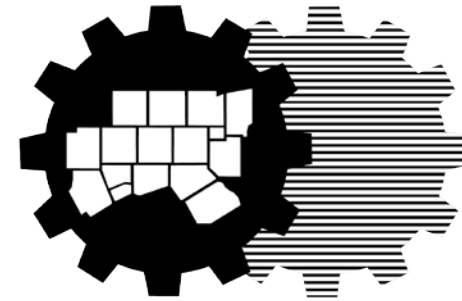


NCTCOG Western Region Solid Waste Capacity Study

NOVEMBER 16, 2020



North Central Texas
Council of Governments



AGENDA

Introductions

Project Survey Results

Preliminary Needs Assessment Findings

Next Steps

This study was funded through a solid waste management grant provided by TCEQ through NCTCOG. This funding does not necessarily indicate endorsement of the study's findings or recommendations.



Introductions

PROJECT TEAM

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ELENA BERG – NCTCOG

MICHAEL CARLETON – AZ&B

RACHEL HERING - KTB

PROJECT SURVEY RESULTS

UNDERSTANDING ISSUES, NEEDS & RESOURCES

Survey Purpose

Understand	Understand issues facing local governments.
Identify	Identify programs and planned changes.
Identify	Identify local resources and planned facilities.
Establish	Establish waste generation and recycling rates.

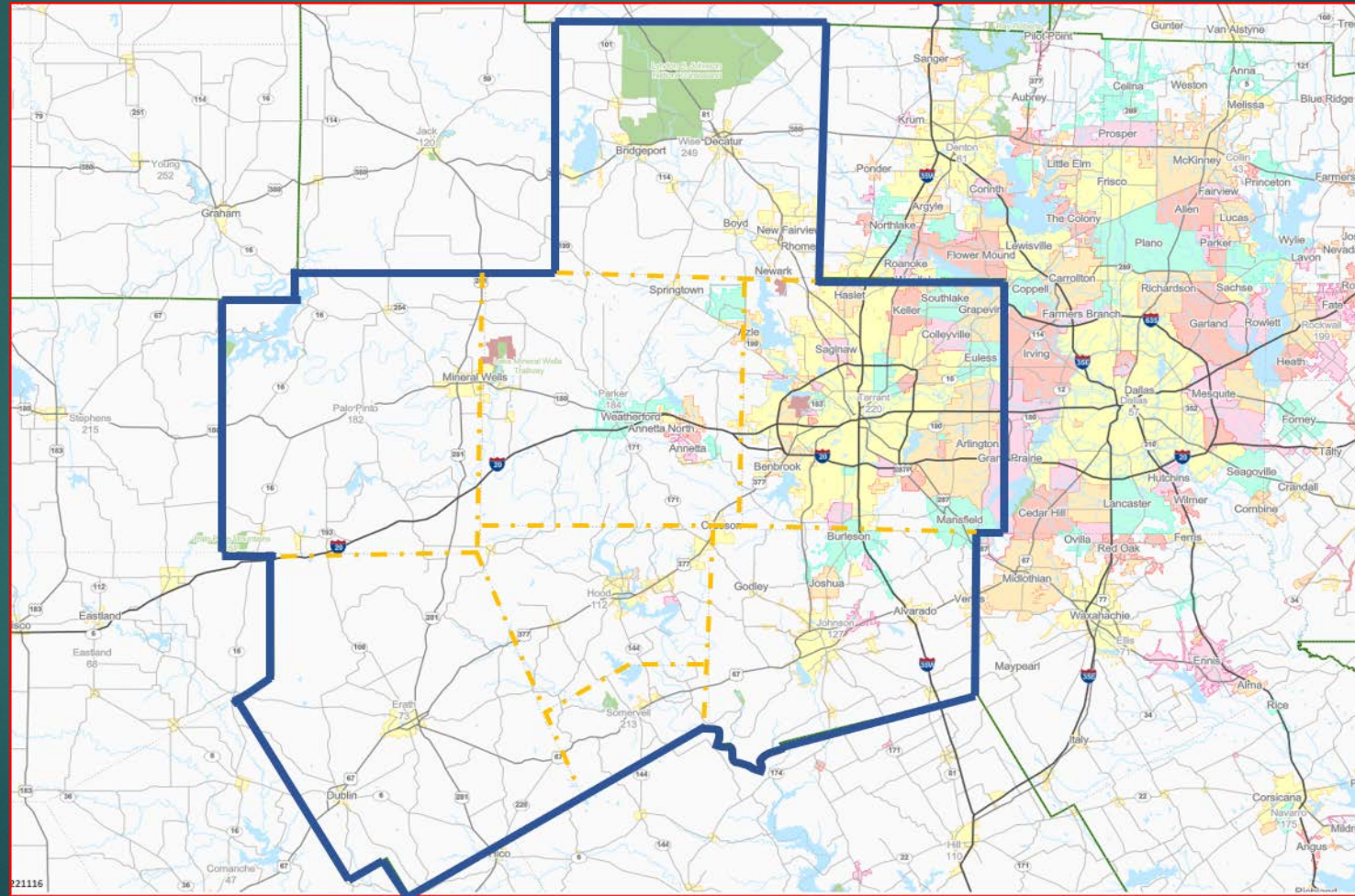
The Survey is key to the completion of the Needs Assessment Report.

