



Solid Waste Study Update



Board of County Commissioners

September 18, 2012



Presentation Outline



- Study Progress
- Operations Review
- Waste Flow Analysis
- Preliminary Financial Review
- Next Steps





Study Progress

- **Scope of Services**
 - **Phase I – Background Document Review**
 - **Phase II – Market Analysis**
 - **Phase III – Operations Review**
 - **Phase IV – Flow Analysis**
 - **Phase V – Financial Review**
 - **Phase VI – Legal and Political Review**
 - **Phase VII – Structural Review**
- **Completed work for Phases I-IV**



Presentation Outline



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Operations Review

- **Objectives**
 - Review components of OCU waste system to identify how solid waste management services are provided
 - Analyze what services are provided by OCU, and what services are provided by other entities
 - Perform initial benchmark comparisons with other public agencies and private sector to identify potential efficiencies



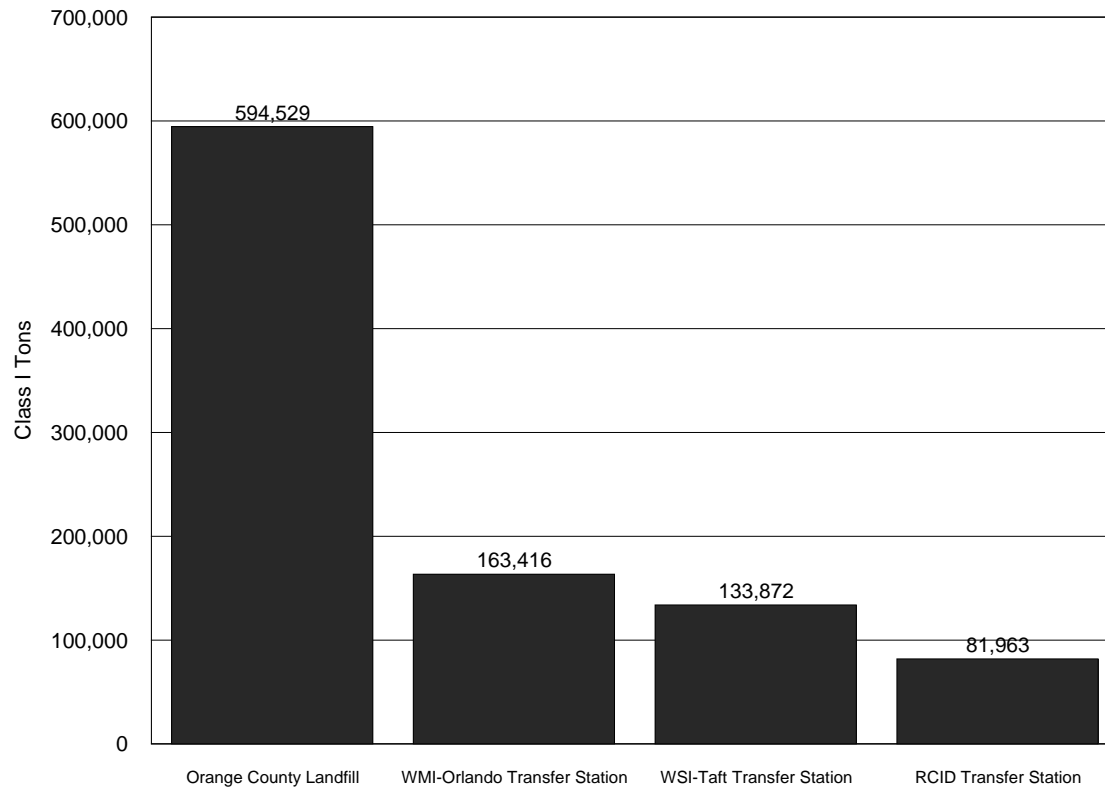
Operations Review

- **Quick refresher: OCU waste operations are comprehensive and include:**
 - **Class I and Class III landfills**
 - **2 waste transfer stations and 1 recyclables transfer station**
 - **Recycled materials processing facility**
 - **Yard waste processing facility**
 - **Household hazardous waste facility**
 - **Waste tires processing facility**
 - **Additional waste-related programs and services**



Operations Review

Class I Waste Disposal (2010)

