

RESIDENTIAL SOLID WASTE AFFORDABILITY STUDY

City of Austin

November 2018

Overview of Study

Objectives

- ▶ Conduct a comprehensive, data-driven benchmarking study of public and private solid waste collection operators in Texas
- ▶ Provide basis for assessment of ARR's affordability and sustainability of services to customers

Methodology

- ▶ Gather publicly available data
- ▶ Interview staff of benchmark cities for additional data and understanding
- ▶ Conduct data analysis and develop findings

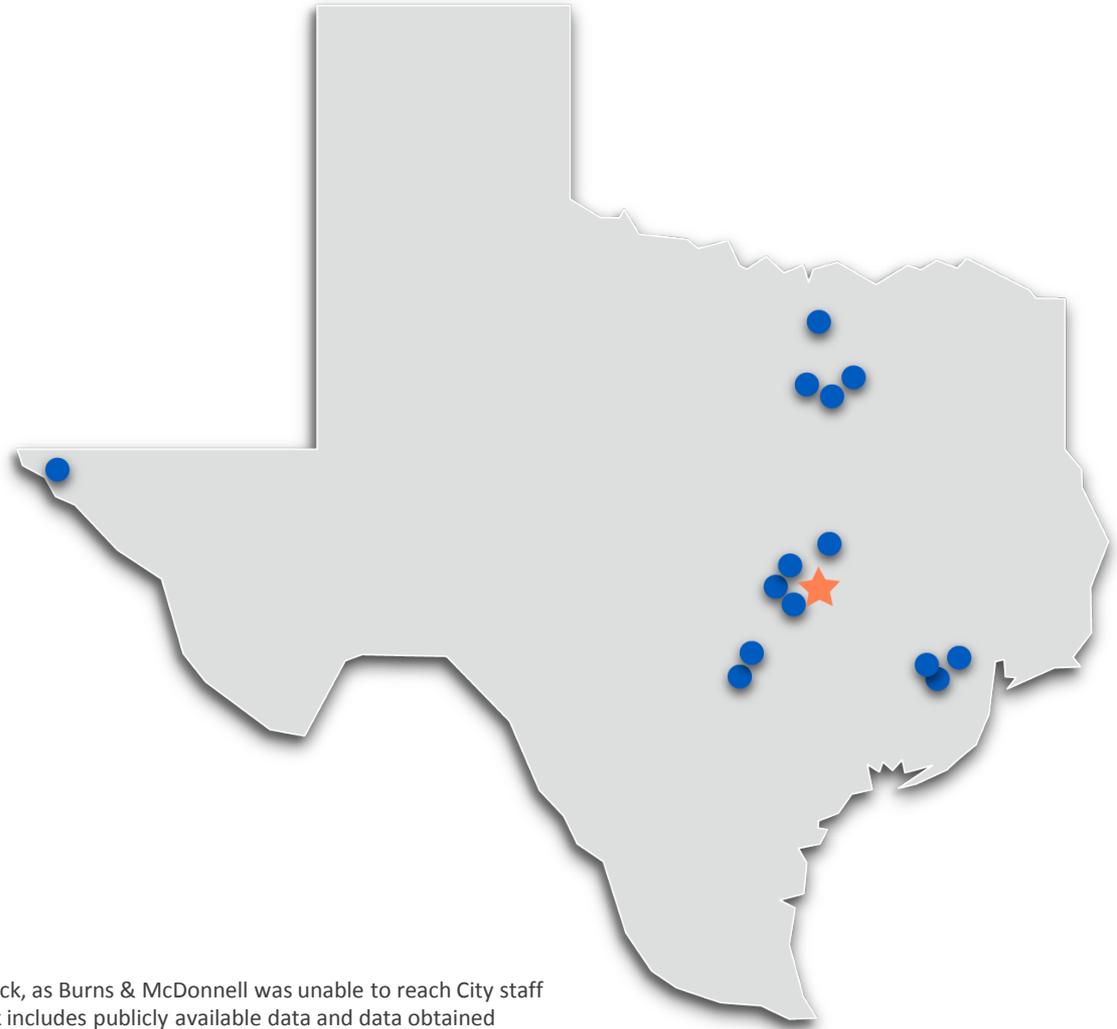
Benchmarking Challenges

- ▶ There are many factors impacting cities' service offerings, cost of service, and rates
 - Simple comparison of rates is challenging
 - Necessary to gather and analyze detailed data and information to develop a comprehensive understanding of solid waste programs and potential implications for the City of Austin

