Solid Waste Assessment Practices

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Meet the Speakers

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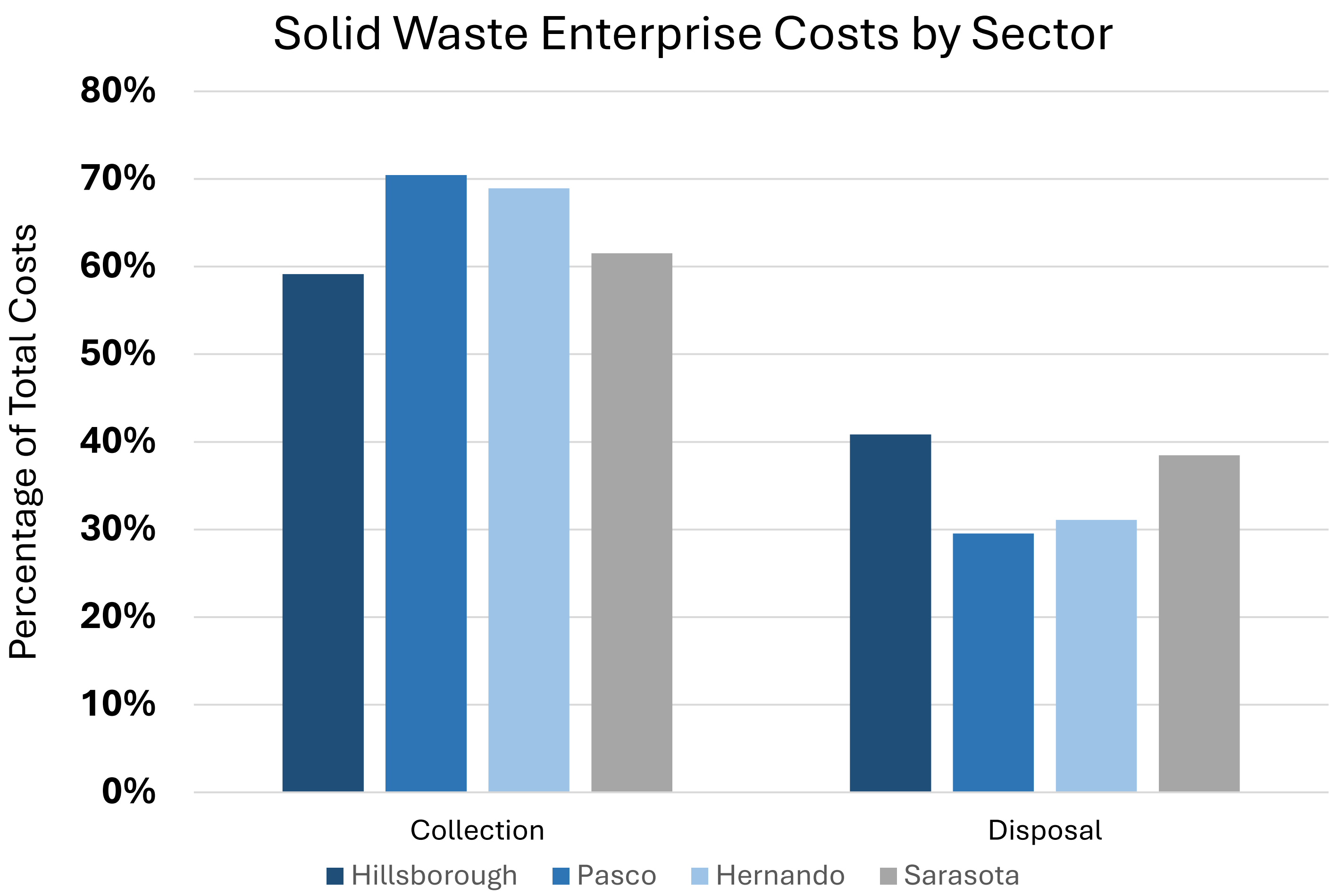
How are Solid Waste Systems Funded?

