



**To:** Zero Waste Advisory Commission

**From:** Sam Angoori, P.E., Interim  
Director Austin Resource  
Recovery Department

**Date:** February 13, 2019

**Subject:** **Director's Monthly Report to the Zero Waste Advisory Commission**

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### **Slow Down To Get Around - Resolution**

ARR has been involved in developing support for Slow Down To Get Around (SDTGA) legislation in Texas to be introduced during the 86<sup>th</sup> legislature. Richard McHale, Assistant Director, who is also the current President of TxSWANA, has been working with other entities to develop supportive resolutions from their elected official to demonstrate their support for this type of legislation. The solid waste industry has historically been in the top five most dangerous occupations and in 2017 there were 33 fatalities across the country. Texas led the country with 3 fatalities. The proposed legislation would require motorists to slow down or move over when approaching solid waste vehicles and workers collecting materials, which is similar to existing laws protecting first responders, highway workers and tow truck operators. At this time there have been 23 states across the country that have adopted SDTGA legislation and in the past month 5 cities in Texas have passed resolutions, including New Braunfels, Irving, Garland, Abilene and Sudan. Several other cities have it on their agendas for future approval. Austin had its resolution approved on consent January 31, 2019.

### **China Impact**

The China Impact program, commonly known as "Operation Green Fence," was formally implemented in February 2013 as an aggressive inspection effort aimed at curtailing the amount of contaminated recyclables and waste that was being exported to China. Chinese government officials began to take notice that the recyclables entering China such as plastics, scrap metal and fiber contained too much food, trash and other contaminants. The excess residue could not be recycled and Chinese manufacturers were expending additional monies to sort out and dispose of non-recyclables in Chinese landfills. The Chinese government, looking to protect its homeland manufacturers and mindful of the environmental impact, took action to improve the quality of the raw materials through enhanced inspection, and possible rejection, of recyclables that were exported to China.

One of the most notable effects of the China Impact is the focus on various recycling commodities collected locally, regionally, and nationally. With no expected improvement anticipated in market conditions in the near future, the Green Fence has created an opportunity for the recycling industry and municipalities to evaluate policies and practices and adjust as needed to changing markets.

The ripple effects of China's actions and the deterioration of the U.S. recycling markets created concern for the City of Austin and the possible effect it would have on our current residential recycling program. Austin Resource Recovery Department officials met, on multiple occasions, with our two contracted recycling processors, Balcones Resources and Texas Disposal Systems (TDS), to gain insight on the impact the City of Austin due to current recycling market conditions.

Balcones Resources and TDS have continued strong, healthy, and positive relationships with their respective contractors and buyers of recyclable materials and both have created situations and conditions which have isolated the City of Austin from extreme risk. According to our contractors, they continue to sell 100% of all recyclables coming from City of Austin residents and our collection program. Additionally, both have state of the art facilities and equipment which continue to focus on quality to add more value to materials being sold on the market and both companies are committed to honoring all recycling commodities collected in the City of Austin's residential recycling collection program. In short, Balcones Resources and TDS have committed to invest and remain healthy for future expansion and growth.

### **Expansion of Household Hazardous Waste Program**

ZWAC had asked for ARR to look into possible ways to expand the HHW Program, as it is not in the most convenient of locations for most of Austin's residents. Since opening six days per week, the program has increased participation from 17,925 customers and collecting 1,477,925 pounds in FY14, to the current pace of 30,750 customers and 1,898,460 pounds for FY18. While a 72% increase in participation is commendable, there are other options to explore to potentially expand the program further. Representatives from Travis County, Cedar Park, and local businesses have been contacted, and initial meetings have been scheduled for this month. Local churches have also shown interest in partnering with the City for a one-time collection event. Additionally, our current hazardous waste vendor is contacting their larger Austin-area customers with space and interest for such an event. As each of these items progress, we will give an update at future ZWAC meetings as to which opportunities may be more feasible.

