



# CITY OF MERCED PUBLIC WORKS DEPARTMENT SOLID WASTE DIVISION

# About Solid Waste



40 Employees

27 Daily Routes Monday-Friday

14-Residential Routes:

1,220,000 lbs. garbage hauled weekly  
120,000 lbs. recyclables hauled weekly  
700,000 lbs. green waste hauled weekly

13-Commercial Routes:

1,436,000 lbs. hauled weekly

110 Roll-offs hauled weekly

1-Saturday Commercial Route:

30,000 lbs. hauled weekly

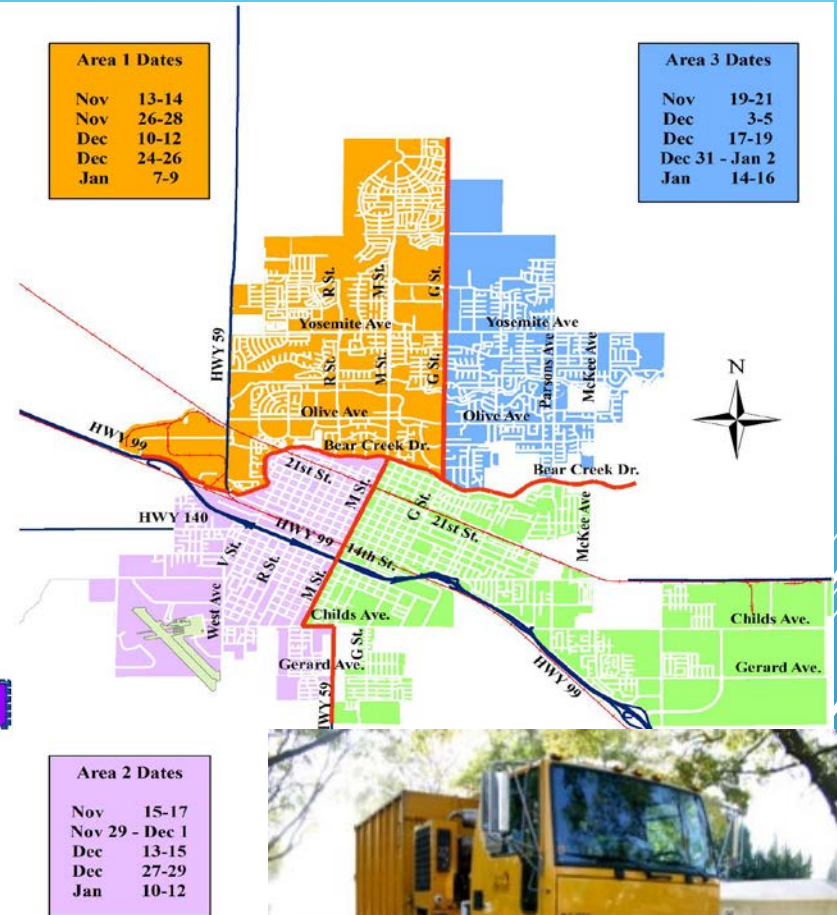
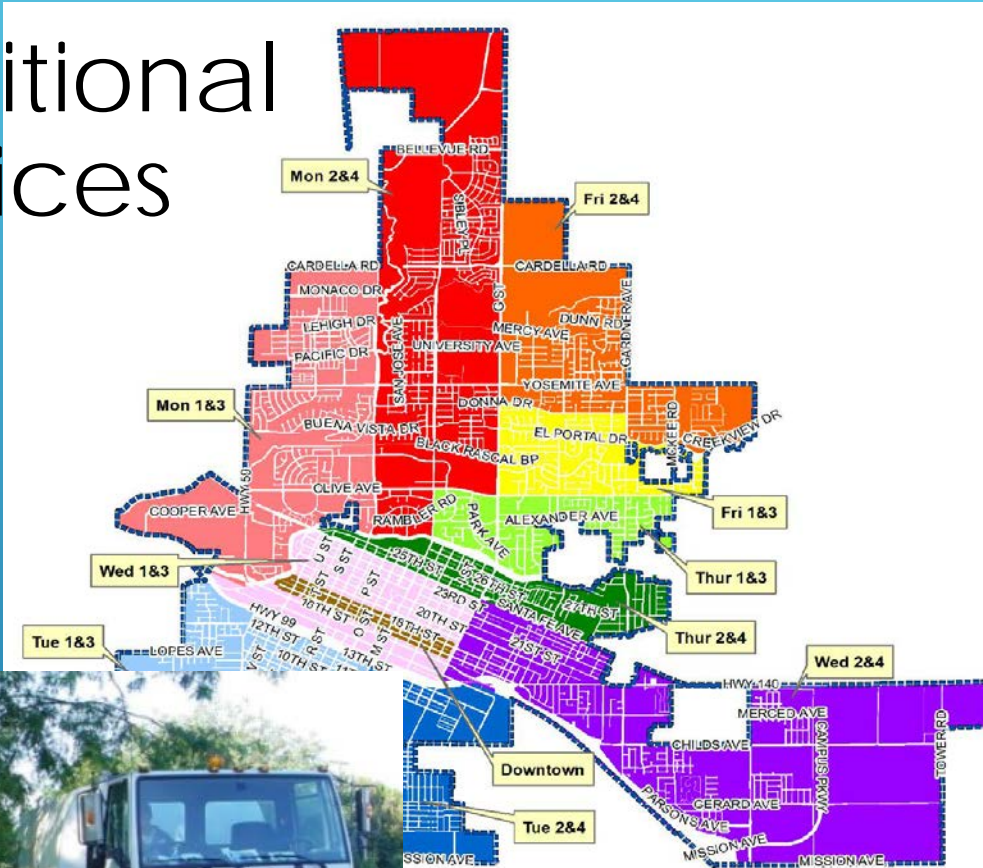
1-Sunday Parks Route

