



COSTA MESA
SANITARY DISTRICT

Wastewater 2022 Rate Study

Costa Mesa Sanitary District

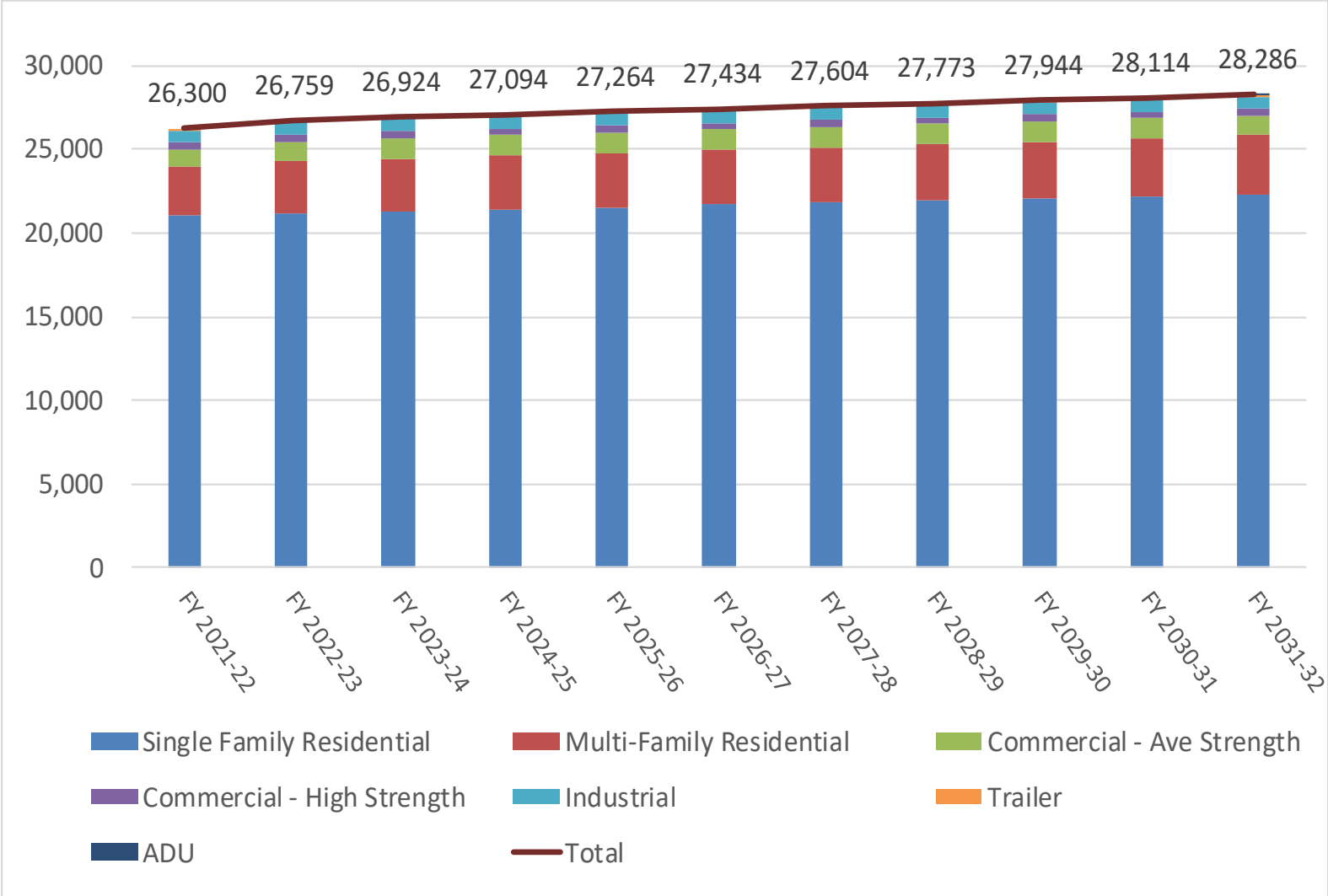
ROBERT D. NIEHAUS, INC.