Benchmark Cities

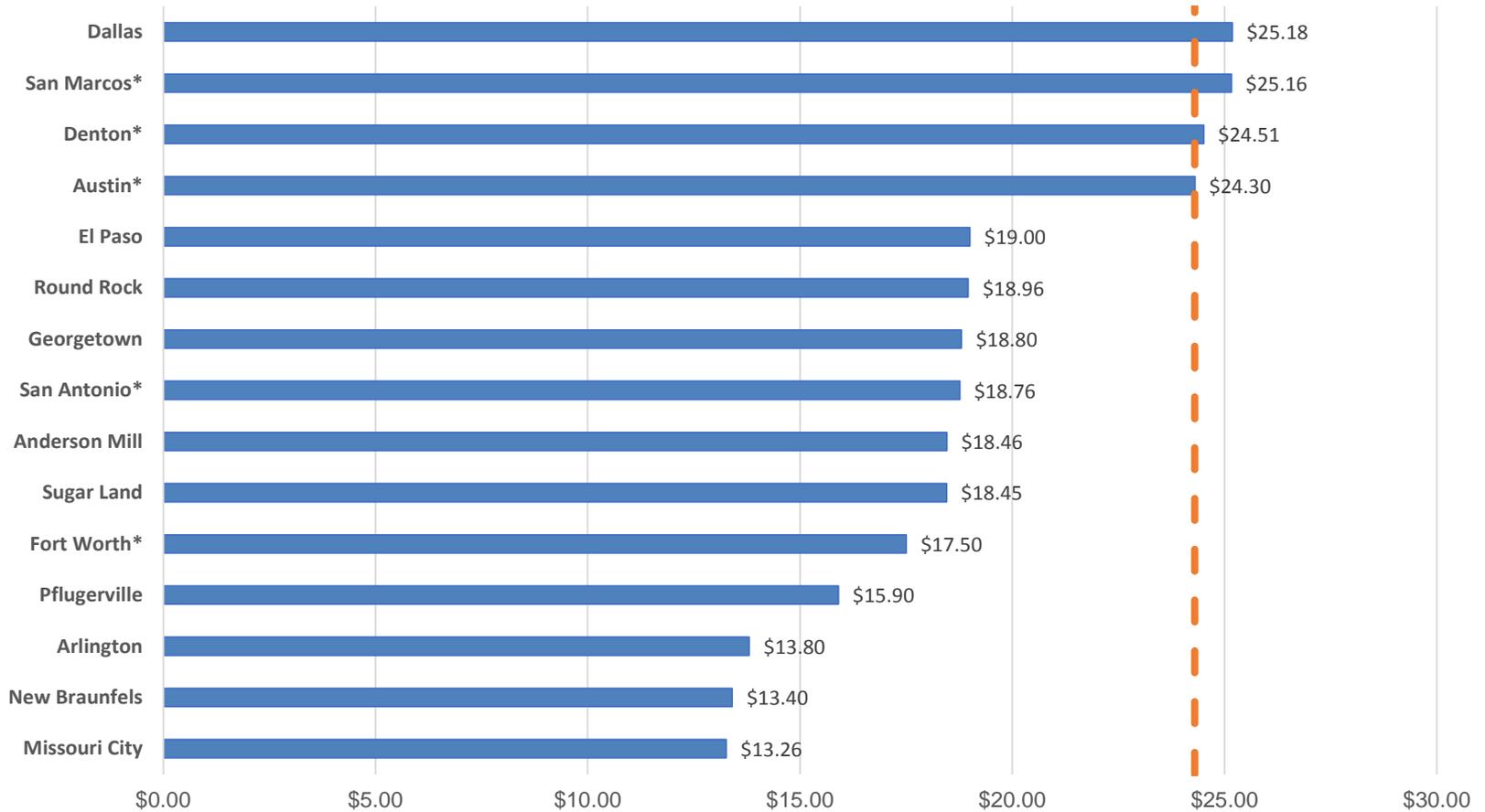


- Anderson Mill
- Arlington
- Dallas
- Denton
- El Paso
- Fort Worth
- Georgetown
- Houston
- Missouri City
- New Braunfels
- Pflugerville
- Round Rock
- San Antonio
- San Marcos
- Sugar Land



