



Charlotte County Solid Waste

Solid Waste Revenue Sufficiency Study

June 17, 2025



Agenda

1. Background & Issues
2. Scope & Key Objectives
3. Financial Model
4. Findings Summary

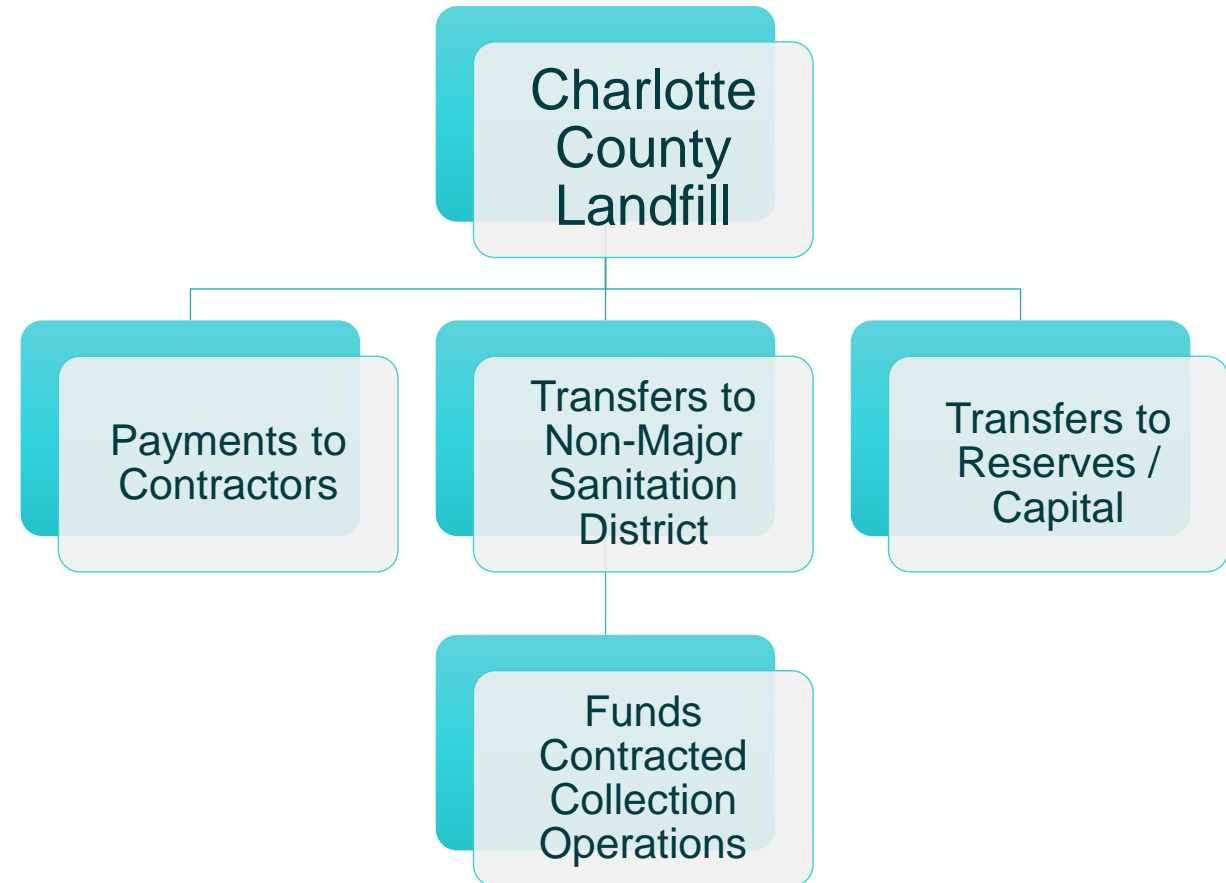
1. Background & Issues



1. Background: Services Overview

County provides the following:

- Landfill
- Collection by contractors
 - › Unincorporated Charlotte County
 - › Don Pedro / Knights Island



