

Department of Solid Waste Management Business Plan

Fiscal Years: 2025 and 2026*

(10/1/2024 through 9/30/2026)

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DEPARTMENT OVERVIEW

The Department of Solid Waste Management (DSWM) has served the community for more than 60 years, beginning with its establishment as a collections entity in 1959 and ultimately merging with the disposal arm originally managed by the Public Works Department. Today, the DSWM is one of the largest government-owned and operated waste collection and disposal systems in the southeastern United States, serving a county population of approximately 2.8 million residents and a geographic area of over 300 square miles. The DSWM has significant responsibility for overseeing the management of waste and recyclables generated within County borders in an environmentally responsible manner. Nearly 1,200 employees, including drivers, collectors, engineers, code enforcement officers, environmental compliance staff, mosquito control professionals, administrative staff, and environmental technicians, work together to accomplish the Department's mission. In addition to the traditional tasks of waste collection and disposal, the Department oversees mosquito control countywide.

Department Mission

The mission of the Miami-Dade County Department of Solid Waste Management is to provide our customers with exceptional waste collection, recycling, disposal, and mosquito control services that protect, preserve, and improve our environment and the quality of life in our community.

Department Description

Major Duties, Services and Programs:

The DSWM's major duties, services and programs currently provided are as follows:

Countywide Services

- Transfer: Operate three waste transfer facilities (the Northeast, West, and Central Transfer Stations) to minimize travel distance and transport time, reduce traffic congestion and better enable the County to meet its waste delivery obligations
- Disposal: Operate two waste disposal facilities located in the north and south regions of the county (North Dade Landfill and South Dade Landfill)
- Mosquito Control: Provide integrated mosquito prevention, control, education, and outreach
- Permits: Issue permits to landscapers, tire generators, and waste haulers

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Neighborhood Services

- Collection and Disposal: Provide waste collection (garbage, trash, recycling) and disposal services to over 350,000 residential households in the Waste Collection Service Area (WCSA), which includes residents of the Unincorporated Municipal Service Area and household curbside recycling to nine municipalities through interlocal agreements
- **Drop-Off Centers:** Manage and operate 13 Trash and Recycling Centers (TRCs) located throughout the WCSA
- **Enforcement:** Enforce Miami-Dade County Chapter 15 Code regulations that promote clean, safe, and attractive neighborhoods and encourage recycling
- Debris: Oversee debris removal within the WCSA following emergencies such as storms and hurricanes
- Home Composting: Provide step-by-step workshops on how to make rich organic soil by composting through a partnership with the University of Florida Institute of Food and Agricultural Sciences

Environmental Protection

- **Recycling**: Provide recycling to over 360,000 residential customers, protecting natural resources, and diverting 60,000 tons from landfills.
- Home Chemical: Operate two household chemical and electronic waste collection centers (and over ten mobile events throughout the County) that are designed to divert hazardous materials from the residential waste stream and prevent groundwater contamination
- Litter: Conduct litter clean-up at designated hot spots and on selected corridors throughout unincorporated Miami-Dade County and designated municipalities
- Regulatory Compliance: Maintain environmental compliance with federal, state, and local waste-related regulations, including post-closure care of County landfills
- Landfill Remediation: Protect groundwater by funding and overseeing remediation of inactive landfills
- Landfill Gas: Protect air quality by capturing and destroying methane gas, which
 is a powerful Greenhouse gas that is converted to a less potent form through
 combustion

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• **Wetlands:** Create, restore, and maintain coastal and freshwater wetlands that provide habitat for native plants and a variety of wildlife at the Resources Recovery Facility, 58th Street, South Dade, and Old South Dade Landfills

• Education and Outreach: Provide a robust education and outreach program to raise residents' awareness through classroom, community events, and civic organization presentations of the proper use of their waste services, litter and illegal dumping prevention efforts, proper home chemical management, and guidelines designed to avoid contamination of recyclables and increase recycling program participation; Participate in Water and Energy Learning and Behavior (WE+LAB) workshops that teach residents about water and energy conservation, recycling (waste diversion), and pollution prevention. Additionally, the Department is responsible for comprehensive education and outreach for countywide mosquito control services, providing residents with information needed to prevent mosquito breeding and to protect themselves from mosquito bites and associated mosquito-borne viruses.

Division Descriptions

- Accounting & Bond Administration: manages the financial operations of the
 waste management enterprise fund, which includes the disposal and collection
 systems, as well as the Department's general fund segment, which encompasses
 mosquito control operations; responsibilities include general ledger oversight,
 financial reporting, capital assets, grants management, accounts payable,
 accounts receivable, billing, bond administration, compliance with Generally
 Accepted Accounting Principles (GAAP) and Governmental Accounting Standards
 Board (GASB) guidelines and coordination of internal and external audits
- Budget & Performance Tracking: manages the efficient allocation, utilization, and oversight of the Department's financial resources, responsible for creating the Department's annual operating budget and multi-year capital plan, ensuring that they align with the County's strategic goals and priorities, handles data analysis, business analytics, and statistical reporting, assesses the cost-effectiveness of services, evaluates the financial impact of proposed service changes and monitors spending to prevent budget overruns
- Business Development & Contract Management: responsible for reviewing and responding to planning and permit applications, business/strategic planning, emergency management coordination, grants management, audit, and compliance, developing and monitoring operational contracts and agreements
- Code Enforcement: responsible for enforcing Chapter 15 of the Code of Miami-Dade County, which includes regulating unauthorized debris located on the County right-of-way, illegal dumping, curbside recycling contamination, and commercial and multifamily recycling; issues and regulates landscapers, general haulers,

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waste tire generators and waste tire transporter permits; collaborates with the Credit and Collections Section within the Clerk of Court and Comptroller to manage Uniform Civil Violations (UCVN), affidavits of compliance and non-compliance, and the collection of outstanding debt from unpaid fines.

- Facilities Maintenance: provides labor, materials, and equipment to repair, replace, and return to service, including but not limited to waste handling equipment, cranes, and compactors, as well as provide maintenance service to all DSWM buildings and facilities, to ensure continuity of operations
- Fleet Management: works with Department endusers to select appropriate
 vehicles for work requirements, manages fleet utilization, and ensures timely
 replacement of the DSWM vehicle fleet; collaborates with the People and Internal
 Operations Department's Fleet Maintenance Division to ensure vehicles are
 properly maintained and repaired; prepares the Department's 5-year vehicle
 replacement plan in collaboration with DSWM end-users; oversees the collection
 of white goods and scrap metal
- Garbage: provides residential and commercial garbage collection services to the DSWM waste collection service area
- **Human Resources:** manages payroll, employee benefits, recruitment, and compensation
- Information Services: coordinates and communicates with ITD regarding day-to-day IT-related service delivery issues, including problem resolution, service request completion, and management of ongoing projects and initiatives; provides general oversight to IT initiatives, including project requirements, definition, design, development, implementation, testing, training, and monitoring; works with DSWM and ITD staff to identify process improvement opportunities and outline and conceptualize a systems approach to implementing systems solutions; prepares annual budget for operations under ITD and reviews financial activity related to IT services delivery to comply with budgeted parameters and ensure accurate disbursements related to DSWM operating and capital funds.
- Intergovernmental External Affairs and Consituent Services: oversees all local, state, and federal legislative initiatives for the Department; by fostering strategic partnerships with various levels of internal and external governments and related stakeholders, the Division works to advance priorities that align with the best interests of the Department and our customers in the waste collection service area
- Labor Relations, Safety & Training: provides guidance, resources, and subject
 matter expertise pertaining to the areas of labor relations, discipline, safety, and training;
 serves as the liaison to the County Attorney's Office, People and Internal Operations
 Department (PIOD), Human Rights and Fair Employment Practices and Risk Management

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Divisions, PIOD Office of Safety, Commission on Ethics (COE), and the Office of the Inspector General (OIG)