Survey Background

- ▶ Survey questions **reviewed by the Policy Advisory Group**
- ▶ **Survey Monkey** used as the primary distribution tool
- ▶ Distribution through emails to **local government officials**
- ▶ Survey period **October 7 through November 5**
- ▶ Scoring method “high” ranking =5, “**medium**” ranking = 3 and “low” ranking =1. Final score was an average of all responses

The Western Region covers 700 square miles – 2.8 million people

- ▶ Erath
- ▶ Hood
- ▶ Johnson
- ▶ Palo Pinto
- ▶ Parker
- ▶ Somervell
- ▶ Tarrant
- ▶ Wise
- ▶ City of Denton (participant, but not part of Western Region)



Survey Responses

37 Responses

Annetta
Annetta North
Annetta South
Arlington
Aurora
Azle
Benbrook
Burleson
Cleburne
Colleyville
Dalworthington Gardens
Decatur
DeCordova

Denton
Euless
Fort Worth
Glen Rose
Granbury
Grapevine
Haltom City
Haslet
Hurst
Joshua
Keller
Mansfield
New Fairview

North Richland Hills
Richland Hills
Stephenville
Trophy Club
Watauga
Weatherford
Westworth Village
Hood County
Johnson County
Tarrant County
Wise County

What are the Issues?

- ▶ What are local governments' biggest concerns?
- ▶ *What are the perceived benefits of regionalization?*
- ▶ What are the concerns of regionalization?
- ▶ *What are waste tire concerns?*

What concerns you today and in the future?	Near-term Concern	Long-term Concern
<i>Cost of Service</i>	3.45	4.00
<i>Landfill Capacity</i>	3.45	3.68
Storm Events	3.27	3.41
<i>Recycling Material Markets</i>	3.45	3.41
Recycling Material Contamination	3.11	3.22
<i>Transportation Costs</i>	3.24	3.51
Landfill Ownership	2.21	3.35
Illegal Dumping	3.38	2.49
Tires	3.26	3.26

Based on a 1-5 scoring 1= low, 3 = medium, 5= high

Biggest near-term and long-term concerns are **cost related**, followed by **landfill capacity**.

Concern about **recycling markets lessens with time**.

Each issue ranked higher than a medium concern.

Any successful regional options must demonstrate good economics.