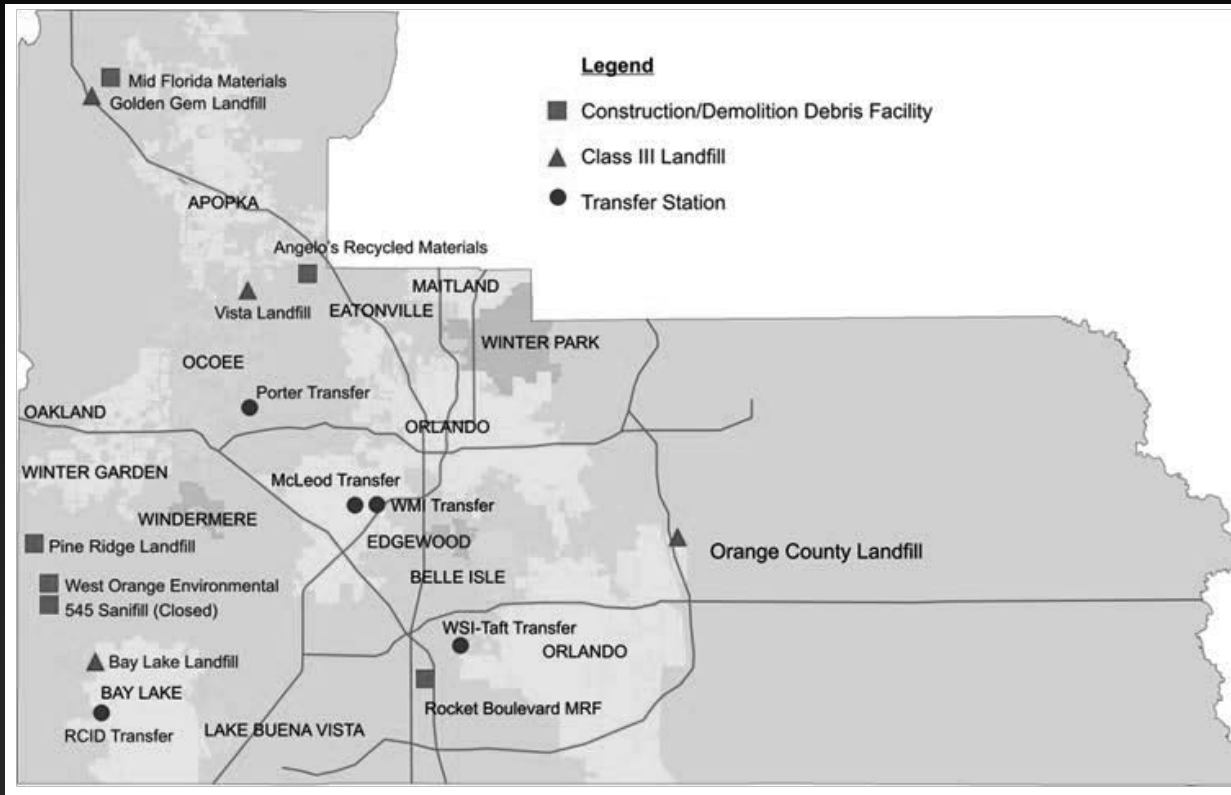


- OCU is the largest Class I provider in the County
- 3 competing in-county transfer stations also receive Class I waste which is primarily disposed at non-OCU landfills



Operations Review

Class III and C & D Debris Facilities



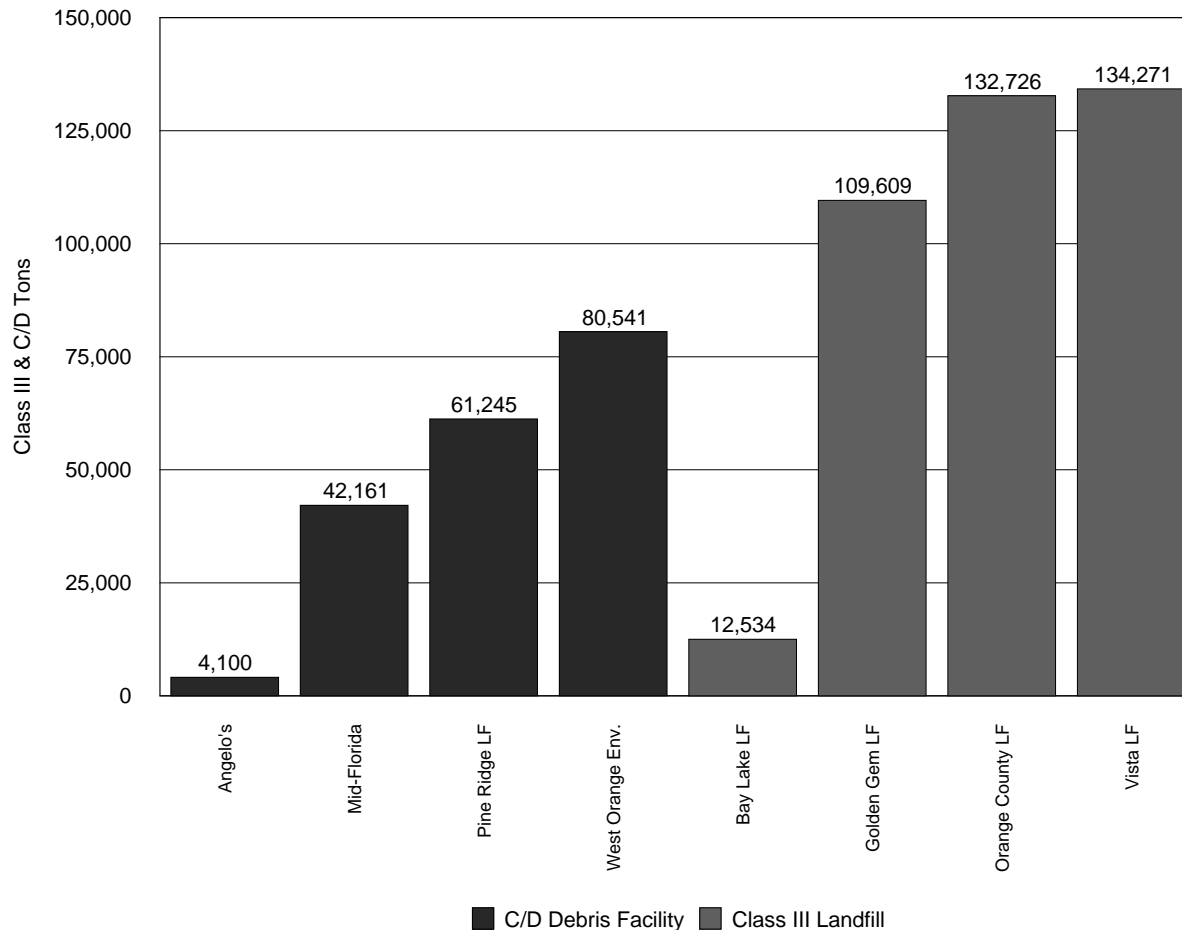
Class III waste includes yard trash, C & D debris, cardboard, processed tires, glass and asbestos

- Class III, including C & D debris, is a sizable waste stream
- OCU provides Class III and C & D debris waste transfer and disposal
- Competing in-county facilities include:
 - 3 Class III landfills
 - 4 C & D facilities
 - 2 private transfer stations
 - Facilities located in west half of County



Operations Review

Class III /C & D Waste Disposal (2010)