1/27/2022



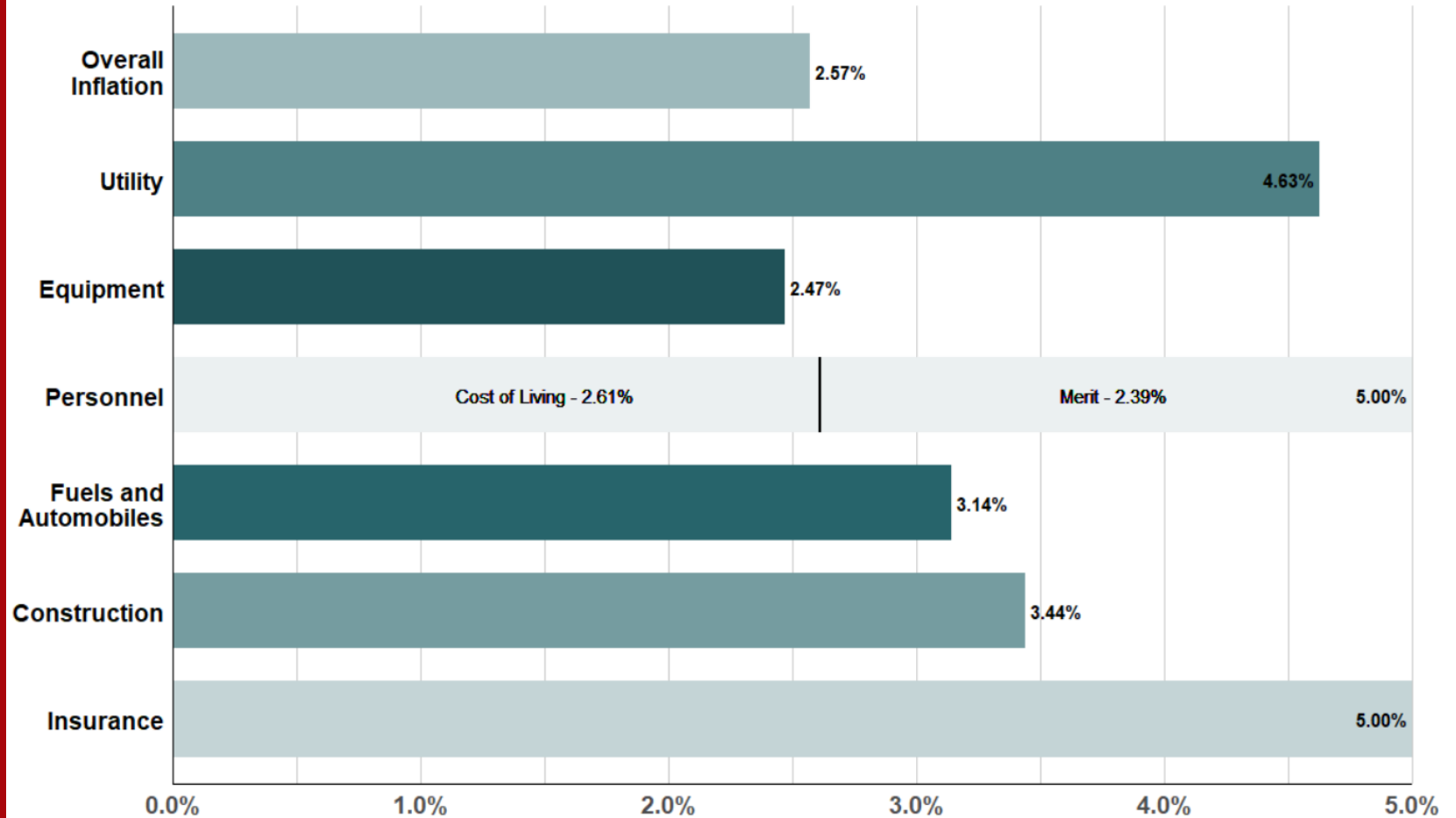
Account Growth Projections

After the first-year adjustment, total number of accounts is forecasted to increase 166-172 per year, all in residential customers



Escalation Factors

- US BLS 20-year average for Los Angeles-Long Beach-Anaheim
- Federal Reserve Bank of St. Louis Economic Research Division
- District's historical data
- Engineering News Record (ENR) Los Angeles Building Cost Index



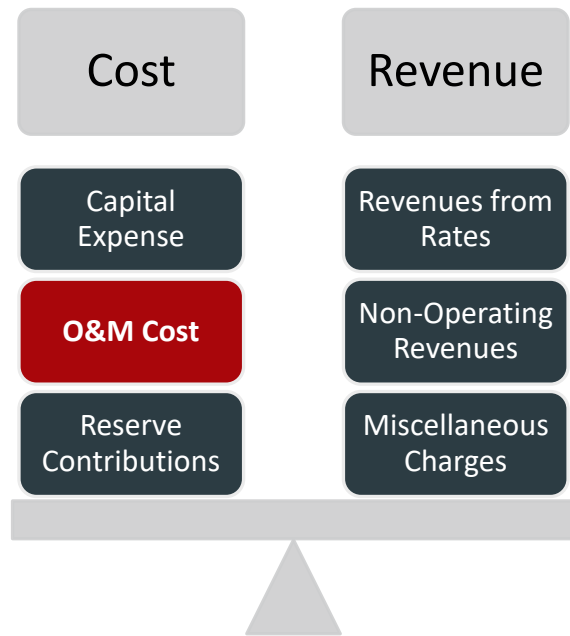
Current Rates

- Residential Customers rates are flat annual fee per dwelling unit
- Commercial and Industrial customers are charged an annual fee based on the parcel size