OBSERVATIONS

Biggest Benefit of Taking a Regional Approach	Low	Medium	High	Score(1)
<i>Reducing Costs</i>	1	13	23	4.19
Reducing local responsibilities for solid waste management	7	15	15	3.43
Reducing the environmental impacts of waste management	4	14	19	3.81
<i>Increasing opportunities to implement programs that would otherwise not be feasible</i>	2	14	21	4.03
<i>Assuring long-term waste capacity</i>	2	8	27	4.35

(1) Scoring – 1=low, 3=medium, 5=high

(2) 8 = ... Waste ...

Observations

- ▶ There is an understanding that the **region faces disposal capacity issues**.
- ▶ **Cost savings are what local governments view as second biggest benefit** of a regional approach.
- ▶ Recognizing that **transportation is going to be more challenging in the future**, this issue is a major concern over the long-term.
- ▶ Given that almost all cities rely on private sector contracts, their **day-to-day responsibilities are limited**.

Biggest Concern about Regional Approach	Low	Medium	High	Average(1)
<i>Loss of decision-making control</i>	6	12	18	4.33
<i>Higher costs</i>	2	10	24	4.61
<i>Reduced level of service</i>	4	12	20	4.44
Decisions regarding facility site selection	8	15	13	4.14
Long-term commitments	4	20	12	4.22
<i>Greater bureaucracy</i>	5	8	23	4.50
<i>More regulations</i>	6	11	19	4.36
Potential use of eminent domain	11	13	12	4.03

(1) Average based on 1-5 scoring 1 = low, 3 = neutral, 5 = high

(2) Source: NCTCOG Western Region Local Government Survey

Observations

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- ▶ *Cost is the top concern followed by the potential of a greater bureaucracy.*
- ▶ Loss of decision making is another key concern expressed.
- ▶ *A potential regional organization must show cost savings, while providing adequate input into decision making.*

Interest in Cooperative Recycling Programs	Yes	Maybe	Yes and Maybe	No
<i>Public information</i>	22	9	31	3
<i>Residential curbside collection</i>	16	13	29	6
<i>Material marketing</i>	18	9	27	7
<i>Yard waste collection</i>	19	7	26	7
Drop-off centers	14	8	22	12
Food waste collection	11	10	21	13

Source: NCTCOG Western Region Local Government Survey

Would you be interested in participating in a Regional program for the following types of recycling programs?



There is interest in regional approaches.

Observations

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- ▶ High amount of interest in regional public information programs and potential regional recycling programs.
- ▶ May require inter-local agreements or a regional entity to take the lead.
- ▶ Another possibility is for NCTCOG to take on a broader regional role in public information.
- ▶ Some communities in Parker County have already established "regional" collection agreements.

Tire Issues	Low	Medium	High	Average
<i>Illegal tire dumps</i>	12	9	13	3.0
Markets for recovered tires	13	11	10	2.8
<i>Mosquito habitat</i>	10	11	13	3.2
Consuming landfill capacity	11	18	5	2.6
Large scale tire fires in the community	24	5	4	1.8

Average is scored on a 1-5 scoring 1= low, 3 = neutral, 5= high
 Source: NCTCOG Western Region Local Government Survey

Mosquito habitat and illegal tire dump sites are the biggest tire-related concerns for the region.

What are you planning?	Yes	Maybe	No
Modify Collection Program	10	16	11
<i>Enhance recycling efforts</i>	14	14	9
<i>Add drop-off centers for MSW</i>	1	10	26
Add recycling centers	2	5	30
Build a transfer station	1	5	31
Build a compost facility	0	6	31
Build a HHW facility	0	3	34
<i>Build or expand a landfill</i>	4	1	32
Build a material recovery facility	0	2	35

Source: NCTCOG Western Region Local Government Survey

What programs would you like to see on a regional basis?