Total- 168,288,000 lbs. annually





# Additional Services



Street Sweeping / Leaf Collection



# Green waste Diversion: Trees



**Celebrating 38  
Years as a  
"Tree City USA"!**



# Spring Clean-Up



6000 Vehicle loads of  
Garbage

1,556,820 lbs. of Garbage

301,600 lbs. of Metal

1110 Mattresses

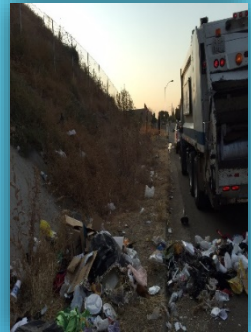
60 yards of Chipped Brush

# Bulky Item Drop-off





# Clean Ups



Neighborhood Refuse Response Team:  
Homeless Encampments  
Illegal Dumping  
Alley Clean-ups



# Hazards



Refuse and Recycling Collection Worker is  
currently the 5<sup>th</sup> most deadly job in the world



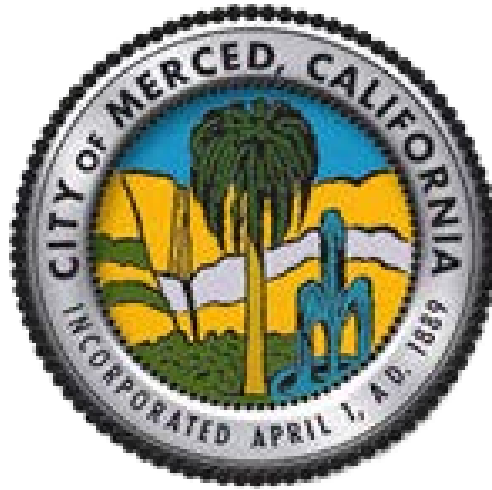


# Corp Yard Expansion

Circa 1960



## 5-Year Refuse Rate Study



### PRESENTATION TO:

City of Merced, City Council

November 4, 2019



# Background

## *Primary Functions and Responsibilities*



- ▶ Provides solid waste, recycling and green waste collection services
- ▶ Labor, operating equipment, maintenance, billing, administration, overhead
- ▶ Other programs
  - ▶ Disabled/Senior Citizen Pack-Out Service
  - ▶ Alley Cleanup/Illegal Dumping
  - ▶ Drop-off Site Removal (Spring Cleanup)
  - ▶ Bulky Waste pickup
  - ▶ Tire Removal
  - ▶ Street Sweeping
  - ▶ Street Trees
  - ▶ Encampment Cleanup
  - ▶ Christmas Tree Removal





# New California Legislation

- ▶ AB 341 and AB 1826: Mandatory Commercial Recycling and Organics Collection Requirements
  - Identify Covered Generators
  - Provide Recycling Program
  - Education and Outreach
  - Monitor Compliance and Report Progress
- ▶ AB 1594: Green Material Used AS Alternative Daily Cover
- ▶ SB 1383: SLCP Organic Waste Methane Emission Reductions
  - Reduction in Disposal of Organics
  - Enforcement and Penalties (CalRecycle 2022, Local Jurisdictions 2024)





# China National Sword

- ▶ Historically, California has exported a significant portion of collected recyclable material to China for processing
- ▶ In 2018, China reduced the level contamination in their accepted recyclable materials to >0.5%, essentially banning all recyclable material
- ▶ This ban has drastically shifted the global recycling markets
- ▶ The revenues generated from collected recyclables has been reduced
- ▶ Jurisdictions have been changing their collection operations model to cope with this ban



# Rate Model Overview

## *Background*



- ▶ Divisions of Refuse Fund 558
  - Refuse Collections (1112)
  - Curbside Recycling (1135)
  - Green Waste Collection (1133)
  - Street Sweeping (1113)
  - Street Trees (1122)
- ▶ FY 18/19 Budgeted Deficit of \$2.2M
- ▶ Operating Reserve Target of 16% of Budgeted Expenses
- ▶ Efficient and Effective Operations



# Rate Model Overview

## *Increasing Cost Factors*



- ▶ Labor Costs Increases
  - Collection route labor
  - General and administrative costs
  - CalPERS costs
- ▶ Other Operating Increases
  - Recycling markets change due to “China National Sword” in 2018
  - Future Costs Depend on Markets
  - Garbage Landfill Costs
  - Depreciation
  - Fleet Maintenance and Replacement
- ▶ New Operating Expenses

# Rate Model Overview

## *New Operating Expenses*



- ▶ 2004 CARB Regulation Impacts
  - 8 Collection Trucks
  - 2 Street Sweepers
  - 4 Street Trees Maintenance Trucks
- ▶ New Residential Development through FY 23/24
  - New Equipment
    - ❖ 2 Collection Trucks
    - ❖ 1 Street Sweeper
  - New Employees
    - ❖ 4 Maintenance Workers
    - ❖ 1 Street Sweeper Driver
    - ❖ 1 Tree Trimmer
- ▶ Projected Capital Outlay
  - \$3.5M, anticipated to be paid by FY 23/24
  - \$8.7M, amortized at 3% interest over a 20-year period
- ▶ Estimated New Development Fees