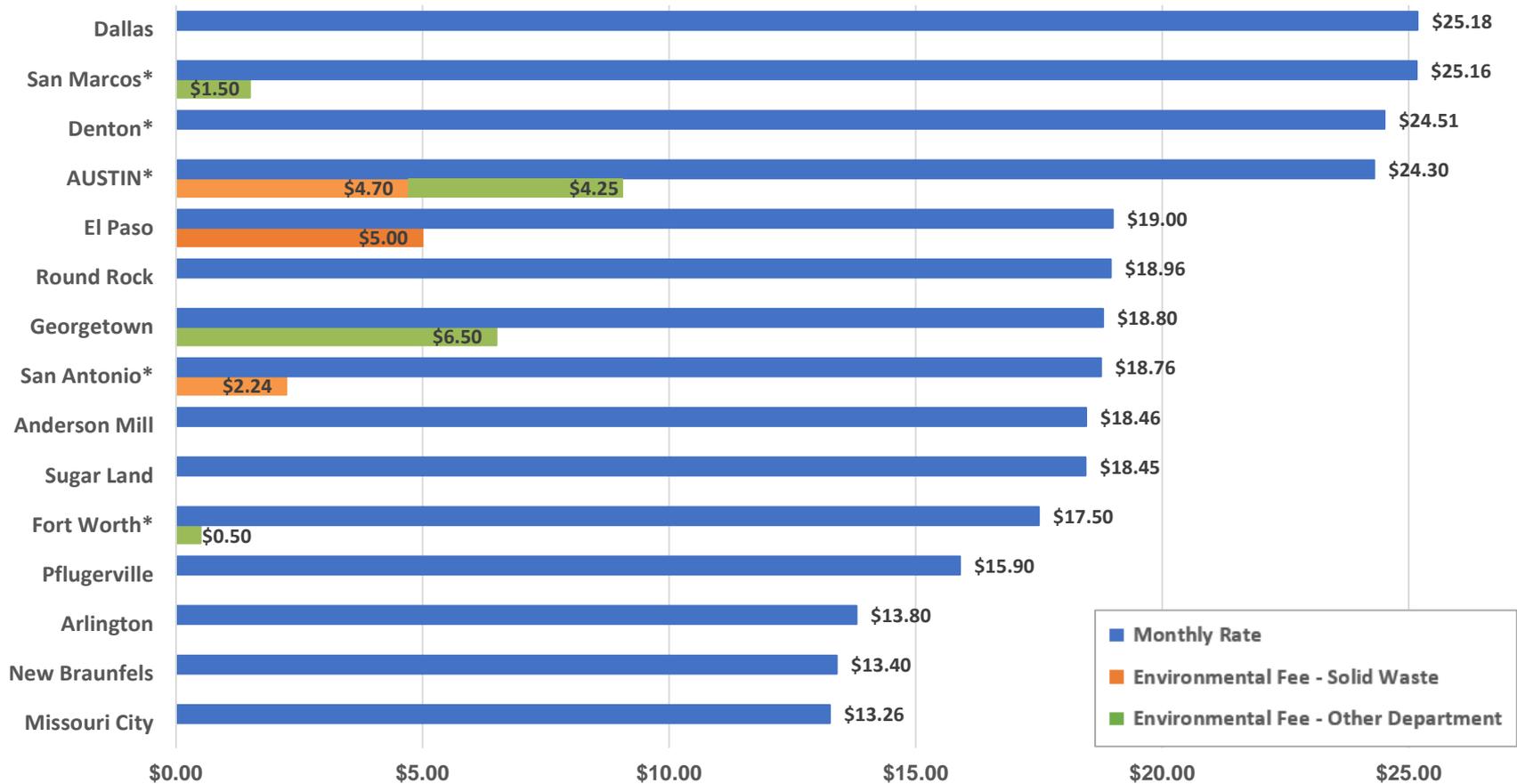
1. This analysis contains partial data for Round Rock, as Burns & McDonnell was unable to reach City staff for an interview. Data included for Round Rock includes publicly available data and data obtained through prior recent benchmark studies conducted by Burns & McDonnell.

Residential Monthly Rate Comparison



1. Cities marked with an * have variable residential monthly rates based on cart capacity. Rates shown for these cities are for 60/64-gallon carts.
2. Rates do not include sales tax.
3. ARR residential customers pay a monthly base fee of \$14.05 plus a per-gallon fee of \$0.16 for 64-gallon carts or smaller and \$0.30 per gallon for 96-gallon carts.
4. The City of Houston was included in the benchmark analysis but is not shown in this chart because residential solid waste services are funded by the General Fund and customers do not pay a separate monthly user fee.

Residential Monthly Rate Comparison + Environmental Fees



1. Cities marked with an * have variable residential monthly rates based on cart capacity. Rates shown for these cities are for 60/64-gallon carts.
2. Six cities, including Austin, have monthly environmental fees in addition to monthly solid waste rates. For some cities, the environmental fee is entirely allocated to the solid waste department, in some cities it is entirely allocated to other City Departments, and in Austin's case, the fee is split between ARR and another department. The Environmental fees fund a variety of solid waste and non-solid waste services.
3. The City of Houston was included in the benchmark analysis but is not shown in this chart because residential solid waste services are funded by the General Fund and customers do not pay a separate monthly user fee.

Residential Services Comparison

- ▶ Information provided on the following slide is a comparison of services that each city's solid waste department (or equivalent) or its hauler provides
- ▶ Indications are given as to the funding source for each service
- ▶ For additional detail on services provided by each city, please refer to the Detailed Residential Services Matrix

Legend	
★	Provided with monthly rates
■	Material collection provided but not as separate service
◆	Provided with an environmental fee
▲	Provided with other funding source
●	Provided and funded by another city department
(blank)	Service is not provided by the city

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	Austin	Anderson Mill	Arlington	Dallas	Denton	El Paso	Fort Worth	Georgetown	Houston	Missouri City	New Braunfels	Pflugerville	Round Rock	San Antonio	San Marcos	Sugar Land
CORE SOLID WASTE SERVICES																
Refuse	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Recycling	★	★	★	★	★	★	★	★	★	★		★	★	★	★	★
Bulky	★	★	■	★	★		★	★	★	★		★	★	★	★	★
Brush	★	■	■	■	★	■	■	■	★	★	■	★		★	■	★
Yard trimmings	★	■	■	■	■	■	★	★	★	■	★	■	■	★	■	■
Organics (including food scraps)	★													★	★	
ADDITIONAL SERVICES																
Household Hazardous Waste (HHW)	◆			★	★	★		★	★		★			◆	★	★
Textiles collection	★												NR			★
Dead animal collection	◆			★			★		★					★◆		
Prescription medication drop-off	◆				★											
Drop-off centers	◆			★	★	★	★		★				NR	◆	★	★
Street sweeping	◆						◆						NR			
Bike lane sweeping	◆						★◆						NR			
Illegal dumping cleanup	◆		★	★	★	★	★		★				NR	★	◆	★
Neighborhood Clean-ups	◆					★							NR	◆		
Post-disaster response/cleanup	★◆			★	★		★		★				NR	★		
Special events	★◆	★					★		★	★	★	★	★	★	★	★
Education and outreach	★◆			★	★	★	★	★	★	★	★	★	★	★	★	★
Central Business District (CBD)	◆					◆										