- Curbside yard waste
- C&D processing / recycling
- Food waste recycling
- HHW collection efforts
- Regional recycling collection
- Large brush facilities
- Regional E-waste collection
- Management of debris from road projects
- Regional convenience centers
- Illegal dumping enforcement
- Regional landfills

Observations

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- ▶ Significant interest in re-evaluating recycling efforts – **local governments may want to establish more cost-effective, multi-jurisdictional programs.**
- ▶ *An option may be for number of local governments to **arrange multi-city collection contracts** to reduce costs.*
- ▶ **Existing contracts** are going to make this difficult.
- ▶ **Three MSW and one CD landfill are planning expansion.**
- ▶ **There is time to re-evaluate contracts.**

Collection Programs and Facilities

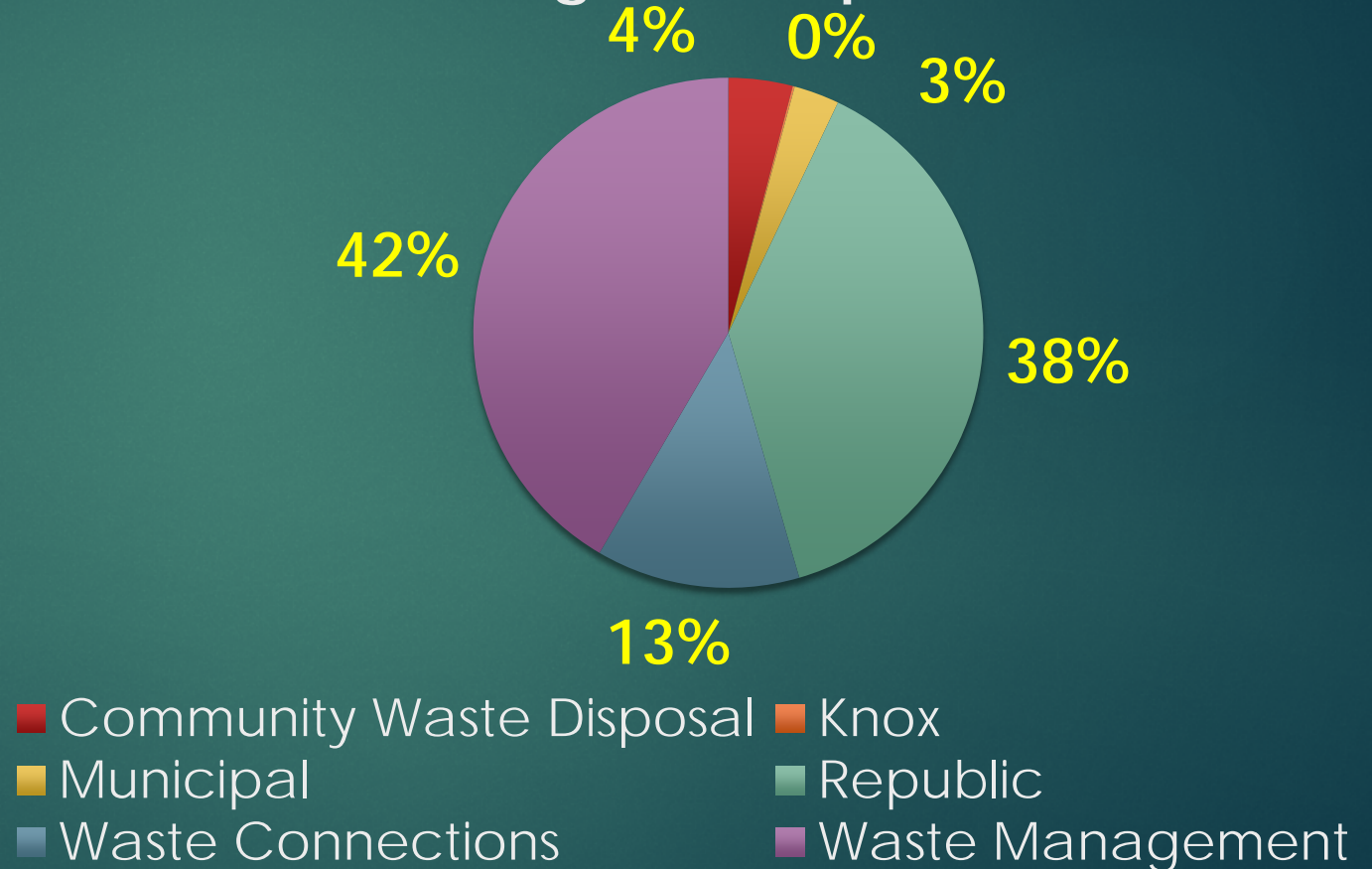
- ▶ How are local governments collecting waste?
- ▶ What facilities do they currently have?
- ▶ What facilities are being planned?

