

To: Zero Waste Advisory Commission

From: Bob Gedert, Director

Austin Resource Recovery Department

Date: February 11, 2015

Subject: Director's Report to ZWAC

Yale / USBCSD Intern Report

Over a 10 week period, Yale graduate students Snigdha Garg and Ben Morelli from the Yale School of Forestry and Environmental Studies interned at ARR and developed recommendations aimed at assisting the department achieve the Austin Zero Waste goals. Three broad recommendations are presented in their report, which includes:

1. Establish a continuous baseline education campaign with a compelling argument for resource recovery.

The first recommendation proposes a shift in outreach and education efforts asking ARR to refocus on answering the basic questions: How and Why to recycle? This recommendation is designed to address the current lack of ongoing, baseline education. Numerous indicators such as the annual customer surveys, low participation rates, and high contamination rates highlight the existing gap between the current waste diversion situation and the progressive goals of Zero Waste. The recommendation also suggests development of a more comprehensive and compelling justification for recycling that looks beyond environmental benefits to employment effects and economic opportunities.

2. Continue the roll-out of services, programs, and ordinances in line with the Best Practices of other municipalities

The second recommendation deals with the rollout of programs, services, and ordinances. The suggested actions address a number of key goals: [1] provision of consistent service, [2] encourage appropriate use of services, and [3] inclusion of the desires of ARR's customers. Largely, these recommendations are in line with the current direction of the department. ARR already has many of the services and ordinances it needs to achieve Zero Waste. A few programmatic gaps remain to be filled, but moving forward it will be the details of program implementation and ordinance enforcement that determine diversion rates within Austin.

3. Address current departmental data and communication gaps

The final recommendation concerns actions to address data gaps that exist broadly within the field of resource recovery and specifically within ARR. Data gaps were discovered and catalogued during the development of the 2014 Austin Waste Flows and the Outreach Plan (Morelli 2014b, Garg 2014).

This report concludes with a synthesis of these recommendations and aims to integrate them into the broader issues and operational procedures that characterize Austin Resource Recovery and the system of solid waste management in the City of Austin.

I will present a deeper discussion of these recommendations in the next three monthly reports to ZWAC.

February 2015 Master Plan Annual Program Update

Master Plan Programs/Policies implemented:

- Add 24 gallon trash cart and 64 gallon recycling carts to customer selection options: Completed
- Expand recycling service to all ARR customers with same day as trash service: Completed
- Negotiate and implement Recycling Processing Agreements: Completed
- Add new material to Single Stream Recycling program: FY13-Household Metals, FY14-Rigid Durable Plastics, (FY15-Cartons/Aseptic Containers cancelled)
- Pilot Curbside Residential Organics Collection Pilot Program to collect food waste: Currently 14,000 households
- Relocate Resource Recovery Center from Landfill to MRF location: Completed
- Expand HHW public access hours on weekends and every Saturday: Completed
- Piloting a door-to-door household hazardous waste collection: Completed
- Providing rechargeable battery collection sites: Completed
- Repurpose the Materials Recovery/Transfer Station for bulk item diversion: Completed
- Implement Clean Austin, to address increased material flows from high need areas: implemented and ongoing
- Petition TCEQ with Permit Modification to remove Remanufacturing Hub land from landfill permit area: Completed
- Design and implement a more robust gas capture system at the FM812 Landfill: Completed
- Create and staff Recycling Economic Development program: Completed
- Develop and sponsor a Recycling Investor's Forum: Completed
- Develop and sponsor a Reuse Forum to coordinate reuse agencies: Completed
- Develop and deploy material exchange network: Austin Material Marketplace launched
- Develop and implement rebate program for backyard composting: Completed
- Provide outreach, commercial technical assistance initiatives: Completed and on-going
- Develop Comprehensive Education and Outreach Campaigns: Completed and on-going
- Conversion of heavy vehicles from diesel to compressed natural gas (CNG): FY11 FY19
- Refine city purchasing policies to include recycled content: underway through FY16
- Complete Storm Debris Management Plan: Completed, revised annually
- Reconfigure vehicle routes to reduce mileage and carbon footprint: Completed
- Study food scrap from restaurants: Pilot and Study results completed Data supported URO
- Adopt Universal Recycling Ordinance: Phase 1 & Phase 2 Rules adopted by Council Implementation through FY18
- Adopt Single-Use Bags Regulations: Adopted by Council and fully implemented
- Adopt Hauler Registration Ordinance and Rules: Adopted by Council and fully implemented
- Develop compost classification for consumers: Completed by US Composting Council

Programs/Actions/Policies – proceeding in FY15 and FY16:

- Analyze material composition of residential trash stream: Study completed, awaiting results
- Inventory and analyze city-wide Diversion Rate Measurement (Report completion by April 2016)
- Present to Council a Construction and Demolition Ordinance (Dec 2014 & Oct 2015)
- Negotiate and implement Recycling Processing Agreements for reset period 2 (Feb June 2015)
- Develop and operate several one regional public Reuse/Recycling Austin drop-off site (FY15 at Todd Lane Resource Recovery Center)
- [Re]Manufacturing Hub development (FY15–Engineering, FY15–Relocation of Landfill Operations Facilities, FY16–Site Utilities Construction, FY16–Tenant agreements signed)
- Solicit businesses to locate at the [Re]Manufacturing Hub (April Oct 2015)
- Implement Landfill Gas to Energy to reduce carbon footprint (Repairs to gas collection system completed, currently analyzing gas quality and volume, preparing bid for Gas-to-Energy project)