- ★ Provided with monthly rates
- ◆ Provided with an environmental fee
- ▲ Provided with other funding source
- Material collection provided but not as separate service
- Provided and funded by another city department
- (blank) Service is not provided by the city
- NR Not Reported

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	Austin	Anderson Mill	Arlington	Dallas	Denton	El Paso	Fort Worth	Georgetown	Houston	Missouri City	New Braunfels	Pflugerville	Round Rock	San Antonio	San Marcos	Sugar Land
CORE SOLID WASTE SERVICES																
Refuse	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Recycling	★	★	★	★	★	★	★	★	★	★	▲	★	★	★	★	★
Bulky	★	★	■	★	★	▲	★	★	★	★	▲	★	★	★	★	★
Brush	★	■	■	■	★	■	■	■	★	★	■	★	▲	★	■	★
Yard trimmings	★	■	■	■	■	■	★	★	★	■	★	■	■	★	■	■
Organics (including food scraps)	★													★	★	
ADDITIONAL SERVICES																
Household Hazardous Waste (HHW)	◆		▲	★	★	★	▲	★	★		★ ▲		●	◆	★	★
Textiles collection	★												NR			★
Dead animal collection	◆	●	●	★		▲	★	●	★	●	●	●	●	★ ◆	●	●
Prescription medication drop-off	◆		●	●	★	●	●	●	●	●		●	●	●	●	
Drop-off centers	◆		▲	★	★	★	★	▲	★		▲	▲	NR	◆	★	★
Street sweeping	◆		●	●	●	●	◆	●	●	●	●		NR	●	●	●
Bike lane sweeping	◆			●		●	★ ◆			●			NR			
Illegal dumping cleanup	◆		★	★ ●	★ ●	★	★	▲	★	▲	▲	●	NR	★	◆ ▲	★
Neighborhood Clean-ups	◆			●		★		▲	▲				NR	◆		
Post-disaster response/cleanup	★ ◆		▲	★	★	●	★	▲	★	▲	▲	▲	NR	★	▲	▲
Special events	★ ◆	★		●	▲	▲	★ ●	▲	★	★	★	★	★	★ ●	★	★
Education and outreach	★ ◆		▲	★	★	★	★	★	★	★	★	★	★	★	★	★
Central Business District (CBD)	◆					◆	▲									

★ Provided with monthly rates
◆ Provided with an environmental fee

▲ Provided with other funding source
■ Material collection provided but not as separate service

● Provided and funded by another city department
(blank) Service is not provided by the city
NR Not Reported

Key Findings: Rates and Service Types

▶ Monthly Rates

- Austin is in **highest quarter** of benchmark cities based on 64-gallon cart, but 32-gallon cart is in the mid-range
- **Comparable** to other cities (Denton, San Marcos) that also have variable rates
- Some cities' residential services receive supplemental funding from commercial rates; residential rates appear artificially low (Missouri City, Arlington)

▶ Environmental Fee

- When the Clean Community Fee is also considered, Austin's total monthly fees appear **higher** than benchmark cities
- However, Austin provides many **additional services** funded by the Clean Community Fee which are
 - not provided by other cities or
 - funded by other sources or city departments

▶ Services

- Austin is the **only** city that provides **all** benchmarked services
- Austin and San Antonio are the only cities that provide **six** types of **separate** regular collections
 - Refuse
 - Bulk
 - Yard trimmings
 - Recycling
 - Brush
 - Organics