Who Provides Service?

Provider	Number of cities served
Republic	14
Waste Management	2
Community Waste Disposal	3
Knox Services	1
Progressive	5
City Services	2
Other	13

Again, multiple contracts and service providers will have to be addressed for regional organization.

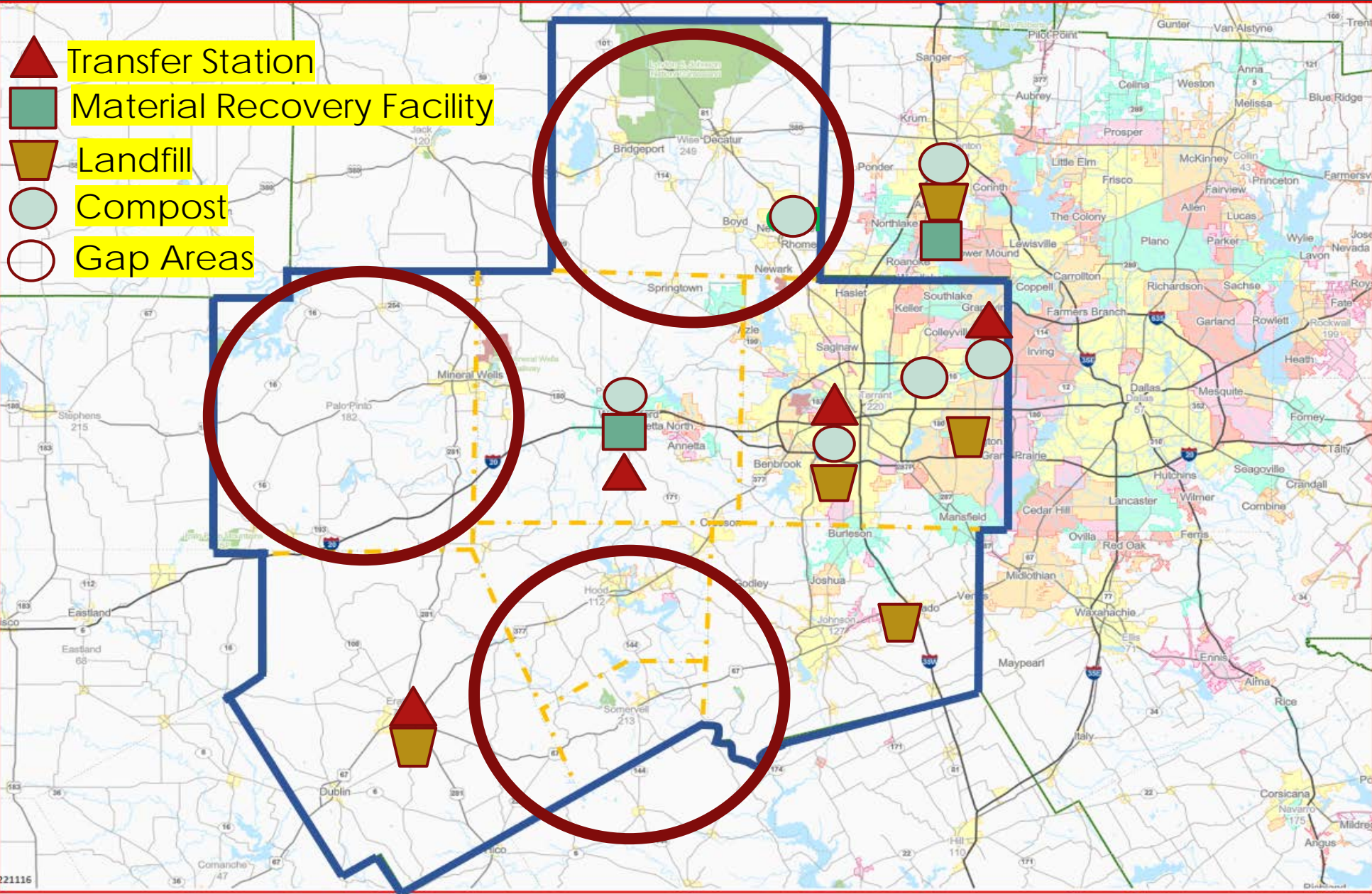
Service Providers Percentage of Regional Population



