



Department of Public Works

CITY OF GRAND RAPIDS

MATERIALS MANAGEMENT BRIEFING TO CITY COMMISSION

SEPTEMBER 24, 2024



Purpose of the Briefing

- Introduction of Materials Management Services
- Brief History of Trash/Recycling Disposal
- Key policy and Operational considerations
- Rate Study Presentation
- Next Steps



What is Materials Management?

- Refuse Collection and Disposal
- Recycling Collection and Disposal
- Yard Waste Collection and Disposal
- Compost Facility



17 Core Activities

- Enhancements:
 - ROW Cleanup
 - Corridor Cleaning
 - Neighborhood Cleanups
(Dumpster Days)
 - Addition Cleanups
 - Recycling
 - Scrap Metal Collection
 - Textile Recycling
 - Styrofoam Recycling

Cost of Service Summary

Service Fees	Revenue Source	Expenses	%
PAYT	Rates	\$ 8,200,616	41.9%
Recycling	Millage	\$ 5,272,228	26.9%
Yard Waste	Rates	\$ 1,706,277	8.7%
Bulk	Rates	\$ 239,225	1.2%
Dumpsters	Rates	\$ 212,804	1.1%
Dead Animal Collection	Millage	\$ 14,036	0.1%
Illegal Dumping	Millage	\$ 11,668	0.1%
Graffiti Abatement	Millage	\$ 154,739	0.8%
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Compost/Yard Waste Site	Millage/Revenue Reimbursement	\$ 1,255,660	6.4%
Closed Superfund Site	Millage	\$ 92,637	0.5%
Trash Reduction Program	Millage	\$ 455,204	2.3%
Cart Maintenance	Rates	\$ 451,532	2.3%
Forestry Support	Millage	\$ 285,305	1.5%
Total Service Fees		\$ 19,586,867	100.0%

Refuse Collection

- **Pay as You Throw**

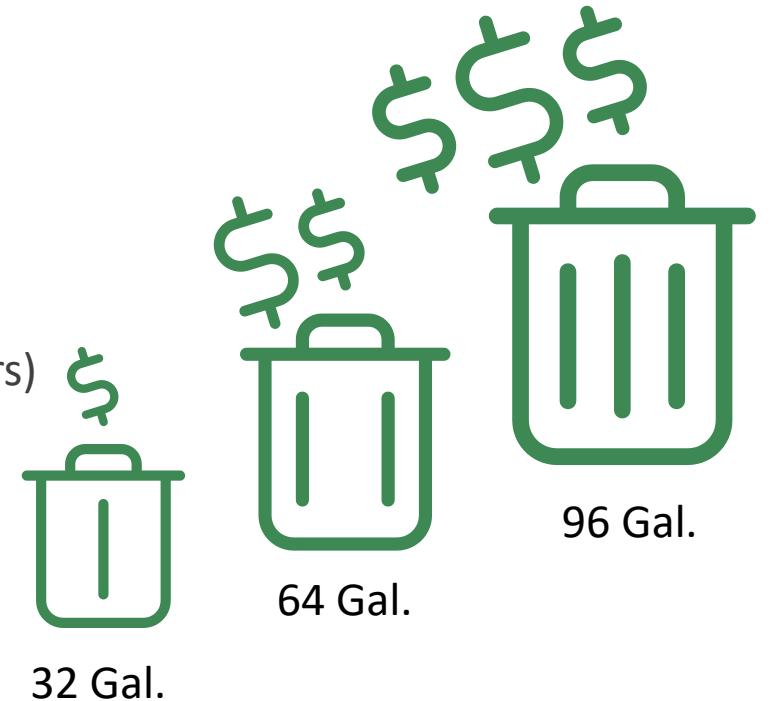
- Open market (open to the City and private haulers)
- City has ~80% of the residential market – 52,500 customers)
- Customizable to the needs of each household (3 cart sizes)
- Self managed accounts (pay for service only when needed)
- Income Based Service – Home Repair Services of WM (~900 customers)
- RFID Technology – 98.5% to 99% accuracy

- **Commercial Service** (~35 customers)

- **Bulk Items**

- **Illegal Dumping**

- **Dead Animal Clean-up**



Disposal:

Waste to Energy Facility

Kent County

Department of Public Works





Historical Context: Waste to Energy

- 1950s to 1973 – waste material generated in the City disposed of at the City of Grand Rapids Butterworth landfill.
- 1973 – 1990 - waste material transported to Kent County landfill.
- 1985: City entered Combustible Waste Agreement with Kent County Board of Public Works.
- Partnership with the core six cities (Grand Rapids, Kentwood, Wyoming, Grandville, Walker and East Grand Rapids) and Kent County Board of Public Works. Each adopted ordinances that require “Flow Control” as part of the agreement with Kent County. Regardless of waste hauler, all refuse collected within the six cities is required to go the Waste To Energy facility.
- Construction completed in 1990 and facility accepted trash at \$39.07/ton.
- 40-year agreement that expires in 2025.