# Rate Model Overview

## *Solid Waste Fund Expenses*



### Actual and Budgeted Expenses

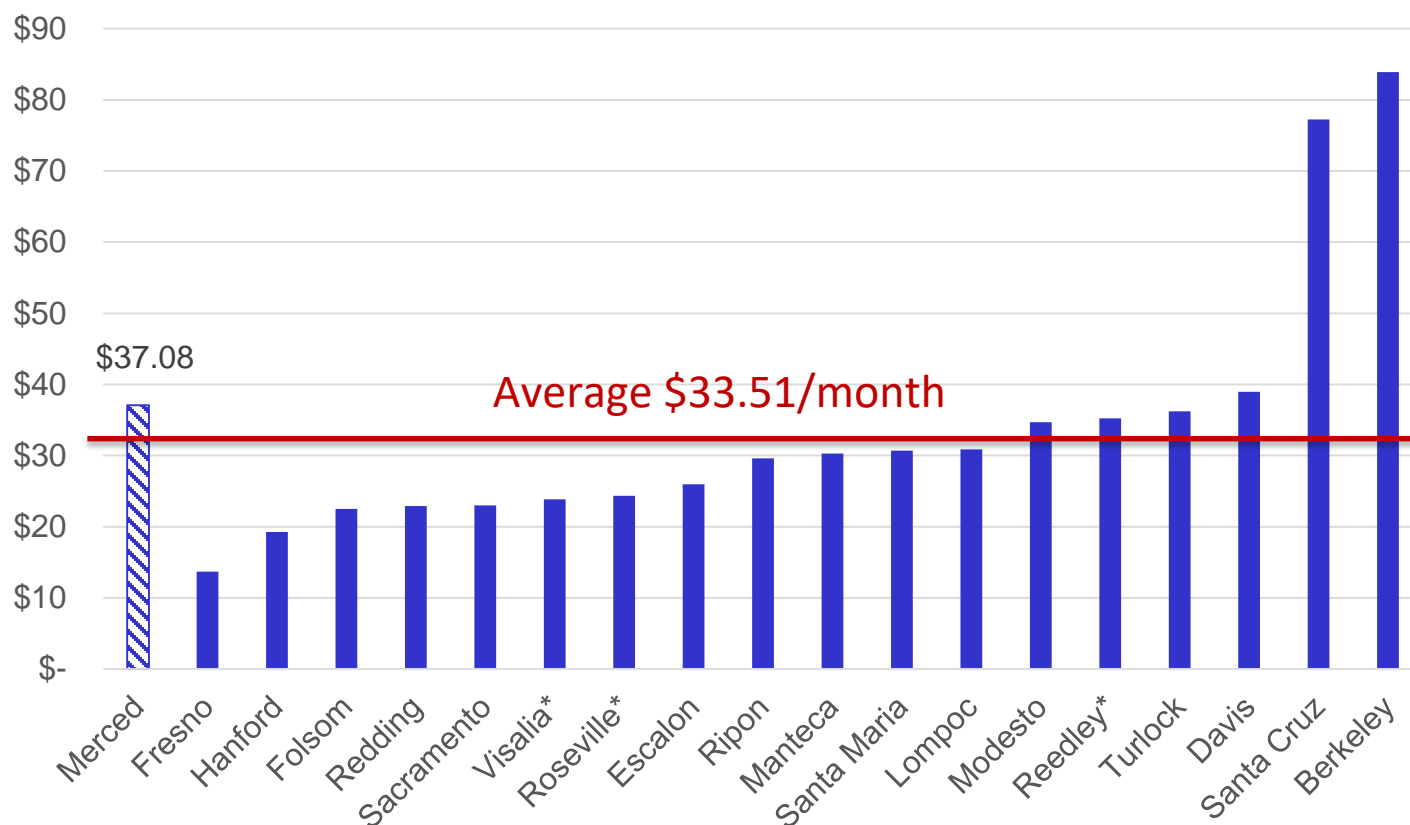
Account	Actual FY 16/17	Actual FY 17/18	Approved Budget FY 18/19
Refuse (1112)	8,448,954	9,319,879	11,236,058
Recycling (1135)	936,997	1,012,075	1,063,961
Green Waste (1133)	700,736	738,499	911,461
Street Sweeping (1113)	1,366,380	1,442,453	1,394,984
Street Trees (1122)	839,022	1,027,563	1,169,501
Finance (0701)	269,010	39,000	425,739
<b>Total</b>	<b>12,561,099</b>	<b>13,579,469</b>	<b>16,201,703</b>
Annual Change		1,018,370	2,622,234
% Increase FY 16/17		8.1%	29.0%

