Meeting Agenda

Introductions

Planning Process

Benchmarking

Research & Analysis

Stakeholder Engagement

ARR Comprehensive Plan Overview

Questions and Next Steps

CITY OF AUSTIN

CITY OF AUSTIN · FOUNDED 1839

BURNS McDONNELL.

Introductions

Update to 2011 Zero Waste Master Plan

- The existing 2011 Zero Waste Master Plan has been renamed to the 2023 Zero Waste Comprehensive Plan

- 2011 Plan had a goal to reach 90% diversion by the year 2040

- The 2011 plan focused on introduction to zero waste and access to services

- This is a roadmap for the next 10 years

Key Accomplishments Since 2011

- Curbside Composting at Single Family Homes

- Universal Recycling – recycling, food donation, or composting access for employees at all businesses and food permitted businesses

- Construction Debris Recycling

Planning Process

Planning Process

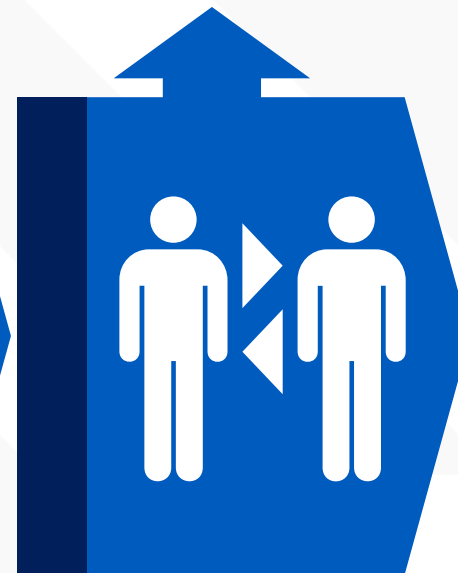**Early Improvement Recommendations**

Feasibility Matrix

Preferred Strategies

Benchmarking

Research Key Definitions, Data/Technology & Policy Issues

Analyze Multiple ARR Topics

Establish Plan Goals & Objectives

Identify Alternatives

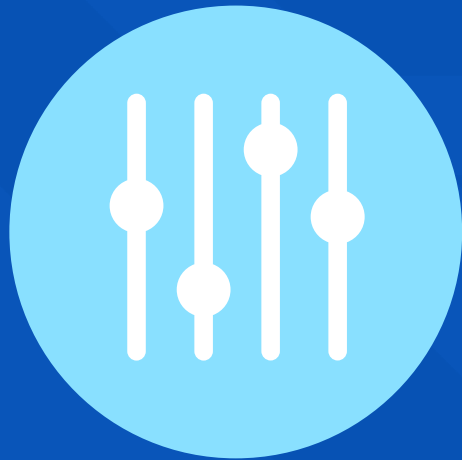**Evaluate Options**

Develop Outline & Write Multiple Drafts Based on Workshop and Stakeholder Engagement Feedback

Research, Analysis & Recommendations

Develop Strategies & Options

Multiple Strategy Workshops

ARR Comprehensive Plan

City/Stakeholder Engagement & Public Outreach

Benchmarking

Benchmarking Overview

Benchmarked 13 Zero Waste cities

Zero Waste definitions

Technology solutions

Policy issues

Key findings & recommendations to inform Comprehensive Plan

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Benchmarking Results

City	Year when City Adopted Zero Waste Vision	Published Diversion Rate*		Waste Generators Considered			
		Percent	Year	Single-Family	Commercial	Multi-Family	Construction & Demolition (C&D)
Los Angeles	2008	76%	2011	✓	✓	✓	✓
Portland	2008	70%	2015	✓	✓	✓	
San Diego	2013	65%	2018	✓	✓	✓	✓
Seattle	1998	57%	2018	✓	✓	✓	✓
Austin	**2005**	**42%**	**2015**	✓	✓	✓	✓
Minneapolis	2015	37%	2016	✓			
Phoenix	2012	36%	2019	✓			
San Antonio	2010	36%	2019	✓			
Fort Worth	N/A	30%	2018	✓	✓	✓	✓
Denver	N/A	23%	2019	✓			
Boston	2014	21%	2019	✓			
Dallas	2013	21%	2016	✓			
San Francisco	2009	City does not use diversion rate	N/A	✓	✓	✓	✓

*Metrics are based on data published at the time of benchmarking analysis (2020). More recent diversion rates may have been published by cities but were not updated within the table in order to maintain a baseline benchmarking comparison.

