

CITY OF MERC ED PUBLIC WORKS DEPARTMEN SOLD WASTE DIVISION

## About Solid Waste



40 Employees
27 Daily Routes Monday-Fïday

## 14-Residential Routes

1,220,000 lbs. garbage hauled weekly $\mathbf{1 2 0 , 0 0 0}$ lbs. recyclables hauled weekly $700,000 \mathrm{lbs}$. green waste hauled weekly

## 13-Commercial Routes:

 $1,436,000$ lbs. hauled weekly110 Roll-ofis hauled weekly
1-Saturday Commercial Route: 30,000 lbs. hauled weekly

## 1-Sunday Parks Route

Total- 168,288,000 los. annually



## Green waste Diversion: Trees



## Spring Clean-Up



Bulky Item Drop-off


6000 Vehicle loads of Garbage

1,556,820 lbs of Garbage $301,600 \mathrm{lbs}$ of Metal 1110 Mattresses

60 yards of Chipped Brush


## Corp Yard Expansion

Circa 1960



## 5-Year Refuse Rate Study



PRESENTATION TO:
City of Merced, City Council
November 4, 2019

## Background <br> 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 > Tire Removal
Pack-Out Service $>$ Street Sweeping
> Alley Cleanup/Illegal Dumping
> Drop-off Site Removal (Spring Cleanup)
> Bulky Waste pickup
> Street Trees
> Encampment Cleanup
> Christmas Tree Removal

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## 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)

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## 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

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## 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 $\$ 2.2 \mathrm{M}$
- Operating Reserve Target of 16\% of Budgeted Expenses
- Efficient and Effective Operations

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## 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

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## 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 | New Employees |
| :---: | :---: |
| * 2 Collection Trucks | * 4 Maintenance Workers |
| * 1 Street Sweeper | * 1 Street Sweeper Driver |
|  | * 1 Tree Trimmer |

- Projected Capital Outlay
> $\$ 3.5 \mathrm{M}$, anticipated to be paid by $\mathrm{FY} 23 / 24$
> $\$ 8.7 \mathrm{M}$, amortized at $3 \%$ interest over a 20 -year period
- Estimated New Development Fees

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## Rate Model Overview

## Solid Waste Fund Expenses

## Actual and Budgeted Expenses

| Account | Actual <br> FY 16/17 | Actual <br> FY 17/18 | Approved <br> Budget <br> 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 |
| Total | $\mathbf{1 2 , 5 6 1 , 0 9 9}$ | $\mathbf{1 3 , 5 7 9 , 4 6 9}$ | $\mathbf{1 6 , 2 0 1 , 7 0 3}$ |
| Annual Change |  |  |  |
| \% Increase FY 16/17 |  | $1,018,370$ | $2,622,234$ |

# 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

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# 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 <br> Reserve <br> (FY 24) | Annual <br> Revenue <br> (Shortfall) <br> (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 | $35.0 \%$ | $10.0 \%$ | $10.0 \%$ | $10.0 \%$ | $0.0 \%$ |  |  |

## Rate Adjustment Scenarios

## With Litter Abatement Program

| Scenarios | 2020 | 2021 | 2022 | 2023 | 2024 | Operating <br> Reserve <br> (FY 24) | Annual <br> Revenue <br> (Shortfall) <br> (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

| 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 | $40.0 \%$ | $7.5 \%$ | $7.5 \%$ | $7.5 \%$ | $0.0 \%$ |  |  |

## Rate Adjustment Scenarios Deficit Recovery (without itter Abatement Program)



## Rate Adjustment Scenarios Deficit Recovery (with Litter Abatement Program)



## Rate Adjustment Scenarios Proposed Residential Rates

(without Litter Abatement Program)


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 | $\$ 7.42$ | $\$ 2.22$ | $\$ 2.34$ | $\$ 2.45$ | $\$ 0.00$ |

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## 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) |  |  |  |  |  |

## Rate Adjustment Scenarios Proposed Commercial Rates

(without Litter Abatement Program)


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 | $\$ 100.74$ | $\$ 30.29$ | $\$ 33.31$ | $\$ 36.65$ | $\$ 0.00$ |

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# Rate Adjustment Scenarios Proposed Commercial Rates <br> (with Litter Abatement Program) 



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 | $\$ 110.85$ | $\$ 23.47$ | $\$ 25.23$ | $\$ 27.13$ | $\$ 0.00$ |

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## Sample CA Rate Increases



## QUESTIONS \& ANSWERS

## THANK YOU FOR YOUR TIME

For additional questions, contact:
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