Collection Contracts & Flow Control

- ▶ Most local governments have contracts for waste disposal that require varying degrees of service & different costs and terms that expire over many years.
- ▶ ***Assuring a flow of waste to a solid waste facility is CRITICAL!***
- ▶ This will be one of the largest issues that will need to be addressed as it relates to future facilities.
- ▶ ***There is time to deal with this issue.***

- ▲ Transfer Station
- Material Recovery Facility
- ▾ Landfill
- Compost
- Gap Areas



Are you planning a new facility?

Even with planned sites, there may still be gaps in capacity and transfer options.

Planned Facilities – Drop-off facilities, recycling centers and HHW

City	Add drop-off centers for MSW	Add recycling centers	HHW Collection
Annetta			
South/Parker	Maybe	No	No
Azle	Maybe	Yes	No
Benbrook	No	Maybe	No
Burleson	No	No	Maybe
Denton	Yes	Maybe	No
Fort Worth,	Maybe	No	Maybe
Glen Rose	No	Maybe	No
Granbury	Maybe	No	No
Grapevine	Maybe	Maybe	Maybe
Mansfield	Maybe	No	No
New Fairview	No	Maybe	No
North			
Richland Hills	Maybe	Yes	No
Stephenville	Maybe	No	No
Weatherford	Maybe	No	No



Source: Western Region Local Government Survey.

Photo Source: City of Fort Worth

Planned Facilities – Transfer Stations

City/Town/County	Build a transfer station
Annetta North	Maybe
Denton	Yes
Fort Worth	Maybe
Grapevine	Maybe
Stephenville	Maybe
Weatherford	(private firm may)



Source: Western Region Local Government Survey, October 2020.

Photo Source: City of Cleburne

Planned Facilities – Compost and Material Recovery Facilities

City	Compost facility	MRF
Denton	Maybe	Maybe
Fort Worth	Maybe	No
Grapevine	Maybe	No
New Fairview	Maybe	No
North Richland Hills	Maybe	No
Weatherford	Maybe	Maybe



Planned Facilities – Compost Facilities

City/Town/County	Build or expand a landfill
Arlington	Yes
Denton	Yes
Fort Worth	Maybe
Stephenville	Yes
Turkey Creek Landfill	Expansion permit amendment filed
Fort Worth C&D Landfill	Expansion permit amendment filed

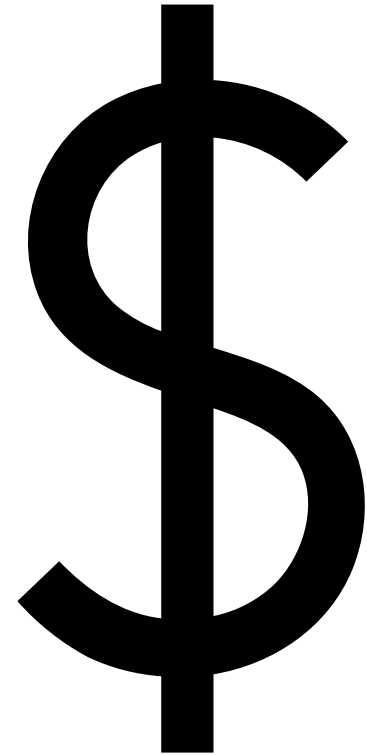


Source: Local Government Survey, October 2020.

