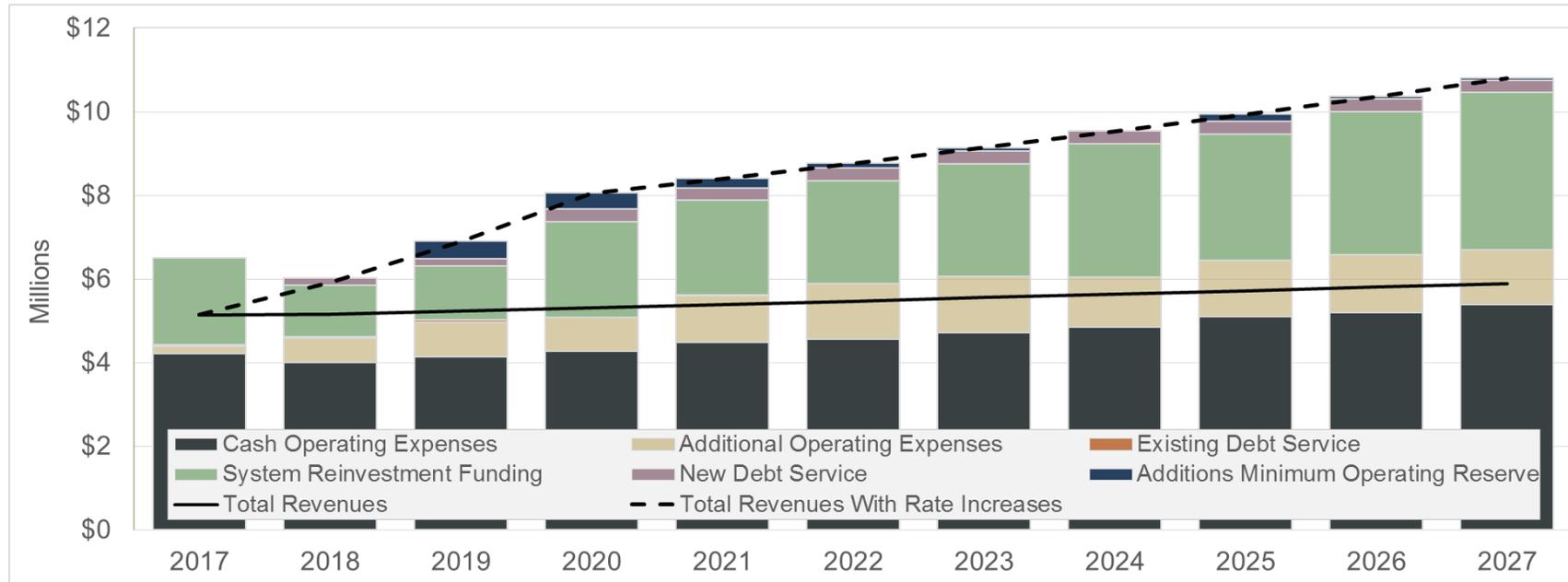
Monthly SFR Rate	\$18.75	\$21.56	\$24.80	\$28.52	\$29.51	\$30.55	\$31.62	\$32.72	\$33.87	\$35.05	\$36.28
Annual SFR Rate	\$225	\$259	\$298	\$342	\$354	\$367	\$379	\$393	\$406	\$421	\$435
Annual Increase		15%	15%	15%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%

# Scenario 2: 90% Developer Funded



Monthly SFR Rate	\$18.75	\$21.56	\$24.80	\$28.52	\$29.37	\$30.25	\$31.16	\$32.10	\$33.06	\$34.05	\$35.07
Annual SFR Rate	\$225	\$259	\$298	\$342	\$352	\$363	\$374	\$385	\$397	\$409	\$421
Annual Increase		15%	15%	15%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