- Another RRDOC with the same capabilities of the current facility, is planned at the new Northeast Service Center.
- Work with our current vendor to look at the possibility of an off-site collection event. These can be expensive and the specifications for locations (especially in metropolitan areas) can be difficult to meet.
  - Since the last ZWAC meeting on 11/14/18, staff has continued to work toward possible HHW expansion scenarios:
    - On December 10, staff met with City of Pflugerville to discuss the possibility of Household Hazardous Waste collection event that might be more convenient for North Austin residents. The City of Pflugerville was very receptive to the idea and is investigating potential sites for an event. Additional conversations are scheduled with City of Pflugerville within the coming weeks.
    - On December 11, City Staff met with representatives from Dell Computers to explore using Dell campuses to host an event to reach out to residents from North Austin and Travis County. Their initial response was positive, and further meetings have been scheduled in the coming weeks.
    - The Travis County Expo Center has verbally agreed to a collection event in the future.
    - Staff has plans to meet with Cedar Park in the future to resume the discussion regarding an HHW collection partnership.
- Staff will also look at other City properties that might be able to house a "scaled down" version of the current HHW Facility. Possibly a site that collects just Batteries, Oil,

Paint, and Antifreeze.

- Sites such as Fleet Service Centers, Austin Energy, and Austin Water may serve as scaled down Batteries, Oil, Paint, and Antifreeze (BOPA) collection sites. These locations would need to have available space, and allow for security and traffic control. The benefit to these sites is how numerous and geographically widespread they are around Austin. Staff anticipates meeting with other departments to evaluate potential locations.
- Work with Travis County to find alternative collection sites.
  - Travis County has some sites that are outside the City Limits that serve as recycling collection stations, but would likely benefit Travis County residents more than Austin residents. A County site would require infrastructure such as storm shelters, lockers, and forklifts prior to operations commencing, costing approximately \$90,000
- Look into a pilot for on-call home pick up of HHW in different areas of Austin.
  - Staff has explored this option in the past; it would require at least 2 new vehicles, retrofitted to have the appropriate capacity and spill response equipment. This would require at least one additional FTE for each vehicle.
- Interlocal agreements where we work with other municipalities and Austin residents may use their HHW facilities/programs. We will also explore this option during meetings with municipalities regarding a possible mobile collection event. These meetings are scheduled in the coming months.
  - Residents from outside the City of Austin, but reside within Travis County, make up about 16% of the HHW's customers. This includes the cities of Pflugerville, and Manor, and Sunset Valley that do not have their own sites; these municipalities direct their residents to the City of Austin's HHW.
  - Other smaller surrounding municipalities have sites that accept HHW from residents, although on a limited schedule. It is our belief that utilizing this option would increase services to Austin residents, while having the lowest cost. Any cost sharing would mirror our own interlocal agreement with Travis County, so that COA would still pay for Austin residents' HHW, but avoid the cost of a new site and infrastructure. However, there have been some initial concerns from smaller municipalities regarding capacity, should Austin residents start utilizing these facilities.
- The included map illustrates the zip code in which each HHW customer lives. The different colors reflect sheer number, and are not an indication of percentage of participating households.



## ARR Truck Breakdown Analysis

### Trash Routes

	Monday	Tuesday	Wednesday	Thursday	Friday
<i>Automated</i>	31	24	29	28	21
<i>Semi-Automated</i>	14	11	12	14	14
<i>Dead-Ends</i>	5	5	5	5	6

### Recycling A Week

	Monday	Tuesday	Wednesday	Thursday	Friday
<i>Automated</i>	12	13	15	14	13
<i>Semi-Automated</i>	6	6	6	6	6
<i>Dead-Ends</i>	5	5	5	5	6

### Recycling B Week

	Monday	Tuesday	Wednesday	Thursday	Friday
<i>Automated</i>	14	12	16	14	12
<i>Semi-Automated</i>	8	6	6	6	6
<i>Dead-Ends</i>	5	5	5	5	6

### Yard Trimmings/Curbside Compost

	Monday	Tuesday	Wednesday	Thursday	Friday
<i>Yard Trimmings</i>	9	7	11	9	7
<i>Curbside Compost</i>	13	13	13	13	15