Historical Context: Waste to Energy

- WTE tip fees steadily increased up to \$79.37/ton in 2008, primarily due to debt service, and then decreased to \$45/ton in 2013.
- Current WTE Tip Fee increased in 2022 to \$74/ton plus a landfill legacy surcharge of \$1.68/ton.
- Approximately 31% of material received at WTE is transported to South Kent Landfill due to overcapacity.
- \$42 million in capital improvements currently underway at facility.
- Sustainability Park – Kent County is still considering a sustainability park built in phases, including some type of County wide “Flow Control.”

Recycling Collection

- Millage Funded
- No direct cost to resident
- Approximately 56,000 customers
- Challenges with contamination
- Multi-family recycling grant
 - EGLE
 - Recycling Partnership
 - Prairie Robotics



Disposal:

Material
Recovery
Facility

Kent County
Department of Public Works



RECYCLING GUIDE

Kent County Recycling & Education Center | reimaginetrash.org



RECYCLE THESE ITEMS

CLEAN, EMPTY & LOOSE (NOT BAGGED OR BUNDLED)

CARDBOARD & PAPER



PLASTIC BOTTLES, CUPS & CONTAINERS

Rigid plastics #1-7; no foam or flexible plastics



GLASS BOTTLES & JARS



METAL CANS, BOTTLES & FOIL



MILK, JUICE & SOUP CARTONS



If the cap/lid and container are the same material, keep them attached. If they're different materials, detach and recycle separately.

KEEP OUT OF RECYCLING CONTAINERS!



**SEPARATE
OUT
RECYCLING
TRASH**



No hazardous waste or chemicals:
Batteries, electronics, propane tanks, fuel, chemicals, ammunition or other hazardous waste.



Nothing that would tangle:
Plastic bags, flexible plastics, string lights, extension cords, clothing, hoses, tarps, hangers, etc.



No bundled or bagged recycling:
Recyclables need to be loose in order to be sorted properly.



No foam plastics:
Foam take-out containers or cups, blocks of styro-foam, packing peanuts, foam coolers, etc.

Have an item you'd like to recycle that's not on this guide? We can help!
www.reimaginetrash.org | recycle@kentcountymi.gov | 616-632-7920



Historical Context: Material Recovery Facility

- 2010 - Established partnership agreement with Kent County thru 2030, unless terminated by either party.
- 2010 – Kent County Single-Stream Material Recovery Facility (MRF) opens - \$0 tip fee
- 2016 – MRF implements a recycling tip fee - \$10/ton
- 2017 – Tip fee increases to \$35/ton (71% increase)
- 2019 – Tip fee increases to \$65/ton (46% increase)
- 2022 – Tip fee increases to \$70/ton (38% increase) annual increase of approximately \$200,000



Curbside Yard Waste and Composting

- Carts, bags, and tags
- Millage support
- Storm Debris
- Street Sweeping
- Leaves
- Organics Collection Pilot
- Contract with WeCare Denali



Establishing future strategy

- Conducted operational analysis in 2019-2020
- Historically, rate changes have been reactionary to changes in the market vs. based on long-term strategy & community goals
- 2024 rate adjustment based on equipment/technology & labor costs as well as forecast disposal costs for Sustainable Business Park
- Community expectations continue to increase, particularly around bulk collection, “clean community” services, yard waste and organics collection
- Rate study can be paired with operational analysis to chart future path for materials management aligned with the City’s sustainability goals