1. Background – Existing Rate Structure

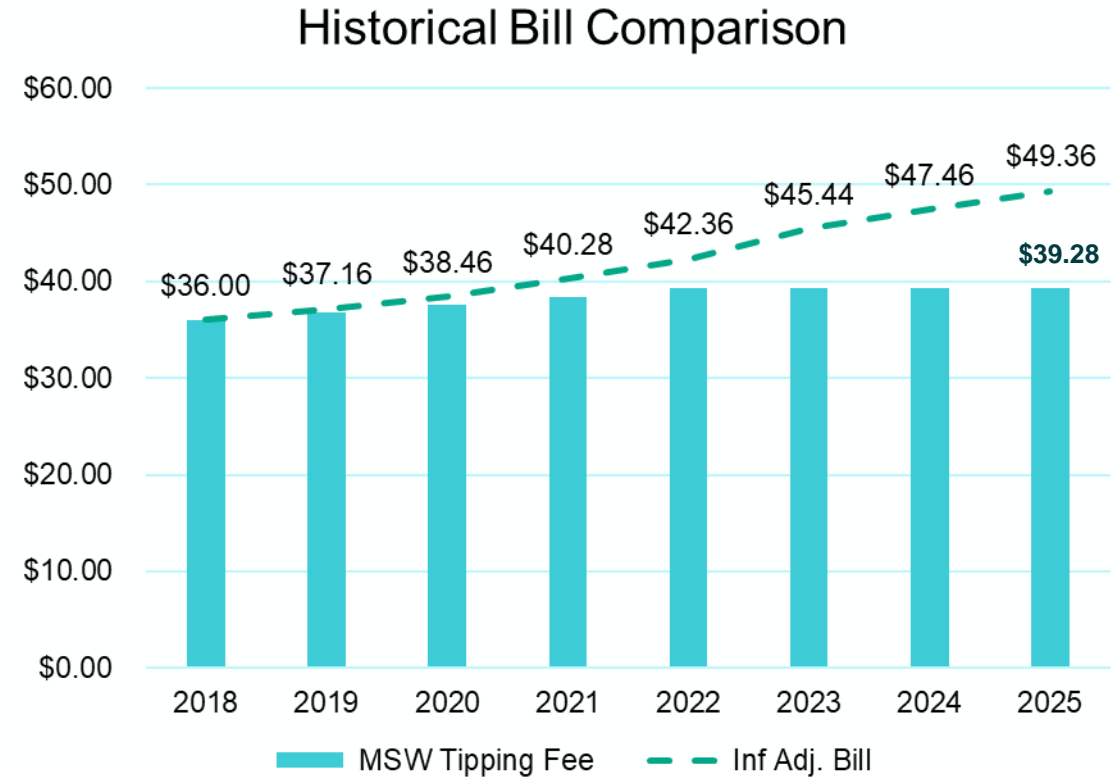
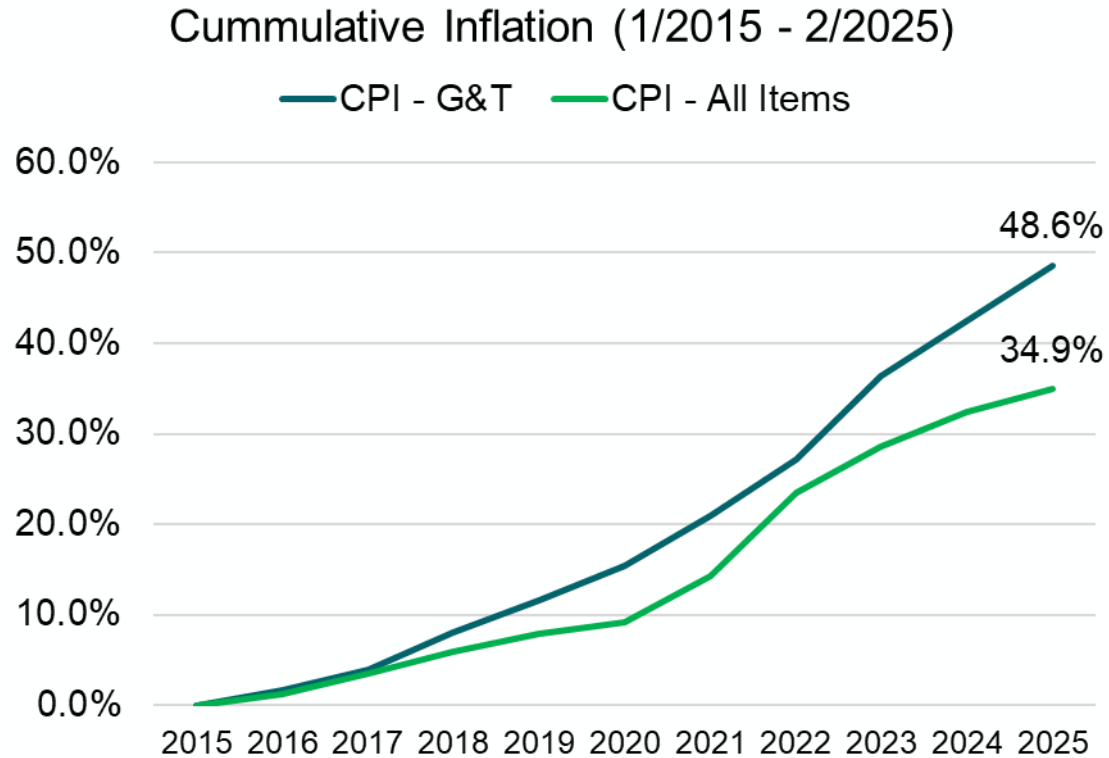
- Disposal Fees