**Brush** One route per week

**Bulk** One Route per week

### Vehicles in ARR Fleet

Vehicle Type	Number of Units
Automated	61
Rearloader	89
Multi-pack	10
Tractor-Trailer/Rolloff	16
Crane	8
Street Sweeper	26
Bucket Truck/Dump Truck	6
Light Duty	53



ARR Solicitations Update  
ZWAC Meeting Date: February 13, 2019

**Upcoming Solicitations (in alphabetical order):**

1. **Recycle and Reuse Drop-off Center Gatehouse App:** (RFQ) – Contractor to design, develop, and maintain a web-based data collection and reporting system for the Recycle and Reuse Drop-off Center (RRDOC) that allows the RRDOC to determine residential customer jurisdiction so that Austin Resource Recovery may collect or assess fees based on jurisdiction and usage. This is a new Contract.
2. **Textiles Curbside Recycling:** (RFP) – Contractor to develop and implement an all-encompassing curbside soft textile recyclables collection services program that will not compete with charitable clothing donation centers. Current Contract Documents:  
[https://www.austintexas.gov/financeonline/contract\\_catalog/OCCViewMA.cfm?cd=MA&dd=1500&id=NR160000006](https://www.austintexas.gov/financeonline/contract_catalog/OCCViewMA.cfm?cd=MA&dd=1500&id=NR160000006)

**ARR New Contracts Under Review (in alphabetical order):**

1. **Rigid Plastics Recycling Services IFB 1500 SLW1012** – The IFB for a new Rigid Plastics recycling contract has closed with one bidding vendor. Balcones Resources has been recommended as the vendor for a 5-year contract not to exceed \$212,025. Balcones Resources held the previous contract for this service, and ARR recycled approximately 80 tons under that contract in fiscal year 2018.

**Requests for Information (RFI) Follow Up:**

1. **Mattress Collection and Recycling Services RFI 1500 SLW6000** – The RFI for Mattress Collection and Recycling Services closed on August 16, 2018, with two respondents providing information. ARR is in the process of reviewing these responses and determining next steps regarding mattress recycling throughout the city of Austin.
2. **Master Plan Update RFI 1500 SLW6001** – The RFI for a consultant to update the master plan closed on December 7, 2018, with six respondents providing information. The Department reviewed these responses and made changes where appropriate. A list of the responses can be found online with the corresponding RFP ([RFP 1500 SLW3003](#) – due 3/19/2019) as “Attachment B – RFI 1500 SLW6001 Comments Summary.”

**Definitions:**

Request for Proposals (RFP): Formal request for a supplier to provide a solution and cost estimate to a complex need.

Invitation for Bid (IFB): Formal bidding documents inviting suppliers to submit pricing for goods or services.

Request for Quotation (RFQ): Informal request to suppliers to provide quotes on specific goods or services.

Request for Qualifications (RFQS): Formal solicitation used when qualifications are the main criteria for professional services.

Request for Information (RFI): Used to obtain industry input, feedback, or reactions from potential suppliers prior to issuing a solicitation.