- Landfill: manages active landfills (North and South Dade) that provide the County, private haulers, and residents with an avenue to properly dispose of municipal waste in Miami-Dade County; oversees yard waste grinding operations at both the South and North Dade landfills
- Mosquito Control: provides countywide mosquito control activities, including public information and outreach, mosquito surveillance and inspection, and abatement
- **Procurement & Contract Management:** responsible for contract administration, which includes procuring goods and services, as well as construction, design-build, and professional services (architectural/engineering)
- Public Information and Outreach: the "voice" of the Department; responsible for creating DSWM's marketing campaigns, as well as public education and outreach programs; manages all DSWM social media platforms, while also handling media requests concerning DSWM stories; oversees the Department's public records requests
- Resilience & Sustainability: charged with directing the Department and County
 in maximizing waste diversion by implementing a Zero Waste Master Plan and
 taking steps to make Miami-Dade County a 'Zero-Waste County'; tasked with
 reducing environmental and climate impact of the Department, tracking and
 reducing the Department's greenhouse gas emissions, and acting on other
 initiatives that promote resiliency and sustainability
- Scalehouse Operations: responsible for operating and maintaining waste truck scales used to weigh waste materials at DSWM disposal facilities (North and South Dade landfills, West, Central and Northeast transfer stations); ensures waste material is acceptable at the disposal sites; educates customers on the disposal process at the location; processes payments for disposal via check, major credit or bank debit cards.
- Technical Services & Environmental Affairs: responsible for ensuring environmental compliance across all solid waste facilities, overseeing engineering and construction services for capital improvement projects (CIP), and manages the operation of two home chemical collection centers, coordinating the disposal of household hazardous waste, organizing mobile collection events, and evaluating special waste disposal requests for landfill processing
- **Transfer:** manages the removal of waste from its three regional transfer stations (Northeast, Central, and West Transfer) and Waste-by-Rail program

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• **Trash:** provides bulky waste pick-ups to the DSWM waste collection service area and illegal dumping removal, operates the neighborhood Trash and Recycling Centers

Departmental Operations & Mayor's Key Deliverables

Many departmental operations support the Mayor's key deliverables, which are highlighted in this section. Waste collection (garbage, trash, recycling), disposal operations (transfer and landfill), and mosquito control operations support the Mayor's key deliverables, "Healthy and Safe Communities and Risk Reduction and Resilience." Waste collection and mosquito control are important for public health, environmental protection, and resource conservation. Proper waste disposal prevents the spread of diseases, reduces pollution, and helps conserve natural resources by promoting recycling and reuse. It also helps maintain the cleanliness and beauty of communities, making them more attractive and enjoyable places to live.

The Technical Services and Environmental Affairs staff is responsible for developing the capital improvements plan and overseeing the design and construction of DSWM capital improvement projects. These include projects such as stormwater improvements at the South Dade Landfill, Northeast, and West Transfer Stations. This Departmental operation ties to the "Investment In Infrastructure" key deliverable. Staff's due diligence in implementing the capital improvements plan enhances our long-term asset management, addresses aging infrastructure, and improves operational efficiency, which in turn supports long-term growth. DSWM capital improvement projects are essential for ensuring the long-term success and sustainability of our department and Miami-Dade County.

The Budget and Performance Tracking division focuses on the key deliverable, "Fiscal Responsibility and Efficiency." Budget staff play a major role in working with the other divisions to identify efficiencies that maximize resources and yield the best results. The process begins with budget development, and good results are achieved by assessing the cost-effectiveness of services and evaluating the financial impacts of any proposed operational and/or capital improvements. Additionally, the staff regularly monitors expenditures to avoid exceeding the budget. Performing these functions helps the DSWM maintain fiscal responsibility and achieve efficiencies.

The Department plans to implement the DSWM Cares Program within the next two years. The program will provide low-income residents with financial assistance for payment of their current annual household waste fee of \$697. Via the DSWM website, constituents will be able to make donations to the DSWM Cares Program. The donated monies will be utilized to assist low-income residents with payment of their solid waste household fees. This type of initiative supports the Mayor's key deliverable, "An Economy That Works for All," and helps to ensure that DSWM customers can afford to live, work, and thrive in Miami-Dade County.

FY 2024-25 Proposed Budget and Multi-Year Capital Plan

TABLE OF ORGANIZATION

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The FY 2024-25 total number of full-time equivalent positions is 1,173.25

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Our Customers

The Department's key customers and/or market segments are County and municipal residents within the WCSA, private solid waste haulers, municipal waste collection operations, commercial establishments, and other County departments. For mosquito control services, all residents of Miami-Dade County are our customers. Our customers require and receive effective, efficient, courteous, and consistent service.

The Department's waste collection and disposal services are structured to ensure accessibility for all customers who are assessed the waste collection fee. Enhancements to waste services, such as the Bulky Appointment System, are designed and implemented simultaneously throughout the service area to ensure that all customers can access and utilize their services to maintain their properties and enhance neighborhood aesthetics. Through education and outreach programs such as Dirty Crimes Carry Fines, Let's Clean Things Up, Detox Your Home, the Home Composting Program, and Recycle Right, the Department seeks to promote greater environmental stewardship and increased community engagement.

Customers Served

Residential:

- County Residents: All residents of Miami-Dade County who benefit from mosquito prevention, control, education, and outreach services
- Waste Collection Service Area: Households within the Waste Collection Service Area that include the unincorporated area and the following ten municipalities: Aventura, Cutler Bay, Doral, Miami Gardens, Miami Lakes, Opa-Locka, Palmetto Bay, Pinecrest, Sunny Isles Beach, and Sweetwater; commercial and multi-family account holders in the Solid Waste Collection Service Area

Non-Residential:

- Cities: The following municipalities have interlocal agreements: Recycling (9)

 El Portal, Florida City, Medley, Miami Beach, Miami Springs, North Bay Village, South Miami, Virginia Gardens, and West Miami; Disposal (15) Bal Harbour, Bay Harbor Islands, Coral Gables, Homestead, Miami, Miami Beach, Miami Shores, Miami Springs, North Bay Village, North Miami, North Miami Beach, South Miami, Surfside, Sweetwater, and West Miami
- Permitted Businesses: Businesses that are issued general, landscaping, or waste tire permits by the DSWM
- **Community Stakeholders:** Community stakeholders such as homeowner associations, civic groups, and schools

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- Haulers: Private solid waste haulers operating throughout the County that make deliveries to DSWM disposal facilities
- **Peer Agencies:** Other city and county governments across the country that exchange comparative operational and financial data with the Department for research and analysis projects
- **Internal customers** include County elected officials/policy makers and other County departments that receive DSWM service.

Residential customers focus on receiving excellent waste collection services (garbage, trash, and recycling) and being protected from mosquito-borne diseases such as Dengue, Zika, and Chikungunya. Non-residential customers (cities and private haulers) require adequate disposal options. It is crucial for DSWM to have dedicated long-term disposal capacity to meet customer needs. Other non-residential customers look to DSWM for permits that allow them to provide waste collection services to their clients. Community stakeholders depend on the DSWM for education and outreach about DSWM services and to promote and conduct programs like "Let's Clean Things Up." Our peer agencies rely on DSWM to share operational and financial data that assists various solid waste agencies in analyzing and improving their operations. Internal customers (County departments) depend on the DSWM for garbage collection and disposal services. County elected officials collaborate with DSWM staff to help their constituents resolve solid waste issues. The DSWM has systems and operations in place to help facilitate customer needs. As the Department strives to accommodate these needs, it is essential to note that the five quality elements of accuracy, cost, timeliness, safety, and legal/ethical considerations are incorporated into operations based on relevance.

Customer Trends

The Miami-Dade County Code establishes DSWM's authority to provide waste collection and recycling services. To provide these services, DSWM must construct or maintain extensive infrastructure, which requires major capital investment and includes associated debt service. Such debt service will be incurred regardless of tonnage intake. Therefore, conservation of the System's customer base is crucial. There are indications of a consistent, gradual increase in customer demand for waste collection and disposal services.

Customer Feedback

In DSWM, customer feedback is direct and immediate. It comes in the form of phone calls, emails (through the Solid Waste Management Mailbox), social media interactions, and customer surveys following bulky waste and green waste cart service requests, as well as online service requests collected via the County's 311 Contact Center, website, and mobile apps, along with direct letters, emails, calls, and requests. The Department obtains much of its feedback from outreach events. Staff present to environmentally conscious civic organizations seeking to learn more about DSWM's services and how

they connect with the local environmental landscape. Members take the opportunity to express their opinions about ongoing projects, processes, and services. Among the various events that staff participate in, the Miami-Dade County Youth Fair is regarded as the most significant on the Public Information and Outreach Division's calendar. Staff manage an information table where they interact with the public and discuss solid waste services. This serves as another channel for the community to engage with staff and talk about issues affecting their area. Another way to gather feedback from residents is through escalated service issues, whereby staff contact residents to address their service concerns. The information shared during these interactions is used to resolve the complaint and provide closure to any issues the resident currently has or may encounter in the future. Direct and immediate feedback allows management to pinpoint problems and respond swiftly to effectively analyze and enhance performance while continuously boosting customer satisfaction.