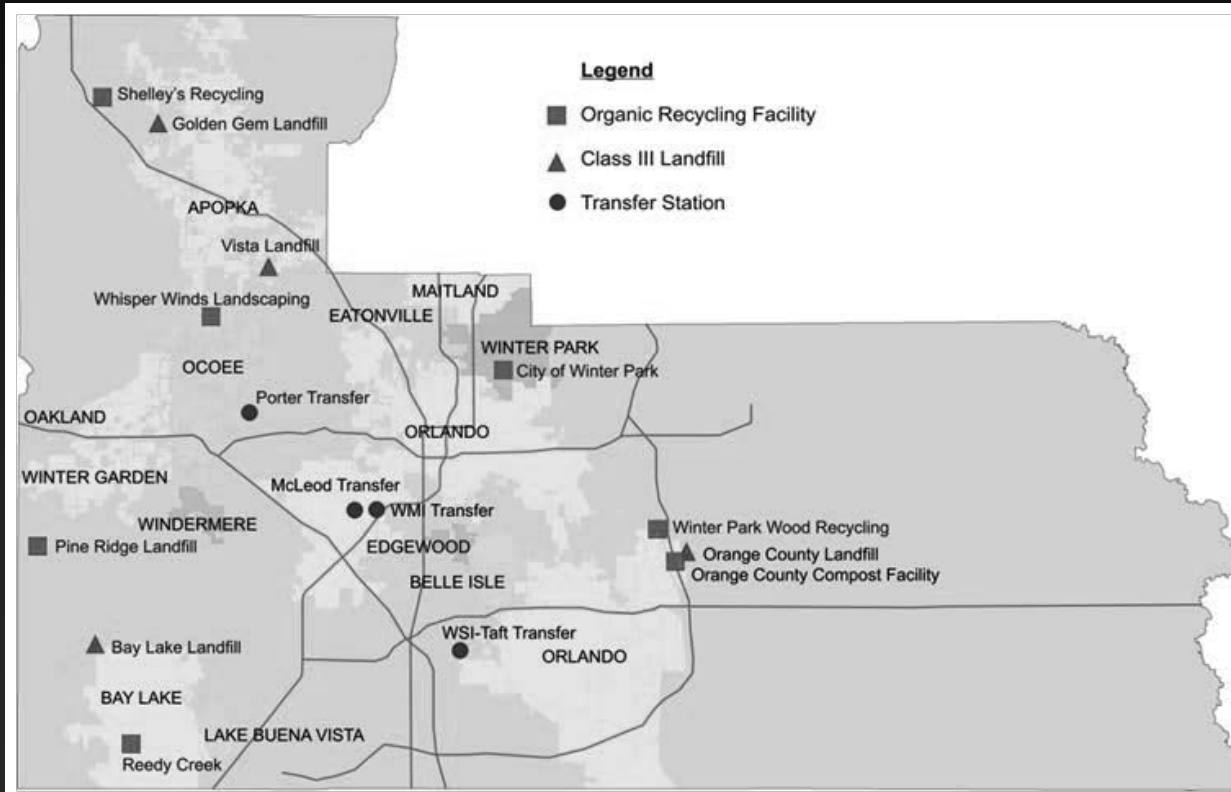


- OCU managed 25% of Class III and C & D waste disposed from the County in 2010
- C & D facilities also recycle large amounts of materials (35% in 2010)
- Tonnage processed at C & D facilities decreased 64% from 2006 to 2010



Operations Review

Yard Waste & Organic Processing Facilities

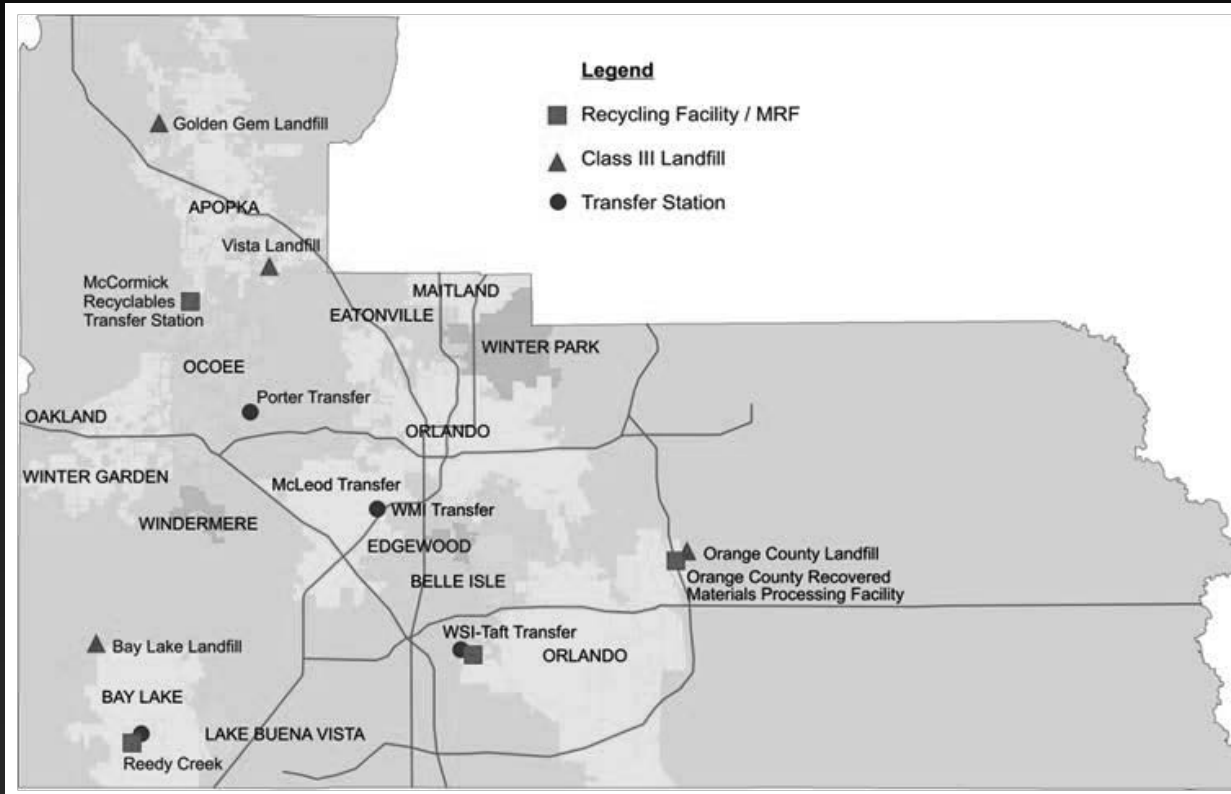


- OCU operates the largest yard waste facility in the County
 - Nearly 100,000 tons managed in 2010
- Other sites in the County managed about 50,000 tons in 2010



Operations Review

Recycling Facilities



- OCU is the principal recycling processing facility in the County (132,000 tons)
- Private transfer stations also separate recyclables (43,000 tons)
- 64 other sites reported handling recyclables from Orange County
 - Scrap and auto yards
 - Brokers/retailers



Operations Review

- **Summary of OCU's role in managing Orange County's solid waste**
 - **OCU is the largest single-source provider of comprehensive services to manage all types of waste from Orange County**
 - **Other entities also manage components of the County's overall waste stream, but not as comprehensive as OCU**
 - **OCU's level of service must be considered when benchmarking with competing facilities, as there are trade-offs between cost and services provided**