**Zero Waste Advisory Commission - February 13th, 2019**  
**Single Stream Recycling Statistical Report**

**FY19: October 18 - December 2018**

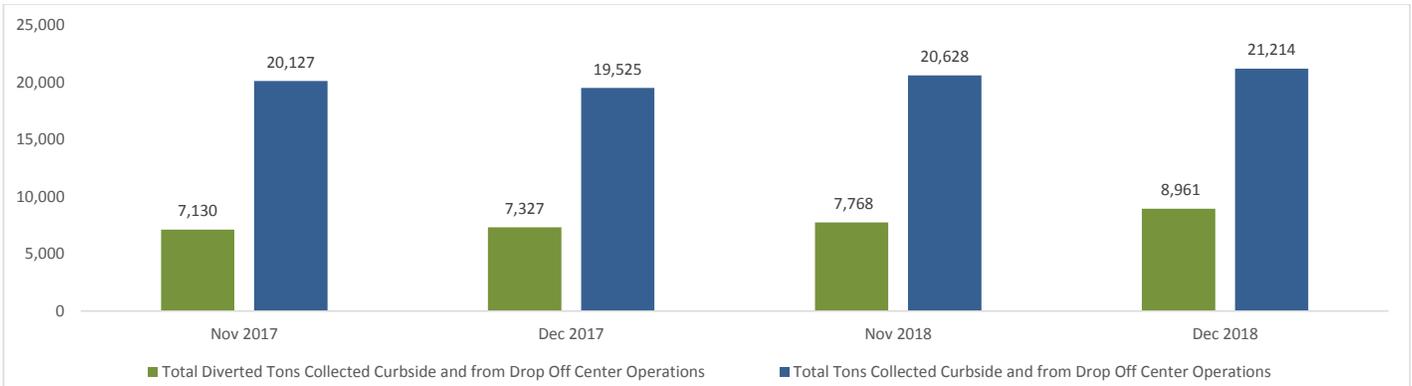
**Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)**

Month and Year	Contractor	Tons Delivered	Contractor Payments			Net Value to the City \$ per ton value	Landfill Cost Avoidance	
			Revenue	Processing Cost	Net Amount Due/(Owed)		Cost Per Ton	Total
October 2018	TDS	2,292.54	\$93,700	\$207,475	(\$113,775)	(\$49.63)	\$22.52	\$51,628
	BRI	2,907.11	\$60,090	\$211,519	(\$151,430)	(\$52.09)	\$22.52	\$65,468
	<i>Total</i>	5,199.65	\$153,790	\$418,994	(\$265,205)			\$117,096
November 2018	TDS	1,890.70	\$71,812	\$171,108	(\$99,296)	(\$52.52)	\$22.52	\$42,579
	BRI	3,256.23	\$65,141	\$231,092	(\$165,951)	(\$50.96)	\$22.52	\$73,330
	<i>Total</i>	5,146.93	\$136,953	\$402,201	(\$265,247)			\$115,909
December 2018	TDS	2,164.25	\$81,734	\$195,865	(\$114,130)	(\$52.73)	\$22.52	\$48,739
	BRI	3,043.88	\$60,832	\$219,414	(\$158,582)	(\$52.10)	\$22.52	\$68,548
	<i>Total</i>	5,208.13	\$142,566	\$415,278	(\$272,712)			\$117,287
	<b><i>FY19 Totals</i></b>	<b>15,554.71</b>	<b>\$433,309</b>	<b>\$1,236,473</b>	<b>(\$803,164)</b>			<b>\$350,292</b>

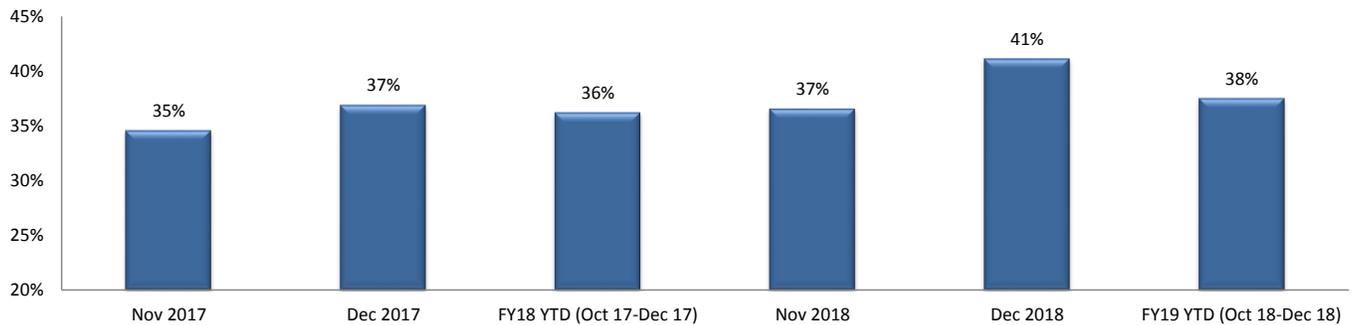
# Austin Resource Recovery Curbside Collection and Drop Off Center Operations