Customer feedback is measured on the Department's scorecard via the Strategic Management System (SMS) for various services such as garbage, bulky waste, and recycling collection service complaints.

Strategic Alignment

The DSWM supports the following strategic goals and outcomes through the delivery of its integrated waste management collection, recycling, disposal programs, and mosquito control. In addition, the DSWM supports other plan goals and objectives by utilizing technology, administering various programs, and adhering to established policies and procedures.

- Safe, Healthy and Attractive Neighborhoods and Communities (NI1)
 - Promote livable and beautiful neighborhoods NI1-1
 - Protect the community from public nuisances and events that threaten public health NI1-4
- Continuity of Clean Water and Community Sanitation Services (NI2)
 - Provide sustainable solid waste collection and disposal capacity NI2-3
- Accessible, Equitable, Transparent, and Responsible Government (GG1)
 - Facilitate community outreach and engagement to promote better decision-making in County government GG1-2
- Excellent, Engaged and Resilient Workforce (GG2)
 - Promote employee development and leadership GG2-2

- Effective Leadership and Management Practices (GG4)
 - Provide sound financial and risk management GG4-1
 - Effectively prioritize, allocate and use resources to meet the current and future operating and capital needs for all residents GG4-2
- Well-maintained, modern transportation infrastructure and assets (TM3)
 - Harden and maintain roadway infrastructure TM3-1

Recent Accomplishments

- Emission Reductions The DSWM was awarded the 2023 EPA Diesel Emissions Reduction Act National Grant on August 10, 2024, in the amount of \$1,483,400 to purchase and replace the following vehicles: eight (8) Trash Trucks (Model years 2002 and 2007), Five (5) Cranes (Model years 2002 and 2007), Six (6) Roll-off trucks (Model years 2003 and 2006), One (1) Backhoe (Model year 2003) and One (1) Pay Loader (model year 2005) with new diesel models equipped with EPA-certified engines. Total Project Cost is \$5,933,600, with a cost-sharing match of \$4,450,200.
- Enhanced Financial Reporting Accuracy and Recognition The Financial Reporting Unit in the Accounting and Bonds Administration Division of DSWM has attained the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting for the 30th consecutive year. This award is in recognition of its Annual Comprehensive Financial Report (ACFR) for the fiscal year ending September 30, 2023. This prestigious acknowledgment in governmental accounting highlights the Division's dedication to transparency and accuracy, as it achieved a 'Proficient' rating in all categories.
- Recycling Contamination/Curbside Recycling Program Increased Compliance The Public Information and Outreach (PIO) Division and the Enforcement Division have made significant strides in educating the community and addressing recycling contamination. The PIO Division revamped the Recycle Right campaign to include lightly soiled pizza boxes and yogurt cups, which are newly accepted materials in the household curbside recycling program. Additionally, PIO is collaborating with the Miami Dade County School Board and Head Start Program to provide recycling education to the youngest participants of the recycling program.

As part of our ongoing efforts, Enforcement Officers inspected 10,778 recycling carts and issued 2,720 warning notices for contamination in FY2023-24. This proactive strategy has laid the groundwork for improved compliance during the enforcement phase. Since the enforcement period began on June 1, 2024, 4,100

recycling cart inspections have occurred, resulting in 815 warning notices for contamination.

To date, no properties have received more than three warning notices, highlighting the effectiveness of our educational initiatives during the initial phase. Repeat violators whose carts receive tags more than three times will incur a special collection and disposal fee of \$160 for each occurrence. These measures have been established to ensure that our community continues to reduce contamination rates and maintain a sustainable recycling program.

- Mosquito Control The Mosquito Control Division is collaborating with Indiana University to assess the effectiveness of various mosquito control methods in Miami-Dade County. Additionally, several other projects are being undertaken, including: 1) studying the population biology of Aedes aegypti and other mosquito species that pose public health risks in Miami-Dade County; 2) examining the population dynamics of both disease-carrying and nuisance mosquito species in the area; 3) testing the effectiveness of A1 Misters and Buffalo turbines in reducing Aedes aegypti populations; and 4) analyzing the composition of mosquito species and their spatial distribution throughout Miami-Dade County.
- Waste Oil Recycling Program The collection of used oil has been expanded to include services at the Sunset Kendall Trash and Recycling Center.
- Taylor Park Landfill Closure The remediation at Taylor Park has been completed. The DSWM received approval from the Florida Department of Environmental Protection (FDEP) and confirmed that no further action is needed. The next steps include submittal of deed restricted convenance to the Florida Department of Environmental Protection before the Department hands the land back to the City of North Miami Beach.
- Electric Vehicle Charging Station The DSWM's first Electric Vehicle Charging Station was constructed at the 58th Street facility and completed in September 2024. Five level 2 charging stations with two cables each were installed and are now fully operational. It takes eight hours to charge a vehicle fully, and ten electric vehicles can be charged simultaneously. The DSWM has plans to build additional charging stations at other solid waste facilities within the next three years.
- Amended Long-Term Disposal Agreements The DSWM has secured long-term contractual agreements to allow the County, including its Contract Cities and Contract Haulers, to utilize Waste Management and Waste Connections disposal facilities. These agreements are intended to meet the County's solid waste disposal needs while addressing planning and public health, safety, and welfare concerns. Under the newly amended Third Agreement with Waste Management, Inc., which the BCC approved in September 2024, the DSWM can access 2.7 million tons of disposal capacity annually. The amended agreement with Waste Connections was approved by the Board in FY 2024-25, which will provide 800,000 tons of disposal capacity.

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KEY ISSUES

<u>Departmental Issues</u>

Financial Stability: The Department must ensure financial stability to fulfill its service delivery obligations and maintain a strong credit profile, which includes a stable bond rating outlook. In September 2024, Fitch Ratings reaffirmed the Department's AA-rating with a stable outlook. To prevent any downward pressure on this bond rating, it is crucial to maintain adequate debt service coverage levels and robust liquidity. These measures will help the Department preserve financial stability and secure favorable rates for future bond issuances.

To sustain financial stability, the Department must identify a reliable revenue source that supports the impact of the County's growth on the DSWM Solid Waste System. Both the Board of County Commissioners (BCC) and the Administration recognize the ongoing need to stabilize the financial outlook for the Collections and Disposal Funds. In September 2024, the Board approved a \$150 increase in the Residential Solid Waste Collection Fee for FY2024-25, raising the annual fee from \$547 to \$697. The proposed FY 2025-26 budget includes a 1% increase, equating to an additional \$7, which would raise the fee from \$697 to \$704, pending BCC approval. These increases are intended to help maintain essential waste collection services and offset rising operational and inflation-related costs affecting the system.

In collaboration with the County Administration, the Department will continue to seek new approaches to contain expenses, enhance efficiency, remain competitive, and accelerate progress toward a more sustainable waste system. This strategy helps to minimize the necessity for annual increases in the residential solid waste collection fee (non-ad valorem fee), thereby reducing the financial burden on residents.

Looking ahead, additional funding will be critical to support major capital initiatives, including the design and construction of a state-of-the-art Sustainable Solid Waste Campus, a new landfill, and other essential facilities. The Department is actively evaluating and pursuing alternative financing strategies to ensure the long-term sustainability of its infrastructure and services. (Supports Mayor's Key Deliverable: Fiscal Responsibility and Efficiency)

Land Availability: The Department continues to assess and explore the availability of property for the future of the solid waste system, including potential sites for emerging technologies. The Old South Dade Landfill property is under design for development of a new transfer station, collection facility, citizens drop-off center, and green waste processing/reuse. The 58th Closed Landfill is nearing its post-closure care period, and staff is seeking termination of the post-closure care permit.

Diminishing County Waste Disposal Capacity: Increased waste generation and population growth will impact existing capacity. Cell 5 is the final cell that can receive waste at the South Dade Landfill. It has a design capacity of 4,400,000 tons and is

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currently being used for waste disposal. Based on current waste acceptance rates, the South Dade Landfill is expected to reach capacity by December 2028. Based on current waste acceptance rates, the North Dade Landfill will reach capacity by December 2029. The procurement and award for the design and permitting of a vertical expansion at North Dade Landfill was deferred by the Board to no date certain on September 19, 2023. For the DSWM system to be viable, options include optimizing the existing landfill footprint and/or maintaining contract continuity with third-party entities to secure additional disposal capacity.

Waste-to-Energy: On Sunday, February 12, 2023, at approximately 2:00 p.m., a significant fire broke out at the Resources Recovery Facility (RRF), causing significant damage that rendered it inoperable. As a result of the fire, the Department had to amend its disposal operations by diverting waste going to the RRF to other system facilities to ensure seamless service delivery to 350,000 customers and partner municipalities.