Tipping Fees	Existing Rates
County Residents	\$39.28
Out-of-County	\$78.46
Tires	\$125.46
Asbestos	\$109.10
Peace River Sludge	\$3.28

- Collection Assessment

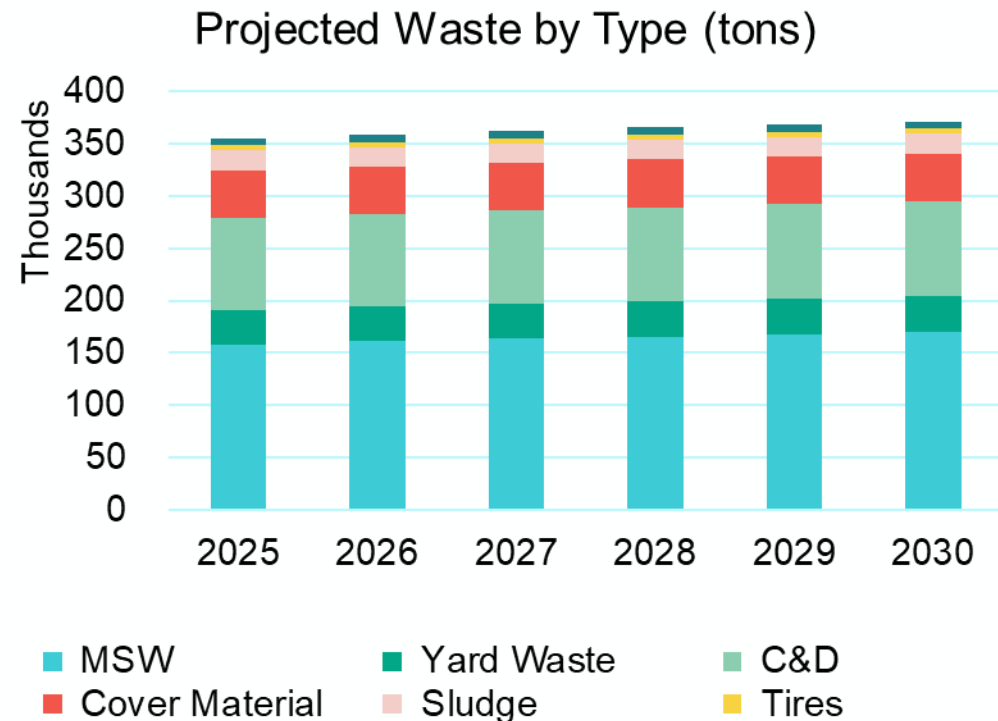
Assessments	Existing Rates
Unincorporated Charlotte County	\$325.38
Boca Grande	\$345.23
Don Pedro Knights Island	\$549.64

1. Background – Inflation



1. Background– Waste Generation

- Majority of Material Type Received
 - Municipal Solid Waste (MSW) - 36%
 - Yard Waste - 18%
 - Construction Debris (C&D)- 25 %
 - Cover Material - 10%
 - Sludge - 4%
 - Tires – 1.5%
 - Other - 5 %
- Forecast assumed 0.85% growth in total tons



1. Background– Waste Generation

	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
All Landfilled Material (MSW)	195,286	259,191	259,328	206,650	209,583	212,314	214,832	217,127	219,449
Landfilled Material for Operations (e.g., Alt. Daily Cover)	93,052	112,104	99,580	93,754	93,958	94,162	94,369	94,577	94,787
Landfill CD/Shingles	44,118	175,989	73,923	54,655	55,080	55,508	55,939	56,373	56,811
Landfill from Hurricane	<u>0</u>	<u>21,111</u>	<u>10,807</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Landfilled	332,457	568,395	443,639	355,060	358,621	361,984	365,139	368,077	371,046

- County processes more tons than is landfilled (e.g., yard waste sent to composting facilities)
- In FY 2023 and FY 2024, increases in waste were due to hurricane damage and debris
- County is reaching near capacity on their current landfill cell