Residential	Annual Charge Per Dwelling Unit
Single Family Residential	\$92.38
Multi-Family Residential	\$54.21
Non-Residential	Annual Charge Per 1,000 Sq. Ft.
Commercial - Ave Strength	\$41.09
Commercial - High Strength	\$44.81
Industrial	\$105.48

Revenues and Expenses





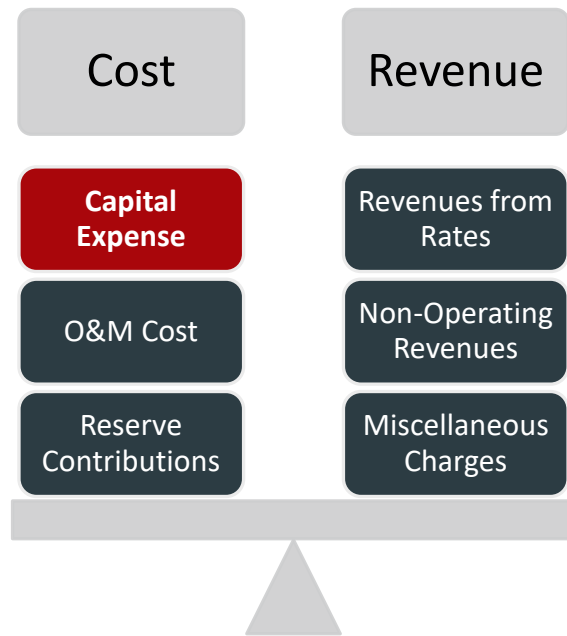
Key Operations Expenses

M&O

Two Wastewater Maintenance Workers	\$265,300
General Engineering Support & Resource	\$25,000
Flow Meter Rental and Cloud Access	\$45,000
IT Security Maintenance & Monitoring	\$17,000

Capital Outlay

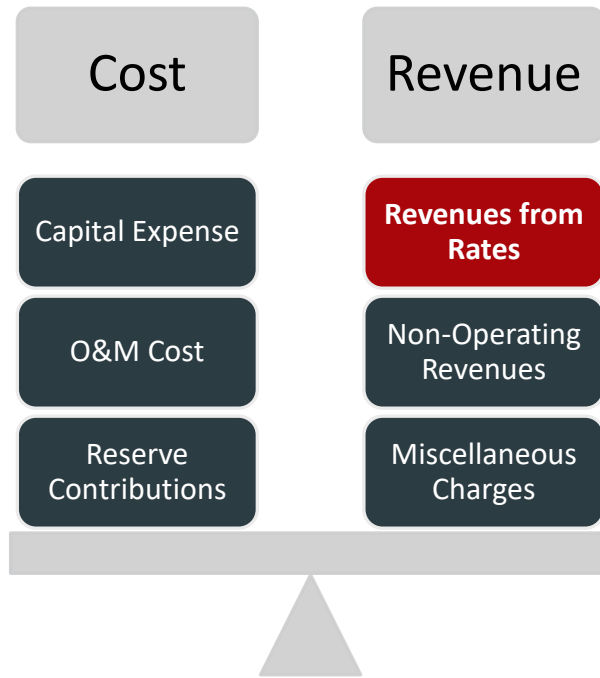
One Combo Cleaning Unit	\$464,000
One Pickup Truck	\$77,500
One Forklift	\$46,000