DSWM has actively engaged its insurance providers and obtained initial payments totaling \$50.5 million. DSWM has received a one-year extension to February 2026 to replace the RRF. A power siting act permit modification has been submitted to FDEP for approval to begin the process of the RRF closure. Upon approval, the existing structures can be demolished.

The Department updated its Solid Waste Master Plan (SWMP) in 2020. The SWMP offered several recommendations, including the need for a new, modern WTE facility. DSWM is currently working with a consultant to explore emerging technologies that address the Department's disposal needs using market research. (Supports Mayor's Key Deliverable: Investment in Infrastructure)

Solid Waste Disposal Concurrency: The DSWM determines compliance with the County's adopted level-of-service (LOS) standard, which is a minimum of five years of solid waste disposal based on the ability of the County Solid Waste Management System to accommodate projected waste flows for concurrency. Only those System facilities that are constructed or subject to a binding executed contract for construction are included in the determination, in accordance with Chapter 33G of the Miami-Dade County Code, Service Concurrency Management Program. The DSWM currently meets the minimum LOS standard for solid waste disposal. However, the fire incident at the RRF has impacted DSWM's remaining years of disposal capacity. Insufficient disposal capacity could possibly limit development in Miami-Dade County. To ensure that DSWM complies with the LOS standard, the Waste Management agreement was amended and approved by the Board in September 2024. Under the newly amended Third Agreement, the County has access to 2.7 million tons of disposal capacity annually. The Waste Connection agreement has been renewed and will provide 800,000 tons of additional disposal capacity.

Recycling Participation and Waste Diversion: The Department has been working on waste diversion since launching its curbside recycling program in 1990. The Curbside Recycling Program services over 360,000 households across the County. Beginning in

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1993, the County and Department further committed to its mission of beneficial reuse of waste by requiring single-family homes, businesses, and multifamily buildings to recycle. In its continuous commitment to waste diversion, DSWM has expanded its used oil collection program, Home Composting Program, and ChemAgain Program. The Department also started a program where some of its yard waste is processed into mulch.

DSWM has also improved recycling contamination rates by 10% through its outreach and engagement abatement program and by enhancing enforcement measures to ensure compliance. A Recyclables Contamination Abatement Program has been established to address the issue of items like plastic bags, hangers, hoses, and other non-recyclable materials being mistakenly placed in recycling containers. Contamination of the recyclable material stream is a significant national problem, leading to serious economic and environmental consequences.

DSWM recognizes that there are more opportunities to divert waste. Starting in 2025, the Department will begin developing the County's Zero Waste Master Plan. As the plan develops, the Department will work to increase its construction and demolition recycling rate, continue strategizing with its recycling partners to reduce contamination rates, and maintain onsite yard waste grinding operations at both the North Dade and South Dade landfills. In recognizing that education is critical to waste diversion, the Department will also collaborate with Miami-Dade County Public Schools, to educate as many of its 300,000 students as possible. (Supports Mayor's Key Deliverable: Risk Reduction & Resilience)

Mosquito Control (Larviciding): DSWM Mosquito Control has adopted a strategy for 'larviciding,' which involves the application of larvicides—pesticides specifically designed to target mosquitoes' immature stages. This approach prevents adult mosquitoes from emerging and helps reduce their populations.

Larviciding is a proactive methodology as it targets mosquitoes during their larval stage before they develop into biting adults. Commonly used bio-larvicides are safe for humans, pets, plants, and wildlife. These products are specifically designed to be target-specific, which means they do not harm beneficial insects. By emphasizing larviciding, the strategy helps to minimize the risk of increased insecticide resistance among local mosquito populations, which has already become a significant issue in mosquito control.

The Mosquito Control staff plans to evaluate the effectiveness of A1 Mist Sprayers in Miami-Dade County. These sprayers have proven to be very effective in applying larvicides in various jurisdictions across the United States, including the Florida Keys. Currently, MDC uses Buffalo Turbines with an effectiveness rating of approximately 35%, while the A1 Mist Sprayers boast over 80%. Additionally, the A1 Mist Sprayers are about half the cost of the Buffalo Turbines, which will help reduce operational expenses.

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Changes in Business Environment

Disposal Services: The solid waste management system (System) operates within a competitive environment where private firms provide the same or similar services. To ensure that the System remains financially stable and the County's waste delivery obligations are met, the Department utilizes several means to control the flow of waste into the System. First, the Department collects waste directly from more than 350,000 households. Second, the Department enters into long-term waste disposal agreements with municipalities, private waste disposal companies, and private waste haulers at contract rates. Finally, the Department enforces Resource Recovery and Management Facility regulations that preserve the County's ability to meet financial obligations, as well as provisions in Solid Waste System Bond documents that authorize the County to disapprove the construction, acquisition, or operation of private solid waste disposal facilities that may compete with the System or adversely affect operating revenues. It is vital that these systems remain in place. The fire at the Resources Recovery Facility impacted operations and changed DSWM's business environment. The waste that was being disposed at the RRF facility continues to be diverted to other System locations. It is essential that the DSWM maintains adequate disposal capacity.

Waste Delivery Compliance: As stated under Disposal Services, private firms provide the same or similar waste collection and disposal services as DSWM. One of the issues faced by the Department involves municipalities with County waste disposal agreements privatizing their waste collection services. Privatization can limit the Department's ability to monitor a Contract City's compliance with its waste delivery obligation to the County because a Contract City's waste is co-mingled with waste from other entities serviced by the private hauler. To minimize any potential tonnage decreases resulting from such municipal collection privatizations, all prospective hauler agreements require Contract Cities to report separately to ensure that Contract Cities meet the terms and conditions of their waste disposal interlocal agreements.

Waste by Rail (WbR): Waste by Rail has become integral to the DSWM's operations. The fire at the Resources Recovery Facility in February 2023 resulted in significant operational changes. The Department has amended its agreement with Waste Management and Waste Connections to increase disposal capacity. In addition to increased contracted disposal capacity, the Department has secured disposal capacity outside of Miami-Dade County to support WbR operations. The DSWM has purchased forty-six (46) intermodal trailers that are capable of safely transporting forty-foot-long intermodal waste containers. These chassis are fully operational and are currently transporting nearly 2,000 tons daily by rail, effectively removing over 100 trucks from Florida's traffic each day. In addition, twenty-two (22) intermodal chassis will be purchased to further expand the WbR initiative to include Waste Connections and CSX. By the end of 2025, the DSWM expects to transport approximately 3,000 tons daily by rail, working in tandem with Waste Management, Waste Connections, Florida East Coast Railway, and CSX Transportation.

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Opportunities

To increase efficiency and maintain service levels, the DSWM will continue to evaluate all possible opportunities that benefit its operations. Some potential opportunities currently in process and/or under consideration are as follows:

Garbage Collection and Disposal Services (County Departments): The Department is in the process of analyzing the feasibility of providing garbage collection, recycling, and disposal services to County Departments. The County extended the current contract that was set to expire in November 2022 for an additional five years. This will allow the DSWM sufficient time to assess its ability to evaluate and provide County departments with an option to transition to DSWM service upon expiration of the requested extension. The analysis will include reviewing supply chain issues, determining needed personnel, and other related issues such as procuring trucks and dumpsters, establishing positions, recruiting, and training.

Electric Garbage Truck: The Department currently operates a fleet of garbage trucks that run on ultra-low sulfur diesel. Staff is actively researching evolving technology in the refuse industry. Ongoing discussions are taking place with manufacturers, such as Mack, Build Your Dream, Peterbilt, Autocar, and Freightliner, on the development of electric refuse trucks. Unfortunately, current electric vehicles in the heavy trucking industry do not possess the driving range needed to fully transition from diesel to electric. Staff will continue to monitor advancements in battery technology and driving distances.

Currently, the Department is using a fully electric automated side loader. Staff is closely observing its capabilities while tracking driving distances, tonnage, and electrical consumption to determine the breakeven point for this unit. DSWM staff will also familiarize themselves with the overall performance, durability, maintenance requirements, and infrastructure demands of vehicle electrification.

As technology continues to progress, the Department aims to test these capabilities and pursue local, state, and federal funding opportunities to support this initiative. This rapidly advancing technology promises zero tailpipe emissions, reduced operating noise, elimination of fuel leaks during transport, and improved air quality, contributing to a more environmentally friendly waste management system. As technology improves, the Department could transition its fleet in phases toward a zero-emission, environmentally friendly lineup of automated side-loader garbage trucks.