Comparison to Cities with High Recycling Goals

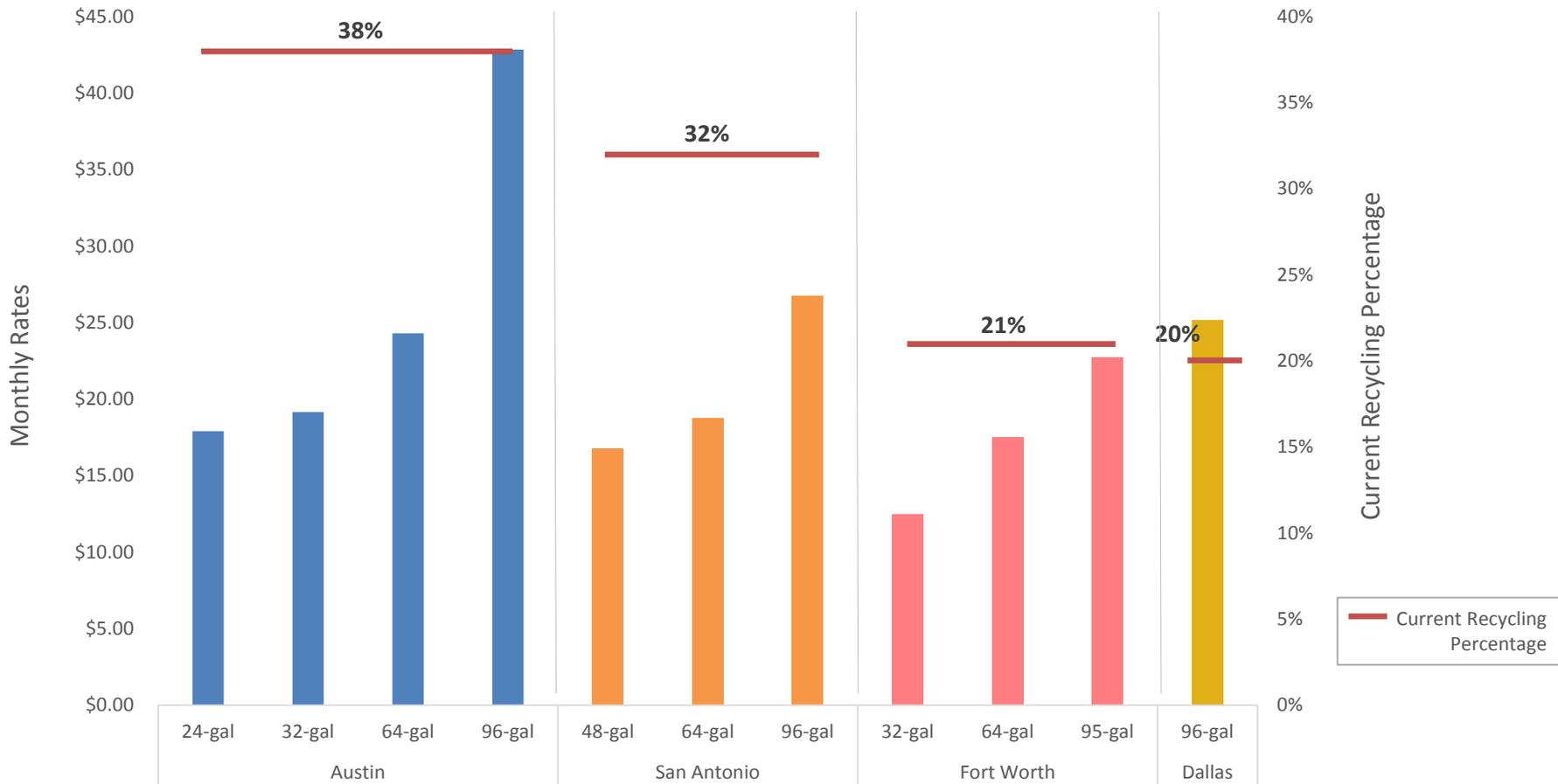
City	Goal	Recycling Percentage	Residential Monthly Rates ^{1,2}
Austin	20% reduction in per capita solid waste disposal by 2012 75% recycling by 2020 90% recycling by 2040	38%	24-gallon: \$17.90 32-gallon: \$19.15 64-gallon: \$24.30 96-gallon: \$42.85
San Antonio	60% single family residential recycling by 2025	32%	48-gallon: \$16.76 64-gallon: \$18.76 96-gallon: \$26.76
Fort Worth	30% residential recycling by 2021 40% total City recycling by 2023 50% total City recycling by 2030 60% total City recycling by 2037 80% total City recycling by 2045	21%	32-gallon: \$12.50 64-gallon: \$17.50 95-gallon: \$22.75
Dallas	40% recycling by 2020 60% recycling by 2030 Maximize recycling by 2040	20%	96-gallon: \$25.18

¹ Rates do not include tax.

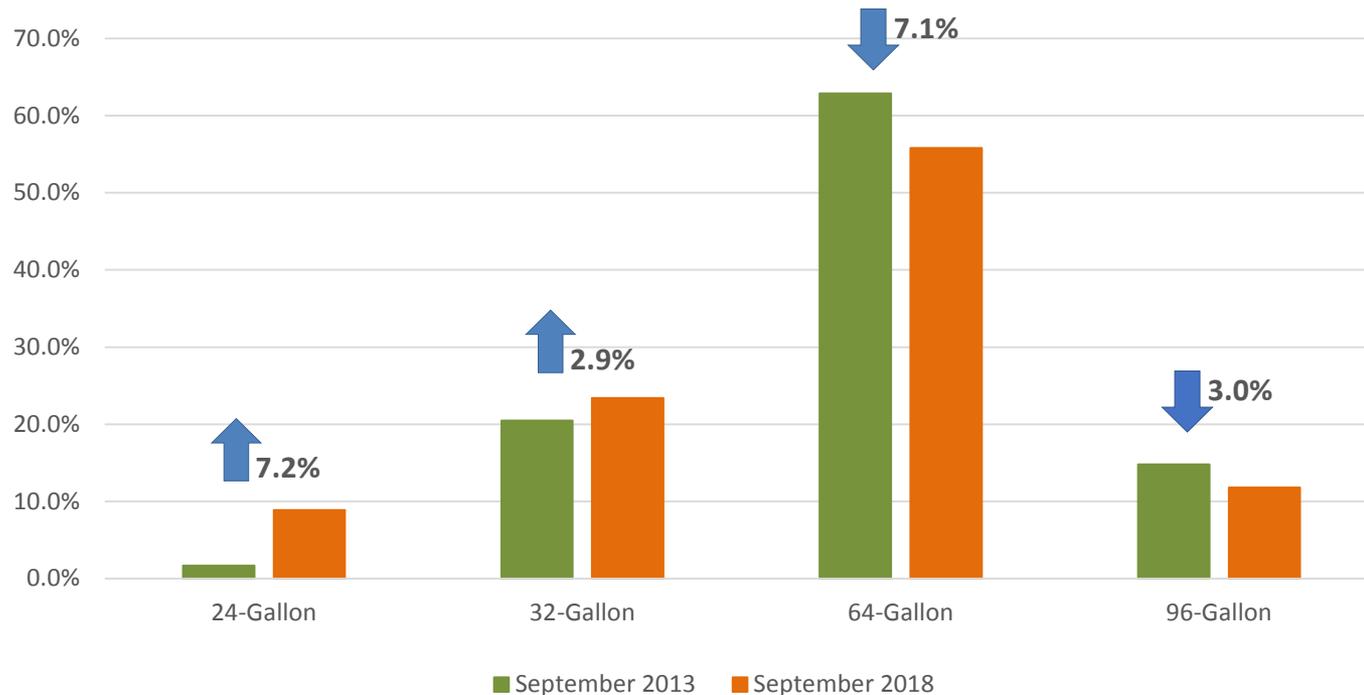
² Rates do not include environmental fees. Austin, San Antonio, and Fort Worth have additional monthly environmental fees.