1. Background - Landfill Capacity

- County is nearing end of remaining capacity in landfill
 - › Without action or deferral in tonnages - capacity would run out in the forecast
- Vertical expansion planned for additional capacity in FY26
 - › Add'l 4.7m cubic yards
- Horizontal expansion planned for additional capacity

2. Scope & Key Objectives



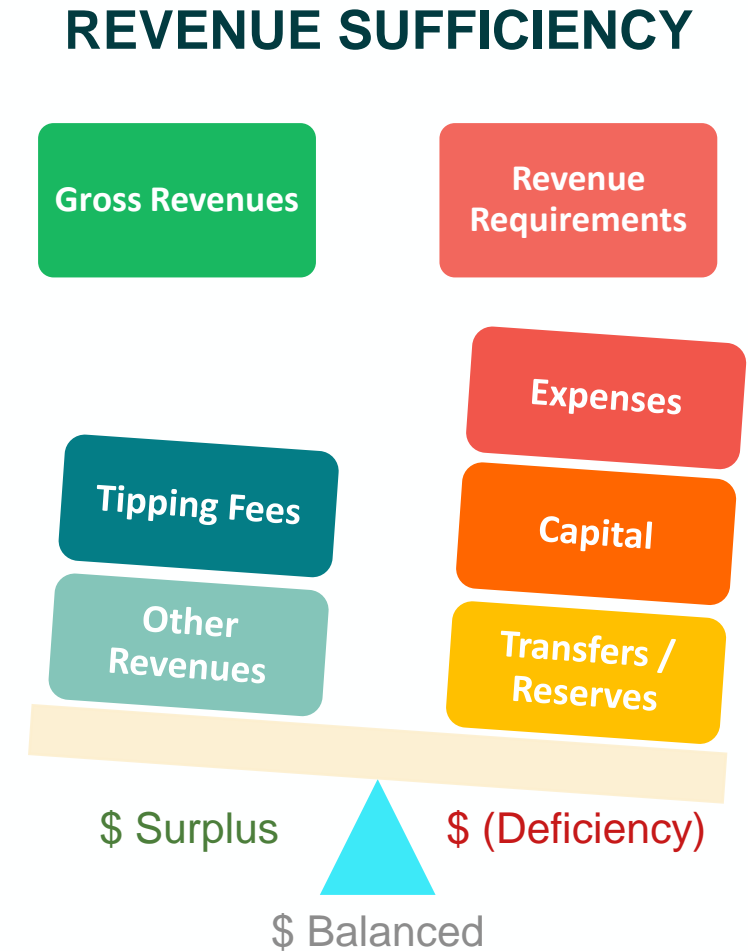
2. Scope & Key Objectives

- Scope
 - › Existing program review
 - › Revenue sufficiency analysis
 - Development of financial model and recommended rates
- Key Objectives
 - › Develop ten-year forecast that recovers the full cost of service
 - › Propose rates that promote fiscal sustainability



2. Scope & Key Objectives

- Data Driven Process:
 - Historical Tonnage Statistics
 - Historical Financial Data
 - Current Budget and Financial Plan
 - Capital Improvement Plan



2. Methodology & Model

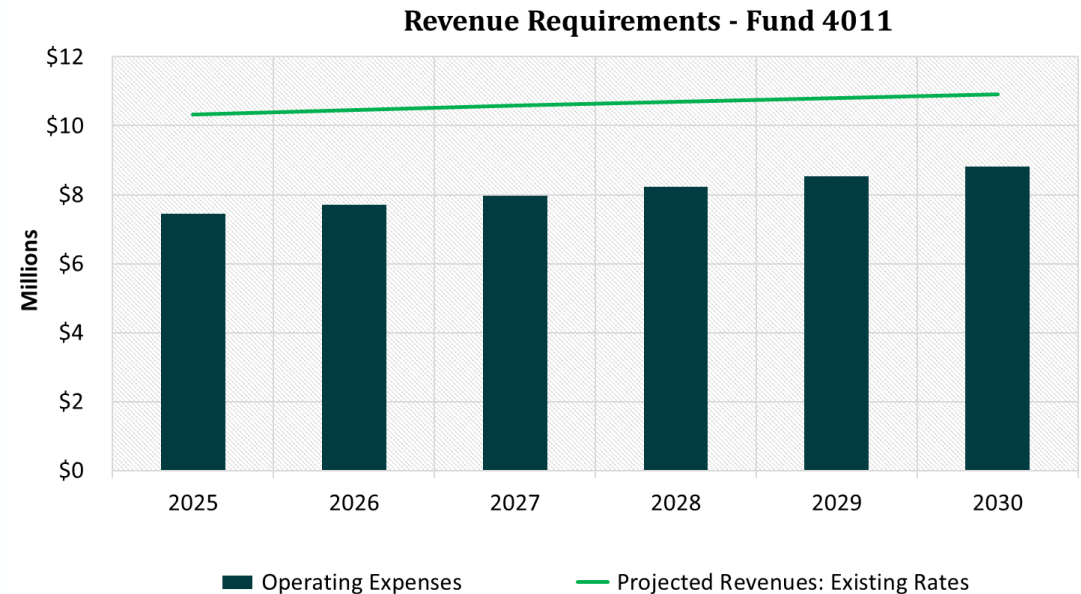
- Philosophy:
 - › Models the Enterprise Operations
 - › Dynamic and Capable of Performing Sensitivity Analyses
 - › Flexible in Design to Accommodate Changes in Operations
 - › Acts as a Decision Support Tool
- Key Model Attributes or Variables:
 - › Growth / Tonnages
 - › Inflation and Escalation Factors
 - › Landfill Expansion
 - › Capital Funding and Debt Financing

