



City of Dallas

Dallas Local Solid Waste Management Plan Update

**Environmental Commission
February 11, 2022**

Cliff Gillespie
Assistant Director of Sanitation

Scott Pasternak
Burns & McDonnell

Meeting Agenda



LSWMP Update Background

Information about LSWMP Update

Study Approach

Strategic process for developing the LSWMP Update

Draft Objectives and Goals

Draft goals and objectives the City is considering for the updated plan

Options

Infrastructure, single-family, multi-family, commercial sector options

Next Steps

Upcoming deadlines and meetings in 2022 to complete the LSWMP Update

Q&A

City staff available to answer questions



LSWMP Update Background



The City's current plan was developed in 2011 and adopted by City Council in 2013. It identified policies, programs and infrastructure that mapped out how the City could achieve Zero Waste.

City has achieved several key milestones since the plan was adopted including:

- In 2015, the City implemented a single-use plastic ban fee that financially supported the development of Comprehensive Climate and Environmental Action Plan (CECAP)
- In 2017, the City entered a public-private partnership to construct a Materials Recycling Facility (MRF) to support increasing residential single-stream material recycled
- In 2020, the City adopted its Multi-Family Recycling Ordinance (MFRO) to increase access to recycling for people who live in multi-tenant properties
- In 2021, the City piloted separate collection of brush and bulky items in select areas to be assessing its feasibility



LSWMP Update Approach

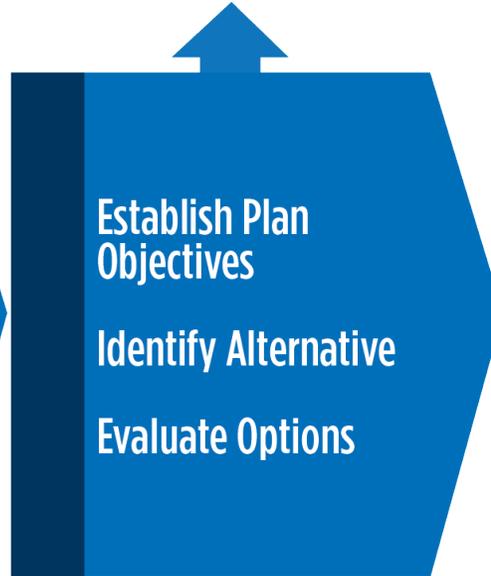


Early Improvement
Recommendations



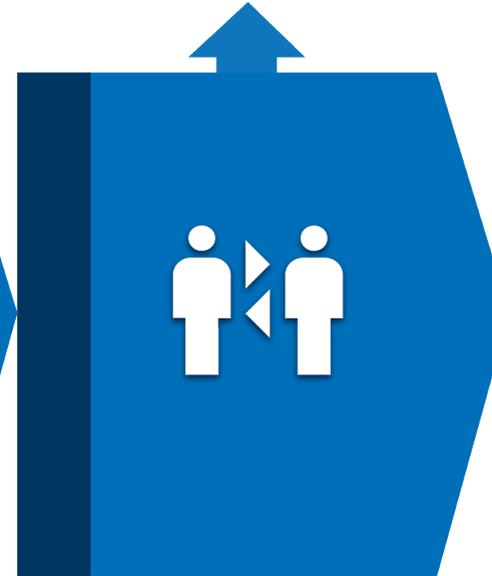
Evaluate Existing
System

Feasibility
Matrix



Develop Strategies
and Options

Preferred Strategies
and Options



Strategy
Workshops



Local Solid Waste
Management Plan



Public & Stakeholder Engagement



- Public and stakeholder engagement is an important part of the LSWMP Update
- Input gathered informs evaluation and recommendations developed as part of LSWMP Update
 - 5,500+ survey responses from single-family residents, multi-family tenants and property managers and commercial entities
 - Individual meetings with neighborhood groups, the Dallas Regional Chamber, Texas Restaurant Association (Greater Dallas Chapter), Apartment Association of Greater Dallas and Texas Campaign for the Environment
 - Interviews with multiple City departments and stakeholders
 - Approximately 6,800 visits to the LSWMP website
- Upcoming stakeholder engagement efforts include
 - Public meeting and community engagement
 - Follow up survey to gather feedback on draft LSWMP Update



Coordination with CECAP



Comprehensive Climate and Environmental Action Plan (CECAP) material management-related objectives:

1	Actively Promote Source Reduction, Recycling and Composting to the Dallas Community
2	Develop a Comprehensive Green Procurement Plan
3	Improve Solid Waste, Recycling and Brush/Bulky Waste Collection Frequency
4	Improve Potential for Electric Waste Collection Vehicles
5	Update and Implement the Zero Waste Management Plan
6	Expand Efforts to Reduce Illegal Dumping by Implementing Recommendations identified in the Litter and Illegal Dumping Assessment Study
7	Encourage the Development of Material Markets Focusing on Creating New Economic Opportunities
8	Continue to Capture Gas and Expand Capacity from Landfill for Reuse and Evaluate for City Operations
9	Adopt an Ordinance to Implement a City-wide Organics Management Program

CECAP goals include:

35% and **80%** diversion of organic waste by 2030 and 2050

60% and **90%** of paper waste by 2030 and 2050

35% and **45%** reduction in waste landfilled in 2030 and 2040



LSWMP Update Outline



Overview Sections

1. Objectives, Goals, Stakeholder Engagement
2. Planning Studies, Regulatory, Trends Review
3. Planning Area Characteristics

Program, Policies, Infrastructure Evaluation Sections

4. Facilities and Infrastructure
5. Transfer Station System
6. Refuse and Recycling Collection
7. Brush and Bulky Item Collection
8. Landfill Operation
9. Recycling Processing
10. Organics Management
11. Multi-Family and Commercial Sector
12. Household Hazardous Waste and Electronics
13. Public Education and Outreach

Technical Appendices

- A. Stakeholder Engagement Summary
- B. Regional Facilities Map
- C. Refuse & Recycling Collection Operations Assessment
- D. Transfer Station System Operations Assessment
- E. Landfill Operations Assessment
- F. Implementation Plan





Update Objectives

Identify long-term strategic considerations that will result in successful operations, programs and material management

Update Goals

Establish recycling targets and timing based on updated objectives and current system evaluation



Evaluate Options

Analyze options to achieve goals based on select criteria (e.g., recycling potential, financial impact, environmental impact, etc.)