# Rates & Services Comparison

## *Residential Customer Rates*



64 Gallon Cart



\* Reedley, Roseville, and Visalia provide a 90-gallon container

City of Merced Residential Customer Rates  
11% **Higher** than Average

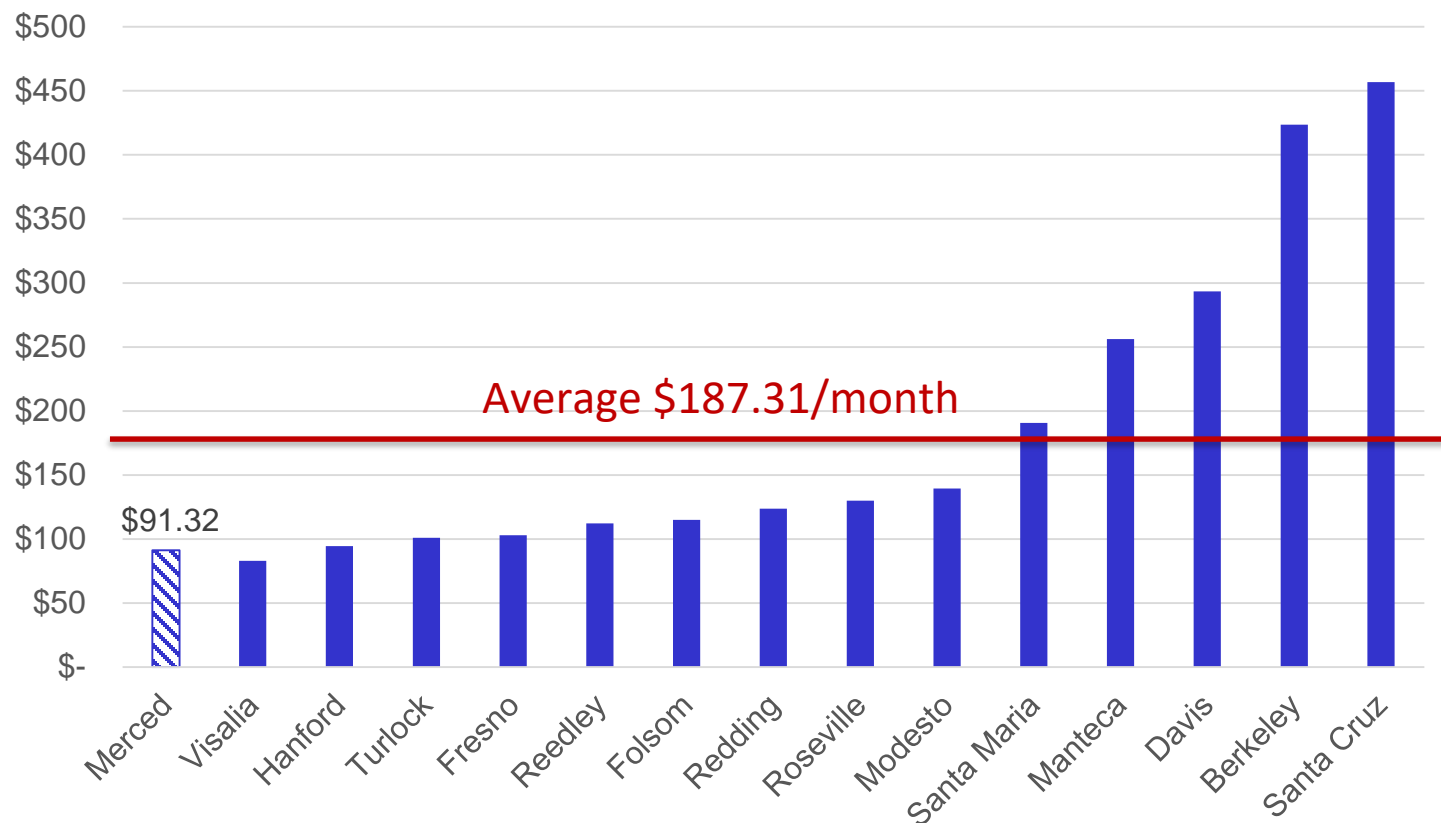


# Rates & Services Comparison

## Commercial Customer Rates



### 3 Cubic Yard Bin



City of Merced Commercial Customer Rates  
51% **Lower** than Average

# Rate Adjustment Scenarios

## Without Litter Abatement Program



Scenarios	2020	2021	2022	2023	2024	Operating Reserve (FY 24)	Annual Revenue (Shortfall) (FY 24)
Scenario 1						\$3,868,000	(\$326,000)
Residential	29.0%	6.0%	5.0%	4.0%	0.0%		
Commercial	29.0%	6.0%	5.0%	4.0%	0.0%		
Scenario 2						\$472,000	\$357,000
Residential	12.5%	12.5%	12.5%	8.0%	0.0%		
Commercial	12.5%	12.5%	12.5%	8.0%	0.0%		
Scenario 3						\$3,970,000	\$472,000
Residential	20.0%	5.0%	5.0%	5.0%	0.0%		
Commercial	35.0%	10.0%	10.0%	10.0%	0.0%		

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GROUP, INC.