3. Financial Plan



3. Financial Plan- Key Assumptions - OpEx

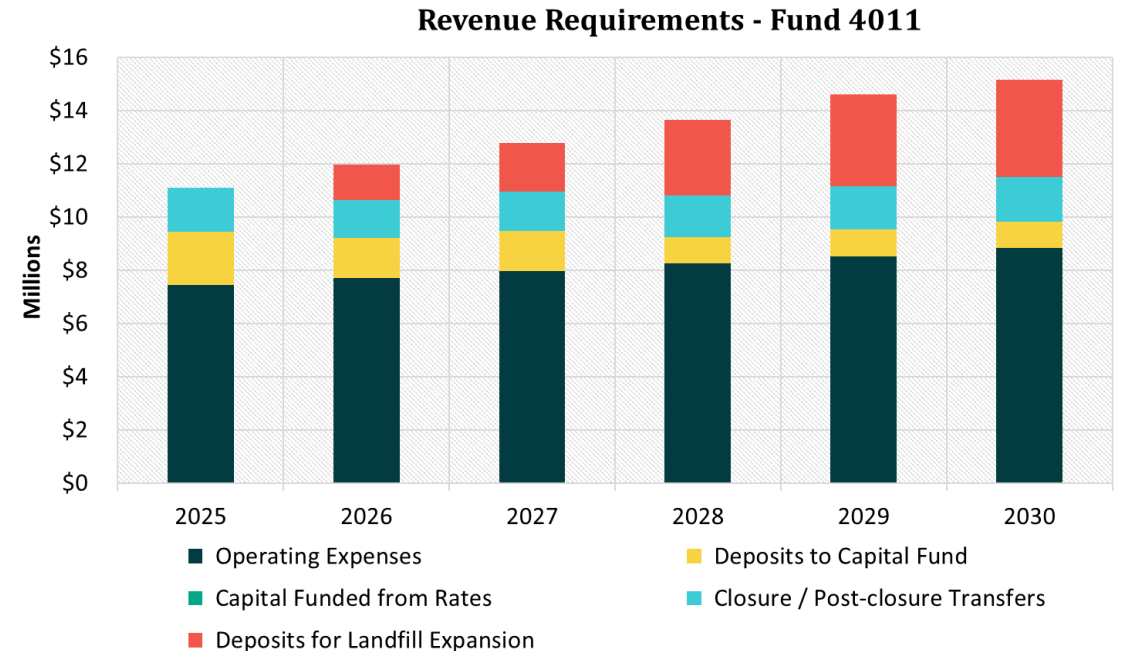
- Based on FY 25 Budget
 - › 5 years of historical actuals
- Includes Landfill, Transfer Station, Resources, Illegal Dumping, Collection
- Overall projected to grow at 3.4% YoY



3. Financial Plan- Key Assumptions

Deposits and Transfers

- **Capital Fund Deposits:** Determined based on the average annual deposit required to fund the projected Capital Improvement Plan
- **Landfill Expansion Deposits:** Based on the estimated cost to construct a cubic yard of capacity times the projected amount of airspace consumed annually.
- **Landfill Closure Deposits:** Based on the estimated cost to close the landfill per cubic yard of remaining capacity times the projected amount of airspace consumed annually.