Operations Review

OCU comparison with other Florida Counties

- As an initial benchmark, it is reasonable to compare OCU with other public waste systems
- The objective was to evaluate whether other counties provide similar services at lower cost, potentially pointing to operational efficiencies



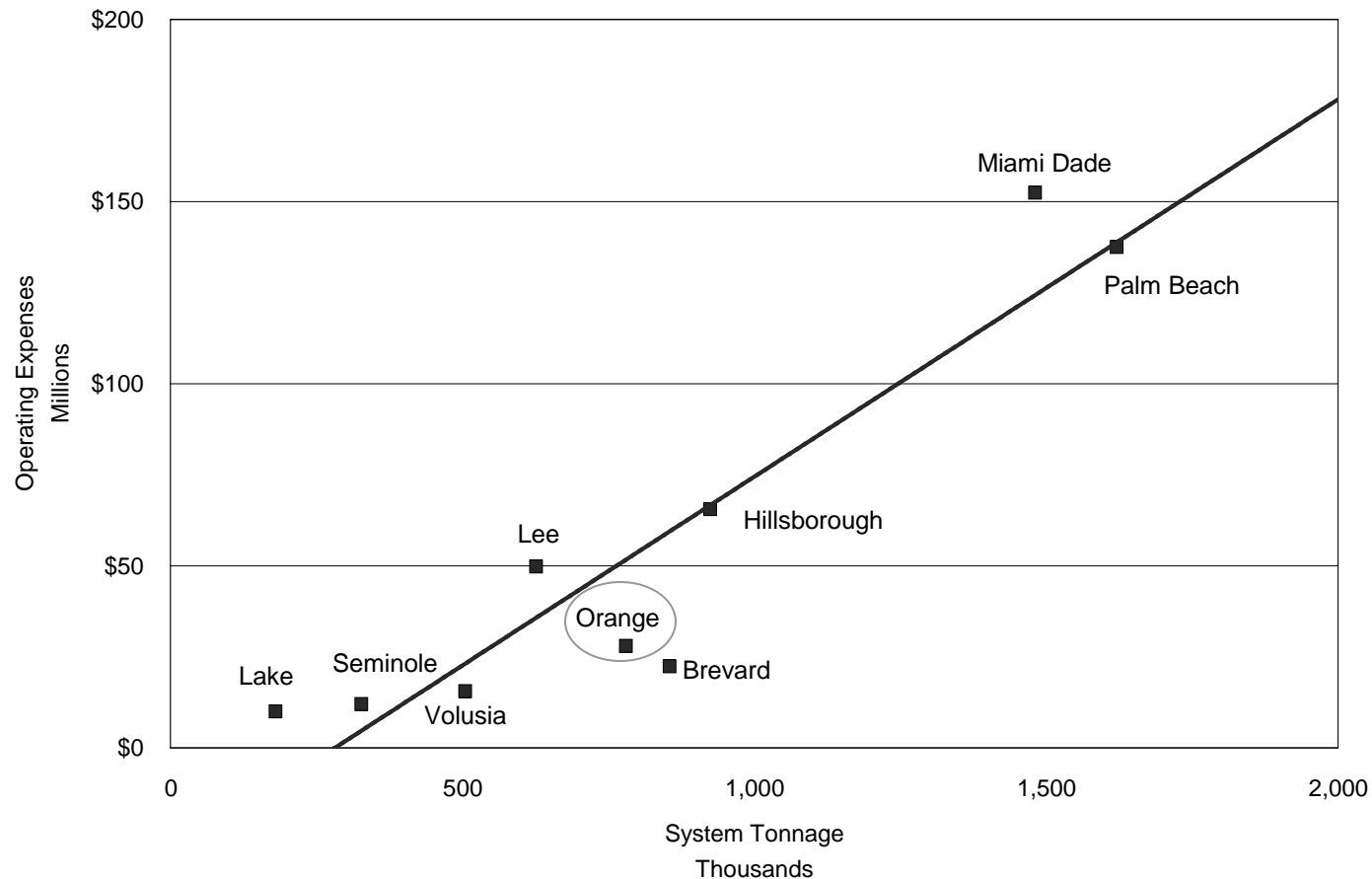
Operations Review

- **Researched eight public solid waste systems in Florida**
 - Brevard, Hillsborough, Lake, Lee, Miami-Dade, Palm Beach, Seminole and Volusia
 - Systems handle from 327,000 tons to 1,620,000 tons (FY2010-11)
 - OCU handled 780,000 tons
- **Metrics for comparison**
 - Operating costs relative to system tonnage
 - Staffing relative to system tonnage