# Rate Adjustment Scenarios

## With Litter Abatement Program



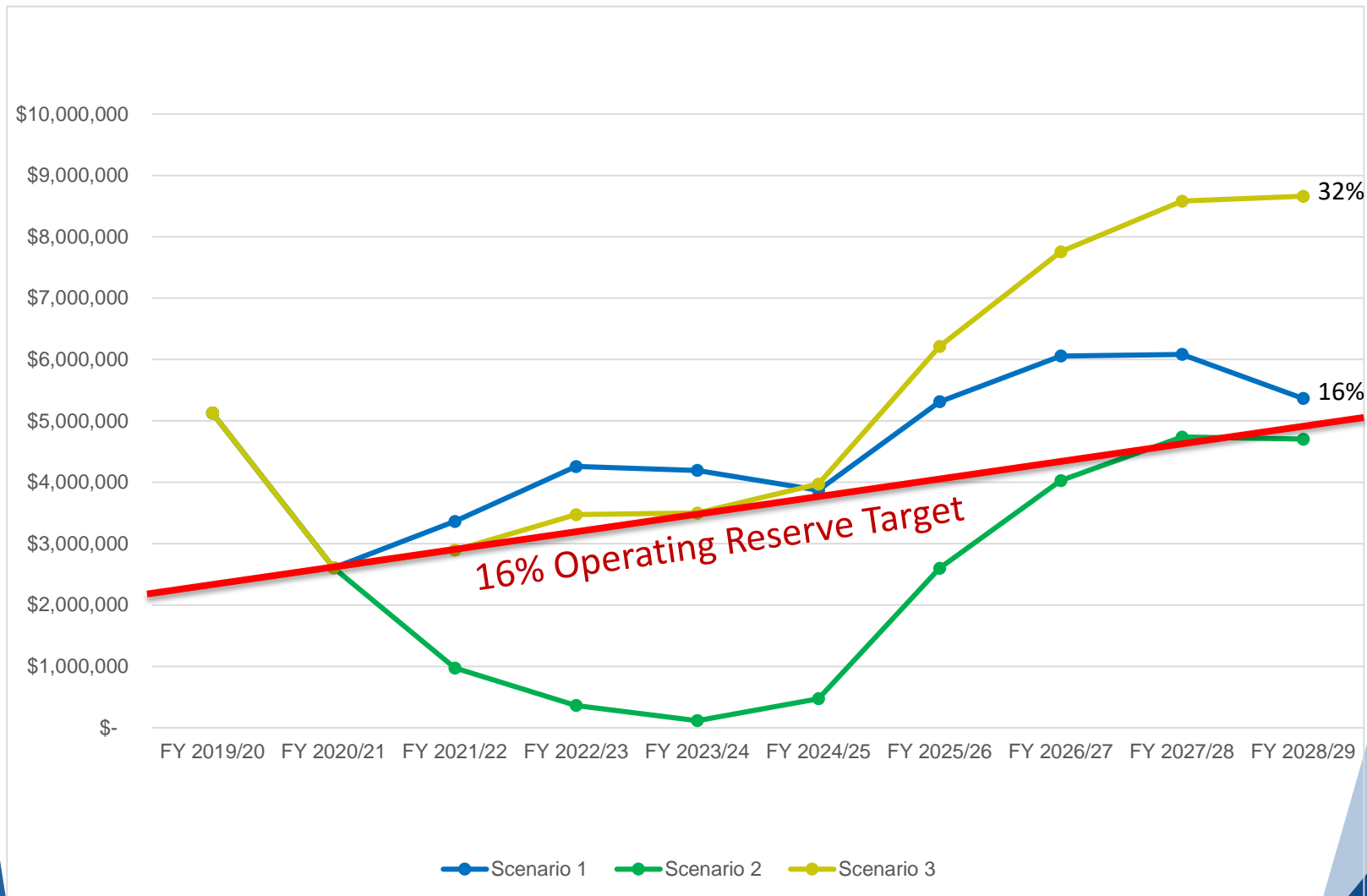
Scenarios	2020	2021	2022	2023	2024	Operating Reserve (FY 24)	Annual Revenue (Shortfall) (FY 24)
Scenario 1						\$3,530,000	(\$148,000)
Residential	29.0%	9.0%	5.0%	4.0%	0.0%		
Commercial	29.0%	9.0%	5.0%	4.0%	0.0%		
Scenario 2						\$911,000	\$365,000
Residential	14.5%	14.5%	14.5%	4.5%	0.0%		
Commercial	14.5%	14.5%	14.5%	4.5%	0.0%		
Scenario 3						\$5,652,000	\$1,879,000
Residential	26.0%	4.5%	4.5%	4.5%	0.0%		
Commercial	40.0%	7.5%	7.5%	7.5%	0.0%		

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# Rate Adjustment Scenarios

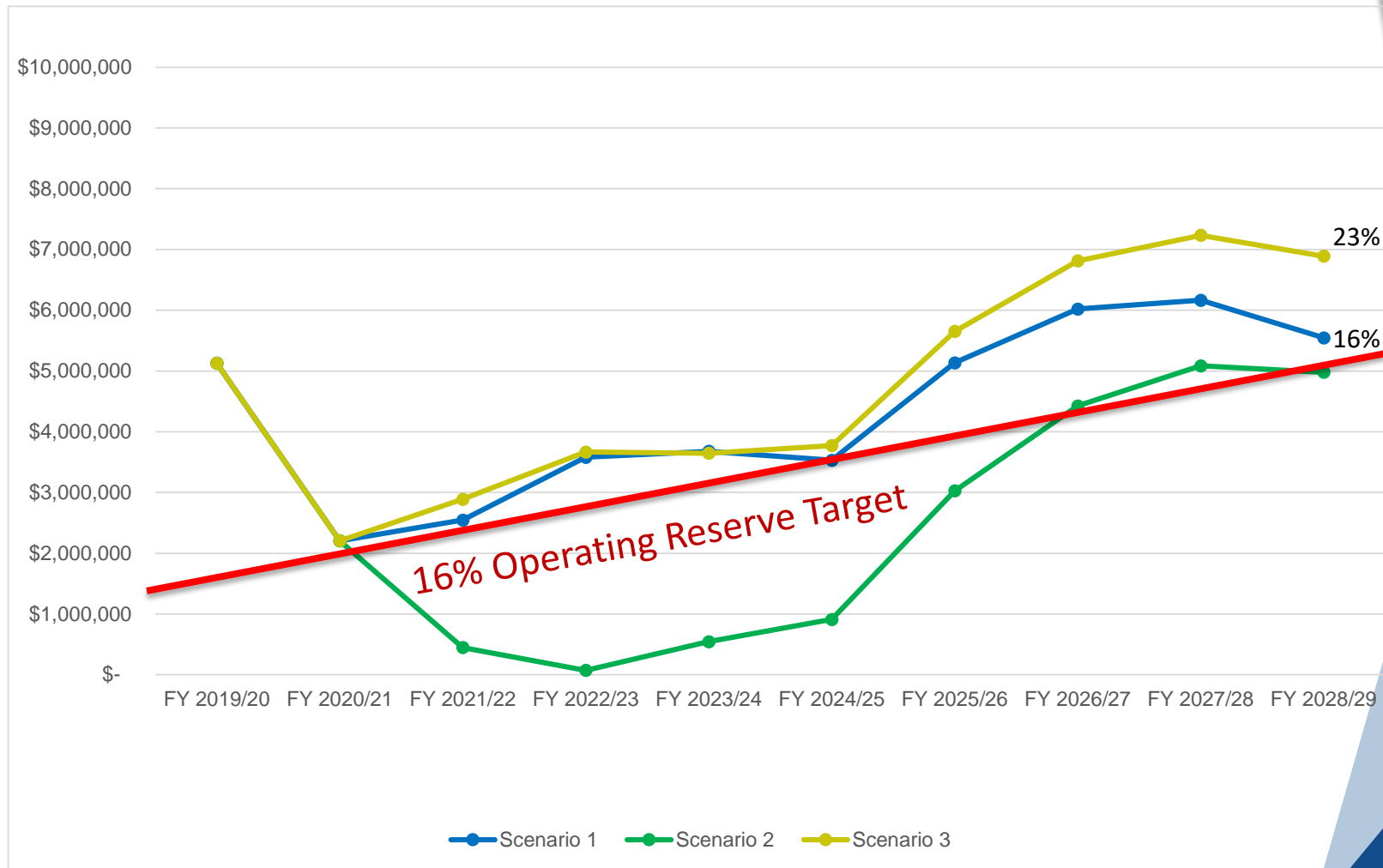
## *Deficit Recovery* (without Litter Abatement Program)