Benchmarking Results

▶ Of 13 benchmark cities, Austin's diversion rate only trails west coast cities (LA, Portland, San Diego, Seattle)

▶ Cities with higher diversion rates share long-term commitment to Zero Waste principles and have mandates

▶ Cities that consider multiple generator types in their diversion calculations generally have higher diversion rates

▶ Programs with higher diversion rates require recycling mandates and/or enforcement, as well as material bans

▶ Austin's lack of detail on commercial waste generation is a common data gap

▶ Austin's framing of Zero Waste as a vision is consistent with other industry and municipal definitions

Benchmarking Recommendations

► Complementary measurement methods (e.g., per-capita disposal rate and capture rate) in Austin's Zero Waste goals offers a more comprehensive measure of progress

► Evaluate options to obtain data from haulers

► Structure waste characterization methodology to provide ability to carry out capture rate analysis

► Evaluate contents of residential setouts through cart audit data entry, and/or notices for contamination

Research & Analysis

Research & Analysis Divided in Three Key Groups

Residential	Private Facilities & Infrastructure	City-Wide
Alternative Metrics	Facilities & Infrastructure	Circular Economy
Residential Collection	C&D Recycling	Messaging and Outreach
Other Residential Services	Organics Processing	Economic Development
Hard-to-Recycle Materials	Universal Recycling Ordinance	Community Partnerships & Special Events

Research & Analysis Results: Residential

▶ Implement alternative metrics, including per-capita disposal and capture rate, in order to set and track short-term goals

▶ Prioritize capturing material with the greatest future diversion potential

▶ Increase access to proper management of hard-to-recycle materials

OUT OF 5,653 TONS plastic → 2,933 TONS recycled

That's a capture rate of **52%**

# Prioritize Capturing Material with the Greatest Future Diversion Potential

Ranking	Material Type	Diverted Tons	Capture Rate (2018)	Future Diversion Based on 90 Percent Capture (Tons/Year)
1	Food Waste	14,414	29%	29,854
2	Mixed Paper	14,427	55%	9,335
3	Other Plastics	2,170	20%	7,837
4	Yard Trimmings	17,830	67%	6,192
5	Newsprint	7,859	60%	3,833
6	Rigid Plastic	1,466	27%	3,407
7	Glass Jars and Bottles	8,035	68%	2,631
8	Ferrous Metal	1,349	34%	2,234
9	Wood	-	0%	1,988
10	PET	2,405	55%	1,536
11	Aluminum	1,290	43%	1,411
12	Corrugated Cardboard	7,507	78%	1,144
13	Other Metal	469	26%	1,137
14	HDPE	2,053	61%	979