Regional Recycling Goals

Variable Residential Monthly Rates & Current Recycling Percentages



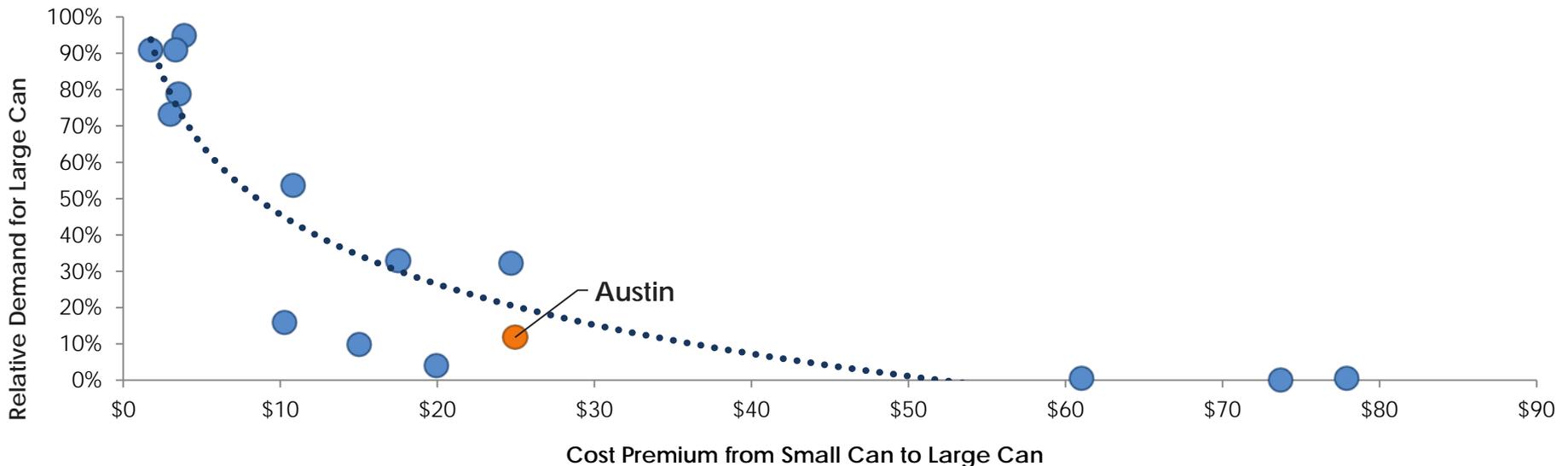
Pay-As-You-Throw Impact: Austin



1. The figure above shows the changes in cart size distribution the City has seen in response to increasing the price differential between the largest cart (96-gallons) and all smaller cart sizes (24-, 32-, and 64-gallons).

Key Findings: Recycling

- ▶ Austin: **highest** recycling percentage among benchmark cities, including other large cities with established recycling goals
- ▶ Pay-As-You-Throw
 - Pricing gaps between cart sizes are higher for Austin
 - **Policy decision** designed to incentivize recycling
- ▶ Pricing for multiple U.S. cities with Pay-As-You-Throw



Supported or Shared Services

Supported or Shared Service	Support Level Provided by Austin	Comparable Support from Other Cities
Central Business District collections	<ul style="list-style-type: none"> • Provided through third-party contractor, customers pay fees directly to contractor • Contractor provides collection, alley maintenance, and special events within Downtown Central Business District 	<ul style="list-style-type: none"> • Provided by only two other cities, El Paso and Fort Worth • Not funded by residential rates • Similar, third-party or partner agreement for services
Commercial services and support	<ul style="list-style-type: none"> • City provides curbside collection to limited number of commercial customers, utilizing the same resources as residential services 	<ul style="list-style-type: none"> • Eight cities provide limited commercial support • Similar to Austin; collection for a small number of commercial customers • Minimal shared administrative support • A few cities' with low residential rates subsidize residential services through commercial rates
Maintenance operations	<ul style="list-style-type: none"> • Fleet maintenance and fuel charges (electric infrastructure surcharge) are expensed where the equipment is utilized and thus included in the cost of service 	<ul style="list-style-type: none"> • Six benchmark cities provide fleet maintenance support