Fleet Telematics/Driver Safety: The DSWM is in the process of implementing a Fleet Telematics Driver Safety Solution that includes all necessary hardware, software licenses, equipment, materials, labor, installation, planning, design, configuration, interface development, testing, training, documentation, implementation, supervision, project management, and any additional items required to install an integrated turnkey solution for the County. This also covers subsequent software and hardware maintenance, escrow, and technical support services throughout the duration of the resultant contract.

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The project will consist of exterior and interior-facing cameras, GPS technology, and sensors that interface with the vehicles' onboard engine control units. This setup will provide insights into the operations of DSWM vehicles on County roadways. Options will be available to install additional cameras in various locations on the vehicles, such as the sides, rear, and hopper, all included in the monthly licensing fee.

This solution promotes a proactive approach to driver safety by utilizing data from video footage, the vehicle's engine control module, sensors, and GPS to identify and analyze poor driving habits, enabling corrections before accidents occur. Additionally, the system offers valuable insights and evidence in the event of an accident.

Implementing this solution will allow the County to take a more proactive stance on safety. They can leverage available system data to design training programs and intervention strategies to reduce risk and enhance driver safety on County roadways.

The Fleet Telematics Driver Safety Solution will also include engine monitoring technology to track when vehicles are idling. This technology is essential for ensuring compliance with anti-idling policies currently programmed in the trucks, which are set to automatically shut down the engine if idling exceeds five (5) minutes. This initiative will improve DSWM's fuel efficiency and support the Department's commitment to making waste management practices more sustainable county-wide, ultimately leading to annual savings for the Department's overall budget.

Waste Diversion: DSWM has become more focused on waste diversion by researching, analyzing, and implementing projects/programs that will help to reduce environmental impact by minimizing the amount of waste going to landfills. This will, thereby, aid in conserving natural resources, lowering greenhouse gas emissions, and preventing soil and water pollution, ultimately contributing to a more sustainable lifestyle. The Department is tasked with reducing the amount of waste disposed of in landfills and is responsible for increasing the waste diversion and recycling rates for Miami-Dade County. Waste diversion efforts like reduced recycling contamination through technological innovations (e.g., Al cameras on recycling trucks) and broad outreach and education initiatives will reduce the cost of the County's recycling program while increasing diversion rates. (Supports Mayor's Key Deliverable: Risk Reduction & Resilience)

Customer Engagement: The Department emphasizes customer engagement and employs a multifaceted approach to engage residents, utilizing various platforms to foster community participation and awareness. Social media serves as a dynamic channel for sharing updates and educational content, while strategic placements of advertisements on bus shelters and billboards ensure visibility across the County. Radio broadcasts, Community News live stream segments, and the Learn with DSWM webinar series further amplify the services and various approaches to serving residents. Engagement extends to events, such as the annual Miami-Dade Fair & Expo and Miami Dolphins home games, where the Department sets up booths to interact with attendees and promote sustainable practices, and ways to reach our Department and address

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residents' questions. This year, the DSWM adopted a proactive approach to engage our youngest customers in the school system. Staff participates in classroom presentations, Career Day events, and school assemblies. Staff also collaborates with environmental groups and community organizations and conducts presentations. Additionally, the "Mosquito Minute" initiative from Miami-Dade County Mosquito Control provides timely information on tidbits, facts, and breaking myths related to mosquito control. The DSWM website overall offers resources and encourages interactive engagement as well as participation in the "Recycler of the Month" program that celebrates residents' commitment to recycling and sustainability. Together, these efforts create a comprehensive engagement strategy that informs, educates, empowers, and engages the community.

Obstacles

The DSWM continues to address operational and capital challenges to deliver quality services efficiently and effectively. Some of them include:

Staffing: The DSWM is actively assessing its staffing needs and reallocating resources to effectively address these needs and reduce staffing shortages in operations. The Great Resignation of 2021 and the pandemic have significantly impacted the Department's recruitment and retention efforts, especially in driver and operator classifications. Additionally, the departure of senior staff in key operational and administrative areas has led to a loss of institutional knowledge, further affecting the continuity of operations.

Retirements have substantially impacted Departmental activities, resulting in immediate knowledge gaps in critical areas. To address this, DSWM actively tracks anticipated retirements of essential positions and incorporates projected vacancies into succession-planning recruitment efforts. However, when timely replacements are unavailable due to a shortage of qualified and trained candidates, the Department must rely on overtime to maintain service levels.

To improve retention and prepare for upcoming retirements, the Department is developing innovative programs and automating HR systems to track, monitor, and analyze employee data. Other initiatives include providing training, participating in career fairs, partnering with community organizations, collaborating with adult and vocational schools, and updating essential job functions for all DSWM positions. The Department also monitors the workforce to maintain the necessary skill sets for operational continuity.

Illegal Dumping: Illegal dumping and general littering are countywide problems. The DSWM Enforcement staff also deals with this issue in the waste collection service area. The Enforcement Division has developed a "hotspot" list of places where illegal dumping occurs and updates this list as needed; the location of the piles is sent to the Trash Division for removal. Information from regular zone patrols and surveillance efforts helps determine the best resource to minimize illegal dumping activity. Game

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and wireless cameras have been added to live feed cameras to increase coverage in remote areas, and they have become an effective tool in the fight against illegal dumping.

One of the more challenging issues that DSWM faces is illegal dumping in commercial facilities and industrial areas. More illegal dumping occurs in these areas, and the enforcement process for unlawful dumping in commercial regions differs from that in residential areas. Remediation of residential illegal dumping issues generally takes 48 hours. However, the remediation of illicit commercial dumping is lengthy because commercial property owners are not eligible for free pickups. Warning notices are issued with a compliance period of seven days. Total remediation (pile removal) can take up to 20 days, depending on various factors.

Resolving the commercial illegal dumping problem is an ever-evolving issue. Enforcement staff continuously educate business owners on their responsibilities and options to help alleviate this dilemma. Those options include installing cameras, nodumping signs, and fencing in open areas. The DSWM currently has five Waste Enforcement Officers who conduct proactive illegal dumping investigations for the waste collection service area. Additional staffing is needed to make improvements in this area.

In addition to the Waste Enforcement Officers' actions, a "Dirty Crimes Carry Fines" education and outreach campaign instituted by the DSMW is advertised throughout the community via billboards, newspapers, buses, online, social media, and radio advertising. The campaign promotes and encourages residents of the County to report illegal dumping by calling 311 or using the 311Direct or DSWM apps, which are mobile telephone applications that enable users, residents, and visitors of Miami-Dade County to report neighborhood problems and code violations to the 311 Contact Center. The DSWM will also continue to promote the Department supported "Let's Clean Things Up" community pride program that incorporates messages that promote litter and illegal dumping prevention and proper use of available waste services. The PIO section works with other County departments, like RER and PROS, to collaboratively clean up properties within the WCSA. Illegal dumping will continue to remain a high priority for the DSWM. Aggressive public awareness and outreach activities will continue supporting illegal dumping prevention. The DSWM illegal dumping crews' work will help improve aesthetics in Miami-Dade County. (Supports Mayor's Key Deliverable: Healthy and Safe Communities)

Recyclable Materials Markets: In July 2024, the Board approved new recycling contracts for curbside collection and processing. The processing contract now provides the County with 100% of the Average Median Value (AMV) of the recyclable materials (i.e., cardboard and plastic bottles) sold. The County's recycling program relies on healthy markets for recyclable materials and low contamination rates. Strong markets drive demand for recyclables and contribute to economic growth by creating green jobs. However, these markets are commodity-driven and fluctuate with market demands, which, as a result, impact the Department's revenues. Recycling markets have

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rebounded since the implementation of China's "National Sword" policy in 2018, which sharply reduced imports due to contamination. In response, the Department has made significant progress with recycling. For example, due to high demand for cardboard, the Department began accepting slightly soiled pizza boxes. This trend, known as the "Amazon Effect," stems from the surge in online shopping during the COVID-19 pandemic, which has continued even after the crisis. In the second quarter of 2024, the Department introduced a new hot stamp on the lids of blue recycling carts to guide customers on the correct items to recycle. Additionally, in June 2024, the Department began enforcing the Recycling Contamination Abatement Ordinance to reduce contamination. (Supports Mayor's Key Deliverable: Risk Reduction & Resilience)

Aging Facilities: The DSWM needs to ensure the future viability of aging infrastructure, including equipment and facilities. Most of the Department's facilities are over 40 years old and require upgrades and/or modifications to improve operations and extend their useful life. Of particular concern is the Mosquito Control facility that requires replacement to accommodate a major reorganization and expansion of the Division. A new facility will include modern laboratories, a safe and clean (hands-free) chemical mixing and loading plant, a separate pesticide storage building and insect rearing capability, as well as showers/locker rooms to help mosquito control staff minimize the possibility of insecticide contamination by quickly cleaning and removing the chemical substance from the body. (Supports Mayor's Key Deliverable: Investment in Infrastructure)

Legislative Changes/Mandates

Legislative changes that can potentially affect the operations of the Department include:

Recycling Goal: The Department opposes any efforts to revise existing Florida statutes or adopt new legislation that would reduce Florida counties' ability to include renewable energy production in meeting the long-term recycling goal of 75% by 2020. This goal requires state and local governmental entities, private companies, organizations, and the general public to recycle at least 75% of municipal solid waste.