Legend

Recycling	Composting

Increase Access to Proper Management of Hard-to-Recycle Materials
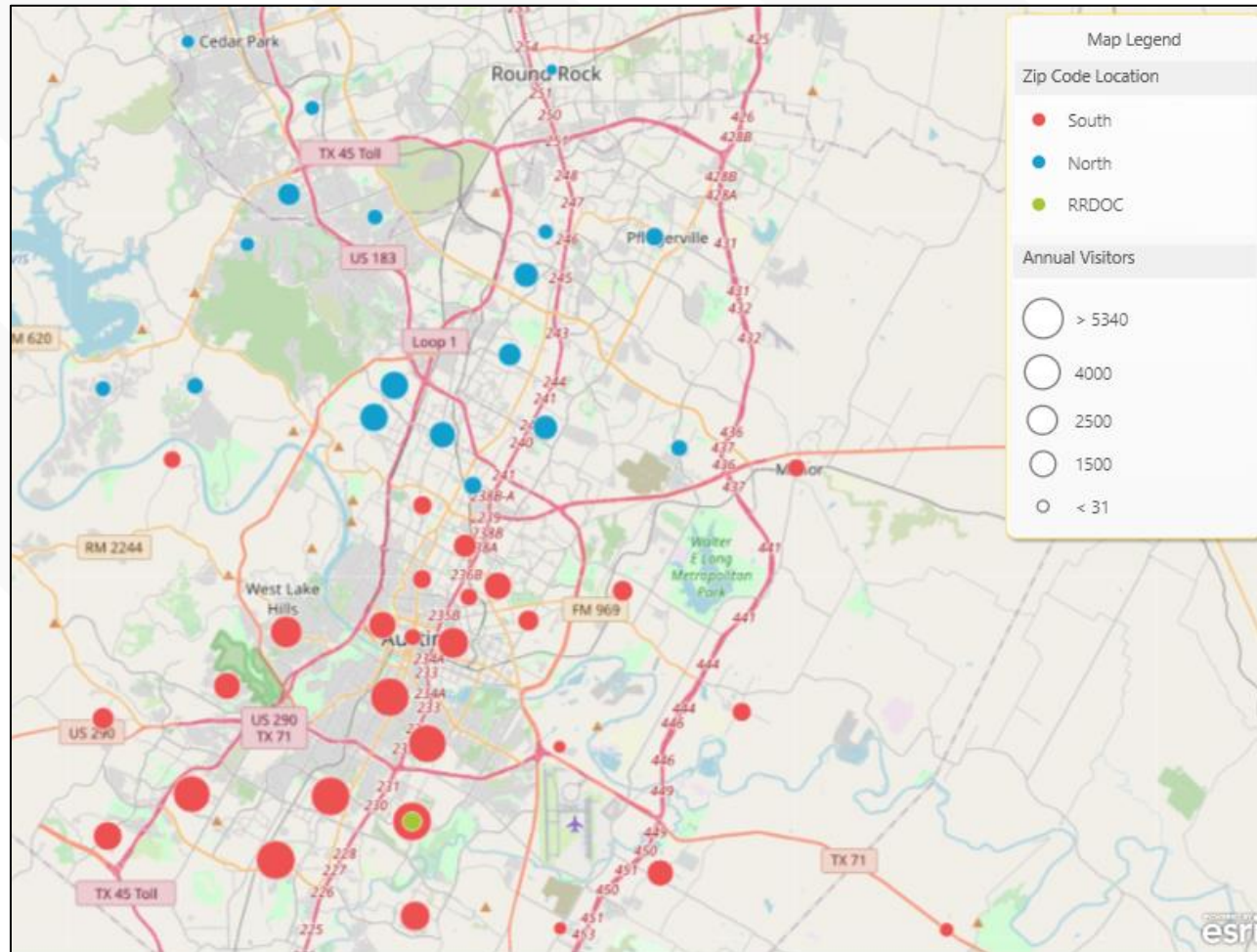
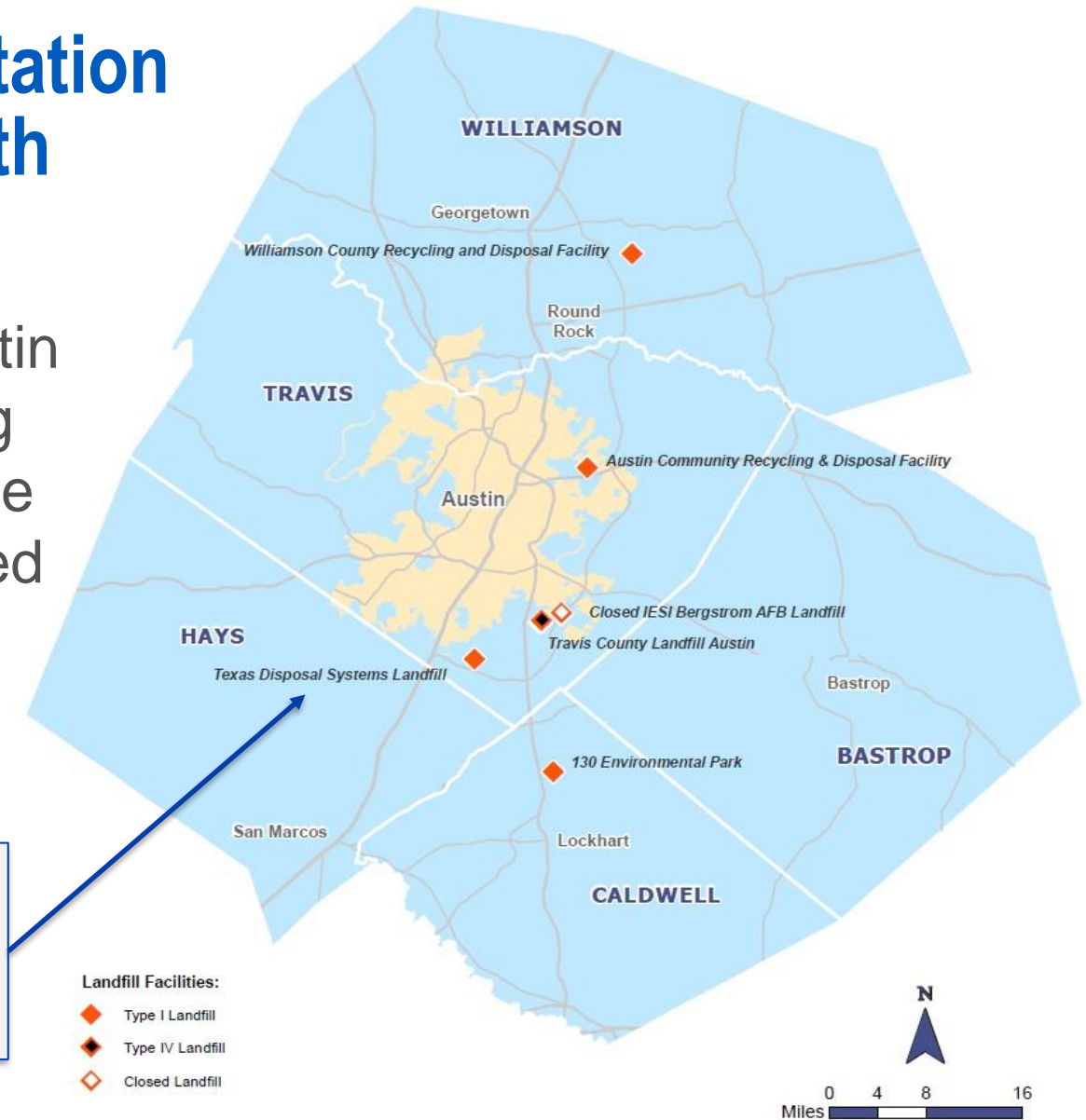**Participation at the RRDOC is concentrated in the four closest zip codes in South Austin**