# Rate Adjustment Scenarios

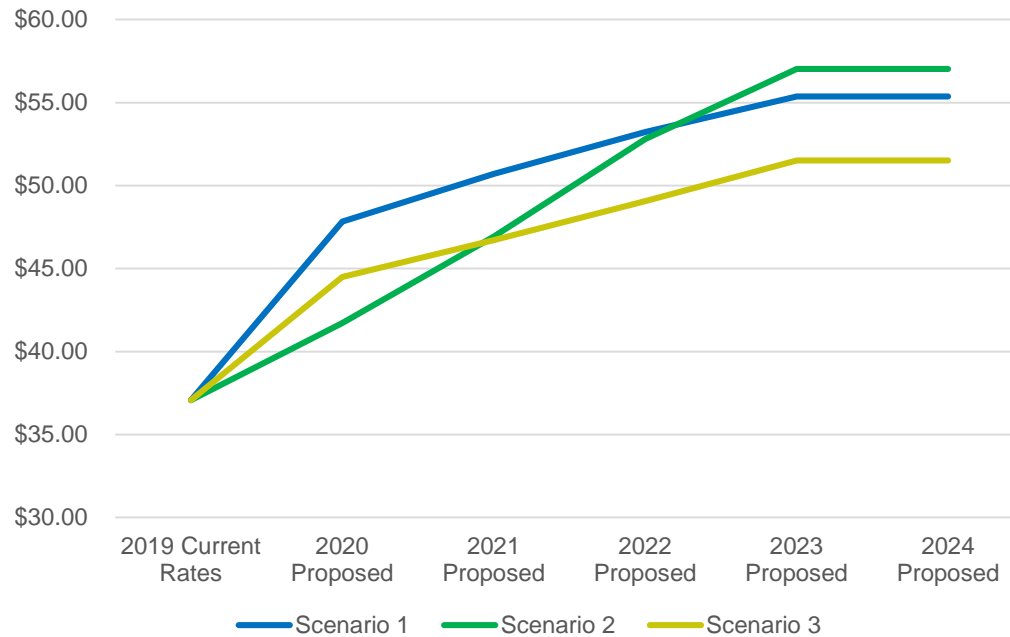
## *Deficit Recovery* (with Litter Abatement Program)



# Rate Adjustment Scenarios

## *Proposed Residential Rates*

*(without Litter Abatement Program)*



Total Monthly Rate  
Includes Weekly  
Collection of:

- ▶ 64-Gal Garbage
- ▶ 90-Gal Green Waste
- ▶ 64-Gal Recycling

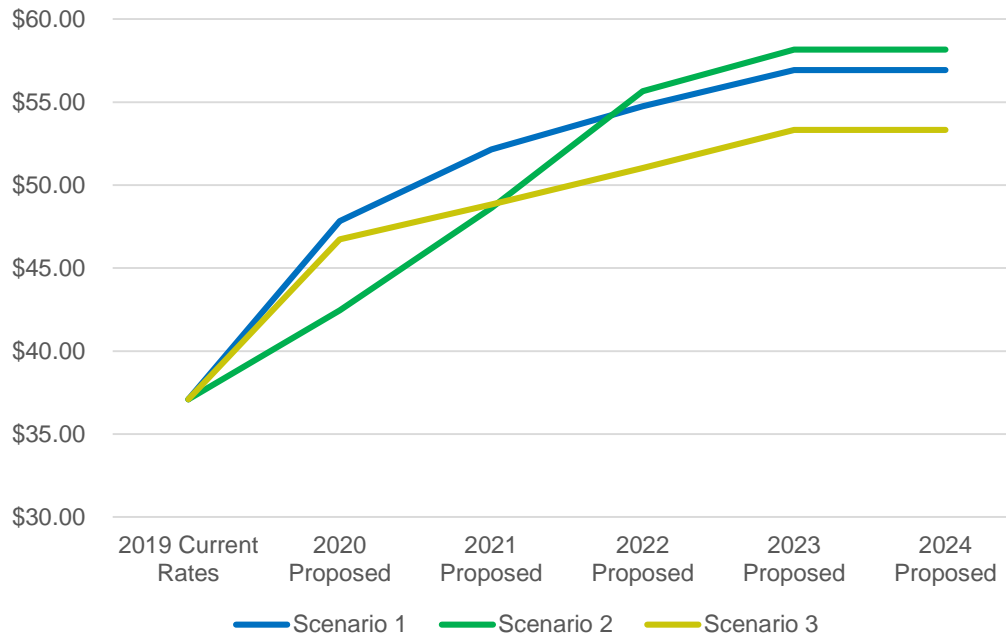
### Residential Dollar Increase over Prior Year by Scenario *(without Litter Abatement Program)*