- Most commonly established as an Enterprise fund
  1. Non ad-valorem tax assessment
  2. Cost recovery through tipping fees
- Single family residential is traditionally a fixed rate
  - Assumed waste generation, container size
- Commercial – methodologies vary
  - Tipping fees
  - Parcel billed or assessed
  - Combination
- Other revenues – recycling, landfill gas, and electric sales

1. Governmental accounting standards also refer to this as a proprietary fund on financial statements.

Solid Waste System Costs

- Most solid waste managers focus on disposal costs
- Collection represents majority of costs seen by residents
- Commercial collection procedures can drive residential rates



Commercial Waste Billing Methods Benchmarking Summary

City/County	Bills Parcels	Bills Haulers
Bay County		X
Broward County		X
City of Tampa	X	
Hillsborough County		X
Lee County [1]	X	X
Miami-Dade County		X
Palm Beach County [1]	X	X
Pasco County	X	
Pinellas County		X
Polk County		X

1. These municipalities also collect a portion of disposal costs through assessments.

Variability in Billing Methods Across State

Commercial Haulers Permitted

- Open market – Any licensed provider
- Commercial only for approved residential collectors
- Franchise collector in designated area

Billing Methods

- Municipality sets a rate cap based on container size
- One bill for collection and disposal
- Hauler plus base rate assessment (sq.ft)

Example Base Rate Table - Florida Municipality

Commercial Assessment Rates		Business A (5,000 sq. ft)	Business B (15,000 sq. ft)
High	$1.338	$6,690.00	$20,070.00
Medium	$0.241	$1,205.00	$3,615.00
Low	$0.094	$470.00	$1,410.00
Non-Gen	$0.011	$55.00	$165.00

Commercial Billing

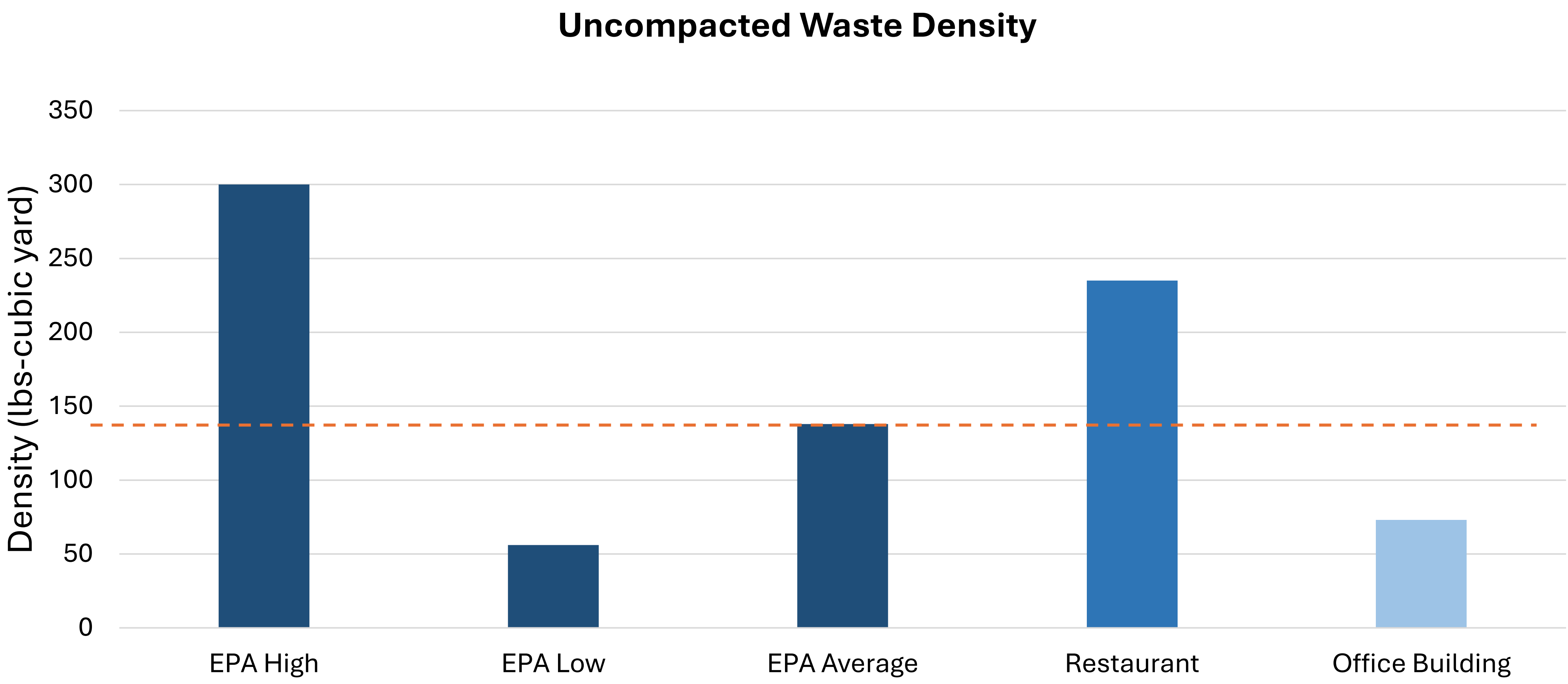
Drivers for Municipal Differences

- Logistics and ease of implementation
- Self-collection with no third-party haulers
- Credit rating or debt considerations