Operations Review

Operating Expenses vs. System Tonnage

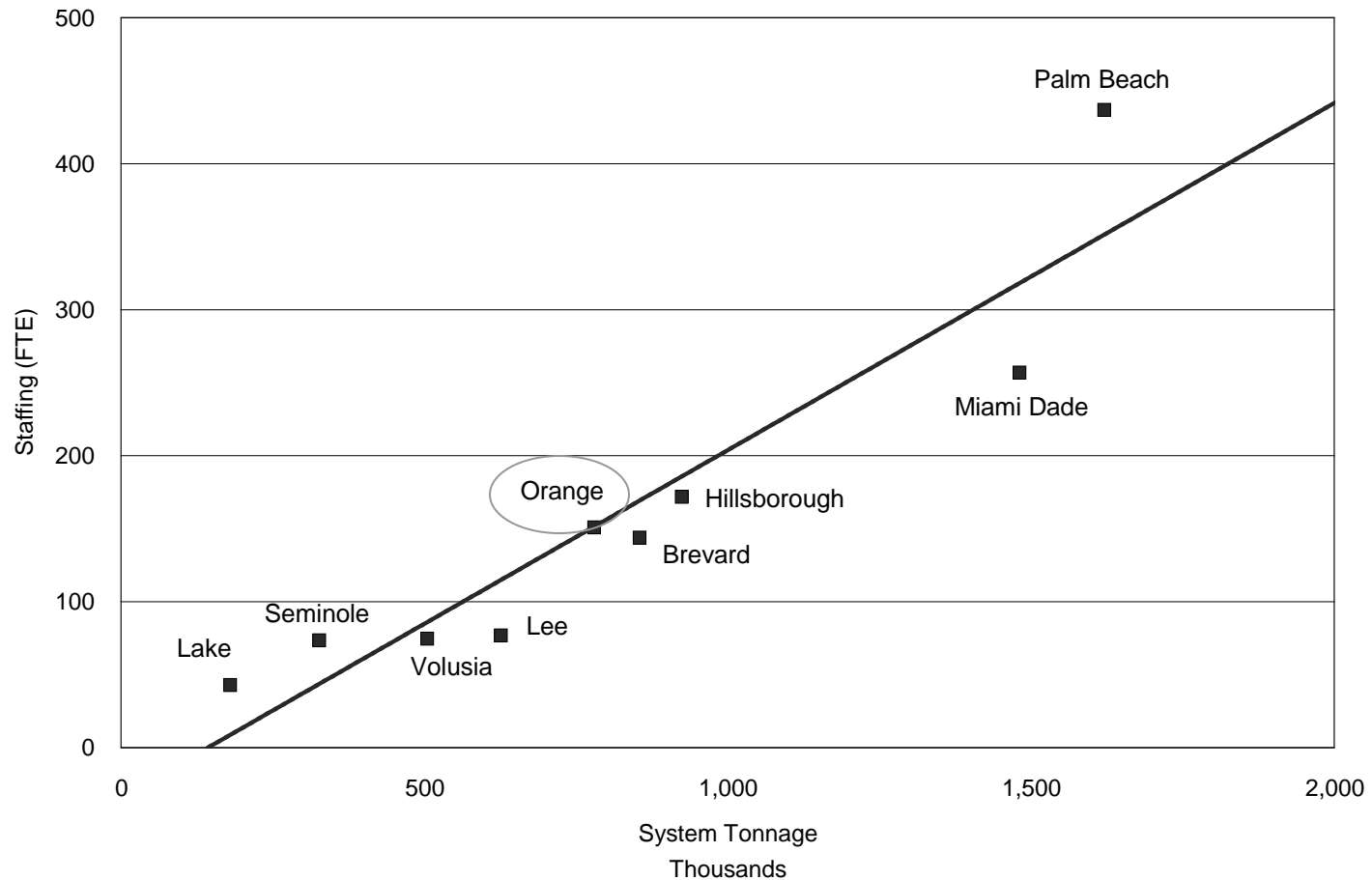


Source: Annual Financial Reports (FY2010/11), except for Volusia County (FY2009/10). Orange County operating expenses adjusted to reverse the closure/post-closure cost adjustment reported in FY2010/11 and to include the average closure/post-closure cost from the previous 5 budget years.



Operations Review

Staffing vs. System Tonnage



Source: Annual Financial Reports (FY2010/11), except for Volusia County (FY2009/10).



Operations Review

Conclusions

- Each solid waste system is unique
- OCU is comparable to other large county solid waste systems in Florida relative to operating expenses and staffing levels and considering tonnage handled



Operations Review

Private Sector Benchmarks

- Financial data for private sector landfills is proprietary information
- Technical Memorandum #1 provides some benchmark information
 - Public contracts for disposal capacity at Okeechobee Landfill and Holopaw (J.E.D.) Landfill are in the low \$20s per ton (\$21.50 - \$22.30 per ton) for waste delivered to the landfills (excluding transfer and transport costs)
- Other benchmark data was compiled by reviewing operating permits for private sector landfills



Operations Review

- **Operating permits filed with FDEP**
 - **Okeechobee Landfill = 17 personnel**
 - **Holopaw (J.E.D.) Landfill = 11 personnel**
- **Current staffing at OCU Landfill is 45 personnel**
 - **Staffing varies based on day of week and is lowest on weekends (7-11 personnel)**



Operations Review

- **Staffing is higher than private landfills due to following factors**
 - **Separate disposal areas for Class I and Class III waste**
 - **Yard waste operations personnel**
 - **Small vehicle drop-off personnel**
 - **Soil hauling**
 - **OCU operates 7 days per week versus 5 ½ days for most private landfills**



Operations Review

- **Weekday staffing for OCU Landfill:**

Work Area	Mon	Wed
Class I	7	11
Class III	7	9
Soil Hauling	7	10
Small Vehicle	2	3
Yard Waste	3	5
Yard Dog	4	7
Total	30	45

- **Separate Class III disposal area, small vehicle drop-off, and yard waste processing are services not provided at competing landfills**



Operations Review

Potential Options to Increase Efficiencies

- **Combine Class III waste into Class I Landfill:**
 - Consistent with operating practice at private landfills
 - Class III tipping fee would be maintained to preserve waste flow
 - Class III waste tonnages are lower due to economy
 - Potential cost savings from operating one disposal area instead of two
- **Combine yard waste into Class I Landfill:**
 - Yard waste now allowed in Class I landfills with landfill gas management systems to enhance energy production
 - Yard waste tipping fee would be maintained to preserve waste flow
 - Potential cost savings by reducing separate handling of yard waste
 - However, compost would not be produced



Operations Review

Potential Options to Increase Efficiencies

- **Soil hauling efficiencies:**
 - Current borrow pit location on landfill property is located further away from Class I and Class III disposal areas
 - New borrow area being permitted that is adjacent to Class I disposal area
- **Closure and long-term care costs:**
 - During the construction boom, estimates of closure costs were impacted by escalating construction costs
 - Following the boom, construction costs have moderated
 - Investigating the impact on future funding requirements
- **These are preliminary options that are being analyzed in more detail**