Photo Source: Google Earth

How are programs funded?

- ▶ 82% of collection programs funded through **monthly service fees**.
- ▶ 64% of recycling collections through **monthly service fees**.
- ▶ **Tipping fees pay for landfill operations.**

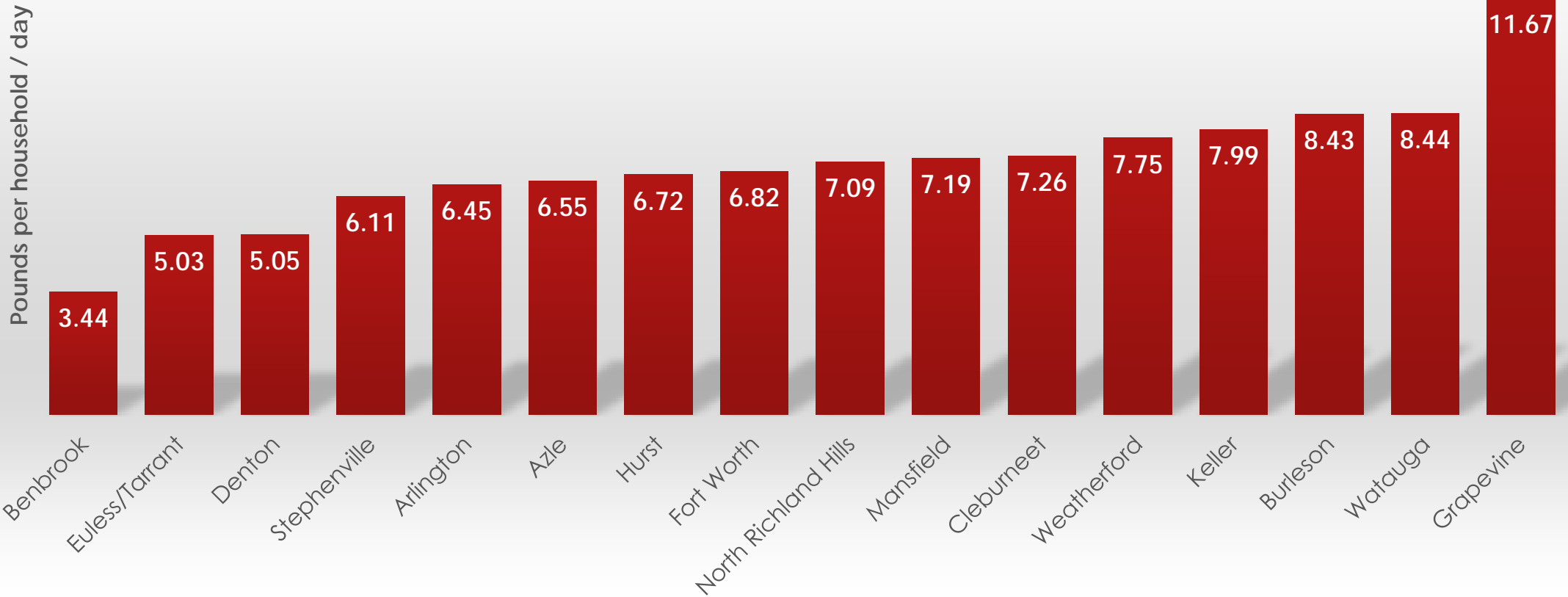


Residential Waste Generation Rates

Average is 6.60 pounds per household per day

Source: Western Region Local Government Survey

Per Household Waste Generation



Observations

Factors affecting this include housing size, public information programs, and recycling efforts.