Scenarios	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1	\$10.75	\$2.87	\$2.54	\$2.13	\$0.00
2	\$4.64	\$5.21	\$5.87	\$4.22	\$0.00
3	\$7.42	\$2.22	\$2.34	\$2.45	\$0.00

# Rate Adjustment Scenarios

## *Proposed Residential Rates*

*(with Litter Abatement Program)*



Total Monthly Rate  
Includes Weekly  
Collection of:

- ▶ 64-Gal Garbage
- ▶ 90-Gal Green Waste
- ▶ 64-Gal Recycling

### Residential Dollar Increase over Prior Year by Scenario *(with Litter Abatement Program)*

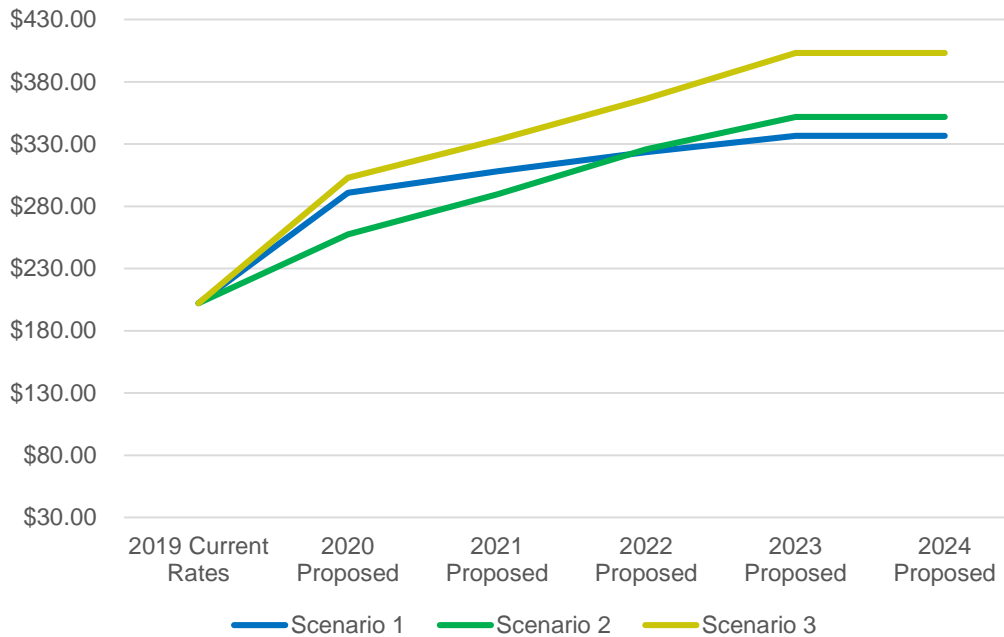
Scenarios	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1	\$10.75	\$4.30	\$2.61	\$2.19	\$0.00
2	\$5.38	\$6.16	\$7.05	\$2.50	\$0.00
3	\$9.64	\$2.10	\$2.20	\$2.30	\$0.00



# Rate Adjustment Scenarios

## *Proposed Commercial Rates*

*(without Litter Abatement Program)*



Total Monthly Rate  
Includes Weekly  
Collection of:

- ▶ 3CY Garbage
- ▶ 64-Gal Organic Waste
- ▶ 3 CY Recycling

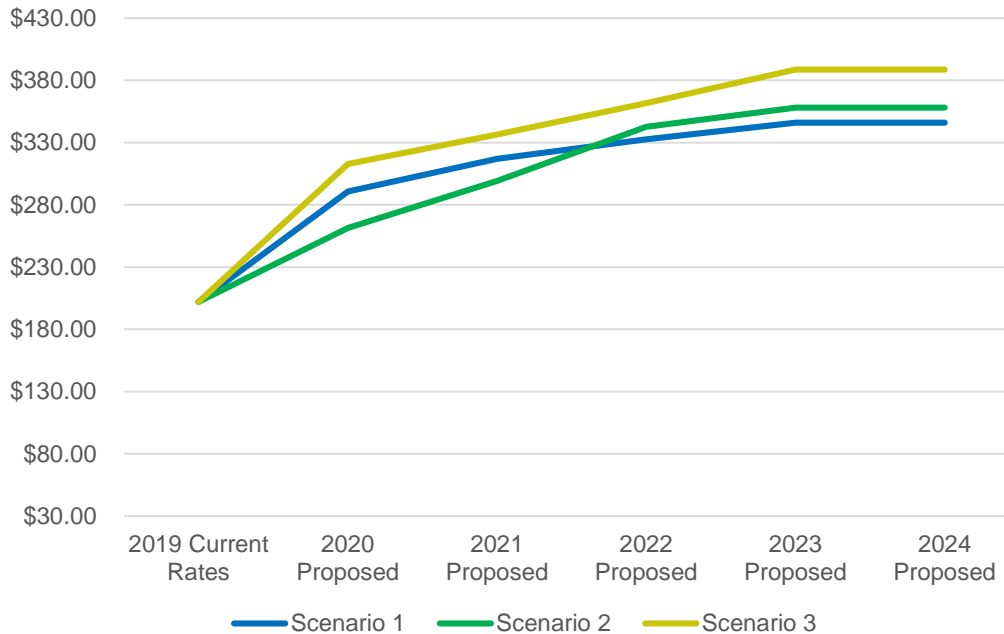
### Commercial Dollar Increase over Prior Year by Scenario *(without Litter Abatement Program)*