Capital Improvement Projects

Five-year Capital Improvement Projects

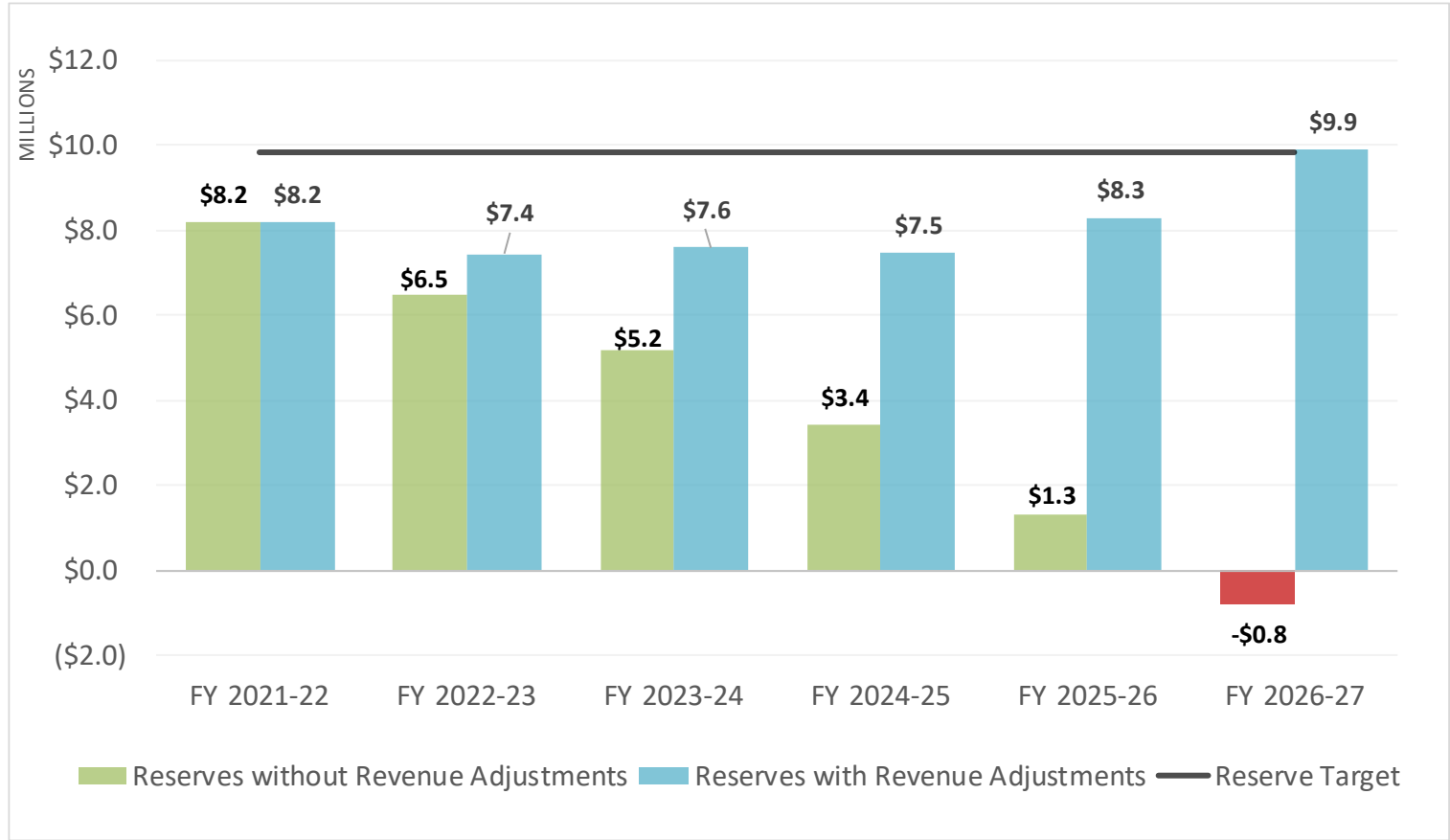
Force Main Replacements/Rehabilitations	\$3,665,000
Manhole Rehabilitation	\$1,571,000
Pump Station Rehabilitation	\$1,408,000
Standby Generators at Pump Stations	\$1,167,000
Grade 4 Pipe Segment Repairs/Rehabilitation	\$1,029,000
Calcium Removal	\$842,000
Odor Control at Pump Stations	\$592,000
Siphon Rehabilitations	\$310,000
Miscellaneous	\$1,383,000
Total	\$11,967,000



Revenue Requirements

Description	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
	Test Year				
Other Operating Revenues	(\$75,000)	(\$75,225)	(\$75,451)	(\$75,677)	(\$75,904)
O&M Expenses	\$4,959,700	\$4,904,584	\$5,106,946	\$5,401,281	\$5,529,851
Non-operating Revenues	(\$326,800)	(\$329,463)	(\$332,168)	(\$334,916)	(\$337,707)
Other Obligations	\$2,902,339	\$2,684,423	\$3,004,999	\$3,059,156	\$2,964,260
Contribution to Reserves	(\$2,270,592)	(\$2,684,423)	(\$2,959,689)	(\$3,045,925)	(\$2,957,491)
PAYGO	(\$631,746)	\$0	(\$45,310)	(\$13,230)	(\$6,769)
Net Balance	(\$1,194,669)	(\$267,880)	(\$69,319)	\$377,881	\$1,222,370
Revenue Requirements	\$6,265,570	\$6,916,438	\$7,635,007	\$8,427,725	\$9,302,871

FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
9.9%	9.9%	9.9%	9.9%	9.9%



Proposed Revenue Adjustment

- Operating Reserve: 25% of total O&M - \$1.4M by FY 2027
- Asset Replacement Fund: Accumulate to replace vehicles, computers, and equipment - \$3.3M by FY 2027
- Asset Management Fund: Maintain \$5.0M (currently \$5.2M)

2012 Study

Total Flow: 11.1 million gpd

55 gpcd for SFR and 40 for
MFR customers

Total Flow – Residential Flow
= Non Residential Use

RDN Study

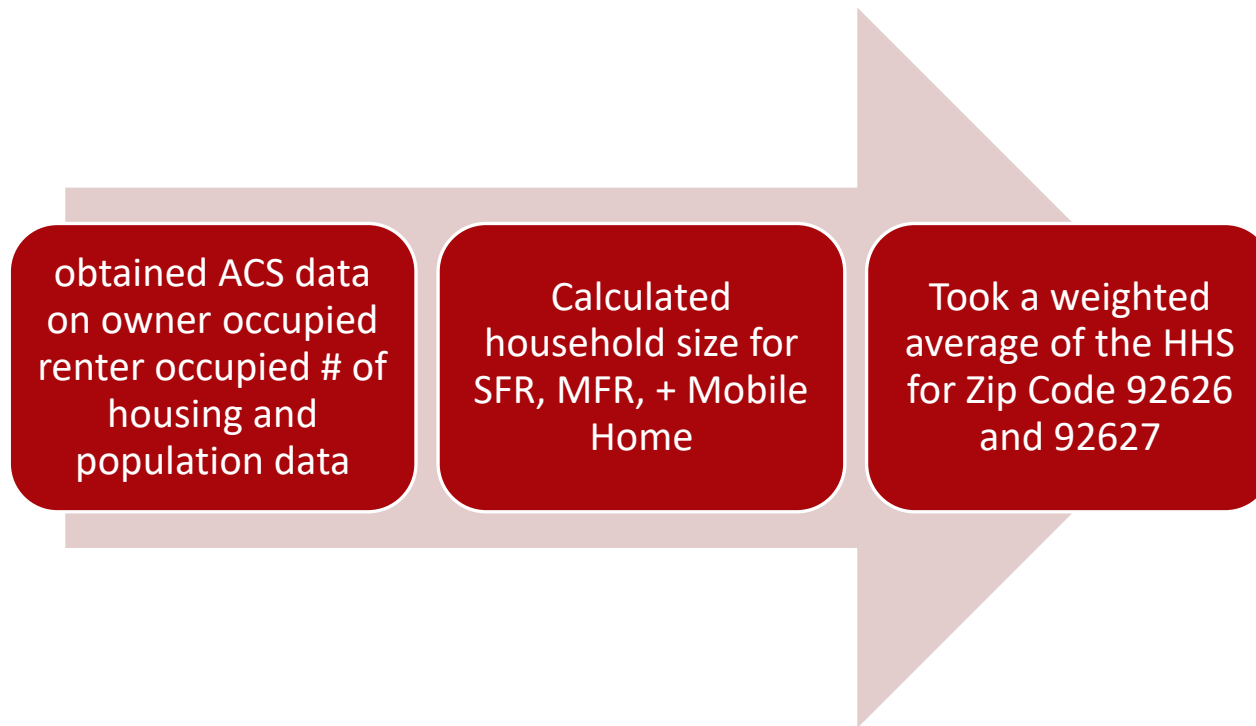
Total Flow: 8.6 million gpd

55 gpcd for all Residential
customers

Flow estimated for individual
Class and scaled down to
match the total flow

Flow Estimate

Flow for each customer class
was estimated based on
2020 Master Plan



Household Size Analysis

Single Family Residential Customers Household Size

Zip Code	# of SFR Housing	SFR Population	HHS
Owner Occupied 92626	7,232	22,448	3.10
Owner Occupied 92627	6,774	18,650	2.75
Renter Occupied 92626	1,622	4,919	3.03
Renter Occupied 92627	4,097	12,086	2.95
Weighted Average			2.95