3. Financial Plan- Key Assumptions

- **Capital Fund Deposits:**
Determined based on the average annual deposit required to fund the projected Capital Improvement Plan
- Average \$1.3m / year for transfers in

Capital Expenditure Summary by Type	FY25-FY30	Funding
Landfill Expansion	\$14,660,400	Revenue Deposits
Facility	\$4,706,000	Revenue Deposits
Equipment	\$5,382,000	Revenue Deposits
Technology	<u>\$42,000</u>	Revenue Deposits
Subtotal	\$24,790,400	

3. Financial Plan- Key Assumptions

Transfers:

- **Landfill Expansion Deposits:** Based on the estimated cost to construct a cubic yard of capacity times the projected amount of airspace consumed annually.
 - Vertical Elevation Expansion (FY26)
 - Horizontal Expansion

Landfill Expansion	
Current Construction Costs	\$14,660,400
Acres	20
Cubic Yard (CY) per Acre	122,849
Capacity of the Cell Expansion	<u>2,702,675</u>
Unit Cost of Expansion	\$5.97

	2025	2026	2027	2028	2029	2030	2031
Landfilled Tons	355,060	358,621	361,984	365,139	368,077	371,046	374,049
Air Space Used (1,100lbs/Cubic Yard (CY)	507,229	512,315	517,120	521,628	525,824	530,066	534,355
Cost per Cubic Yard (CY)	<u>\$5.97</u>	<u>\$6.15</u>	<u>\$6.33</u>	<u>\$6.52</u>	<u>\$6.72</u>	<u>\$6.92</u>	<u>\$7.12</u>
Required Deposit	n/a	\$1,307,921	\$1,801,324	\$2,846,939	\$3,448,878	\$3,666,577	\$3,807,135

3. Financial Plan- Key Assumptions

Transfers:

- **Landfill Closure Deposits:** Based on the estimated cost to close the landfill per cubic yard of remaining capacity times the projected amount of airspace consumed annually.

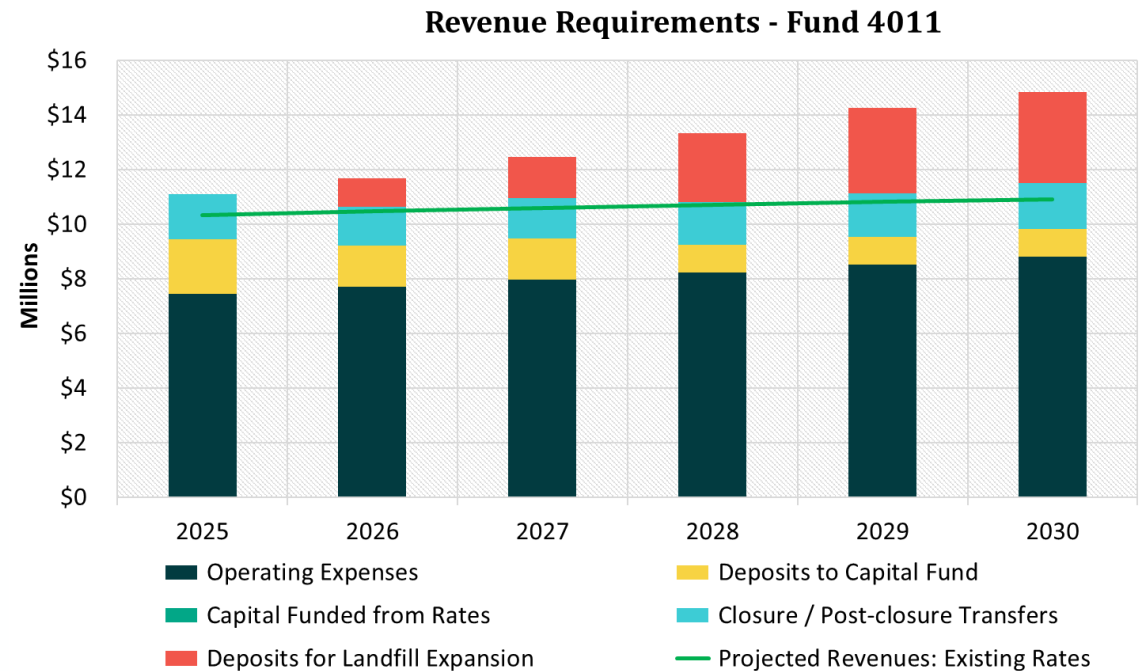
Closure Cost	
Current Closure Costs	\$22,773,897
Total Airspace Capacity in Cubic Yards (CY)	<u>8,559,793</u>
Cost per CY	\$2.66