Establishing future strategy

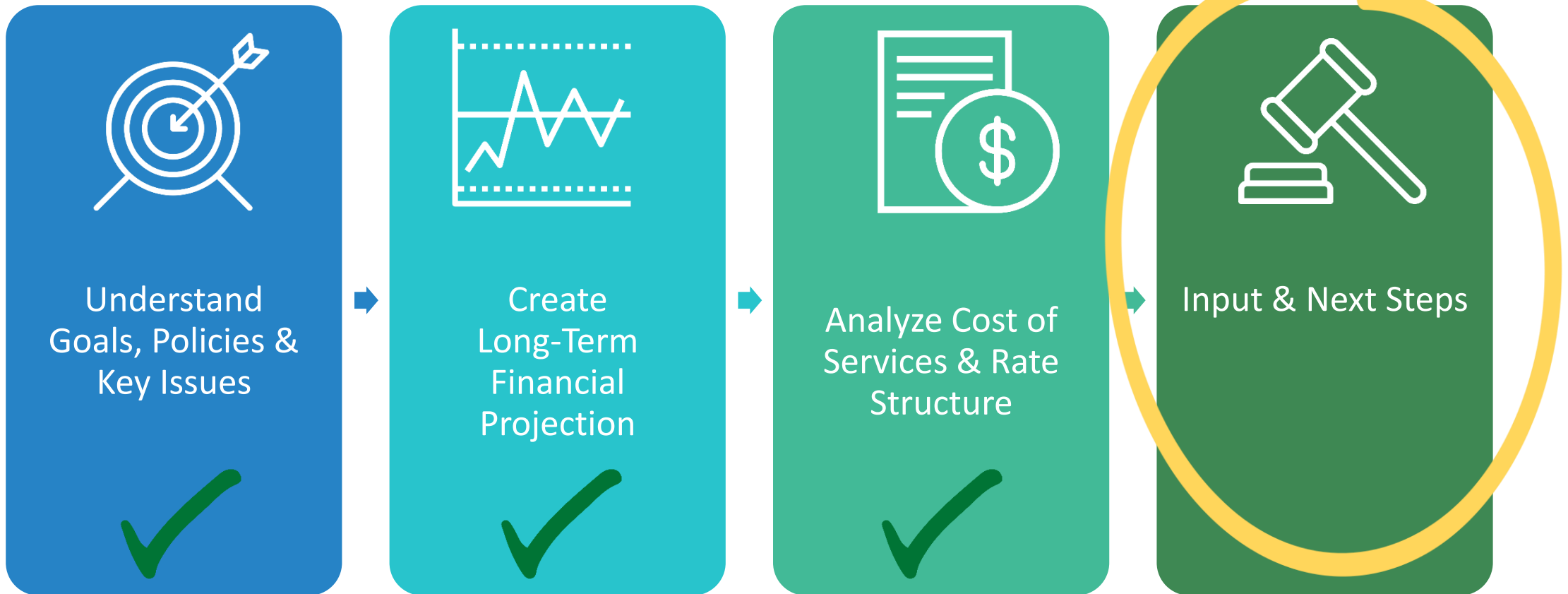
Key policy and operational considerations examined through the rate study:

- Current model vs. exclusive hauler for residential service
- Per-tip fee vs. more traditional monthly/quarterly billing
- Ready-to-serve charge to distribute fixed costs
- Rebalancing revenue for new/updated services
- On-Board truck technology updates
- Kent County Sustainable Business Park

Rate Study



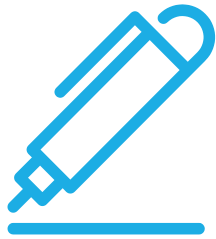
Financial Plan Process



Key Issues

- RFID technology expensive
- Potential 25% disposal cost increase in FY 2026
- Yard Waste and Bulk subsidized by millage

Study Objectives

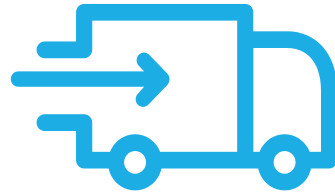


Revenue Sufficiency

Financial Policies

Operations, Fleet, Hiring, etc.