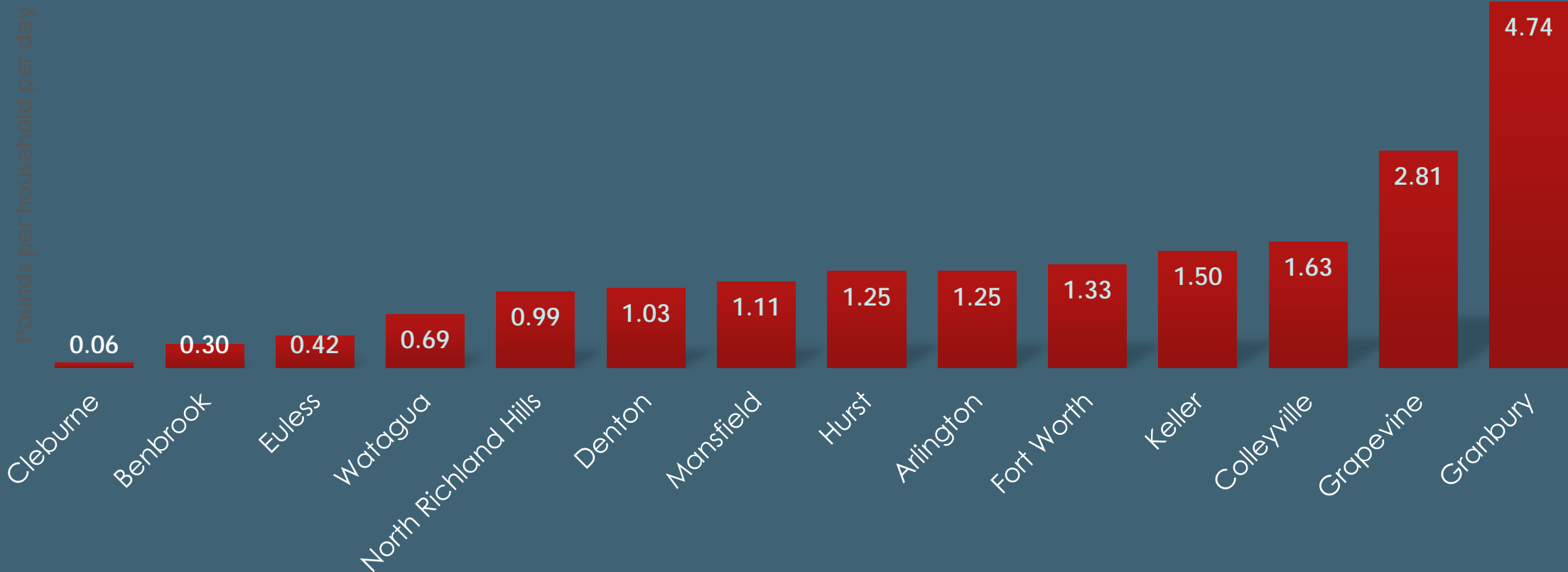
Majority of regions waste stream is generated by the commercial sector.

Single family residents represent only 27% of the total waste stream.

Waste generation rate is an excellent benchmark for determining success of residential waste reduction / recycling programs.

Residential Recycling Rate – 1.2 pounds per household per day weighted average

Per Household Residential Recycling Rate



Observations

1.2 pounds per household per day is 18% of the residential waste stream.

Factors affecting rates include:

- What material are recycled
- Frequency of collection
- Public information efforts

Key Findings from Survey

- ▶ Local governments are **concerned about costs, landfill capacity and recycling markets.**
- ▶ There is **interest in a regional approach**, especially if it reduces costs.
- ▶ There is **concern that a regional approach could cost more and expand bureaucracy.**

Key Findings from Survey

- ▶ **FLOW CONTROL** is going to be a **critical** issue for the success of a regional program - there are contractual issues that need to be resolved.
- ▶ There are **facilities planned for the region**. Local governments should explore regional options to reduce cost and increase efficiencies.



Next Steps

Next Steps

- ▶ Provide PAG with full DRAFT Needs Assessment Report.
- ▶ Present to local governments and to the RCC.
- ▶ Initiate one-on-one interviews for Options Report.

Contact Information

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