Commercial Customer Selects Dumpster Size and Frequency

- Tipping fee must be converted to yards to issue statement
  - Density – what's the appropriate conversion factor?
  - Volume – assumes the dumpster is full when collected

EPA Study of Waste Density



Waste Density is Variable

- Private waste haulers have empirical data
  - Variable rate approach
  - Competition, if present, can drive pricing
- Local governments often used a fixed density when direct billing or establish a third party rate cap

Example Fixed Rate Collection Cost – Florida Municipality

COMMERCIAL SERVICE	
Front-End Load Container Service	
2 Cubic Yard - by frequency of pickups per week	Monthly Charge
▪ 1 pickup per week	$189.62
▪ 2 pickups per week	$369.12
▪ 3 pickups per week	$565.56
▪ 4 pickups per week	$779.05
▪ 5 pickups per week	$1,010.67
▪ 6 pickups per week	$1,257.79
▪ 7 pickups per week	$1,522.50
3 Cubic Yard - by frequency of pickups per week	
▪ 1 pickup per week	$273.03
▪ 2 pickups per week	$542.28
▪ 3 pickups per week	$836.93
▪ 4 pickups per week	$1,157.14
▪ 5 pickups per week	$1,504.60
▪ 6 pickups per week	$1,875.26
▪ 7 pickups per week	$2,272.34

Case Study – Pasco County

- Statements issued by tax collector once per year to parcel owner
  - Lien rights on commercial property
  - Heavily favored by public markets due to security

Goals

- Assess opportunities for possible changes to other structures
  - Tipping fee, disposal charge and base rate
- Evaluate current debt covenants
- Analysis of any financial implications

Case Study – Pasco County

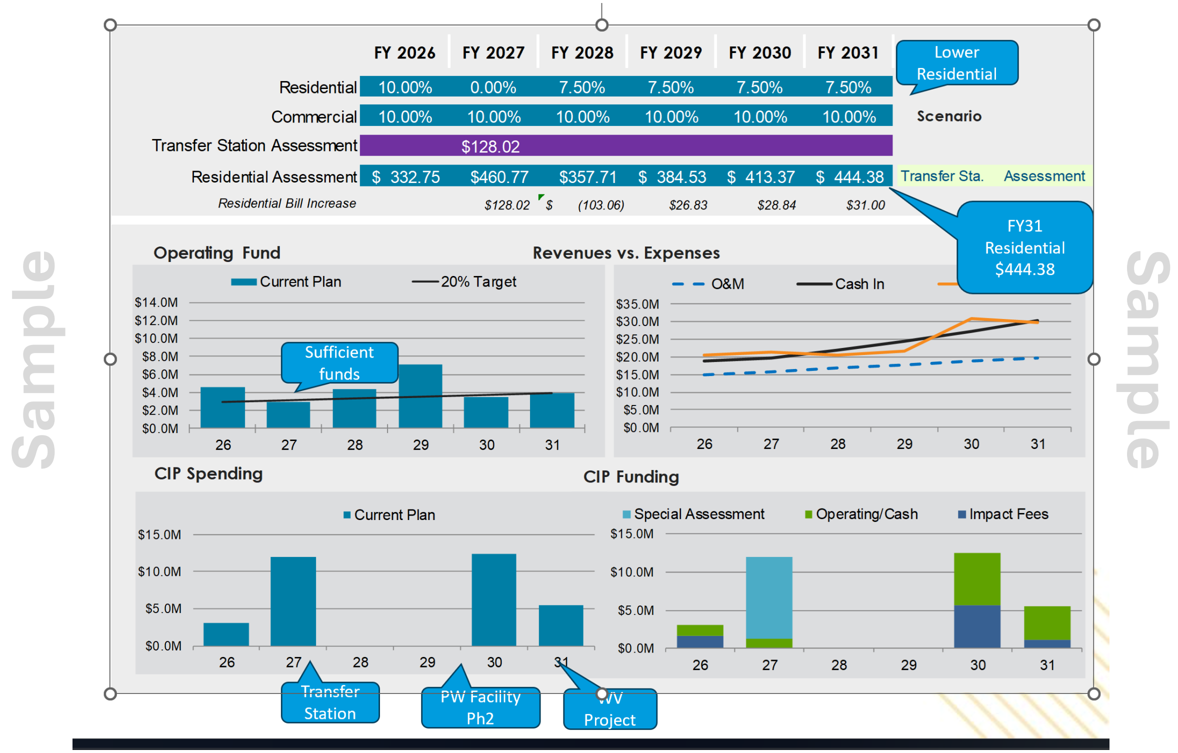
- Open Market: Commercial customers directly contract with private haulers for collections
  - Must be residential provider
  - 5 licensed haulers – increased competition
    - Haulers bill for collection only
- County direct bills parcels for disposal based on yardage
  - Commercial assessment issued annually on tax bill