Research & Analysis Results: Infrastructure and Private Entities

▶ Monitor processing and disposal capacity in region

▶ Utilize transfer stations due to City growth

▶ Focus food waste diversion efforts on commercial food processors, wholesale food distributors, and retail grocery stores

▶ Expand and enhance the URO in a methodical approach

Utilize Transfer Station Due to City Growth

▶ Growth in North Austin coupled with existing landfills located in the South enhances need for transfer stations

Trash collected by ARR is disposed in Creedmoor, nearly 60 miles round-trip from North Austin

WILLIAMSON

Georgetown

Williamson County Recycling and Disposal Facility ◆

Round Rock

TRAVIS

Austin Community Recycling & Disposal Facility ◆

Austin

Closed IESI Bergstrom AFB Landfill
Travis County Landfill Austin

HAYS

Texas Disposal Systems Landfill ◆

Bastrop

BASTROP

130 Environmental Park ◆

San Marcos

Lockhart

CALDWELL

Landfill Facilities:
◆ Type I Landfill
◆ Type IV Landfill
◇ Closed Landfill

N

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Miles

Research & Analysis Results: City-Wide

▶ Introduce the concept of Zero Waste community-wide through accessible, simple language

▶ Continue and expand reuse and waste reduction programs and opportunities

▶ Engage businesses on the topics of Circular Economy

ARR's [Re]verse Pitch Competition has been an engine for Circular Economy entrepreneurship in Austin since 2015

Introduce the Concept of Zero Waste Community-Wide Through Accessible, Simple Language

▶ Effective messages for key ARR programs (e.g., URO, curbside composting collection) implement simple and direct language to affect recycling behavior

▶ Communicating concepts such as "Zero Waste" and "Circular Economy" should similarly focus on simple and direct language to build City-wide familiarity (examples shown in next slide's word cloud)

WHAT CAN I COMPOST?
¿QUÉ PUEDO COMPOSTAR?