Organizational Structure

- ▶ The following slide presents a summary of the organizational structure of benchmark cities and select associated cost metrics
 - **Provision of material collections**
 - Public: Services are provided by the City
 - Private: Services are provided by a single private hauler contracted with the City
 - **Facilities owned and operated by the City**
 - LF: landfills
 - TS: transfer station
 - MRF: materials recovery facilities
 - HHW: household hazardous waste
 - DO: drop-off centers
 - **FTEs:** Number of full time employees in the solid waste operation
 - **Median Salary** of solid waste employees
 - **% Benefits:** Average employee benefits as a percentage of median salary
 - **Number of households serviced**
 - **Per-household cost of salaries and benefits**

Organizational Structure

	Residential Collections	Commercial Dumpster Collections	Facilities Operated by City	FTEs	Median Employee Salary	% Benefits	Number of Households	Monthly Cost per Household of Salaries & Benefits
Austin	Public	Open Franchise	HHW	462 ^b	\$49,286	35%	200,550	\$12.77
Anderson Mill	Private	N/A	None	0 ^a	N/A	N/A	2,800	N/A
Arlington	Private	Excl. Franchise	LF	2 ^a	N/A	N/A	93,700	N/A
Dallas	Public	Open Franchise	3 TS, LF, MRF	479	\$35,701	45%	245,000	\$8.43
Denton	Public	Public	HHW, LF, MRF	123 ^b	\$54,058	Not reported	33,200	Data not reported
El Paso	Public	Open Franchise	LF, TS	275	\$30,644	46%	180,000	\$5.70
Fort Worth	Private	Open Franchise	LF	116 ^b	\$48,096	Not reported	22,500	Data not reported
Georgetown	Private	Excl. Franchise	TS	1 ^a	N/A	N/A	21,500	N/A
Houston	Public	Open Franchise	3 TS, MRF	472 ^b	Not reported	33%	390,400	Data not reported
Missouri City	Private	Excl. Franchise	None	0 ^a	N/A	N/A	23,400	N/A
New Braunfels	Public	Public	None	55	\$35,402	35%	28,900	\$7.58
Pflugerville	Private	Excl. Franchise	None	0 ^a	N/A	N/A	23,300	N/A
Round Rock	Private	Excl. Franchise	DO	4 ^a	N/A	N/A	26,400 ^c	N/A
San Antonio	Public	Open Franchise	TS	619	\$38,924	42%	356,000	\$8.01
San Marcos	Private	Excl. Franchise	None	3 ^a	N/A	N/A	9,200	N/A
Sugar Land	Private	Excl. Franchise	None	4 ^a	N/A	N/A	40,000	N/A

a Residential services are provided by a third-party contractor. Therefore the City has zero to few employees within the solid waste department.

b These numbers of FTEs include primarily those involved in Solid Waste operations but also include some employees in supportive services such as administration, human resources, purchasing, public information, etc.

c Number of Households for Round Rock is the number of 1-unit detached housing units based on American Community Survey (ACS) 2016 5-year estimates. All other Number of Households data was provided by the responding benchmark cities.

Key Findings: Organizational Structure

- ▶ Complete data is available for five large cities that provide collection services through city resources¹
 - Austin
 - Dallas
 - El Paso
 - New Braunfels
 - San Antonio

