# Hillsborough County Solid Waste Master Plan

Our community is experiencing unprecedented growth. Since 2015, our Resource Recovery Facility, which burns garbage, has been at capacity meaning trash is being generated faster than it can be burned. As a result, more waste is landfilled every year, taking up finite and limited space. Solid Waste's existing operations and infrastructure will not be adequate to manage projected waste generation as our population continues to rise. To extend the Southeast County Landfill's lifespan and increase waste diversion for Hillsborough County, Solid Waste developed a Master Plan to serve as a high-level planning document that outlines critical strategies and infrastructure needed to accommodate the growth.

#### **Guiding Principles**

- Quality of Life
- Fiscal Sustainability
- Economic Prosperity
- Responsible Growth

## **Our Vision**

Establish a path to longterm, sustainable, and financially responsible waste management in Hillsborough County that is based on the following:

Providing added value to the community

Customer service

Protection of public health and safety



prosperity



Stewardship to residents and stakeholders

#### Goals

- Maintain low and predictable solid waste rates that cover the cost of service
- Decrease contamination in curbside recycling
- Maximize the efficiency, productivity, and useful life of the Resource Recovery Facility
- Minimize landfill disposal
- Collaborate with other jurisdictions within the County to increase recycling and diversion
- Increase recycling within the commercial and multifamily sectors in the service area

#### What We Do Now



#### **Collection and Transfer**

- Collection franchise agreements in three zones are managed by the County to provide collection services; currently providing twice-per-week residential garbage, once-per-week residential recycling, and onceper-week yard waste collection to 322,000 residential units in the unincorporated area of the County and portions of the city of Tampa.
- Solid Waste oversees one landfill, one waste-to-energy facility, two transfer stations, five community collection centers, two yard waste processing facilities, and three monthly household hazardous waste collection events.

#### Processing

- Through agreement with the County, recyclables collected curbside from residents are separated by material and transported to be made into new products across the country by a private materials recovery facility.
- The South County and Northwest Yard Waste Processing Facilities grind segregated yard waste loads received at the site into mulch by the County's yard and wood waste contractor, which is then hauled away to various reuse applications

#### **Energy Recovery**

- In FY 14-15, the amount of processable waste generated in the County began exceeding the total capacity of the Resource Recovery Facility, which burns garbage.
- The amount of processable waste generated is expected to continue increasing each year during the planning period, with a projected 1,049,128 tons of processable waste managed by the County's system in FY 2065.

#### End Markets/Disposal

 The Southeast County Landfill is the final disposal site for all waste-to-energy ash residue, non-processable materials, and with the facility at capacity, all excess waste from the Solid Waste System.

## **Preferred Path**

#### Processing

 Develop a public-private partnership to operate a mixed waste processing facility to manage additional capacity needs and minimize landfill disposal by recovering recyclables from the waste stream

#### **Energy Recovery**

• Implement option(s) for beneficial use of landfill gas generated at the Southeast County Landfill

#### **End Markets/Disposal**

Research and implement alternatives for beneficial reuse of combined ash





#### from the Resource Recovery Facility

#### **Business Strategies**

- Develop a long-term capital plan and material management plan for the **Resource Recovery Facility**
- Establish a solid waste reserve fund goal and use those funds to balance/ maintain rates over time
- Develop and implement a communications plan for public education and outreach
- Further evaluate the expansion of self-service energy capabilities to include other County-owned facilities adjacent to the Resource Recovery Facility
- Continually evaluate redevelopment/reuse options for closed facilities or closed portions of facilities
- Work with regional partners to reduce landfill disposal when beneficial to the County

#### Where We Are

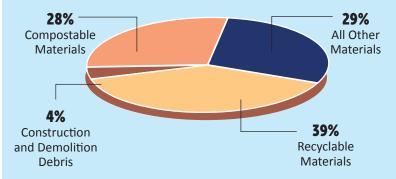
#### **Resident Population**

- 1.5 million residents in Hillsborough County 2023
  - o Expect 600,000 new residents by 2065
- 320,000 customers served in 2023

 957,643 tons of waste generated in 2023 1,238,526 tons projected to be disposed in 2065

#### What's in Our Trash (Waste Composition Study 2023)

**Annual Waste Generation** 



#### Where We Want to Go 2065

#### Organics | Divert 1,093,000 tons

- Construct a waste digestion facility to convert food waste into energy and nutrient-rich liquid
- Educate residents and businesses about food waste diversion
- Develop mandatory commercial organics ordinance

#### **Recycling | Divert 4,139,000 tons**

- Construct a mixed waste processing facility that can recover recyclables from the garbage stream
- Educate residents and businesses on proper recycling
- Develop mandatory commercial recycling ordinance

#### Waste-To-Energy | Divert 32,508,000 tons

• Increase facility capacity from 515,000 tons per year (TPY) to 545,000 TPY through maintenance upgrades

## How Can You Help? HCFL.gov/SolidWasteMasterPlan

Everyone generates food waste, recyclables, and trash daily, which has a social, environmental, and economic cost. It will take all of us to do our part to reach our diversion goals by taking responsibility of the waste we produce.

### Where Does Our Waste Go?

#### Waste-to-Energy

- Trash is burned to reduce volume and create electricity.
- Over 500,000 tons of trash is converted into electricity.

#### Landfill

- Trash is buried, taking up limited space and producing toxic water and gases requiring treatment.
- Over 460,000 tons buried, taking up limited space.
  - o (36.16% increase since 2013)

#### Recycling

- Materials are collected for sorting to be transformed into new products, saving resources and landfill airspace.
- Over 42,000 tons recycled into new products
  - o (Landfill would close 1-2 years earlier if there was no recycling since 2013)