	2025	2026	2027	2028	2029	2030	2031
Landfilled Tons	355,060	358,621	361,984	365,139	368,077	371,046	374,049
Air Space Used (1,100lbs/CY)	507,229	512,315	517,120	521,628	525,824	530,066	534,355
Cost per Cubic Yard	<u>\$2.66</u>	<u>\$2.30⁽¹⁾</u>	<u>\$2.37</u>	<u>\$2.44</u>	<u>\$2.52</u>	<u>\$2.59</u>	<u>\$2.67</u>
Required Deposit	\$1,349,515	\$1,179,763	\$1,226,553	\$1,274,361	\$1,323,150	\$1,373,840	\$1,426,506

(1) Drop in unit cost is estimated due to vertical expansion active in FY 2026 increasing total airspace capacity to 13,267,679 CY

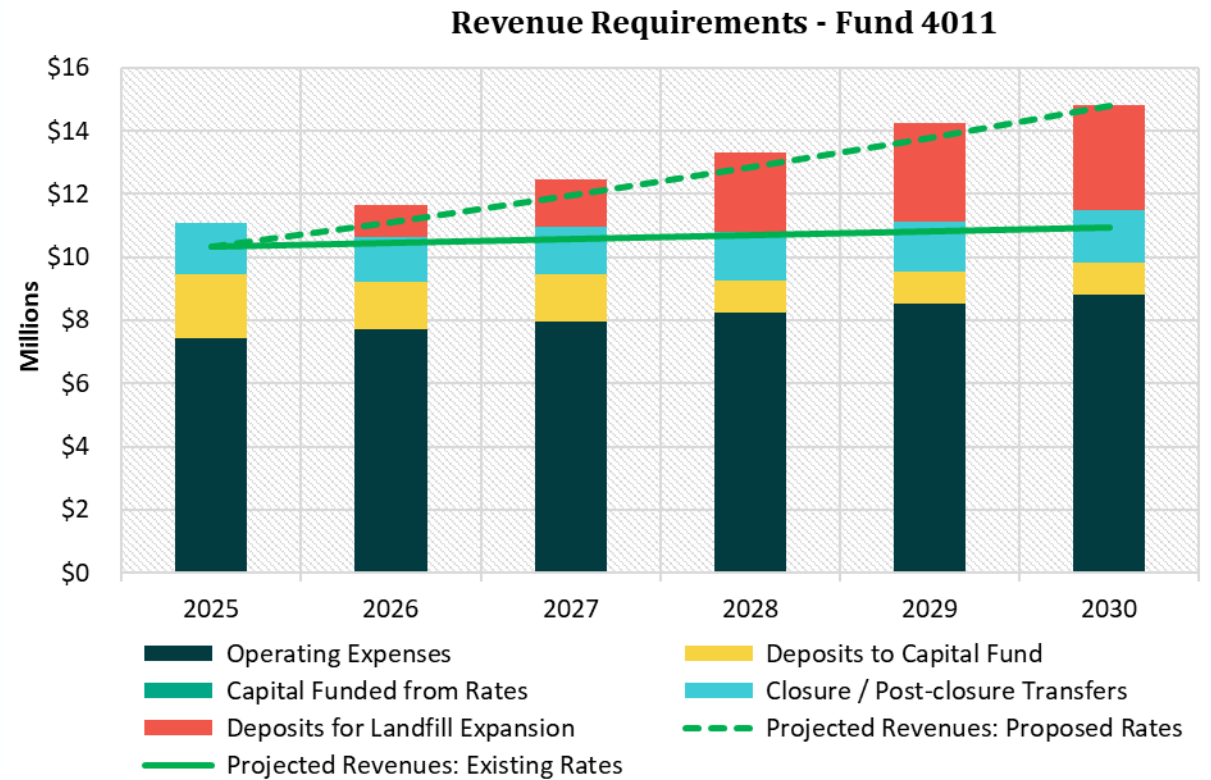
3. Financial Plan- Existing Revenues

- Revenues based on billing statistics and financials
 - › Assumes return to normal operations for MSW, C&D / Shingle tonnages from FY 2023-2024
- Existing revenues do not cover the need for transfers
 - › Shortfall averages \$2.3m per year without rate increases



3. Financial Plan- Revenue Sufficiency

- Two scenarios targeting same endpoint in cash
 - › 5 years of phased increases
 - › 2 years of larger upfront increases
- Assuming implementation County will meet transfer targets



3. Financial Plan- Bill Impact Scenarios

Scenario 1	2025	2026	2027	2028	2029	2030
Phased Increases (Disposal Only)	n/a	6.25%	6.25%	6.25%	6.25%	6.25%
Res. MSW Tip Fee	\$39.28	\$41.74	\$44.34	\$47.11	\$50.06	\$53.19
\$ Change		\$2.46	\$2.61	\$2.77	\$2.94	\$3.13