FOOD SCRAPS (FRUITS, VEGETABLES, MEAT, BONES, DAIRY, BREAD) SOBRAS DE COMIDA (FRUTAS, VERDURAS, CARNE, HUESOS, PRODUCTOS LÁCTEOS, PAN)

FOOD-SOILED PAPER (CARDBOARD, NAPKINS, PAPER TOWELS, PIZZA BOXES, COFFEE FILTERS) PAPEL CON COMIDA (CARTÓN, SERVILLETAS, TOALLAS DE PAPEL, CAJAS PARA PIZZA, FILTROS PARA CAFÉ)

FLORAL & YARD TRIMMINGS (FLOWERS, LEAVES, GRASS) RECORTES DEL JARDÍN (FLORES, HOJAS, PASTO)

BPI-CERTIFIED COMPOSTABLE FOOD SERVICE WARE (CUPS, FORKS, SPOONS, PLATES) SERVICIO DE MESA COMPOSTABLE CERTIFICADA POR EL BPI (VASOS, TENEDORES, CUCHARAS, PLATOS)

ARR has developed easy-to-understand messaging materials as a part of the URO and other key programs, including Spanish materials to further reach our community

Effective Words and Phrases to Communicate Zero Waste Concepts

Reduce

Remade

Reuse

What can your old stuff do?

Buy Used

Share

Reshare

Repair

Give An Experience

Compost

Donate

FIX-IT AUSTIN

Remanufacture

Recycle

Stakeholder Engagement

Stakeholder Engagement Activities

Focus Groups

In 2020, **46 organizations and businesses** representing **7 key stakeholder groups** shared perspective on Zero Waste through facilitated dialogues

In 2021**, 50 residents representing all 10 Council Districts** described their recycling and composting habits and shared ways for ARR to improve awareness of its services in the community

Community Surveys

In 2020 and 2021, residents provided feedback on their current Zero Waste practices, their knowledge of existing programs and services, and how to best achieve Zero Waste by 2040.

3,153 SURVEYS RECEIVED

ARR Comprehensive Plan Overview

Plan Goal Highlights

- On-call services

- Infrastructure expansion
  - Service Centers
  - Transfer Stations

- Fleet electrification

- Data and measurement expansion
  - Keep existing Zero waste goal
  - Expand types of data beyond diversion rate
    - Per capita disposal and capture rate
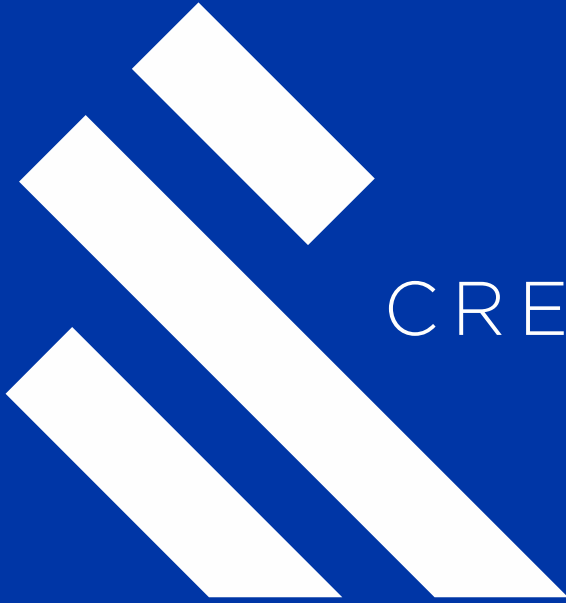
? Questions and Next Steps

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Additional Questions?

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