# Scenario 3: 100% Developer Funded

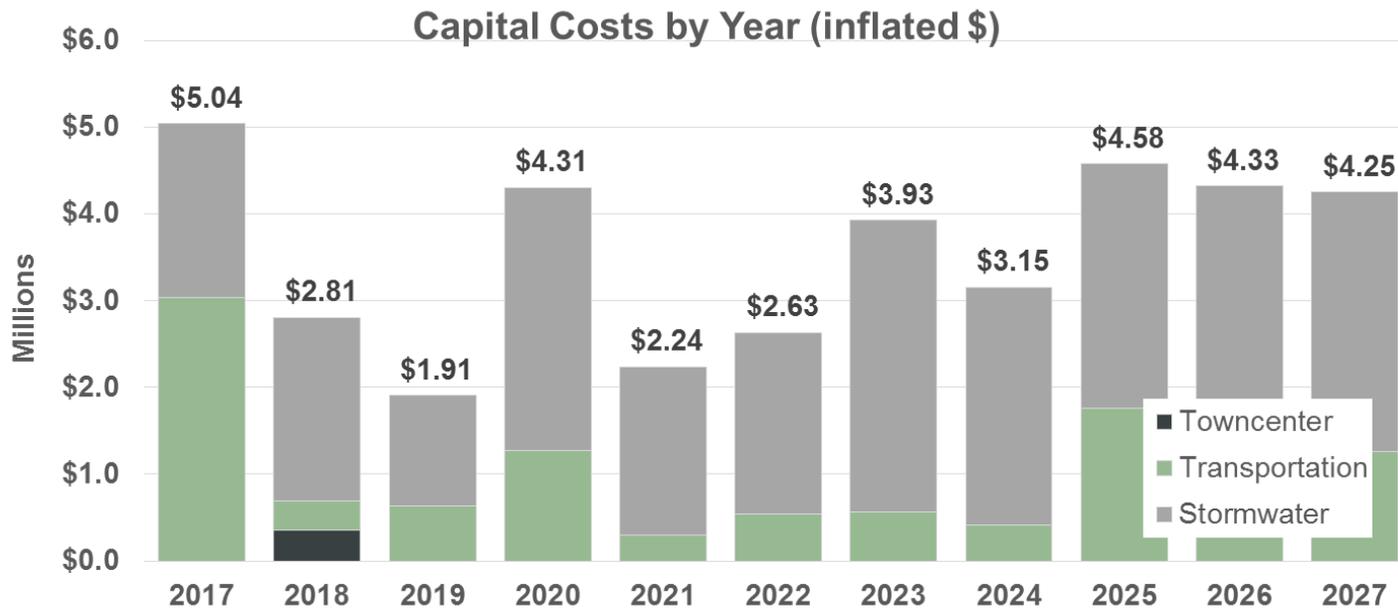


Monthly SFR Rate	\$18.75	\$21.56	\$24.80	\$28.52	\$29.30	\$30.11	\$30.93	\$31.78	\$32.66	\$33.56	\$34.48
Annual SFR Rate	\$225	\$259	\$298	\$342	\$352	\$361	\$371	\$381	\$392	\$403	\$414
Annual Increase		15%	15%	15%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%

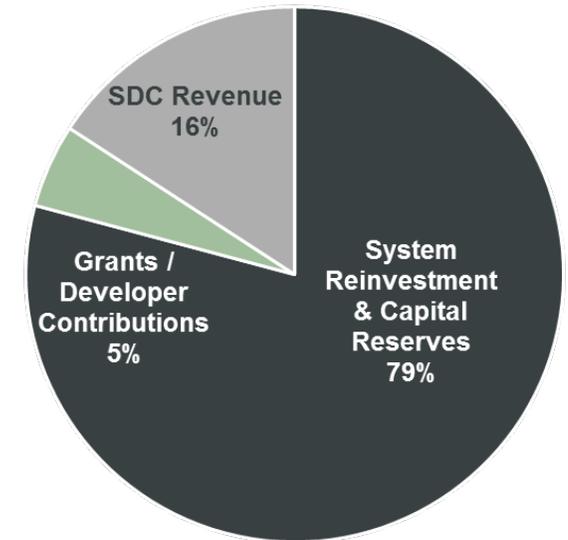
# Town Center Regional Stormwater Facilities

- Unknown variables
  - Timeline of Town Center development
    - Start of project
    - Distribution of costs throughout project
  - Cost to the City for development
    - How much will the developers fund?
- Staff proposes keeping Town Center out of rate model until more is known.
  - 2018 rate increase 15% in all scenarios.