Under current Florida statutes, the DSWM can count WTE production, landfill gas utilization (methane gas converted to energy), materials collected through single-stream recycling programs, and other recycling initiatives toward this long-term recycling goal. Any changes to the Florida statutes that exclude renewable energy from being counted in achieving this goal would negatively impact the DSWM and Miami-Dade County's ability to meet the recycling target.

According to the Florida Department of Environmental Protection's (FDEP) Solid Waste Annual Report/Summary of Recycling Credits, the overall recycling rate for Florida in 2023 was 49%, while Miami-Dade County achieved a recycling rate of 38%. In FY 2020-21, DSWM staff participated in a workgroup with representatives from other Florida counties to develop the "County-Coordinated Guidance on a New State Diversion Goal

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and Benchmarks." The DSWM supports the proposed five-part approach to establishing a new state recycling goal, a process facilitated by Willie Puz, Director of Public Affairs & Recycling at the Solid Waste Authority of Palm Beach County. The DSWM will continue to monitor legislation that affects Florida's recycling objectives.

Recycling Contamination: The Department supports efforts to repeal House Bill 73, which was passed during the 2020 Legislative Session. This bill amends Florida Statute 403.706 and specifies requirements for contracts between residential recycling collectors or recovered materials processing facilities and counties or municipalities. The legislation stipulates that these collectors or facilities are not obligated to collect, transport, or process contaminated recyclable materials unless specific contractual requirements are in place after a contract is executed.

Such legislation restricts the Department's ability to set acceptable contamination levels for recyclable materials in the County's curbside recycling program. Repealing this bill and opposing any legislative changes that could harm the sustainability of the County's solid waste management and recycling initiatives will help avoid unnecessary costs that could lead to fee increases. It will also ensure that the Department can meet statemandated recycling goals.

Waste-to-Energy Facilities: The Department opposes the preemption of any legislation, such as HB 1609 (bill died) and SB 1822 (withdrawn), filed during the 2025 Legislative Session, that prohibits local governments from issuing construction permits for new solid waste disposal facilities that use ash-producing incinerators or waste-to-energy facilities if the proposed location is within a one-mile (HB 1609) or half-mile (SB 1822) radius of any residential property, commercial property, or school. HB 1609 also prohibited DEP from issuing a construction permit for the expansion of any existing landfill that was permitted on or before December 2, 1970, that is located within a 1-mile radius of any property zoned residential unless the entirety of the site is remediated and compliant with the department's environmental standards. HB 1609 applied only to a specific county class, including Miami-Dade County. If passed, proposed legislation like HB1609 and SB 1822 would have limited the DSWM's options for finding the best location for a new WTE facility and restricted existing landfill expansions. The Department opposes any legislation that restricts potential locations for constructing a new WTE facility and/or curtails the expansion of operations.

Waste Diversion and Zero Waste Programs - The Department supports federal legislation, including a federal bottle bill and extended producer responsibility, as well as funding for infrastructure and projects to support zero waste strategies, which convert waste to recovered resources and divert materials from disposal, such as composting, recycling, organic digestion, and renewable hydrogen development.

Flow Control/Interstate Waste Transport - The Department opposes any efforts to amend legislation in response to the April 2007 Supreme Court decision in United Haulers Assn. v. Oreida-Herkimer Solid Waste Authority (No. 05-1345). This decision

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confirmed that flow control to publicly owned facilities is a legitimate exercise of legislative authority. Implementing flow control enhances the financial stability of the DSWM and contributes to a more predictable environment.

PRIORITY INITIATIVES

The most relevant initiatives for the DSWM planned for the upcoming and subsequent fiscal years include:

Waste by Rail (WbR): To address the County's waste disposal needs following the RRF fire, the DSWM has secured significant landfill capacity outside the county. To transport the County's waste to these facilities, the Department, in collaboration with our private partners, is preparing to move waste by rail to out-of-county landfills with substantial capacity. Waste by Rail (WbR) utilizes existing County transfer stations and equipment to fill intermodal (IM) containers that DSWM staff transfers directly to the rail yards. The IM containers are then loaded directly onto the trains and transported to one of several out-of-county landfills.

Rail, as opposed to road, is more cost-effective and has lower emissions when transporting waste long distances. Solid waste operations throughout the Country use rail extensively, and Waste Management is currently using it to move waste out of the County. (Initiative included on Department's scorecard)

Waste Diversion: The Department is implementing and investigating several measures to divert as much waste from landfills as possible. Resilience staff is researching Construction and Demolition (C&D) debris ordinances to develop proposals for future implementation in Miami-Dade County. This ordinance aims to increase the recycling of C&D materials and help the County move towards its zerowaste goal. Over the next two years, it is anticipated that the C&D recycling ordinance will become legislation and increase the current C&D recycling rate from its 2023 recycling rate of 40%.

Additionally, staff will collaborate with the Resources and Economic Resources Department, specifically the Division of Environmental Resources Management (DERM), to explore how composting can be effectively implemented in MDC. The plan includes developing and administering a 12-month composting pilot program in MDC. Based on the report's recommendations, DSWM has partnered with Miami-Dade Innovation Authority (MDIA) to help fund a pilot program to process organic waste (e.g., yard waste) into a beneficial by-product like compost. The pilot program is anticipated to be executed in the Summer of 2025.

Another waste diversion project involves on-site yard waste grinding operations at the South and North Dade Landfills, where approximately 30,000 tons of yard waste is expected to be processed during FY2024-25. This on-site grinding allows the material to be redirected from disposal at the landfills and repurposed as mulch or daily cover.

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Also, during FY2023-24, a total of 43,900 tons of mixed yard waste and 18,900 tons of clean yard waste were diverted to neighboring disposal facilities. As part of the aforementioned MDIA challenge, some of the yard waste will be provided to companies piloting waste diversion technologies for organic waste streams.

DSWM will closely monitor these initiatives and explore additional strategies to advance Miami-Dade County's goal of becoming a Zero Waste County. (Measures on Department's scorecard to support Waste Diversion: Single Stream Recycling Tons and Total Tons of Yard Waste Processed)

Zero Waste Master Plan (ZWMP): A solicitation to procure the services of a consultant to create Miami-Dade County's ZWMP was advertised in July 2024, and WSP is the awarded vendor. They are collaborating with the Resilience Division of DSWM and other key stakeholders to develop the ZWMP over an 18-month period. The anticipated completion of the ZWMP is expected in the first or second quarter of calendar year 2026 (which aligns with the second or third quarter of FY2025-26). The Zero Waste Master Plan will identify a broad scope of initiatives to help transition Miami-Dade County into a zero-waste community, from potential legislative policies to waste diversion technologies and techniques. (*Initiative included on Department's scorecard*)

Electric Vehicle Charging Stations - The DSWM plans to install additional electric vehicle charging stations at eight solid waste facilities. In fiscal year 2025-2026, charging stations will be set up at the Northeast Transfer Station and the Mosquito Control Facility. Future installations are scheduled for the West Perrine, West Little River, and Moody Drive Trash and Recycling Centers, as well as the North and South Dade Landfills and the Central Transfer Station. Each site will feature five charging stations.