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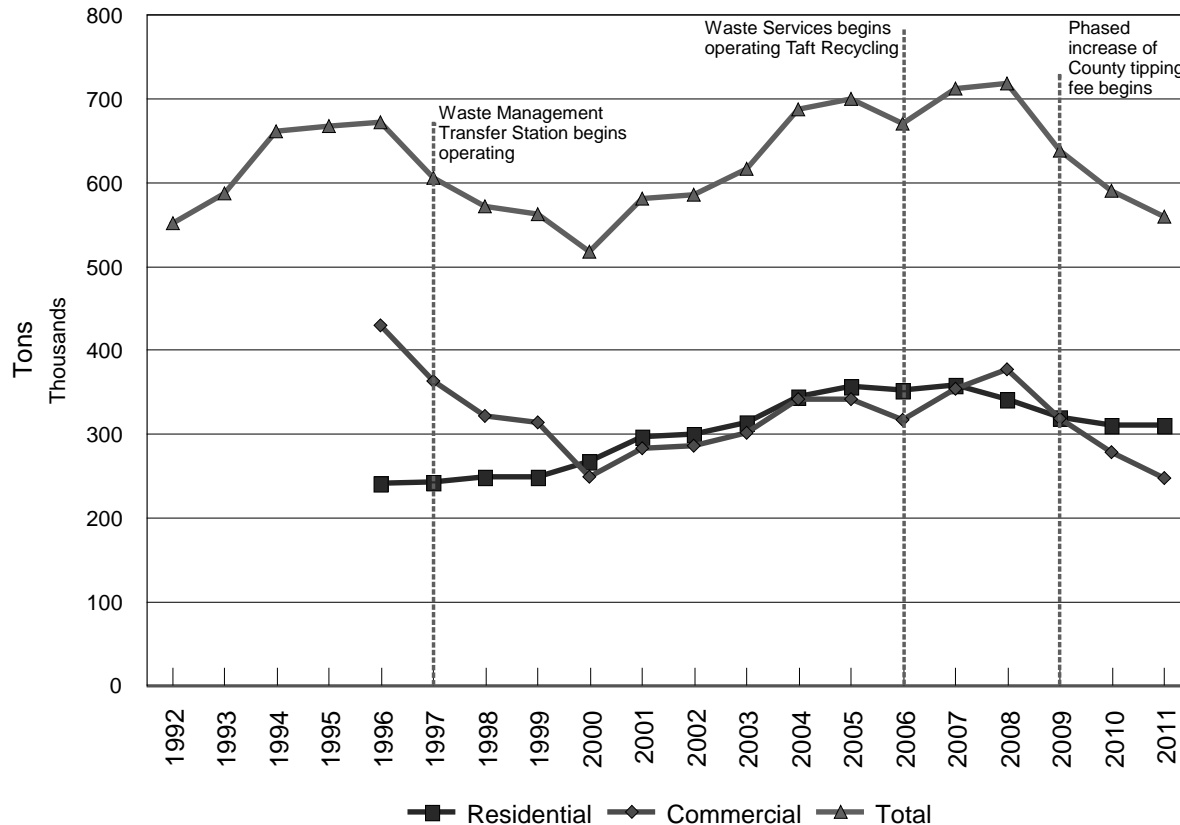
Waste Flow Analysis

- **Objectives**
 - **Further investigate flows of waste generated within Orange County and managed by OCU**
 - **Builds upon preliminary research performed for market assessment**
 - **Analyze trends in customer deliveries to OCU waste system**



Waste Flow Analysis

OCU System Class I Tonnages

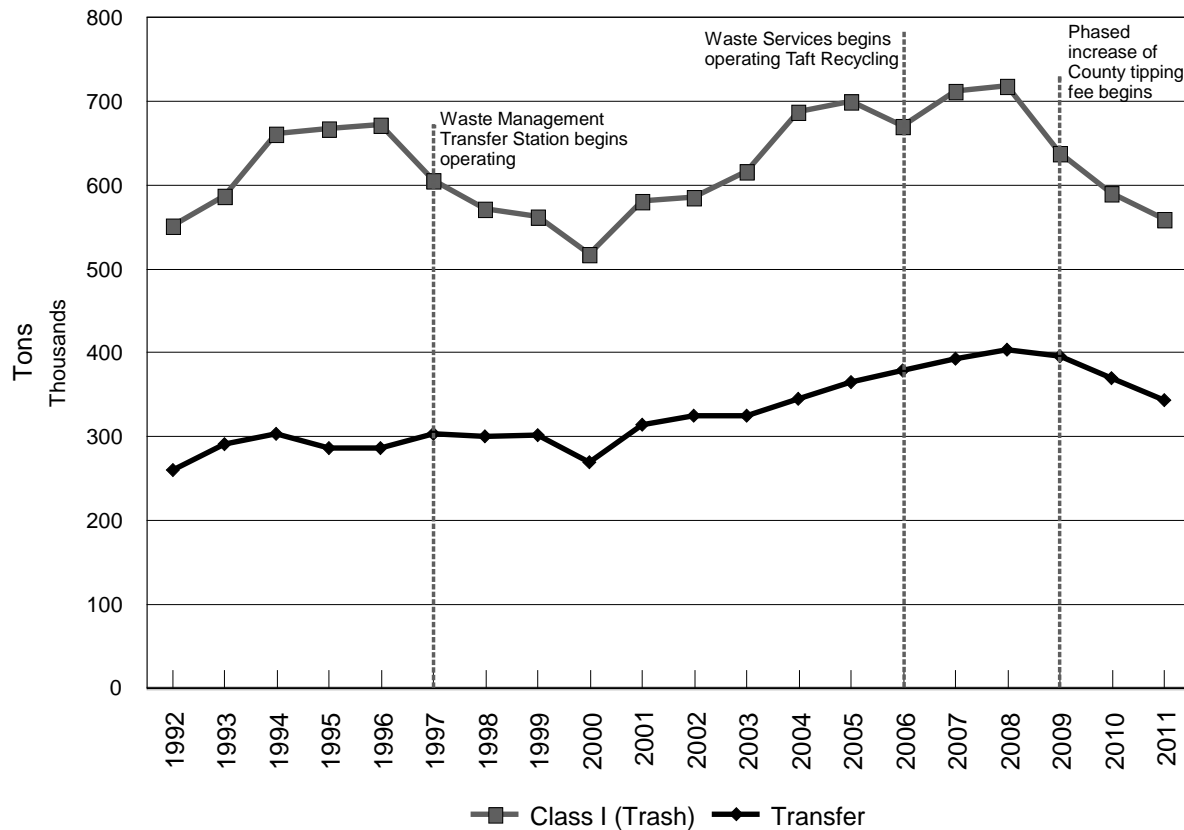


- **Residential**
 - Steady increase from 1996-2008
 - Decreased since 2008, likely economy driven
- **Commercial**
 - Decreased 1996-2000 following opening of WM transfer station
 - Steady growth from 2000-2008 along with economy
 - Decrease since 2008, bigger decline than residential