Multi-Family Residential Customers Household Size

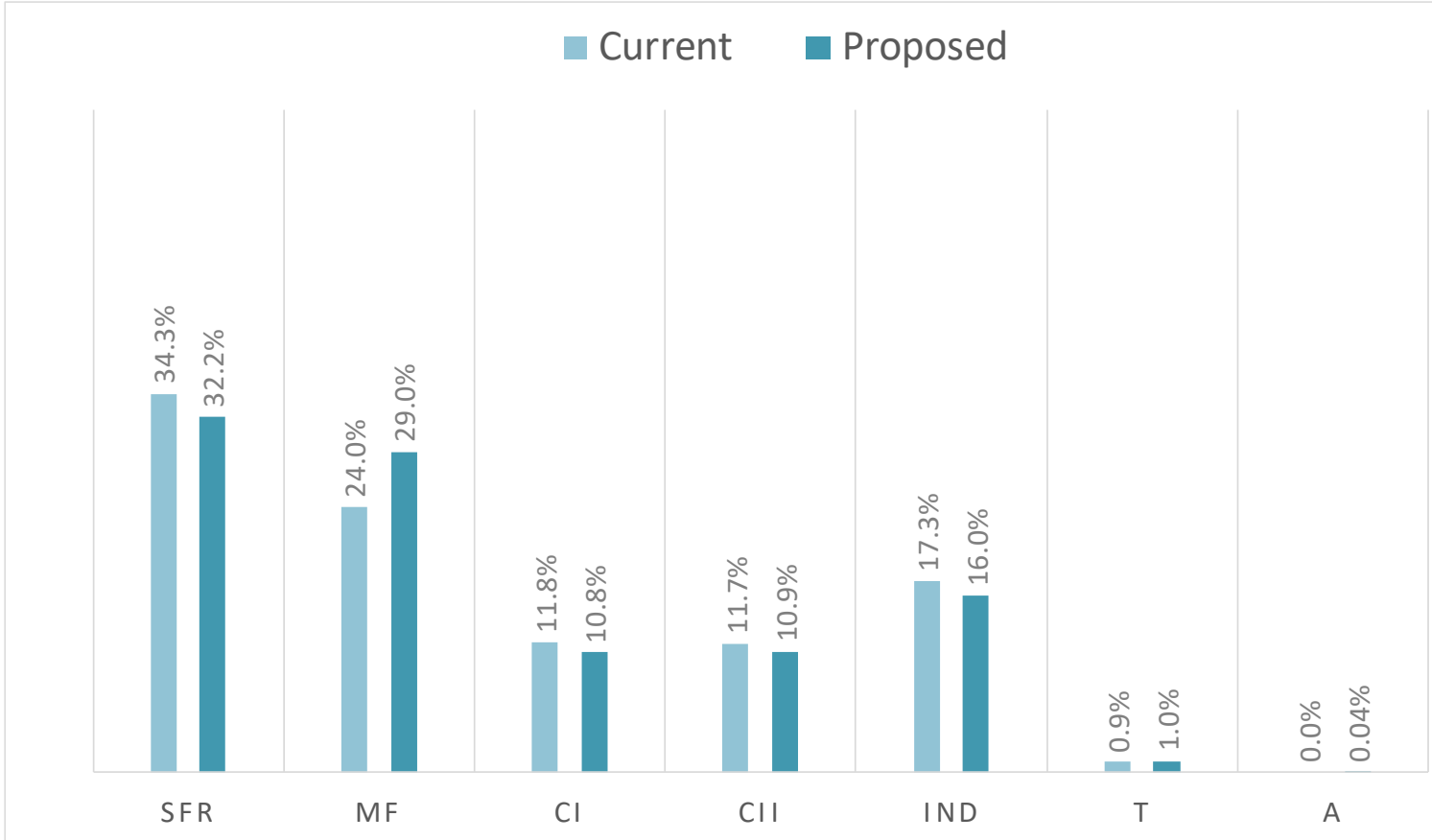
Zip Code2	# of MFR Housing	Population	HHS
Owner Occupied 92626	288	686	2.38
Owner Occupied 92627	688	1,744	2.53
Renter Occupied 92626	9,719	21,666	2.23
Renter Occupied 92627	9,695	27,252	2.81
Weighted Average			2.52

Trailer Customers Household Size

Zip Code2	# of Mobile Homes	Population	HHS
Owner Occupied 92626	24	19	0.79
Owner Occupied 92627	645	1,460	2.26
Renter Occupied 92626	62	27	0.44
Renter Occupied 92627	221	769	3.48
Weighted Average			2.39

Customer Class	HHS	EDU
SFR	2.95	1.00
MFR	2.52	0.85
Trailer	2.39	0.81
ADU	1.25	0.42