Description of Services		LAST FISCAL YEAR				CURRENT FISCAL YEAR				
		FY 2017	FY 2018	Nov 2017	Dec 2017	FY18 YTD (Oct 17-Dec 17)	Nov 2018	Dec 2018	FY19 YTD (Oct 18-Dec 18)	FY 2019 Goal
Tons Disposed	Tons of curbside Trash	131,815	128,829	11,200	10,403	32,137	11,121	10,600	32,915	134,253
	Tons of Curbside Bulk Disposed	11,179	10,073	913	905	2,151	625	657	2,327	11,227
	HHW Operations Tons Disposed	471	528	37	41	111	40	27	100	451
	Estimated Tons of Curbside Recycling Residuals*	9,471	10,642	846	849	2,517	1,074	969	3,102	10,670
	<b>Total Disposed Tons Collected Curbside and from Drop Off Center Operations</b>	<b>152,936</b>	<b>150,072</b>	<b>12,997</b>	<b>12,198</b>	<b>36,916</b>	<b>12,860</b>	<b>12,253</b>	<b>38,444</b>	<b>156,601</b>
<b>*Estimated tons of curbside recycling processed by vendors as residual - based on bi-annual sample route audit</b>										
Tons Diverted	Tons of curbside recycling	49,233	48,080	4,072	4,132	12,191	4,090	4,261	12,519	51,330
	Tons of Drop Off Center Collections Recycled/Reused	3,087	3,768	255	201	754	354	404	1,159	4,453
	Tons of Curbside Yard Trimmings	34,316	32,244	2,313	2,606	6,883	2,870	3,863	8,989	48,114
	Tons of Curbside Bulk Recycled	161	192	23	18	51	25	17	66	165
	Tons of Curbside Brush Collected	7,367	6,292	418	344	1,672	395	374	1,332	8,025
	Tons of Curbside Textiles Collected	245	159	9	8	27	10	9	28	157
	Tons of Carts Recycled	197	154	18	0	36	0	16	32	175
	<b>Total Diverted Tons Collected Curbside and from Drop Off Center Operations</b>	<b>94,767</b>	<b>91,081</b>	<b>7,130</b>	<b>7,327</b>	<b>21,664</b>	<b>7,768</b>	<b>8,961</b>	<b>24,192</b>	<b>112,584</b>
Tons of Curbside Compost Collected**	5,069	14,414	994	1,043	2,906	1,783	2,231	5,471	33,565	
<b>***Tons of Curbside Compost Collected" is included in the "Tons of Yard Trimmings Collected"</b>										
<b>Total Tons Collected Curbside and from Drop Off Center Operations</b>		<b>247,704</b>	<b>241,153</b>	<b>20,127</b>	<b>19,525</b>	<b>58,580</b>	<b>20,628</b>	<b>21,214</b>	<b>62,636</b>	<b>269,185</b>
<b>Estimated Percent of Curbside Collected Materials Diverted from Landfills by ARR</b>		<b>37.51%</b>	<b>36.81%</b>	<b>34.59%</b>	<b>36.90%</b>	<b>36.23%</b>	<b>36.56%</b>	<b>41.12%</b>	<b>37.53%</b>	<b>38.20%</b>
<b>Pounds of Trash collected per customer per pickup</b>		<b>26.09</b>	<b>24.84</b>	<b>26.21</b>	<b>24.32</b>	<b>25.10</b>	<b>25.56</b>	<b>24.31</b>	<b>25.18</b>	<b>25.99</b>
Number of Trash and Recycling Customers		194,357	199,448	197,236	197,420	196,971	200,840	201,211	201,076	198,655
<b>Pounds of Recycled materials collected per customer per pickup (every other week)</b>		<b>19.61</b>	<b>18.65</b>	<b>19.17</b>	<b>19.45</b>	<b>19.12</b>	<b>18.87</b>	<b>19.66</b>	<b>19.26</b>	<b>19.99</b>
Pounds of Yard Trimmings collected per customer per week		6.83	6.25	5.45	6.13	5.40	6.62	8.91	6.91	9.37
Number of Yard Trimmings/Organics Customers		193,110	198,325	196,048	196,137	196,161	200,047	200,067	200,038	197,487
Total tons of Dead Animals Collected from COA rights-of-way and the animal shelter		44	36	4	4	11	4	3	10	42