10-Year Projection



Cost of Services

Residential Carts

Bulk and Yard Waste

Dumpsters

Other millage funded services



Rate & Fee Structure

Based on Cost of Services

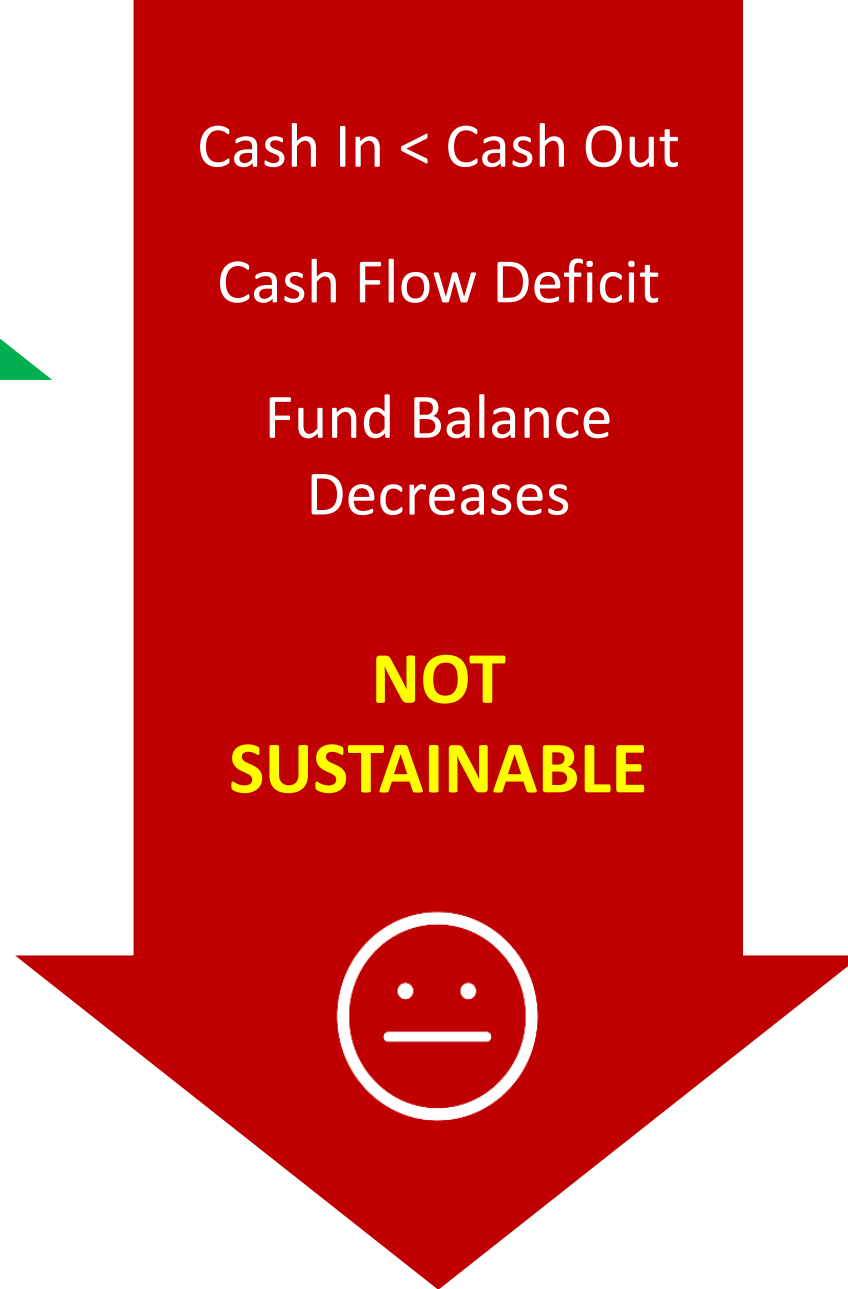
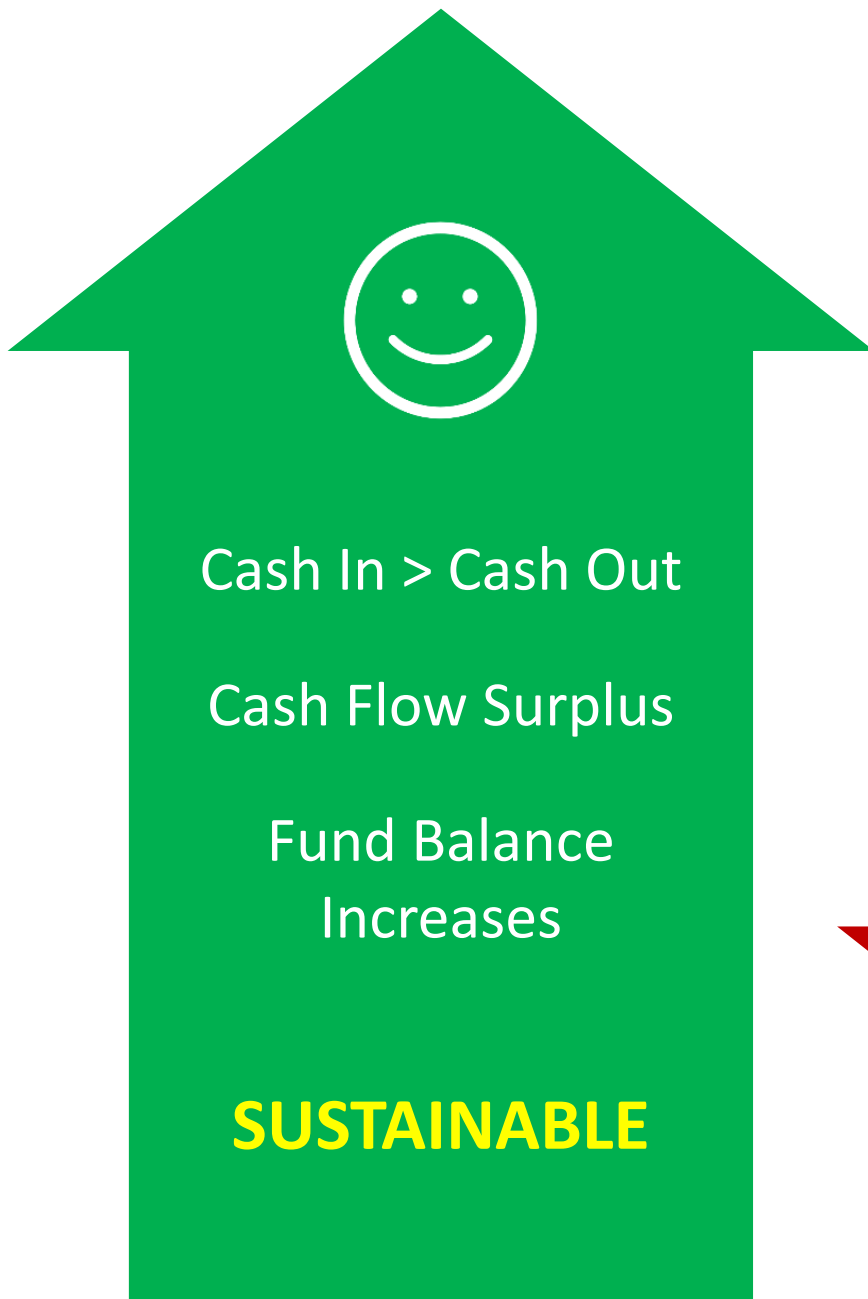
Equitable Rates