# Capital Needs Forecast w/out Town Center

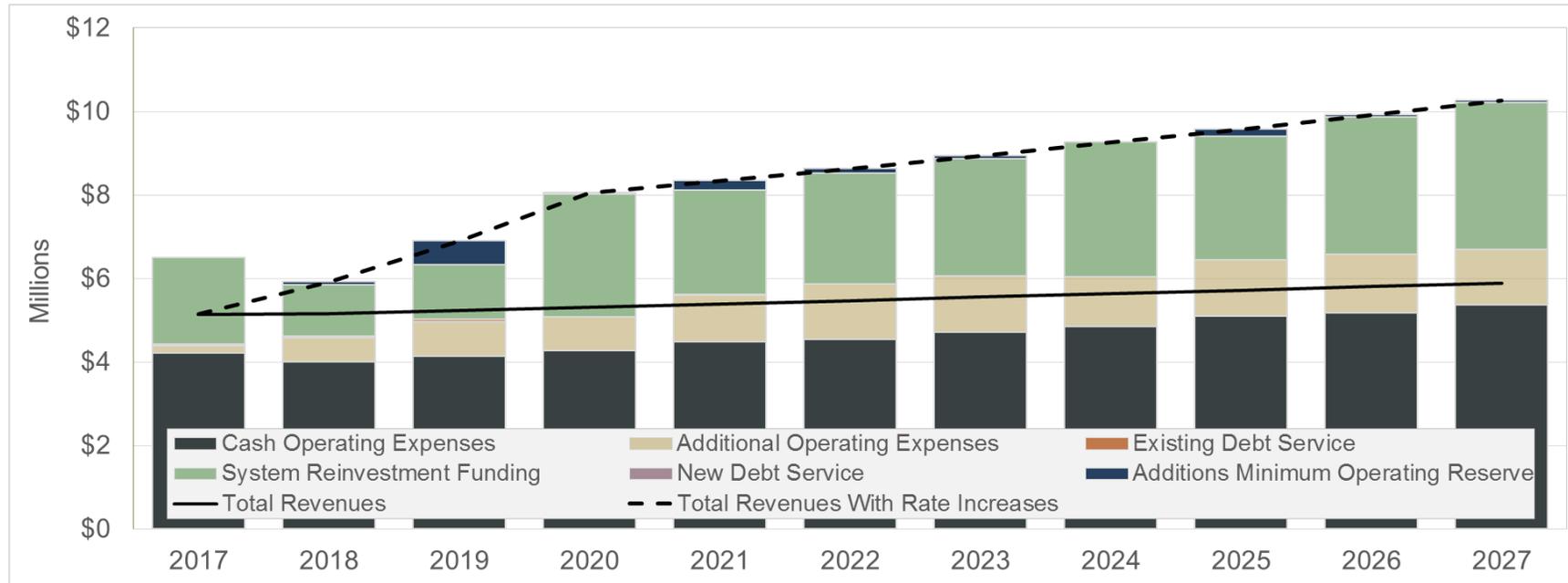


2017-2027 Inflated Capital Costs (\$39.2million)



- \$39.2 million in capital costs (inflated) from 2017 – 2027
  - 16% SDCs, 5% Developers/Grants, 79% Cash Funded
- Still have \$350,000 for Town Center planning in 2018
- No debt issued

# Scenario 4: No Town Center



Monthly SFR Rate	\$18.75	\$21.56	\$24.80	\$28.52	\$29.30	\$30.11	\$30.93	\$31.78	\$32.66	\$33.56	\$34.48
Annual SFR Rate	\$225	\$259	\$298	\$342	\$352	\$361	\$371	\$381	\$392	\$403	\$414
Annual Increase		15%	15%	15%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

# Rate Credits

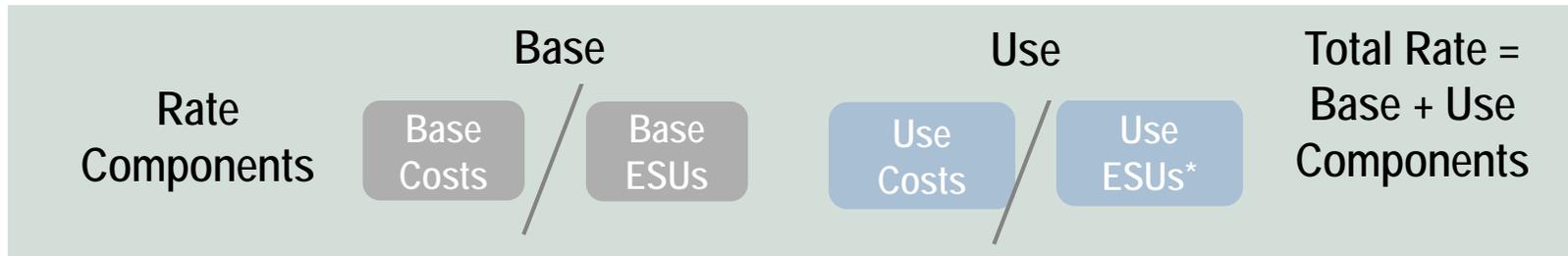
<b>Issue</b>	Evaluate the ways rate credits are calculated and applied across stormwater systems.
<b>Analysis</b>	<ul style="list-style-type: none"><li>◆ Existing types of credits</li><li>◆ Total credit amount</li><li>◆ How to apply to customers</li><li>◆ Ease of implementation – City’s code would need to be changed</li></ul>
<b>Recommendations</b>	<ul style="list-style-type: none"><li>◆ Calculate maximum credit percentage</li><li>◆ Consider rate “penalty”?</li></ul>