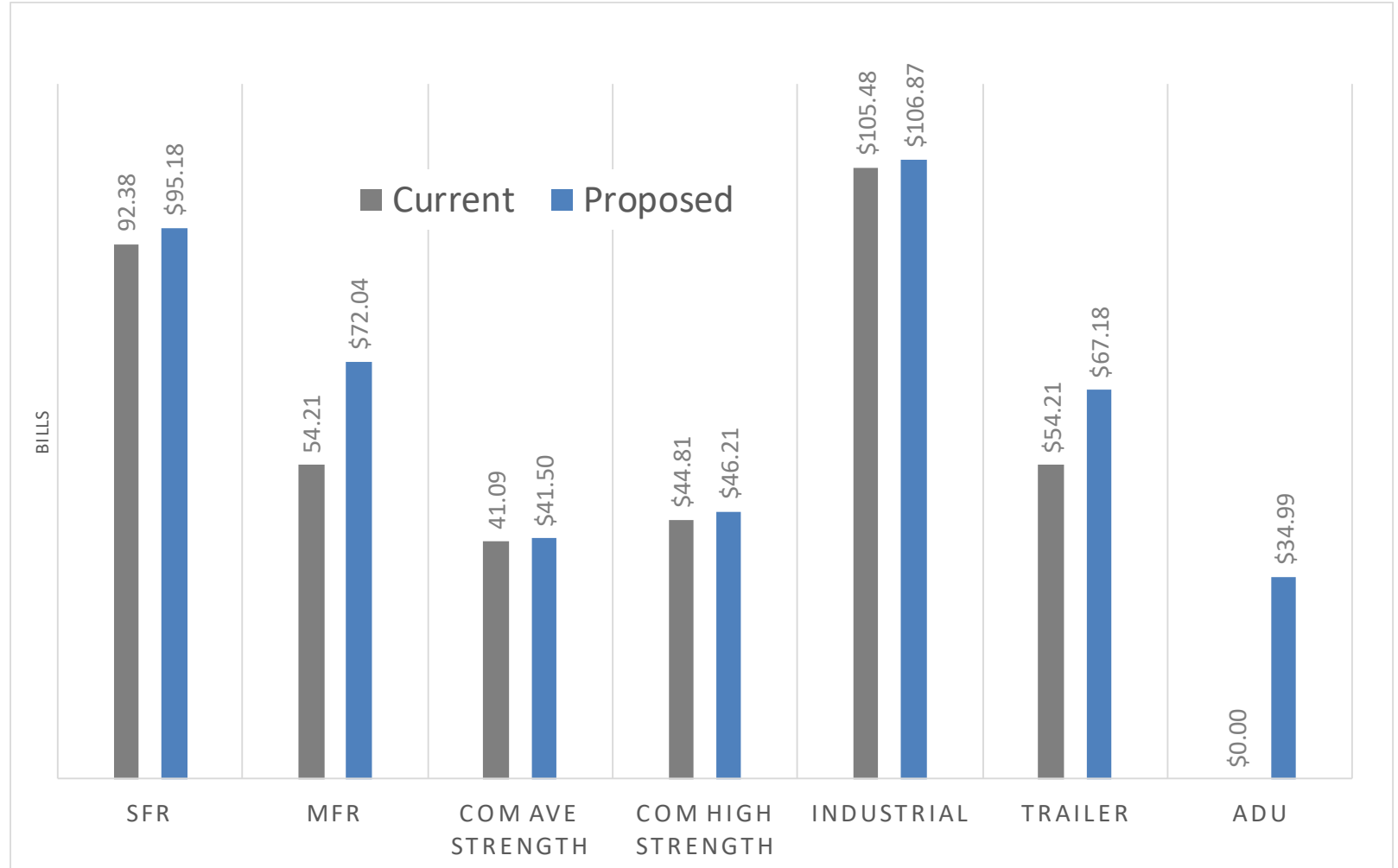
Household Size Analysis



Cost of Service

% of revenue
requirements for
which each customer
class is responsible

Proposed Rates



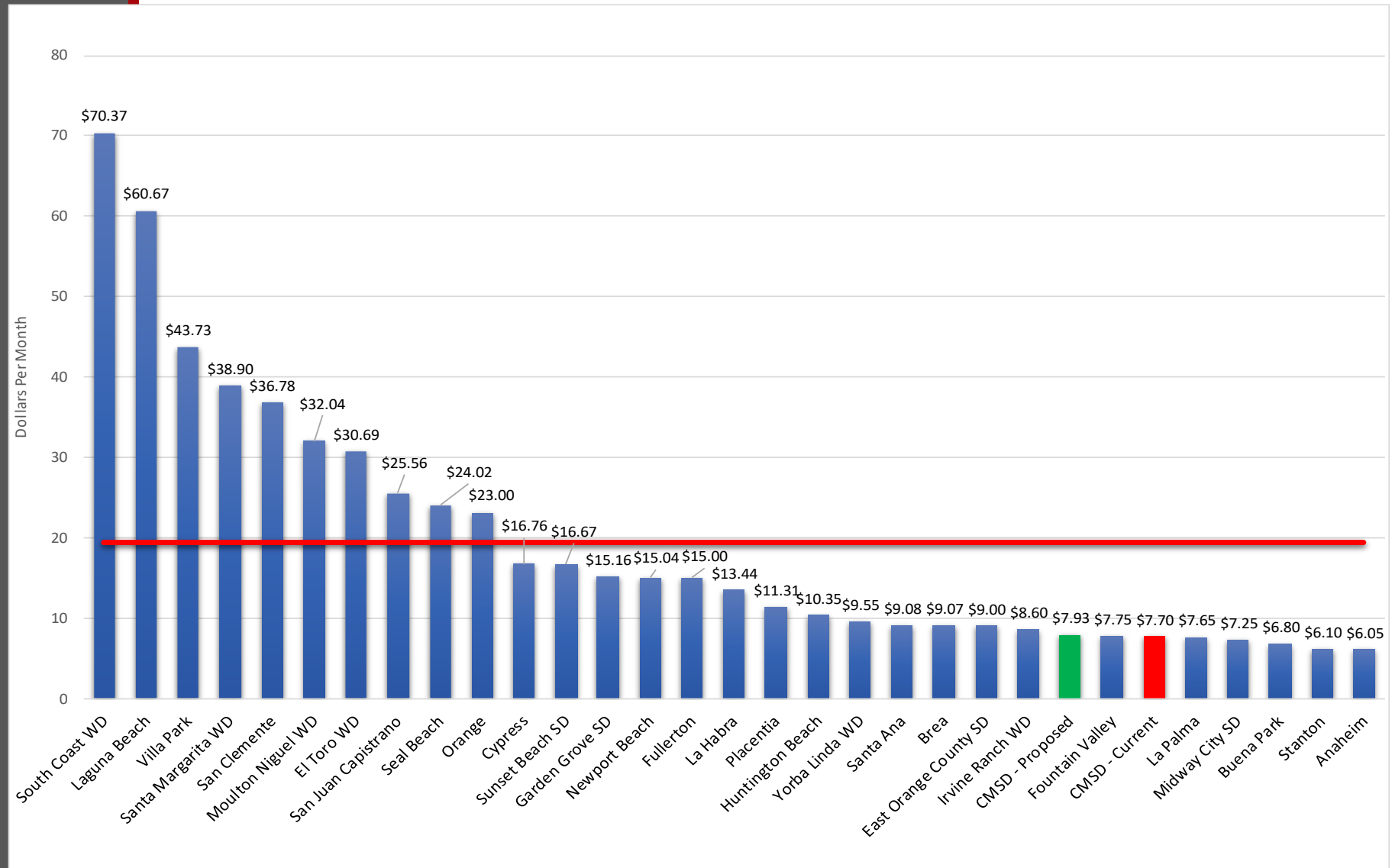
Current vs. Optional Rates

Current Rates vs. Proposed Rates

Customer Class	Current Rates	Proposed Rates
Single Family Residential	\$92.38	\$95.18
Multi-Family Residential	\$54.21	\$72.04
Commercial - Ave Strength	\$41.09	\$41.50
Commercial - High Strength	\$44.81	\$46.21
Industrial	\$105.48	\$106.87
Trailer	\$54.21	\$67.18
ADU		\$34.99

Regional Rates

Current Rates vs. Proposed Rates



5-Year Rate Schedule

Current Rates vs. Proposed Rates

Customer Class	Current Rates	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Single Family Residential	\$92.38	\$95.18	\$104.60	\$114.96	\$126.34	\$138.85
Multi-Family Residential	\$54.21	\$72.04	\$79.17	\$87.01	\$95.62	\$105.09
Commercial - Ave Strength	\$41.09	\$41.50	\$45.61	\$50.12	\$55.09	\$60.54
Commercial - High Strength	\$44.81	\$46.21	\$50.78	\$55.81	\$61.34	\$67.41
Industrial	\$105.48	\$106.87	\$117.45	\$129.08	\$141.86	\$155.90
Trailer	\$54.21	\$67.18	\$73.83	\$81.14	\$89.17	\$98.00
ADU	\$0.00	\$34.99	\$38.45	\$42.26	\$46.44	\$51.04

■ Current Bill with Average BU ■ Proposed Bill with Average BU



1 Billing Unit = 1000 Sq. Ft.

Proposed Rates and Bill Impacts

Based on the median billing units :

CI – 13.5

CII – 34.9

IND – 12.1

Questions?