Data

- Fund balances
- Historical Budget vs Actuals
- FY 2024 Budget
- 10-Year Capital Expenditure Program

This data was then brought into our Revenue Sufficiency Model ...

Cash Flow Analysis



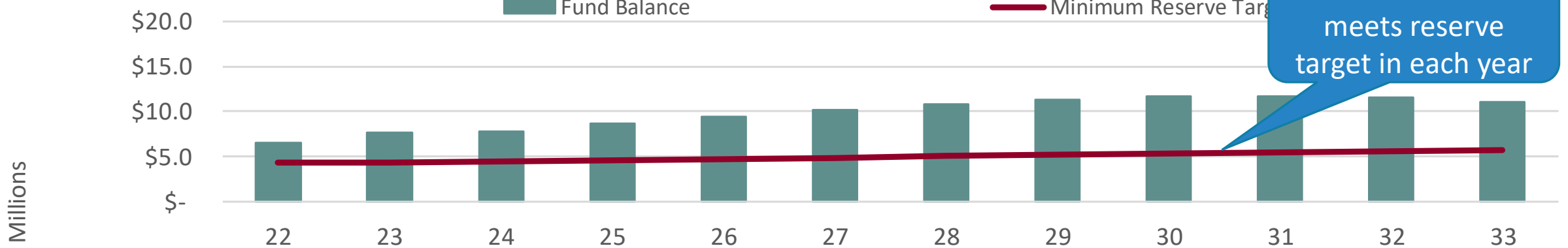
Financial Outlook – Baseline Scenario

Rate increase of 10.00% for Carts and 5.75% for Bags/Tags

City of Grand Rapids, MI Solid Waste Revenue Sufficiency Analysis

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Revenue Adjustment \$M	\$0.00	\$0.00	\$0.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue Adjustment % - Carts	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Revenue Adjustment % - Bag/Tag	0.00%	0.00%	5.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Revenue Adjustment % - Taxes	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
64-Gallon Container (per Tip)	\$5.50	\$5.50	\$6.05	\$6.05	\$6.05	\$6.05	\$6.05	\$6.05	\$6.05	\$6.05	\$6.05
Millage	1.60	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80