Each charging station will be equipped with two cables, allowing two vehicles to charge simultaneously. The charging process takes approximately eight hours, meaning one charger can charge two cars. In total, twenty cars can be charged during a sixteen-hour period. (Initiative included on Department's scorecard)

Mosquito Control Facility: The DSWM has plans to replace the 60-year-old Mosquito Control Building. It will provide adequate workspace for staff, including a testing laboratory, and will have modern environmental controls. The new proposed facility will feature employee amenities, including an emergency shower station, maintenance shop, lab, chemical and trap storage, and a battery charging station. Replacing the Mosquito Control Facility will include essential equipment that will enable Miami-Dade County to better control mosquito populations and prevent the spread of diseases like Zika and Dengue viruses. A consultant has been selected, and the project is in the design phase. The facility design is expected to be completed by FY2025- 2026. Construction will be planned for a future date. (Initiative included on Department's scorecard)

Comprehensive Landfill Closure Plan: A resolution approving County and municipal landfill closure projects eligible for funding through the Comprehensive Landfill Closure Plan (CLCP) was approved by the BCC in October 2015. The CLCP includes County

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and municipal landfill sites eligible for remediation and closure funding from the Utility Service Fee (USF) and sets out the criteria, terms, and timing of this funding. The Department is funding the following municipal landfill closure grant projects: Munisport, Virginia Key, Taylor Park, and a County-owned site in the City of Miami Gardens. (Initiative included on Department's scorecard)

Landfill Gas (LFG) to Renewable Natural Gas (RNG) Conversion: The DSWM has been working towards converting the captured landfill gas at the North Dade Landfill and South Dade Landfill into renewable natural gas. The RFP for this project is currently underway and is anticipated to be completed in FY 2025-26. The intent of this initiative is to reduce greenhouse gas emissions associated with landfills, develop a fuel source (RNG), and help generate revenue for DSWM. (Initiative included on Department's scorecard)

Waste Facility Complex (WFC): The Department has begun the process of designing a new complex at the former Old South Dade landfill, located west of 9350 SW 248th Street, Miami, FL 33170. This complex will feature a new transfer station for temporary waste disposal, an administration building, a scale facility, a customer drop-off area, a household hazardous waste collection center (HHW), and a parking facility. In February 2025, the BCC approved a recommendation to award Adurra Group, Inc., a Professional Services Agreement (PSA) for engineering services. The project's scope will include, at minimum, the design and preparation of a complete set of construction documents. DSWM engineering staff has met with Adurra, Group, Inc. to discuss the project's design, including goals, scope, timelines, responsibilities, and clearly defined expectations. (Initiative included on Department's scorecard)

Technology Initiatives

In addition to program-based initiatives, DSWM has several technological initiatives that are in place or will be implemented in the near term to help support and improve operations. They are as follows:

Waste Collection Software Replacement (SWABS Deployment): The DSWM has largely completed the upgrade of its outdated Mainframe Waste Collection System (WCS). This previous system managed internal customer accounts and receivables while providing external customer-facing features. The new system, now called the Solid Waste Automated Billing System (SWABS), includes several operational and administrative modules from DSWM. These modules cover accounts management, invoicing, billing, customer payments, bulky trash appointments, public complaints, enforcement complaints, and various reporting features. The new system also offers the public access to important functions, including reporting or filing a complaint, making online payments (for bills, services, and fines), verifying the availability of bulky waste pickups, requesting bulky waste service, checking the status of bulky waste orders, requesting inspections, completing permit renewal applications, and checking the status of enforcement actions. (*Initiative included on Department's scorecard*)

Driver Safety/Fleet Telematics: The DSWM worked jointly with the Information Technology Department (ITD) and Department of Transportation and Public Works (DTPW) to piggyback on an existing contract that was competitively solicited and awarded to SAMSARA; this vendor will be the provider of the onboard Driver Safety/Fleet Telematics system and has a planned FY2024-25 implementation. The system will upload a video recording of "triggered" incidents or events to a cloud-based solution for data analysis and reporting via a full-service website. The reports, data, and video accessed via the website would then form the basis for a targeted driver training/coaching program. Similar programs have improved safety performance and generated savings from fewer accidents, fuel, and maintenance, resulting in millions of dollars. (Initiative included on Department's scorecard)

Landfill Grade Management System: Following a successful pilot program concluding in FY 2024-25, the DSWM is planning to procure a GPS-based system (including hardware and software) to provide the landfill waste equipment operator with live GPS data to assist with achieving the ideal landfill compaction and grading needed to optimize air space and usage, reduce landfill leachate, and improve safety. (Initiative included on Department's scorecard)

SMATS Pilot: DSWM will execute a demo/pilot agreement to use Bluetooth technology to establish wait times at Trash and Recycling Centers (TRC). The technology will track smart devices inside vehicles, allowing patrons to see real-time dumping and choose the TRC with the shortest wait times. DSWM will monitor and research this initiative, as it will provide a much-needed solution for the public. (*Initiative included on Department's scorecard*)

FUTURE OUTLOOK

There are various factors that have the potential to significantly impact Departmental operations in the upcoming years. A few of these are as follows:

Solid Waste Disposal Operations: The future of the Department and its waste disposal operations depends mainly on the decisions of the Board of County Commissioners. Extensive research and analysis have been conducted and will continue to identify the best and most feasible options for managing municipal solid waste. These options include the development of a Sustainable Solid Waste Campus, which may feature Waste-to-Energy technology, the construction of a new landfill, the continuation of long-haul waste transportation, composting, and/or recycling, among other possible waste diversion modalities.

Administrative Facility: In the near future, the DSWM plans to initiate the design and construction of a complex that will house all administrative functions and support services within a single, well-organized, and appealing layout that enhances DSWM operations. This new administrative complex could include amenities such as a

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learning and education center, a fitness center, a rooftop work area, and outdoor walking trails. As part of this design, DSWM will explore opportunities to potentially share space with other County departments.

Mosquito Control Collaborations/Scientific Investigations: The DSWM plans to expand its various scientific collaborations already undertaken with research institutions to further scientific knowledge and understanding of mosquito biology and behavior, enhance the DSWM's professional profile through peer-reviewed publications, and establish valuable links with academic institutions, both local and international. Such collaborative investigations can potentially improve control methods in ways not anticipated and identify new avenues for future research.

Financial Stability: Despite facing revenue shortfalls in recent years, DSWM has closely monitored expenditures and implemented cost-saving initiatives to improve operational efficiency. Although the Board of County Commissioners approved residential waste collection fee increases of \$25 in FY 2022-23, \$38 in FY 2023-24, and \$150 in FY 2024-25, the Department remains committed to reviewing its fee structure, streamlining operations, and exploring new revenue opportunities.

Long-Term Interlocal Disposal Agreements: Long-term interlocal disposal agreements lasting ten years or more with municipal and private haulers are crucial to DSWM's financial stability. The consistent revenue generated from these contracts over the specified period helps DSWM manage its finances effectively. This revenue not only supports the Department's operating expenses but also offsets its capital costs. Therefore, it is essential for DSWM to strengthen its relationships with cities and private haulers, increase the number of customers with long-term disposal agreements, and regulate waste flow within the System.

Annexations and Incorporations: Potential annexation and incorporation policies can impact DSWM. Ordinance 96-30 was enacted to protect DSWM's system and financial integrity from incorporations and annexations. Annexations can potentially reduce the Waste Collection Service Area and associated revenues. A smaller WCSA could have a profound impact on revenues, debt service coverage and ultimately fees charged to the remaining collection customers. The cumulative impact of annexations that have taken place since 1996, and that are anticipated to occur in the future, will spread additional debt service over a smaller revenue pool, resulting in increased fees to remaining customers.