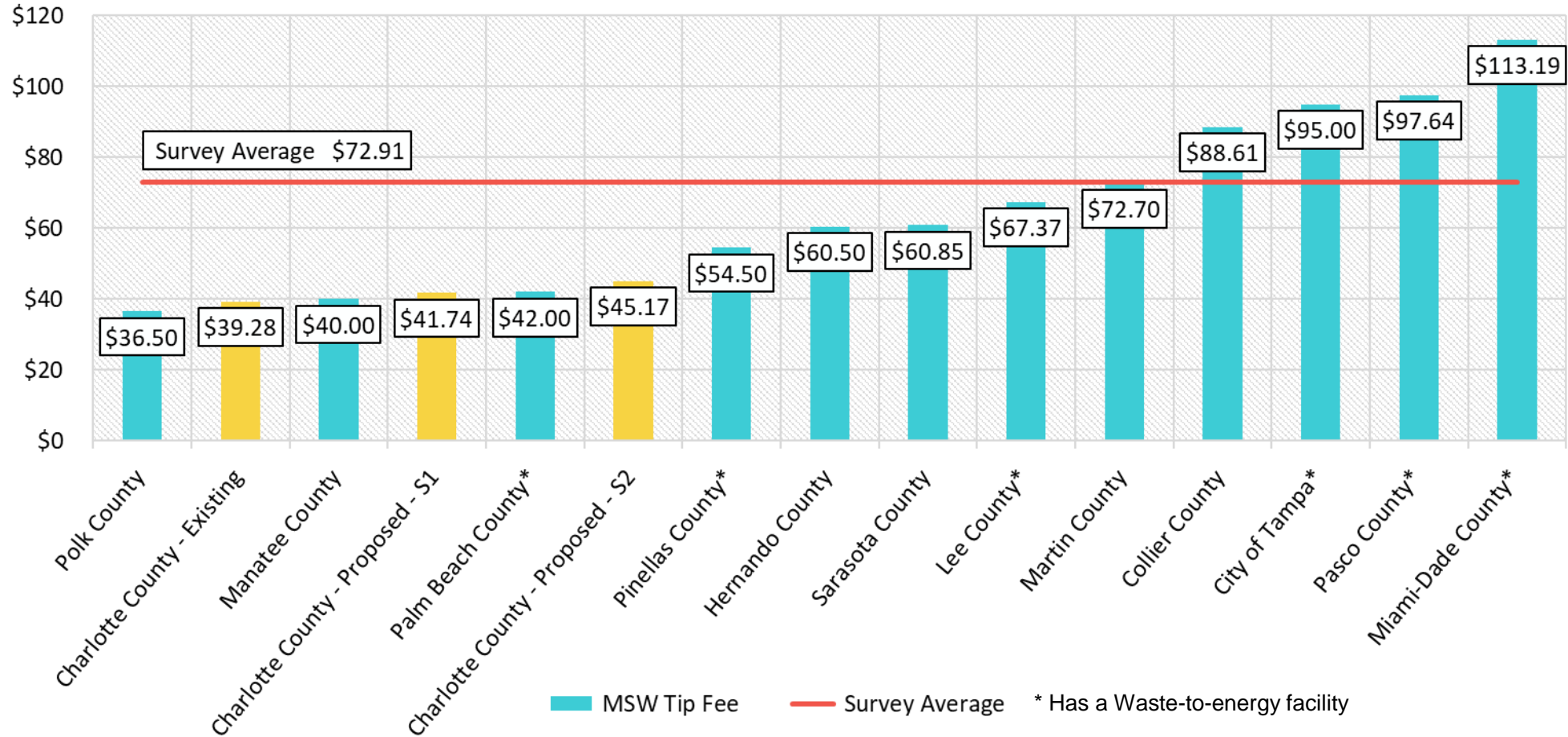
Scenario 2	2025	2026	2027	2028	2029	2030
Front Load Increases (Disposal Only)	n/a	15.00%	15.00%	1.00%	1.00%	1.00%
Res. MSW Tip Fee	\$39.28	\$45.17	\$51.95	\$52.47	\$52.99	\$53.52
\$ Change		\$5.89	\$6.78	\$0.52	\$0.52	\$0.53

4. Findings & Recommendations



4. Financial Model – Rate Comparison Results

MSW Tipping Fee Comparison



Many of these entities are pursuing rate increases or are engaged in rate studies.

4. Findings & Recommendations Summary

- Key Financial Plan Recommendations:
 - > Consider proposed rate plan – with across the board increases
 - Conduct specific cost of service analysis for sludge and C&D



Q&A

Thank you!

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