Scenarios	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1	\$88.61	\$17.44	\$15.41	\$12.94	\$0.00
2	\$55.27	\$32.17	\$36.19	\$26.06	\$0.00
3	\$100.74	\$30.29	\$33.31	\$36.65	\$0.00

# Rate Adjustment Scenarios

## Proposed Commercial Rates

(with Litter Abatement Program)



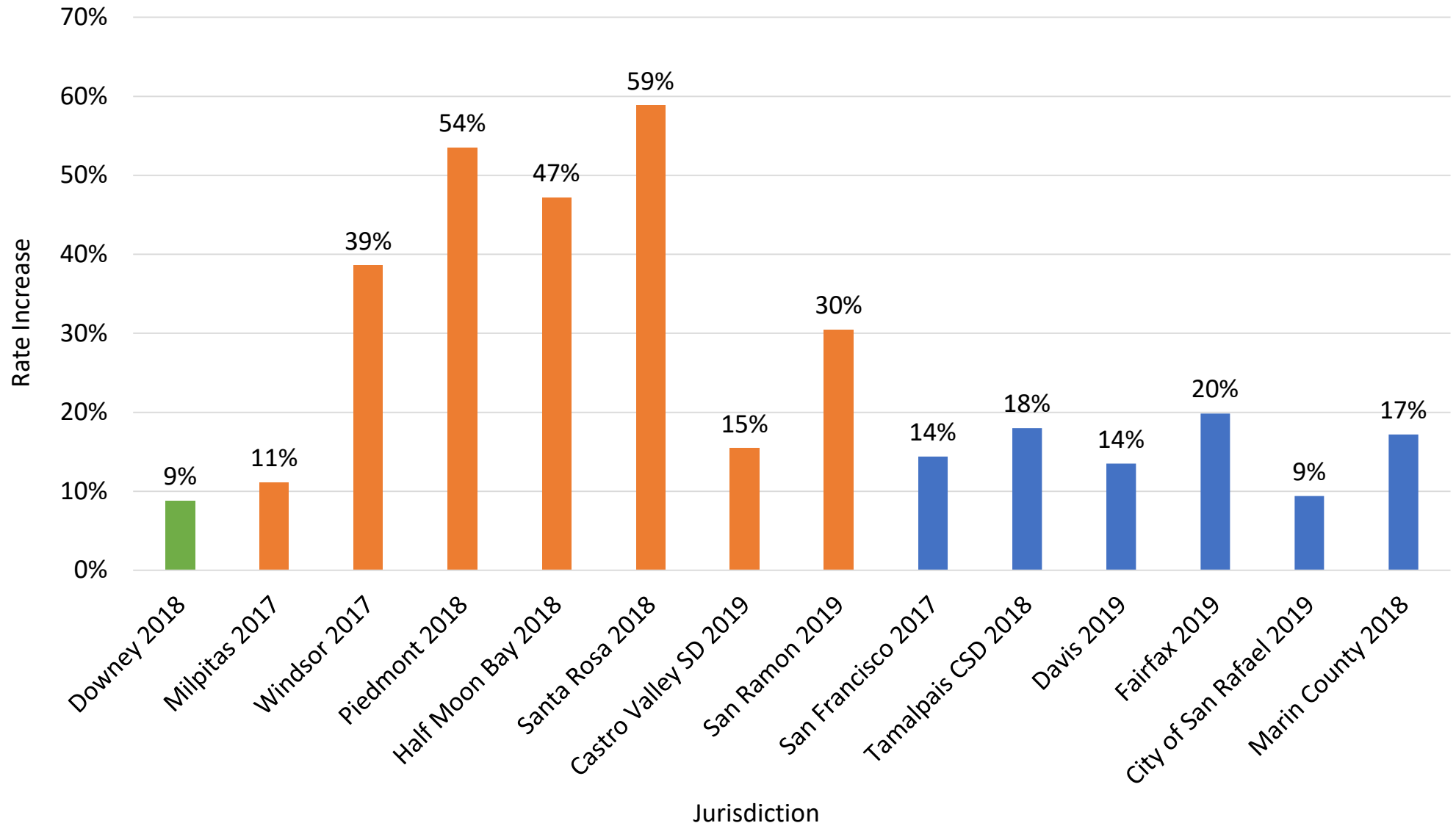
Total Monthly Rate  
Includes Weekly  
Collection of:

- ▶ 3CY Garbage
- ▶ 64-Gal Organic Waste
- ▶ 3 CY Recycling

### Commercial Dollar Increase over Prior Year by Scenario (with Litter Abatement Program)

Scenarios	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1	\$88.61	\$26.17	\$15.85	\$13.31	\$0.00
2	\$59.31	\$37.91	\$43.40	\$15.42	\$0.00
3	\$110.85	\$23.47	\$25.23	\$27.13	\$0.00

# Sample CA Rate Increases





# **QUESTIONS & ANSWERS**

## THANK YOU FOR YOUR TIME

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For additional questions, contact:

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