Develop Recommendations

Develop specific actions aligning with options that provide the foundation for the implementation and funding plan



Draft Updated Objectives



2011 LSWMP

Strive for sustainability by considering the entire life-cycle of products, processes and systems.

Demonstrate that the goals of economic growth, environmental stewardship and fiscal responsibility are inextricably linked.

Reduce the volume of discarded materials and maximize diversion from disposal.

Spur economic growth by recovering valuable raw materials and clean energy from discarded material.



LSWMP Update

Empower residents and businesses to reduce the amount of discarded material generated through proactive education and outreach.

Establish and implement innovative operational best practices to provide efficient, cost effective, and environmentally responsible service.

Provide excellent customer service and support residents and businesses to maximize diversion from landfill.

Operate a clean, green and efficient waste system that seeks to generate energy from organics.



2011 LSWMP Zero Waste Goals



- Zero Waste goals adopted in 2013 include
 - **40%** recycling by 2020 | **60%** recycling by 2040 | **80%** recycling by 2060
- Percentages established by projecting the impact of implementing recommended programs, policy and infrastructure
- At the time, trend among peer City was to set high, aspirational diversion targets
 - Fort Worth – **80%** landfill diversion by 2045
 - San Antonio – **60%** diversion by 2045
- Key assumptions informing the development of Zero Waste goals in 2011 LSWMP
 - Successful implementation of flow control ordinance and mixed waste processing
 - Brush separation from residential sector and implementation of organics processing facility
 - Transfer station system capable of managing multiple material streams goals



Perspectives on Zero Waste Progress



Successes

Adopted single-use plastic ban fee

Built Material Recovery Facility

Adopted Multi-Family Recycling Ordinance

Piloted separate brush and bulky item program

Challenges

Did not move forward to implement flow control ordinance or mixed waste processing

Unable to separately collect brush for composting

No organics processing facility developed

Limited capacity to manage brush separately at transfer stations

Challenges encountered since 2011 require the City to **re-examine goals** as part of LSWMP Update

Goals will be established based on the recommendations being considered



Infrastructure Options



Infrastructure improvements are **critical** to increasing recycling rate among all the sectors

Infrastructure	Current Condition/Challenges	Implementation Recommendations
Transfer Station System	Aging and unable to manage brush separately for recycling.	Update to separately manage organics.
Landfill	Landfill must meet long-term disposal needs of City and region.	Conserve valuable airspace by continuing efforts to prolong site life.
Composting	Current operations do not allow material to be composted.	Develop a composting facility through public-private partnership.
Fueling	Limited fueling infrastructure for Compressed Natural Gas (CNG) or electric collection vehicles.	Explore purchase of additional CNG vehicles and piloting electric solid waste collection vehicles.



Single-Family Sector Options



- Maximize single-stream recycling from residential customers
 - **Current status:** City currently captures about **50%** of recyclable material in the blue roll-cart
 - **Opportunity:** Increasing this to **60-80%** means 15,000 - 30,000 more tons that could be recycled annually
 - **Implementation recommendations:** Education, outreach and compliance measures
- Separate brush and bulky item collection
 - **Current status:** Collect brush and bulky item piles together
 - **Opportunity:** Brush currently disposed represents **45-55%** of brush and bulky items, or an additional 60,000 - 75,000 tons that could be recycled annually
 - **Implementation recommendations:** Update transfer stations, new composting facility, restructure brush and bulky item collection program
 - **Future considerations:** Separate collection of food waste and yard trimmings in roll-cart for composting



Multi-Family Sector Options



- Continue implementing and improving the Multi-Family Recycling Ordinance (MFRO)
 - **Current status:** Based on the initial round of reporting 10,000 tons were recycled by permitted multi-tenant recycling haulers in CY 2020
 - **Opportunity:** With the MFRO in place, the City is well positioned to increase recycling from multi-family generators
 - **Implementation recommendations:** Continue to strengthen the reporting and data verification mechanisms and education, outreach and compliance efforts
 - **Next steps:** Establish a verifiable mechanism to receive refuse tonnage data collected from multi-family complexes
 - **Future considerations:** If existing ordinance does not meet objectives consider additional policies and/or ordinances



Commercial Sector Options



- Adjust reporting requirements and increase reporting rate from non-exclusive franchise haulers
 - **Current status:** Limited understanding of ongoing commercial recycling
 - **Opportunity:** Require comprehensive refuse and recycling tonnage information
 - **Implementation recommendations:** Increase compliance and data verification efforts
 - **Next steps:** Require or incentivize haulers to offer recycling and organics services
 - **Future considerations:** Implement commercial recycling requirements and changes to non-exclusive franchise system that support recycling requirements
- Expand Green Business Certification program
 - **Current status:** 16 businesses have been certified as green businesses
 - **Opportunity:** Work directly with commercial generators to increase recycling on a voluntary basis
 - **Implementation recommendations:** Expand number of certified green businesses
 - **Next steps:** Leverage cross-departmental synergies (e.g., Code Compliance inspections)
 - **Future considerations:** Expand program to include technical assistance services to commercial generators



Next Steps

