CECAP: Dallas is a Zero-Waste Community

Environment & Sustainability Committee

Tim Oliver
Director (Interim)
Sanitation Services Dept.

Danielle McClelland
Zero Waste Division Manager
Office of Environmental
Quality & Sustainability



City of Dallas

March 2, 2020

Overview

- Background
- Zero Waste Plan Status
- Draft CECAP Plan Focus & Goals
- Community Feedback
- Draft CECAP Zero Waste Objectives







Background: McCommas Bluff Landfill (MBLF)

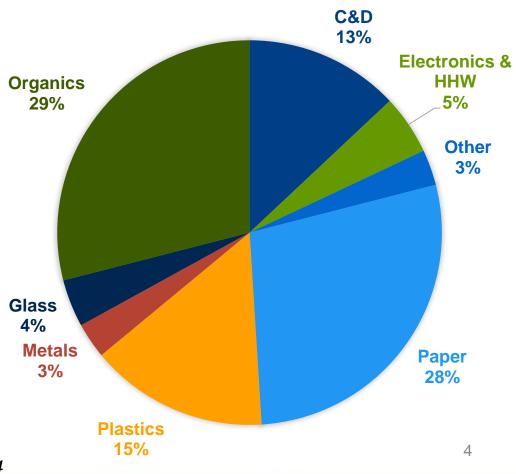
- Estimated landfill life of 35 years
- Receives ~1.9M tons/ year
- City crews deliver ~30% or 600,000 tons annually
- Other 70% comes from multiple sources





Background – MBLF Waste Composition*

- Based on waste audit of 5.2 tons from residential and commercial collections
- Greatest opportunities are in organics, paper, and construction & demolition (C&D)



*Source: City of Dallas Sanitation Services, 2014



Zero Waste Plan: Goals & Strategies*







(2013-2020)

- Marketing & Outreach
- Multifamily/Commercial
- City Facility Zero Waste
- Organics Diversion
- Disposal Bans
- Producer Responsibility

Intermediate

(2021-2030)

- Organics Collection
- Universal Recycling Ordinance
- Resource Recovery Park
- Disposal Bans

Long-Range

(2031-2040)

Evaluate Emerging Technologies

*Source: City of Dallas Local Solid Waste Management Plan, 2013



Zero Waste Plan: Multifamily Recycling

- YTD, 125 multifamily properties have submitted recycling plans (see Appendix, slides 25-26)
- Of those submitted, 62% have been approved
- Staff is conducting random and on-request property site visits
- Staff continues to host Recycling 101 education sessions
- YTD, 46 site visits and 17 education sessions
- Resources at <u>www.dallasrecycles.com</u>



Zero Waste Plan: MFRO Lessons Learned

- Public and private sectors both need time to increase system capacity, build the required infrastructure, educate customers, and plan budget to support MFRO
- Change requires extensive outreach, education, and compliance consultations
- Internal systems needed to be updated/created for permitting, annual report submissions, and property registrations
- Unaddressed provisions are requiring City Plan Commission to implement tiered minimum required parking to support compliance

7



Zero Waste Plan: Organics Diversion

- Dallas currently collects brush & bulk waste together
- Organic materials is about 40%-60% of the waste stream
- Based on recent studies, up to 29% of landfilled materials are organic
 - Organics, including food waste, present future opportunities to increase diversion
- June 12, 2019, Council adopted ordinance changes to implement incremental brush/bulk program modifications
 - Changes which go into effect July 1, 2020 will establish volume limits and promote compliance to help establish a baseline for future program pilots to include organic diversion





Zero Waste Plan: Commercial Recycling

- The recommended strategy to address the path forward on commercial recycling, has been to:
 - Identify Players √
 - Research other Benchmark City Commercial Recycling Programs √
 - Identify Opportunities & Constraints √
 - Develop phased implementation and related ordinance √



S



Programmatic Opportunities & Constraints

Multifamily

- Singular industry
- Homogenous waste stream
- Relatively uniform operations
- Universal professional organizations accessible for education
- All are subject to City Code enforcement and registration
- 2,501 properties subject to MFRO

Commercial

- Includes multiple industries
- Widely variable waste stream
- Operations vary and can include front of house and back of house
- No universal professional organizations accessible for education
- No central enforcement authority
- ~39,400+ businesses potentially subject to commercial recycling*