Waste Flow Analysis

OCU System Transfer vs. Total Class I

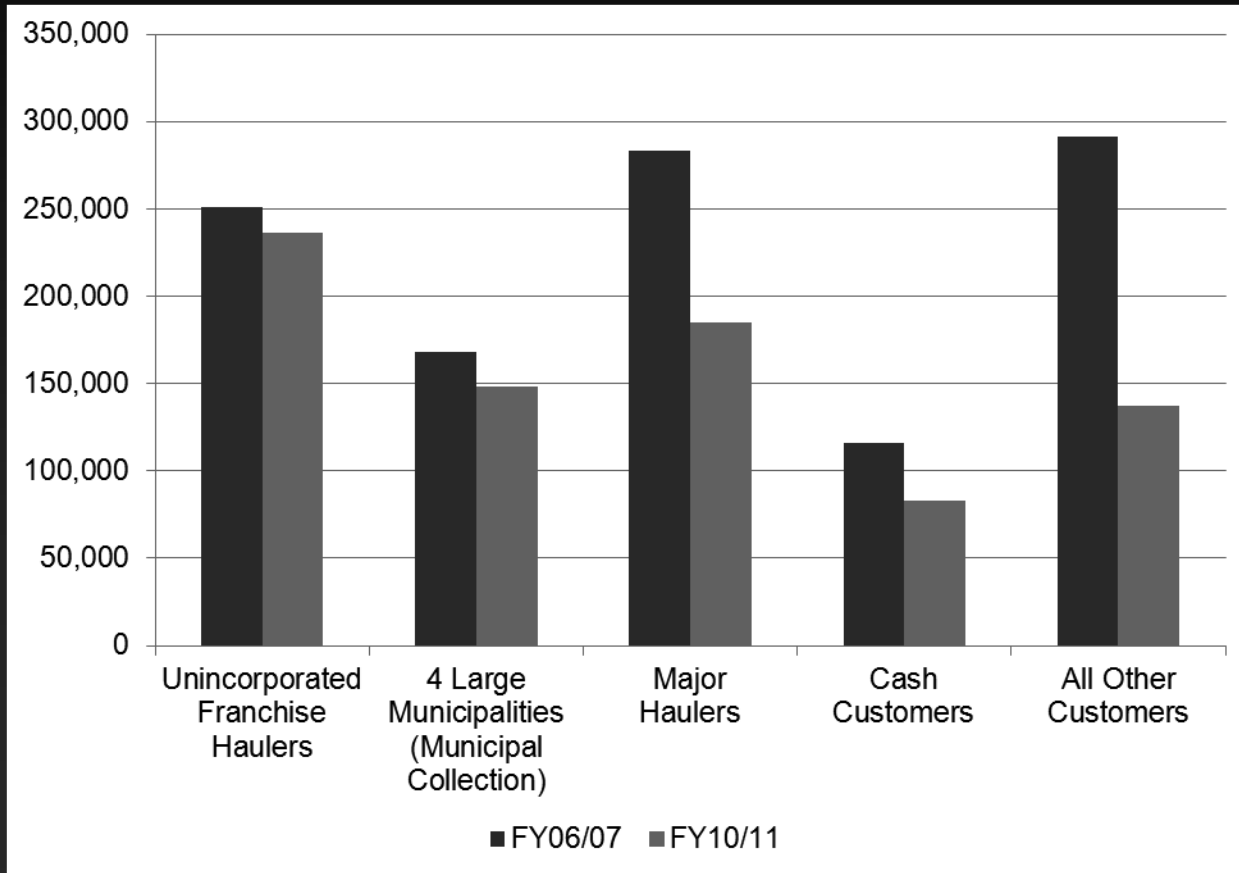


- Transfer tonnage shows steady increase up to 2008
- Over the same period, total Class I waste had greater variability
- Transfer stations provide value and address needs of the densely populated western half of the County



Waste Flow Analysis

Orange County System Customer Breakdown



- Tonnage from each customer sector has decreased over the past 5 years
- Decrease lower for unincorporated residential franchise and 4 large cities
- Largest decreases were for large private haulers and "other" customers which includes many roll-off container businesses



Waste Flow Analysis

Conclusions

- **Historically, OCU has lost tonnage to competing facilities, but regained some tonnage during periods of economic growth**
- **The economic downturn has reduced waste deliveries from all customer classes**
- **Decline in tonnage has been smaller for unincorporated residential franchise waste and waste delivered by 4 large municipalities**
- **Waste delivery agreements help to stabilize tonnage**
- **Continue to evaluate operational efficiencies as incentive to secure waste delivery agreements**



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Preliminary Financial Review

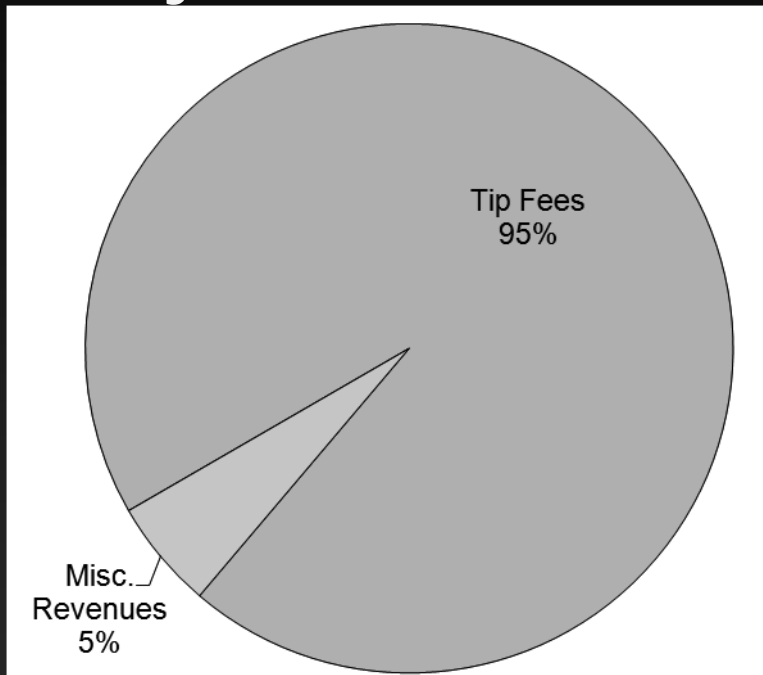
- Objectives
 - Share preliminary financial information
 - Baseline financial data being used to evaluate potential operating efficiencies