Fund Balance



Scenario 1

Exclusive Residential Hauler

Assumptions

- 23% increase in customer base
- 8 Full-Time Equivalent Employees (FTEs)
- 4 sideload trucks
- 12,500 additional refuse carts
- Replacement costs for new carts

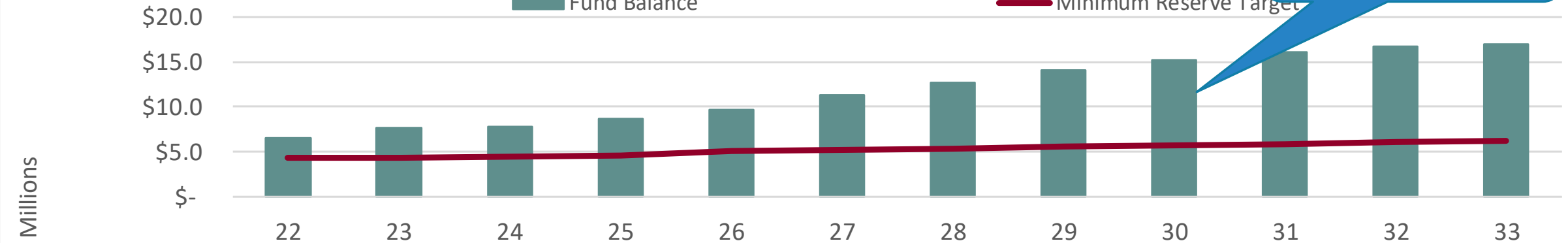
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Millage	1.60	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80

Fund Balance



Better long-term financial outlook

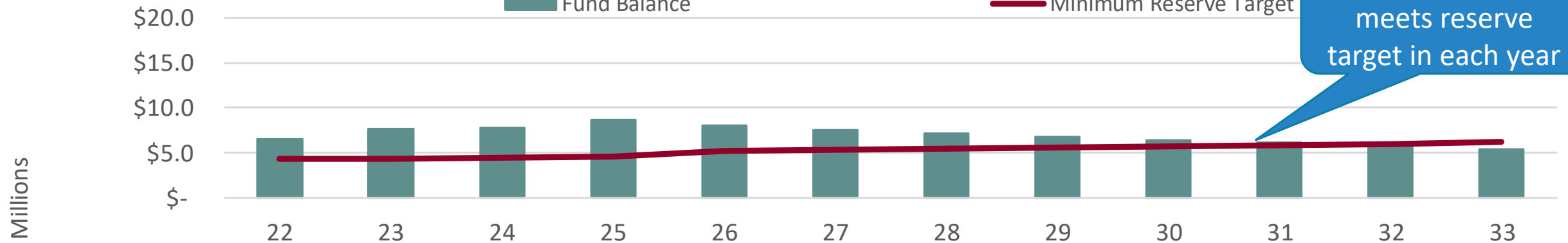
Scenario 2 – Disposal Cost Increase

Same rate plan in FY 2025, 2.00% each year thereafter

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Millage	1.60	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80

Fund Balance



Fund balance meets reserve target in each year

Cost of Service Analysis

- Uses results of Revenue Sufficiency Analysis
- Allocates costs to solid waste functions
- 17 functions identified

Cost of Service Summary

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Rate Structure Analysis

Benefits of PAYT

- Equitable way of charging customers
- Protects affordability
- Guarantees City revenue
- Provides freedom to customers
- Efficient routes