Attachment 1 Business Plan Report

Business Plan Report

Scorecard: Solid Waste Management

As Of: 06/27/2025

Perspective Name	Objective Name	Grand Parent Objective Name	Parent Objective Name	Measure Name	Last Period Updated		Actual	Target	FY2024-25 Annualized Target	FY2025-26 Annualized Target		
Customer	Provide quality residential garbage,	NI1: Safe, healthy and attractive	NI1-1: Promote livable and beautiful	Number of curbside recycling complaints per 10,000 participating households	May '25	$\overline{}$	14.4	6.4	6.4	6.4		
trash and recycling collection services		neighborhoods and communities	neighborhoods	Number of Garbage Complaints Received per 10,000 households	May '25		3	4	48	48		
				Percentage of automated and manual garbage routes completed on time	May '25		97.4%	98.0%	98.0%	98.0%		
				Patrons served by Home Chemical Collection Program including mobile events New Household Accounts added to Solid Waste Collections M			10,601	8,000	8,100	8,000		
							-149	218	2,616	2,292		
				Bulky waste complaints per 1,000 regular bulky waste orders created	May '25		56.7	104.0	104.0	100.0		
		NI2: Continuity of clean water and	NI2-3: Provide sustainable solid	Number of curbside recycling complaints per 10,000 participating households	May '25	$\overline{}$	14.4	6.4	6.4	6.4		
		community sanitation services	waste collection and disposal capacity	Number of Garbage Complaints Received	May '25		3	4	48	48		
		Services	disposal capacity	per 10,000 households Percentage of automated and manual	May '25		97.4%	98.0%	98.0%	98.0%		
				garbage routes completed on time Patrons served by Home Chemical	2024 FY		10,601	8,000	8,100	8,000		
				Collection Program including mobile events New Household Accounts added to Solid	May '25		-149	218	2,616	2,292		
				Waste Collections Bulky waste complaints per 1,000 regular	May '25		56.7	104.0	104.0	100.0		
	Improve programs that	NI1: Safe, healthy	NI1-1: Promote	bulky waste orders created Number of litter corridor miles completed	May '25		632miles	500miles	5,500miles	n/a		
	promote neighborhood and ROWs aesthetics, and environmental	and attractive neighborhoods and communities	livable and beautiful neighborhoods	Percentage of scheduled illegal dumping piles picked up within eight days of scheduling	May '25		94.9%	95.0%	95.0%	95.0%		
	conditions			Percentage of enforcement related complaints responded to within two business days	May '25		100%	95%	95%	95%		
	Provide safe, attractive, and	TM3: Well- maintained, modern	TM3-1: Harden and maintain roadway	Garbage tons collected (in thousands)	May '25		49	0	0	0		
	structurally sound ROWs and	transportation infrastructure and	infrastructure	Litter Tons (D) Trash and recycling centers: tons collected	May '25		5	0	0	0		
	infrastructure for both	assets		U		(in thousands)	May '25		18	16	195	216
	general and special populations			Single Stream Recycling Program Tons (D) Bulky waste trash tons collected (in	May '25	<u> </u>	4,350	4,700	n/a	n/a		
	Provide timely and GG1: Accessible,	GG1-2: Facilitate	thousands) Percentage of mosquito nuisance	May '25		10	10	123	125			
	satisfactory resolution to customer needs, requests and inquiries	transparent, and responsible government	community outreach and engagement to promote better decision-making in County government	complaints receiving a response within 48 hours Total residential enforcement actions (in	May '25		100%	97%	97%	100%		
	requeete and inquiree	govorimon		thousands)	May '25		3.1	3.4	40.0	40.0		
				Average illegal dumping pick-up response time (in calendar days)	May '25		2	5	5	3		
				Average bulky waste response time (in calendar days)	May '25		6.8	10.0	10.0	7.0		
				Average bulky waste response time (calendar days from appointment date to pickup date)	May '25		0.2	0.1	0.1	0.1		
		NI1: Safe, healthy and attractive neighborhoods and	NI1-1: Promote livable and beautiful neighborhoods	Percentage of mosquito nuisance complaints receiving a response within 48 hours	May '25		100%	97%	97%	100%		
		communities		Total residential enforcement actions (in thousands)	May '25	lacksquare	3.1	3.4	40.0	40.0		
				Average illegal dumping pick-up response time (in calendar days)	May '25		2	5	5	3		
				Average bulky waste response time (in calendar days)	May '25		6.8	10.0	10.0	7.0		
				Average bulky waste response time (calendar days from appointment date to pickup date)	May '25		0.2	0.1	0.1	0.1		
			NI1-4: Protect the community from public nuisances and events	Percentage of mosquito nuisance complaints receiving a response within 48 hours	May '25		100%	97%	97%	100%		
	that threaten public health	Total residential enforcement actions (in thousands)	May '25	M	3.1	3.4	40.0	40.0				
				Average illegal dumping pick-up response time (in calendar days)	May '25		2	5	5	3		
				Average bulky waste response time (in calendar days)	May '25		6.8	10.0	10.0	7.0		
				Average bulky waste response time (calendar days from appointment date to pickup date)	May '25		0.2	0.1	0.1	0.1		
Financial	Meet Budget Targets Quarterly			Disposal Revenue Tons - Garbage	May '25		119	111	1,335	1,362		
				Disposal Revenue Tons - Trash Disposal tons accepted at full fee (in	May '25	<u> </u>	53	56	673	683		
				thousands) Total (revenue) tons transferred in (in	May '25		172	172	2,060	2,045		
				thousands)	May '25		65	67	800	836		

Perspective Name	Objective Name	Grand Parent Objective Name	Parent Objective Name	Measure Name	Last Period Updated		Actual	Target	FY2024-25 Annualized Target	FY2025-26 Annualized Target
	Monitor Overtime	GG4: Effective leadership and	GG4-2: Effectively prioritize, allocate and	Overtime Expenditure (WM Operations) (D)	May '25	K	\$677,998	\$554,752	\$6,607,130	\$159,686
		management practices	use resources to meet the current and future operating and capital needs for all our residents	the resources to meet e current and future oberating and capital needs for all our (New) (New) (May '2)		M	\$3,845	\$5,208	\$61,399	\$31,000
	To Reduce Disposal Accounts receivable delinquencies	GG4: Effective leadership and management	GG4-1: Provide sound financial and risk management	Accounts receivable Disposal delinquent balance over 90 days past due {Workload Measure} (D)	Q2 '25		\$7	\$5,000	\$20,000*	n/a
		practices		Total Accounts Receivable (D)	'25 FQ2		\$7,443.0K	\$8,500.0K	\$8,500.0K	\$8,500.0K
	Meet Budget Targets (Solid Waste)			Revenue: Total (Solid Waste)	'25 FQ2	N	\$85,468K	\$197,994K	\$791,978K	n/a
	(Solid Waste)			Expen: Total (Solid Waste)	'25 FQ2		\$103,606K	\$197,995K	\$791,978K	n/a
				Positions: Full-time Filled (D) (Solid Waste)	'25 FQ2	N	1,058	1,172	1,172	1,172
Internal	Improve the Efficiency of the Operations			Total Tons of Yard Waste Processed	May '25	M	2,609	2,833	34,000	n/a
	Ensure ongoing compliance with local,	GG4: Effective leadership and	GG4-1: Provide sound financial and	Disposal system level of service (in years)	2024 FY		11	5	5	5
	state, and federal regulations	management risk management	Percentage of Florida Department of Environmental Protection reporting deadlines met	May '25		100%	100%	100%	100%	
				Number of compliance inspections conducted at FDEP permitted facilities	'25 FQ3		33	30	120	120
		NI2: Continuity of clean water and	NI2-3: Provide sustainable solid	Disposal system level of service (in years)	2024 FY		11	5	5	5
		community sanitation services	waste collection and disposal capacity	Percentage of Florida Department of Environmental Protection reporting deadlines met	May '25		100%	100%	100%	100%
				Number of compliance inspections conducted at FDEP permitted facilities	'25 FQ3		33	30	120	120
Learning and Growth	Provide Training and Employee Development Opportunities			Number of Training Sessions Conducted	May '25		18	n/a	n/a	n/a
	Ensure a Safe Working Environment for Employees	GG2: Excellent, engaged and resilient County workforce	GG2-2: Promote employee development and leadership	Number of Safety Inspections Conducted (D)	May '25		18	18	216	60

Legend:



[:] Featured Objective

Initiatives for Measures

There are no Initiatives associated to the Measures.

Initiatives for Objectives

Objective Name	Initiative	As Of	Status	Budget	Timing	Owners
Ensure ongoing compliance with local, state, and federal regulations	Virginia Key Landfill Grant	1/27/2023	Complete		\blacksquare	Kelapanda, Achaya (DSWM)

Initiatives for Scorecards

Initiative	As Of	Status	Budget	Timing	Owners
Replace Waste Collection System (WCS)	03/28/2025	In Progress			Diaz, Danny (DSWM)
Electric Vehicle Charging Stations	05/05/2025	In Progress			Hurst, Sabrina (DSWM); Contreras, Humberto (DSWM)
Landfill Gas (LFG) to Renewable Natural Gas (RNG) Conversion	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Technology Initiative - Driver Safety/Fleet Telematics	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Waste Facility Complex (WFC)	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Technology Initiative - SMATS Pilot	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Technology Initiative - Waste Collection Software Replacement (SWABS Deployment)	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Technology Initiative - Landfill Grade Management System	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Mosquito Control Facility	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Waste by Rail - (WbR)	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Comprehensive Landfill Closure Plan (CLCP)	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)
Zero Waste Master Plan (ZWMP)	05/05/2025	In Progress			McDuffie-Brewster, Stacey (DSWM)

^{* :} This measure has been annualized to match the fiscal year-to-date total for this report. This year-to-date measure is configured based on the calendar year.