>$90M Debt Financing for WTE Expansion

Revenue Sufficiency Analysis (RSA)

- 10- year third party budget model; annually validated
- Map rates, capital project funding, borrowing efforts, reserves and revenue sources across customer classes
- Long term planning helps to avoid rate shock
- Recurring updates assists with bond surveillance , disclosure and compliance

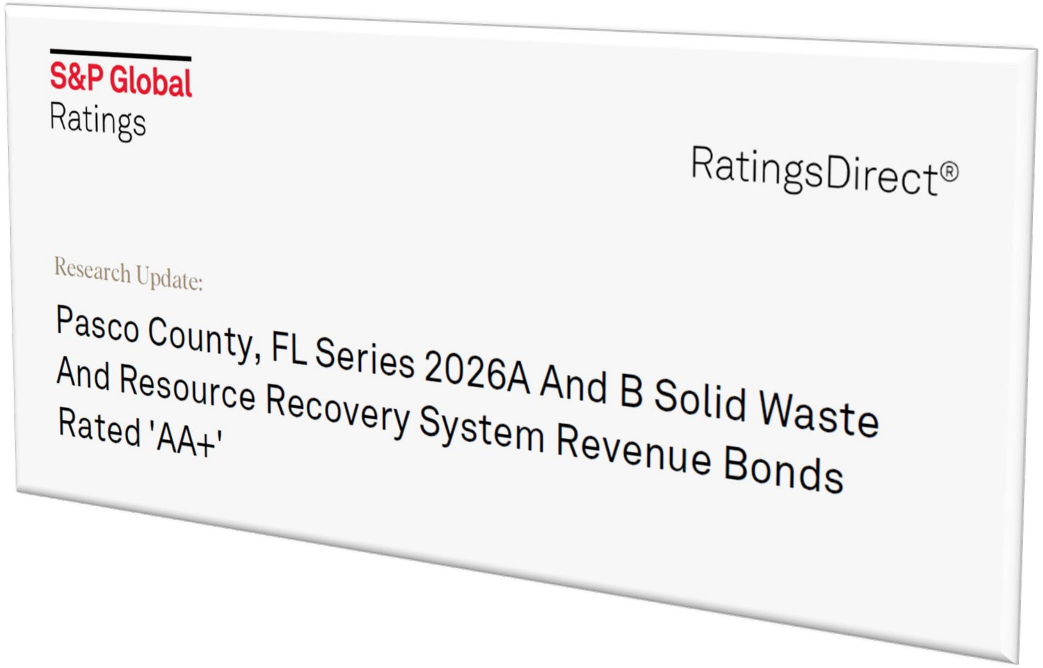
Financial dashboards created to provide multiple indicators of financial health and managerial strategies



Sample FAMS® panel with example data for illustration purposes only – values not applicable to case study. Five years pictured for illustration, dashboards also created in 10 year views.

Debt Considerations

- Credit rating agencies view assessment methodologies differently
  1. Tax Assessments
     - Including Parcel lien rights
  2. Utility billings
     - Carries collection risks
- Debt coverage thresholds require continued financial and policy discipline to uphold
- Disclosure rules require material business changes to be published*
- Small changes in borrowing rates (e.g., 25 bps) can have a significant financial impact, increasing total debt service by millions over the term of the financing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Research Update:

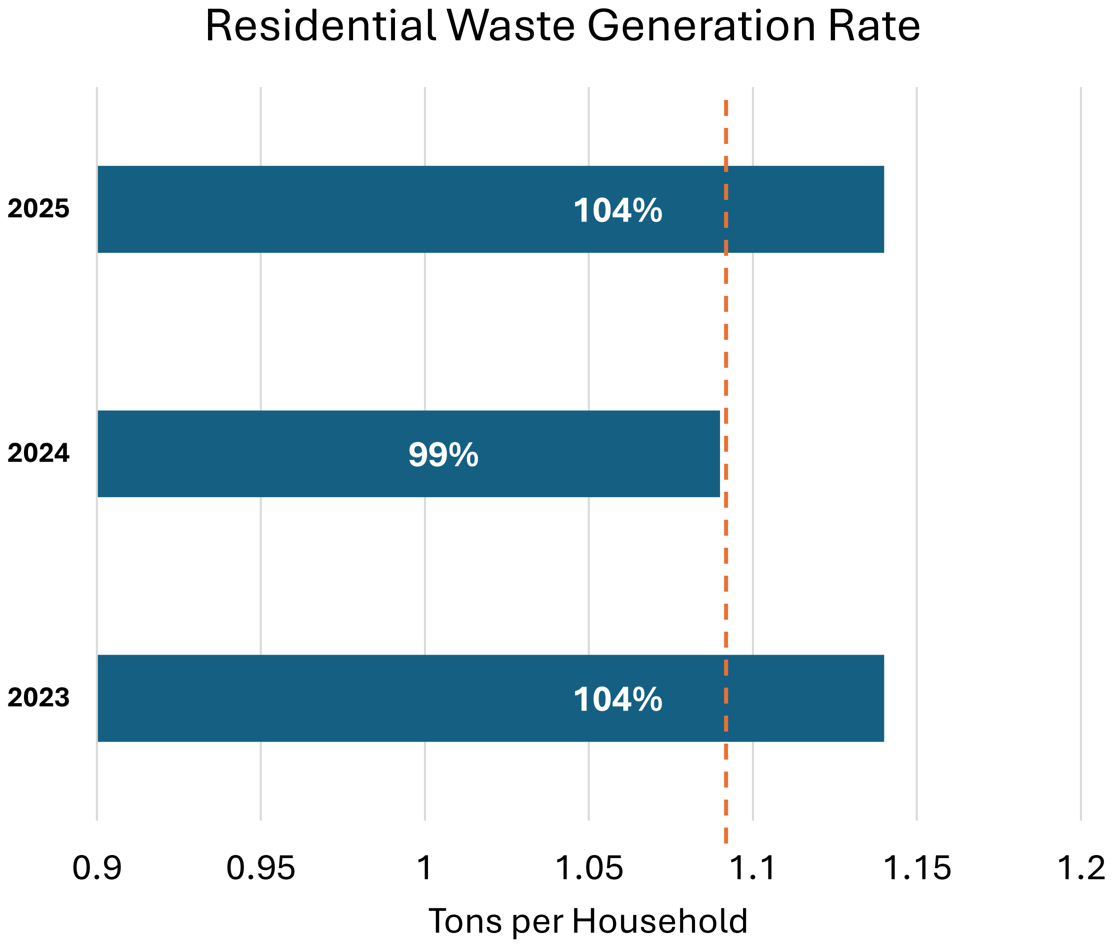
Pasco County, FL Series 2026A And B Solid Waste And Resource Recovery System Revenue Bonds Rated 'AA+'

Survey Stakeholders

- **Hauler Survey:** Gather input from waste haulers on possible outcomes, understand implementation timelines, best practices, communication and implementation plan
  - Enthusiastic about switching to a tipping fee model – collateral OK
  - Messaging of system rollout and potential changes is critical
- **Customer Survey:** Input from commercial business on experience with the County's current billing approach, feedback on possible changes, and suggested areas for improvements
  - Not something that is routinely thought about
- Memorialize in report – highlights opportunities of stakeholder input

Billing Equity

- Careful to consider any impacts to residential customers from any proposed changes
- Pasco's tipping fee is tied to its residential assessment rate
  - Residential ERU – 1.096 tons/year
- Equitable split between commercial and residential
- Validate residential yardage vs tonnage
  - Three year look back
- Further benchmarking across Florida (1 to 1.3 tons per household)



Bond Impacts of Proposed System Changes

- Revenue Neutrality Verified by Independent Consultant
- Rating Agency Confirmation
- Bond Counsel Opinion

- Debt Covenants are rules/commitments made to bond holders during borrowing
  - Evaluate program changes before initiating debt for capital projects
- Review bond covenant requirements before implementing system changes
- Confirm compliance with your Master Trust Indenture and Bond Counsel

Pasco Tonnage to Hauler Record Evaluation

- Density analysis between reported yardage and tons delivered
  - Hauler records (yards)
  - Scale House (tons)
- Use to forecast revenue impacts

Summary

1 **Study Still Ongoing**
The Pasco study is ongoing — the Save Our Homes property-tax ballot took priority.

2 **Not One Size Fits All**
Commercial billing methods vary in approach throughout the state.

3 **Open Questions Remain**
How do commercial methodologies impact overall program pricing — rate caps, approved haulers, disposal margin?

4 **Plan the Big Picture**
Planning around financial impacts to system changes is critical.

Thank You

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Questions?

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