# Maximum Credit Methodology

Base Costs  
Costs related to total system



Use Costs  
Costs related to increased burden on the system (water volume or quality)



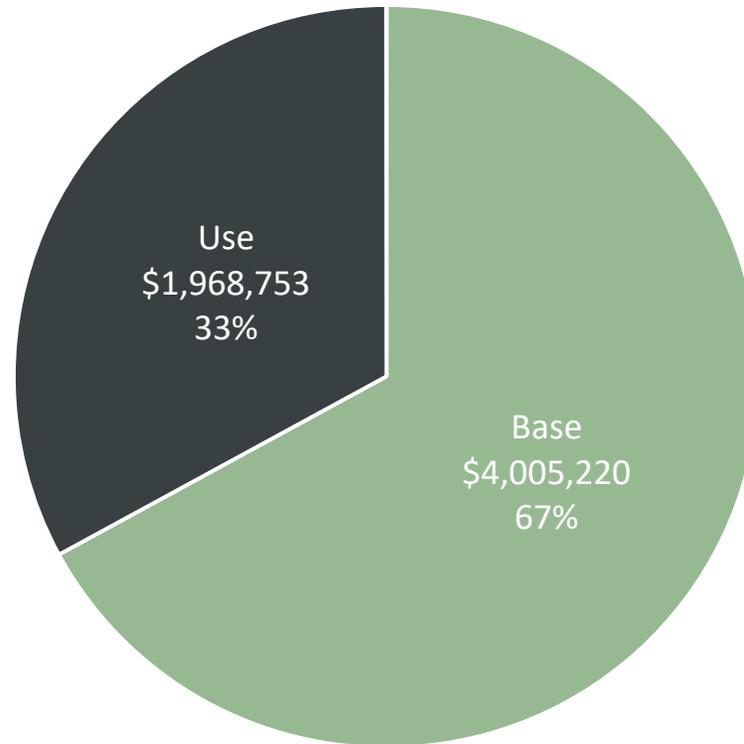
$$\text{Max Credit} = \text{Use Component} \div \text{Total Rate}$$

\*Use ESUs equal the total ESUs less ESUs assumed to be receiving credits

# Functional Cost Allocation

## Use

Costs related to increased burden on the system (water volume or quality)



## Base

Costs related to total system

# Equivalent Service Units (ESUs)

- **1 ESU = 1 residential equivalent (3,500 sq. ft.)**
- Single family parcel = 1 ESU
- Non single family
  - Total impervious area ÷ 3,500 sq. ft. = ESUs

# Maximum Credit Starting 2018

2018 Credit Calculation	Base	Use	Total
<b>2018 Revenue Requirement</b>			
Expense Allocation	\$4,005,220	\$1,968,753	\$5,973,973
% Allocation	67.04%	32.96%	
<b>Customer Data</b>			
Applicable ESUs	23,631	21,245	
<b>Annual Rate</b>	<b>\$169</b>	<b>\$93</b>	<b>\$262</b>
<i>Information Only: ATB 2018 Existing Rate</i>			\$259
			<b>35.3% Maximum Credit</b>

# Proposed Rate Structure w/ Credit

	Existing 2017	Rate Design 2018	ATB 2019	ATB 2020	ATB 2021	ATB 2022	ATB 2023	ATB 2024	ATB 2025	ATB 2026	ATB 2027
<b>Annual System-Wide Rate Increase</b>		15.0%	15.0%	15.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
<b>Existing Annual Residential</b>	\$225	\$259	\$298	\$342	\$349	\$356	\$363	\$370	\$378	\$385	\$393
<b>Proposed ESU Annual Rates</b>											
ESU		\$262	\$301	\$347	\$354	\$361	\$368	\$375	\$383	\$390	\$398
ESU w/ Credit		\$169	\$195	\$224	\$229	\$233	\$238	\$243	\$247	\$252	\$257

- Credits available for non-residential customers only
- 79 of 152 qualifying nonresidential customers received a credit last year
- 138 qualifying low income senior citizens were exempted from paying stormwater fees