*Based on City of Dallas, Dallas Water Utilities Billing Data, 2019/ Dallas Central Appraisal District Property Database, 2019



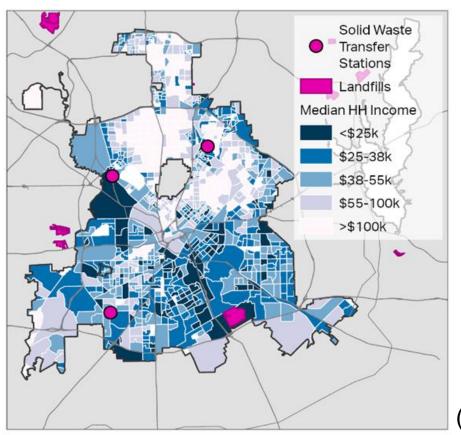
Draft Plan Focus & Goals

- Dallas uses renewable, reliable, and affordable energy
- Dallas' buildings are energy efficient and resilient
- Dallas communities have access to energy efficient, affordable transportation options
- Dallas is a Zero-waste community
- Dallas protects its water resources and its communities from flooding & drought
- All Dallas communities have access to healthy, local food
- All Dallas communities breathe clean air
- Dallas protects its ecosystems that in turn, protect public health



Low Income vs Landfills

Median annual household income by census block vs landfills and solid waste transfer stations



Waste Management Under Climate Equity Lens

"Climate change affects all, but not all people are affected equally."

- Jacqueline Patterson, Director of the NAACP Environmental and Climate Justice Program

(Source: Smart Growth for Dallas, 2020)

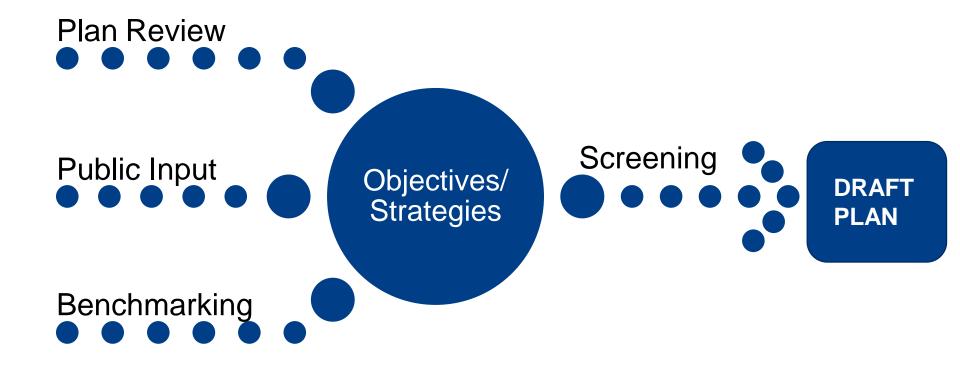


Ideas from Community Outreach Efforts

- Separation of bulk and brush to allow composting/ wood waste diversion
- Mandatory recycling for all
- Source reduction
- City education about waste management
- City enforcement actions

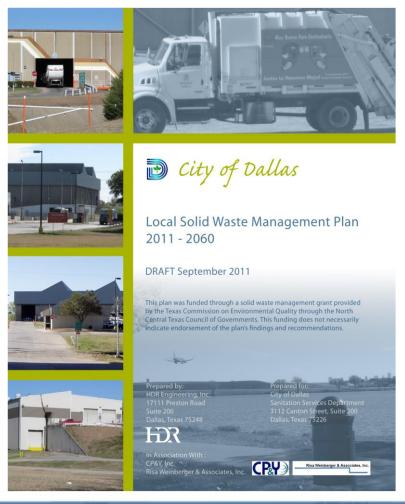


Action Development Process





CECAP Waste Sector Objectives



- Create opportunities to go beyond recycling towards refuse, reuse and repair
- Operate a clean, green and efficient waste system
- Generate energy from organics

Draft Waste Objectives + Actions

Create opportunities to go beyond recycling...