## Austin Resource Recovery Curbside Collection and Drop Off Center Operations



### Estimated Percent of Curbside Collected Materials Diverted from Landfills by ARR

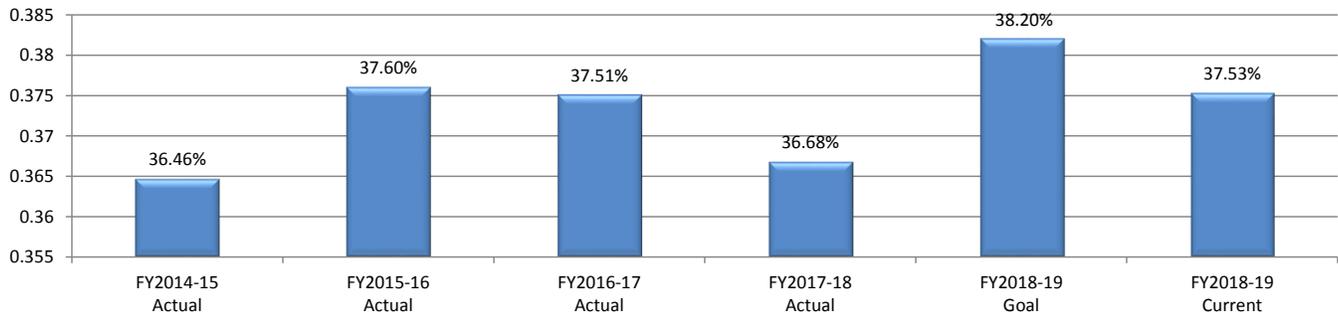


#### Reporting Status and Diversion Results for All Categories of Waste Generation

Category of Waste Generation	FY2014-15 Actual	FY2015-16 Actual	FY2016-17 Actual	FY2017-18 Actual	FY2018-19 Goal	FY2018-19 Current
Residential Waste Diversion (city serviced accounts)	36.46%	37.60%	37.51%	36.68%	38.20%	37.53%
Community Diversion Rate	*	42.02%	*	*	*	*

\*As prescribed in the Austin Resource Recovery Master Plan, the Department will conduct a detailed waste assessment study every five years to determine progress toward our Zero Waste goal. The first such study was published in 2015 and is titled Austin's 2015 Community Diversion Study. The study focused on estimating diversion from both ARR-serviced properties and commercial properties. Commercial properties include retail businesses, food service establishments, professional offices, industrial properties, institutional facilities, government facilities, and multifamily properties five units and larger. According to Austin's 2015 Community Diversion Study, Residential Waste Diversion Rate (city serviced accounts) represents approximately 15% and the Community Diversion Rate (accounts serviced by private waste haulers) represents approximately 85% of the total citywide wastage.

### Residential Waste Diversion (city serviced accounts)



Category of Waste Generation	CY 2015	CY 2016	CY 2017
Commercial Tons Landfilled**	1,062,012	1,152,661	1,708,484
Commercial Tons Recycled**	550,515	360,244	722,573
Commercial Organics Tons**	556,099	206,165	97,173

\*\* Numbers reported here are compiled from self-reported data submitted by licensed private waste haulers via semi-annual tonnage reports required under Section 15-6-3 of the City Code on a calendar year basis and as such, ARR does not attest to the accuracy of these amounts. These numbers reflect data from 100-200 licensed haulers (number of haulers varies over time), and include haulers servicing dumpsters, roll-offs, construction and demolition debris, landscaping debris, and metal scrap. These numbers do not reflect all data sources included in Austin's 2015 Community Diversion Study.