Rate Structure Analysis

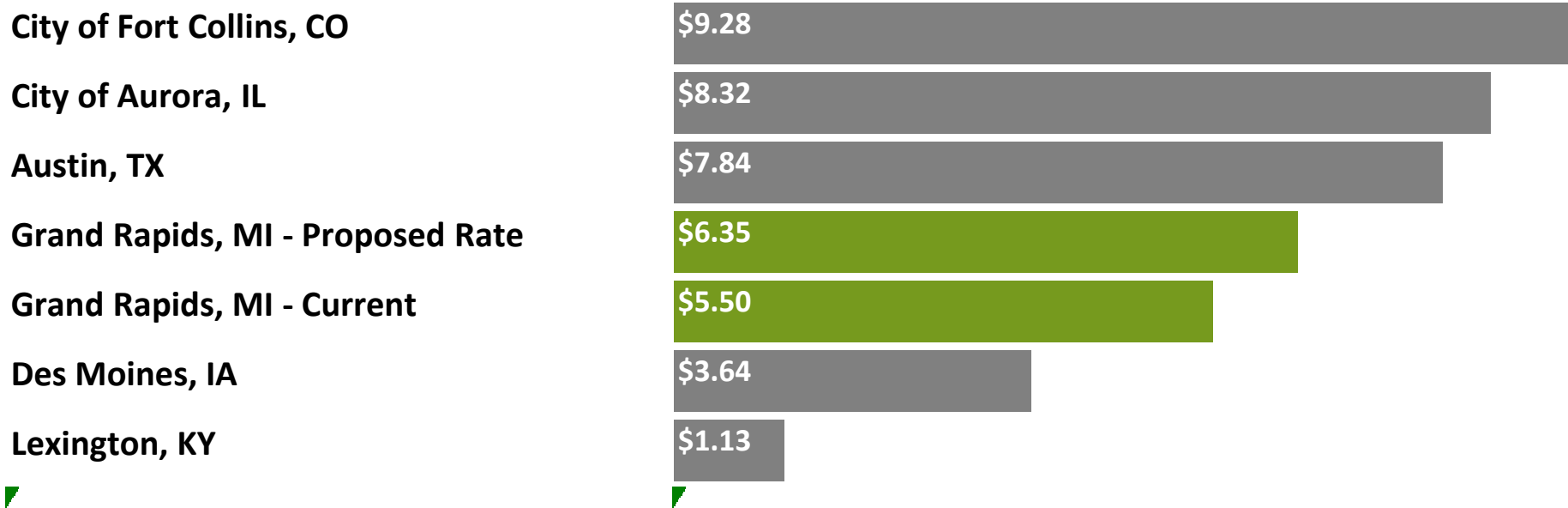
- Uses results of Cost of Service Analysis
- Compares current rates with cost to serve customers

Residential Rate Comparison

Residential Collection

Service Level	32-Gallon Refuse	64-Gallon Refuse	96-Gallon Refuse
Current			
Rate per Tip	\$3.30	\$5.50	\$7.70
Proposed			
Collection Charge	\$2.90	\$2.90	\$2.90
Disposal Charge	\$1.75	\$3.45	\$5.15
Total Proposed Rate	\$4.65	\$6.35	\$8.05
% Change	41%	15%	5%

Monthly Residential Bill - 64 Gallon (per tip based on 4 tips per month)



Notes:

Austin, TX: Weekly trash, recycling and yard waste and 2 bulk collections/year; base fee of \$20.45

City of Aurora: Charges \$2.75 per yard waste sticker

City of Fort Collins: Receive 2 bulk pickups/year included

Des Moines, IA: Must purchase yard bags/stickers

Ann Arbor: Charged on the tax bill, however, charge \$44 to upgrade to 96 gallon cart

Other Considerations

Readiness to Serve Charge

- Calculated using 50% of FY 2025 fleet costs
- 56,500 annual customers billed

Readiness to Serve Charge

FY 2025 Fleet Costs	\$4,966,728
% of Costs Used for Charge	50%
<hr/>	
Total Fleet Costs	\$2,483,364
Annual Customers Billed	56,500
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Annual Cost/Customer	\$43.95
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Monthly Cost/Customer	\$3.66

Each customer would pay the readiness to serve charge once a month plus lower rate per tip

Residential Collection

Service Level	32 Gallon Refuse	64 Gallon Refuse	96 Gallon Refuse
Current Rate	\$3.30	\$5.50	\$7.70
Proposed Rate	\$3.10	\$4.55	\$6.00
% Change	-6%	-17%	-22%

Recommendations & Next Steps

Recommendations

- City should become the exclusive hauler
- Align rates with the costs to provide services
- If the City considers a readiness to serve charge as part of its rate structure, it should consider how this charge would be billed and the costs associated with collecting this revenue.

Next Steps

- Adopt selected rate plan
- Update revenue sufficiency analysis every 1-2 years
- Update the structure of rates every 3-5 years

Questions?



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Next Steps

- Continue engagement with neighborhood representatives to discuss options and alternatives for service
- Evaluate options and propose alternatives to current bag/tag programs
- Determine if a change is desired in current waste hauler model