- Actively promote source reduction, universal recycling/ composting
- Develop a comprehensive green procurement plan along with a sustainable procurement policy



Draft Waste Objectives + Actions

Operate a clean, green and efficient waste system

- Improve solid waste, recycling and bulky, brush waste collection efficiency
- Explore potential for electric collection trucks
- Update & implement Local Solid Waste
 Management Plan (AKA Zero Waste Plan)
 - Update Emergency Debris Management
- Expand efforts to reduce illegal dumping
- Encourage development of material markets focusing on creating new economic opportunities







Draft Waste Objectives + Actions

Generate Energy from organics

- Continue to capture gas and expand capacity from landfill for reuse;
- Adopt an ordinance to implement a City-wide organics management Program



Next Steps

- Draft Plan Review: February 3 March 3, 2020
- Finalized plan Text to consulting for formatting: March 6, 2020
- Full Plan review: April 6, 2020
- Council Resolution: April 22, 2020



Questions and Comments

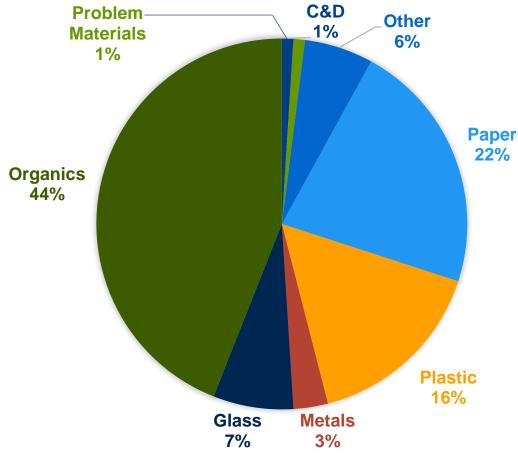


Appendix





Background – Regional Waste Composition*



- Based on waste audit of 5.4 tons of residential waste from 10 cities, including Dallas
- Greatest opportunities are organics, paper, and plastic

*Source: North Central Texas Council of Governments, 2018



Zero Waste Plan

- Approved in 2013
- Major shifts in the last six years
 - Global Markets & Technology
 - Air Quality
 - Climate Change
 - Public Awareness & Tolerance for Change
- Time to update Plan Goals and Strategies



Zero Waste Plan: Single Family Recycling

- Voluntary
- 240,000 accounts
- 55,000 Tons/Year
- Reported diversion rate is ~20% corresponding with single family residential residential program





Zero Waste Plan: Multifamily Recycling

- MFRO adopted June 23, 2018, went into effect January 1, 2020
- Requires properties to:
 - Offer minimum service levels;
 - Use registered recycling collector;
 - Provide ongoing education
 - Submit annual recycling plan with Code multifamily renewal (on a rolling basis monthly)
- As of February 21st, 312 properties have initiated multifamily renewals*

^{*} Renewals are initiated when the account holder begins the application; recycling plans_{r25} are not submitted until account holder completes the application and pays required fees.



Zero Waste Plan: Multifamily Recycling



- Requires recycling collectors to:
 - Use marked containers;
 - Submit annual reports to City;
 - Deliver to an authorized recycling processor;
 - Provide education and specific level of service to properties
- 22 recycling collectors permitted to date

26



Zero Waste Plan: Commercial Recycling

- OEQS has reviewed 12 Benchmark City recycling programs and learned:
 - El Paso & Orlando encourage, but do not require mandatory multifamily or commercial recycling;
 - Phoenix implements "Eco-zones" in parks, and other public places near commercial/ multi-residential areas to facilitate voluntary commercial/ multi-family recycling;
 - Remaining programs typically require single-stream recycling related to primary business operation, along with some C&D and vegetative waste;
 - Most cities allow variances for hardships and for facilities that generate small quantities of recyclable waste;
 - Most cities also handle multi-family and commercial recycling requirements together in one universal recycling ordinance.



Zero Waste Plan: Commercial Recycling

- Multi-family process for hauler registration may be used to support commercial recycling
- Paper, cardboard, and organics including food waste may form easiest way to expand diversion to commercial entities
- Phased implementation is strongly recommended due to #s and different types of businesses (art galleries, bars, banks, churches, dry cleaners, schools, shopping centers, truck stops, warehouses, etc)



28



CECAP: Dallas is a Zero-Waste Community

Environment & Sustainability Committee

Tim Oliver
Director (Interim)
Sanitation Services Dept.

Danielle McClelland
Zero Waste Division Manager
Office of Environmental
Quality & Sustainability



City of Dallas

March 2, 2020