# Next Steps

- **City Council**

- Consider proposed rate increase schedule
- Approve credit and ESU rate design
- Adopt proposed rate increases
  - Hearing & 1<sup>st</sup> Reading: Sept 19. Adoption: Oct 17
  - December 1, 2017 for rate increases to existing structure effective January 2018
  - March 1, 2018 for rate structure changes effective January 2019

- **Staff**

- 2018 - Develop Town Center Regional Stormwater Implementation Plan

- **FCS GROUP**

- Complete System Development Charge draft analysis
- Winter 2018 - Revise rate study to incorporate Town Center

Thank you

# Extra slides

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# Preliminary 2018-2023 Surface Water CIP

	PROJECT	2018	2019	2020	2021	2022	2023	6-Year Total	Prior Years	Future Years	Total Project Cost
Storm Component of Transportation Projects	TIP Concurrency Projects	\$ 127,022	\$ 325,902	\$ 852,902	\$ 76,000	\$ 281,000	\$ 283,000	\$ 1,945,826	\$ 752,285	\$ 750,000	\$ 3,448,111
	TIP General Projects	\$ -	\$ 79,865	\$ 124,077	\$ -	\$ -	\$ -	\$ 203,942	\$ 2,289,444	\$ 2,250,000	\$ 4,743,386
	Other TIP Programs	\$ 190,000	\$ 190,000	\$ 190,000	\$ 190,000	\$ 190,000	\$ 190,000	\$ 1,140,000	\$ -	\$ 760,000	\$ 1,900,000
	<b>All TIP Projects Subtotal</b>	<b>\$ 317,022</b>	<b>\$ 595,767</b>	<b>\$ 1,166,979</b>	<b>\$ 266,000</b>	<b>\$ 471,000</b>	<b>\$ 473,000</b>	<b>\$ 3,289,768</b>	<b>\$ 3,041,729</b>	<b>\$ 3,760,000</b>	<b>\$10,091,497</b>
Stormwater	CIP Projects	\$ 1,560,000	\$ 3,225,000	\$ 4,650,000	\$ 3,650,000	\$ 2,875,000	\$ 3,215,000	\$19,175,000	\$ 4,243,665	\$11,200,000	\$34,618,665
	CIP Programs	\$ 699,635	\$ 828,635	\$ 935,256	\$ 885,256	\$ 1,725,000	\$ 2,405,000	\$ 7,424,781	\$ 353,635	\$ 8,900,000	\$16,678,416
	<b>SW CIP Subtotal</b>	<b>\$ 1,560,000</b>	<b>\$ 3,225,000</b>	<b>\$ 4,650,000</b>	<b>\$ 3,650,000</b>	<b>\$ 2,875,000</b>	<b>\$ 3,215,000</b>	<b>\$19,175,000</b>	<b>\$ 4,243,665</b>	<b>\$11,200,000</b>	<b>\$34,618,665</b>
	<b>TIP &amp; SW CIP Total</b>	<b>\$ 2,576,657</b>	<b>\$ 4,649,402</b>	<b>\$ 6,752,235</b>	<b>\$ 4,801,256</b>	<b>\$ 5,071,000</b>	<b>\$ 6,093,000</b>	<b>\$29,889,549</b>	<b>\$ 7,639,029</b>	<b>\$23,860,000</b>	<b>\$61,388,578</b>

# Scenario #1 (75% Dev Funded): Impacts on Existing Service Charges

Class	Basis	2017 (Existing)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Residential	parcel	\$225	\$259	\$298	\$342	\$354	\$367	\$379	\$393	\$406	\$421	\$435
Very Light	parcel	\$225	\$259	\$298	\$342	\$354	\$367	\$379	\$393	\$406	\$421	\$435
Light	acre	\$524	\$603	\$693	\$797	\$825	\$854	\$884	\$915	\$947	\$980	\$1,014
Moderate	acre	\$1,086	\$1,249	\$1,436	\$1,652	\$1,709	\$1,769	\$1,831	\$1,895	\$1,962	\$2,030	\$2,101
Moderately Heavy	acre	\$2,073	\$2,384	\$2,742	\$3,153	\$3,263	\$3,377	\$3,496	\$3,618	\$3,745	\$3,876	\$4,011
Heavy	acre	\$2,650	\$3,048	\$3,505	\$4,030	\$4,171	\$4,317	\$4,468	\$4,625	\$4,787	\$4,954	\$5,128
Very Heavy	acre	\$3,474	\$3,995	\$4,594	\$5,284	\$5,468	\$5,660	\$5,858	\$6,063	\$6,275	\$6,495	\$6,722