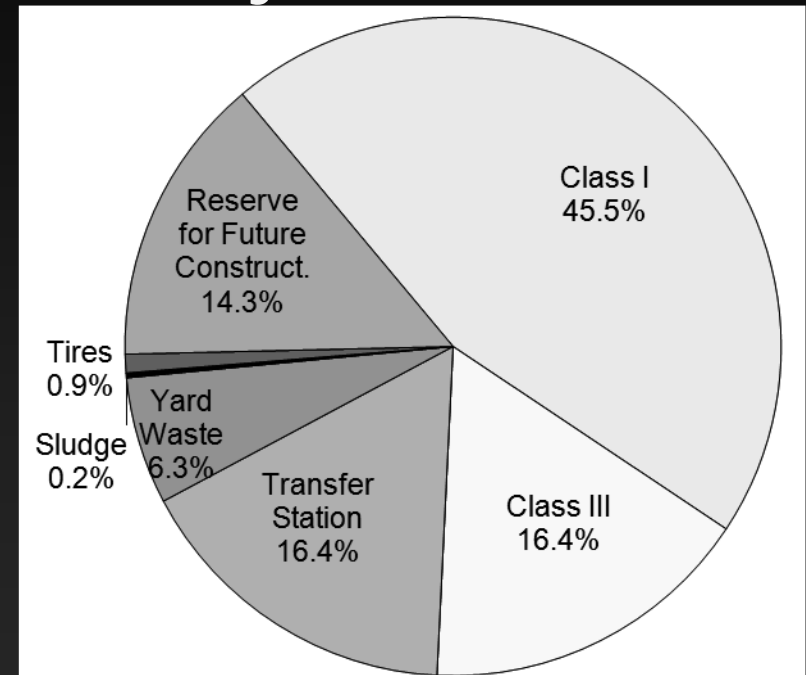
Preliminary Financial Review

System Revenue/Cost Components (FY2010/11)

System Revenues



System Costs

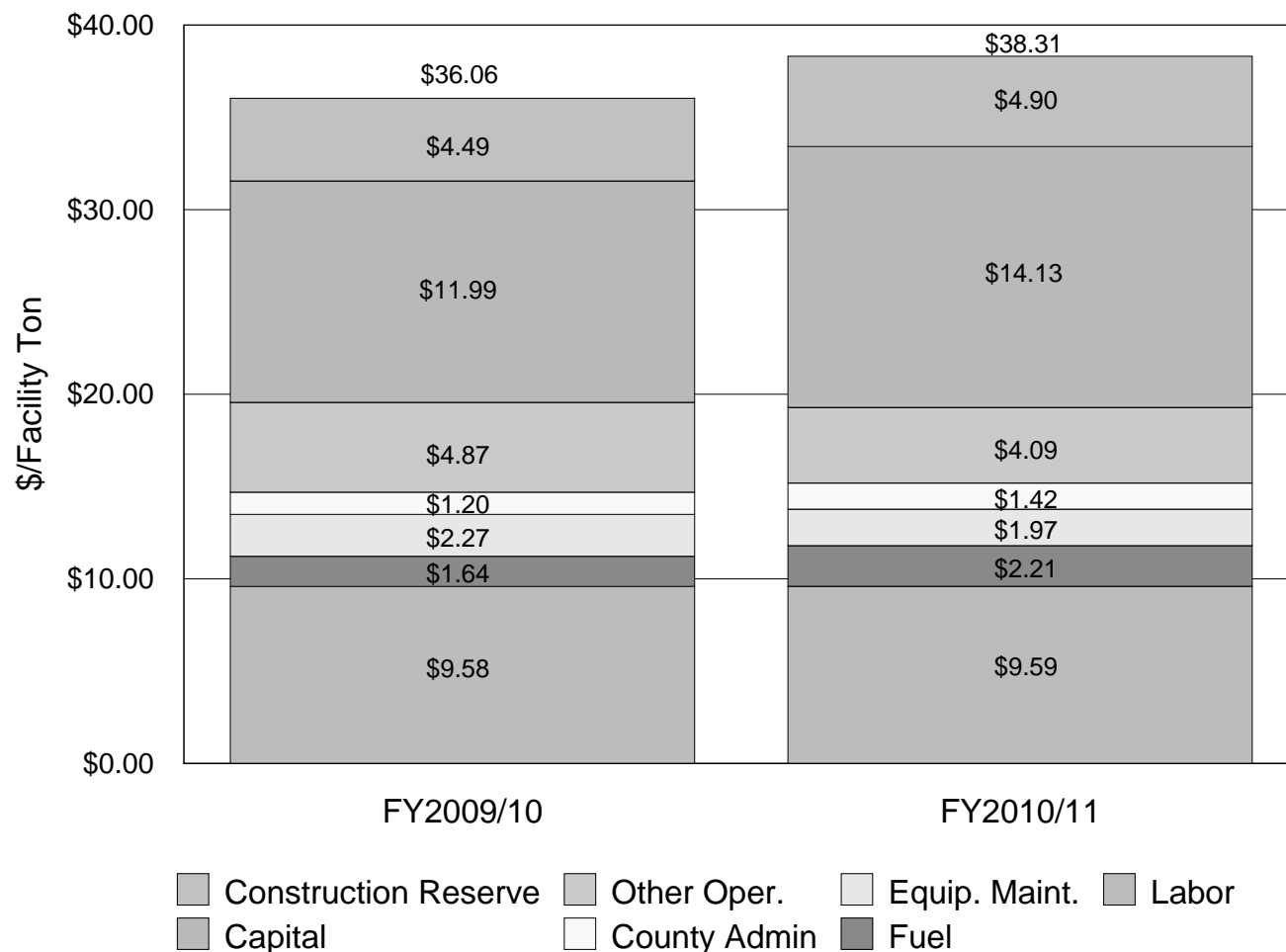


- Tipping fees are major source of system revenues
- Revenues must cover annual operating costs and future capital improvements



Preliminary Financial Review

Class I Waste Tipping Fee Components



- Tipping fee is average of residential and commercial fees
- Cost/ton varies based on tonnage
 - FY2009/10 = 608,344 tons
 - FY2010/11 = 564,762 tons
- Capital includes equipment, smaller projects and closure/long-term care
 - Closure costs are an average over prior 7 years
 - Capital based on average requirements over next several years
- Construction reserve is for major projects (e.g. next cell)



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Next Steps

- **Complete evaluation of potential operations efficiencies**
- **Complete financial review**
- **Perform legal and structural review**
- **Develop recommendations**
- **Schedule next BCC Update**
- **Schedule next Mayors Group meeting**



Solid Waste Study Update



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