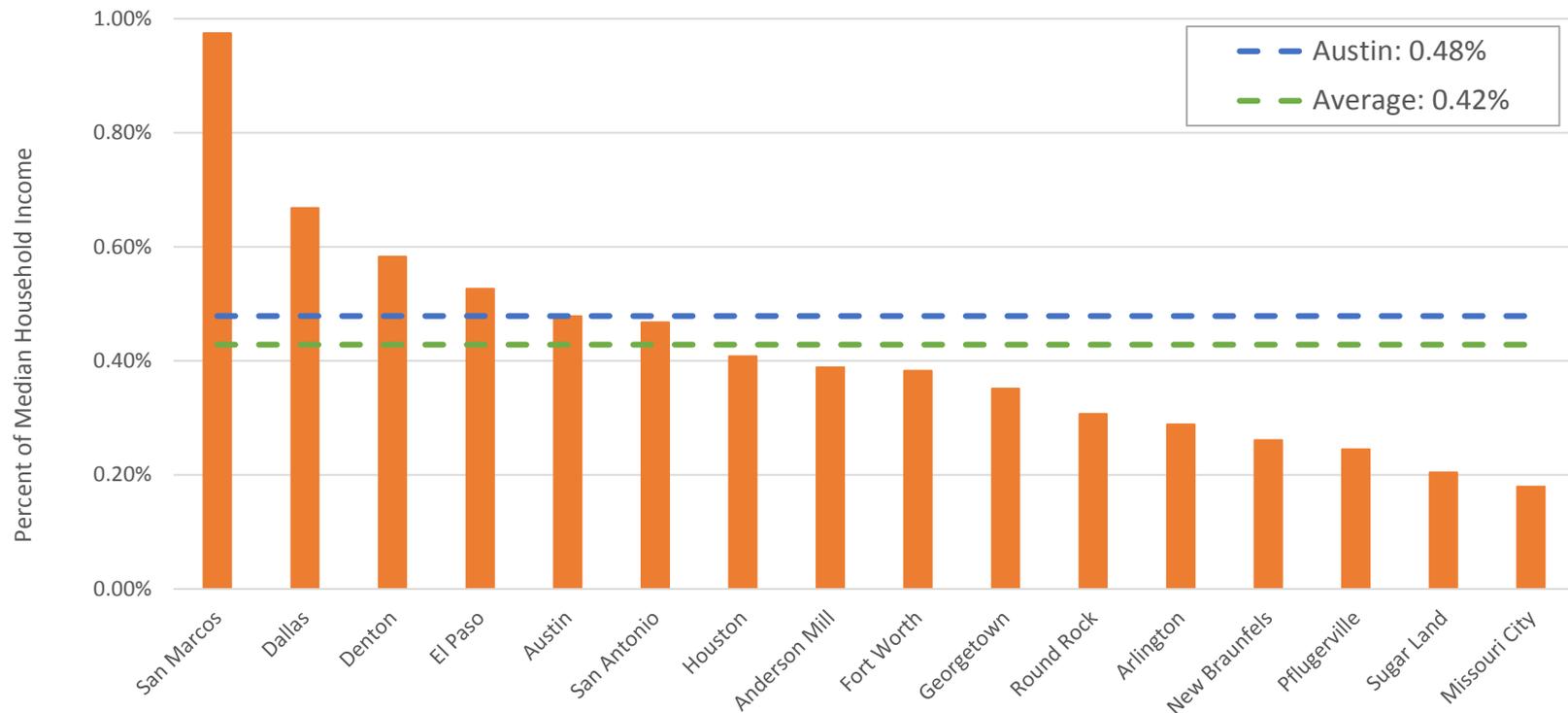
- ▶ Of these five cities:
 - **Average** median employee salary: \$37,991
 - **Austin** median employee salary: \$49,286

- ▶ Monthly cost impacts of salaries + benefits
 - Austin has more staff to support the wide range of programs ARR provides
 - Highest monthly per-household cost impacts
 - Austin: \$12.77
 - Dallas: \$8.43
 - El Paso: \$5.70
 - New Braunfels: \$7.58
 - San Antonio: \$8.01

1. Data for Austin includes some support services for solid waste operations that may traditionally be external resources for other solid waste operations (e.g., Human Resources). Data for Dallas, El Paso, New Braunfels, and San Antonio include only full time employees directly involved in solid waste operations.

Key Findings: Affordability

Annual residential solid waste rates as percent of median household income



Non-Solid Waste Impacts to Rates

- ▶ The City of Austin has several City-wide policies or requirements that impact costs for ARR and thus impact customer rates, including:
 - Living Wage Requirements
 - Paternal leave policies
 - Insurance availability for temporary employees
 - Austin Energy Green Choice program participation
 - Fuel surcharge to fund electric charging stations
 - Cost to administer open records program
 - Art in public places expenses for CIP projects

- ▶ Only 3 benchmark cities reported similar policies
 - Minimum wage floor requirements for solid waste contractors
 - Requirement to maintain certain percentage of reserve balance
 - Annual funds transfers from solid waste department to support fleet maintenance, street maintenance, environmental clean-up, and general fund administration

Potential Cost Reduction Options

- ▶ Options are intended to present only **potential** cost reduction strategies the City may decide to further consider
 - Developed through the benchmarking process and known operations and strategies of other cities
 - Communicated only as options, not as recommendations
- ▶ In-depth evaluation of these options specific to Austin has not been conducted
- ▶ Burns & McDonnell recommends that the City conduct thorough evaluations for the feasibility and impacts of each option it may want to further consider

Potential Cost Reduction Options

Potential Option	Current State for Austin	Potential Applicability
Reduce collection frequencies	Refuse: weekly	Possibly: current frequency is industry best practice, but could consider every other week collection
	Recycling: every other week	Unlikely: reduced frequency would be inadequate
	Brush/bulky: twice per year	Yes: City is currently conducting pilot for call-in service
	Curbside compostables: weekly	Unlikely: current frequency is industry best practice with inclusion of food scraps
Procure or develop local processing and disposal options	Landfill: long distance from some areas of the City	Possibly: closer landfill or multiple options may reduce hauling costs
	Transfer station: City does not utilize a transfer station	Possibly: use of transfer station may reduce hauling costs
	MRFs: currently have local processing contracts in place	Unlikely: no significant benefit
Reduce support of non-solid waste services/programs	ARR funds multiple programs that are typically funded by other departments in benchmark cities	Possibly: Operational/financial support by other departments may reduce annual costs for ARR; requires City Council direction and costs would be absorbed by the General Fund

Potential Cost Reduction Options

Potential Option	Current State for City	Potential Applicability
City Council policies	City of Austin requires multiple programs that are not required by other cities. (e.g., living wage, insurance for temp. employees, green energy requirement, etc.)	ARR will need direction from City Council
Enter commercial collections operations	The City provides residential and cart-based commercial services only	Unlikely: While City would see substantial pushback from private haulers, providing commercial services provides the option to spread costs over more operations and potential for commercial rates to support residential services

Questions?