Major Programs/Actions requiring budget approval:

- Continue expansion of the Curbside Organics Collection Pilot Program to additional households (four year roll-out to city-wide collection FY16-FY19)
- Plan for North Service Facility, to include fueling center, recycling/reuse drop-off, HHW
 collection, vehicle deployment, on-site vehicle repairs, and administrative offices (FY15
 Planning, FY16 Construction, FY17 occupancy)

Programs delayed, postponed, or deferred:

- Add new material to Single Stream Recycling program (FY15 Cartons/Aseptic Containers rejected - requires approval from both recycling processors)
- Transitioning to weekly recycling collection for residential customers (FY17 or later)
- Transitioning to on-call collection of brush and large volumes of yard trimmings (FY17 or later)
- Permit and design Solar Farm on remaining closed the FM812 Landfill site (Planned for FY17)
- Collaborate with stakeholders and educational institutions to offer a Master Composter Certification Program to encourage household composting and support community gardens (Planned for FY17 – largely dependent upon ISLR and STAR Composting Council)
- Develop and operate several regional public Reuse and Recycling drop-off sites to increase diversion (FY15-SE site, FY17-NE site, FY18- SW site, FY19-NW site)
- Implement a Mattress Recycling Program (Planned for FY17)
- Implement a Textiles Recycling Program (Planned for FY17)
- Develop Reuse Austin and Teacher Creative Reuse Center (Planned for FY17 with non-profit)
- Sponsor recycled arts projects (Planned for FY18-FY19)

Policy Development delayed, postponed, or deferred:

- Present to Council a comprehensive staff report on Take-Back Ordinances, in support of Extended Producer Responsibility on hard-to-recycle consumer products that have negative environmental impacts on the community (Delayed - Planned for FY16)
- Present to Council a Single Use Container Ordinance, through a deposit collection system (deferred indefinitely - dependent on State authorization)

Recycling Markets Forecast

ZWAC Commissioners requested in January for a report on the 2015 forecast of the recycling markets. The City of Austin makes no prediction of the recycling markets. Most recycling observers have noted that their "crystal ball" of market forecasting was disrupted by the recycling markets crash of 2007-2009. Waste Advantage Magazine is a trade magazine that offers their insight on 2014 and potential recycling activity in 2015, as noted below (excerpted to reduce length):

Industry Trends 2014: The Year in Review \square January 15, 2015 \square Waste Advantage Magazine

Looking back at 2014, many different transitions took place that moved the waste and recycling industry forward within the areas of hauling, recycling and even waste conversion. Waste Advantage Magazine sits down with experts in the industry to get their take on the past year.

EAB member Will Flower is President of Green Stream Recycling in Brookhaven, NY and has 31 years of experience working in the field of solid waste management and environmental protection.

EAB member Drew Weil is an Account Representative at Sunbelt Hydraulics in Pompano Beach, FL with more than 25 years of waste industry experience in the field of fleet maintenance and operation.

Michelle Leonard is SWANA's International Board of Director's Vice President and Vice President and Director of Sustainable Materials Management for SCS Engineers in Long Beach, CA. She has nearly 30 years of experience in environmental consulting and project management, with expertise in solid waste management planning and facilities.

John Paglia, III, is General Manager at Florida Express Environmental in Ocala, FL and a regular contributor to our "From the Experts" column. He is a 4th generation garbage man and currently focused on growing the company and offering the highest level of customer service and prolonging the world we live in today.

Looking back on the past year, how are the waste and recycling industry and its markets changing?

WF: There were no radical shifts or landmark legislation that dramatically altered the waste industry in 2014. Instead, the waste and recycling industry continue to slowly evolve. In 2014, we saw high fuel prices, escalating labor and insurance costs and skyrocketing equipment costs. Although we experienced a drop in fuel prices during the 4th quarter, we're not sure if that is a short- or long-term trend. To deal with rising costs, large and small companies on both the collection side and the post-collection side of the business have focused on streamlining operations. One continuing trend that is changing the industry is the move to fleets powered by natural gas.

DW: I agree we are seeing a lot more CNG fleets and single-stream recycling. Single-stream has increased recycling set out rates as much as 60 percent in some of cities in our market, which leads to a direct reduction in MSW.

ML: I think that we are continuing to concentrate and look at opportunities to increase recycling. We are seeing a lot more attention on organics, including food scraps and food waste, both in terms of capturing more from the waste stream and doing other things with them besides landfilling. The solid waste industry is realizing that it is a huge issue and that it needs to be addressed before it ever gets into the waste stream. In California, a number of new waste laws were passed towards the end of the year, including a mandatory commercial and multi-family organics recycling requirement that will be phased in beginning in 2016, where large commercial generators will be required to separate their organics for recycling.

As far as traditional recycling, it is pretty flat across the U.S. The biggest issue this year was addressing contamination in co-mingled recyclables. There are those that are thinking about going back to putting them into separate bins again. Other issues include banning single-use plastic bags and other materials that are hard to recycle. Extended producer responsibility (EPR) for printed paper, and packaging will

also continue to be a big discussion item in the next year or so. Many of us are concerned about the potential effect on long-term programs that have worked pretty well to collect those types of materials. By establishing EPR for these materials, you run the risk of giving control of those programs to brand owners, which may not be in the best interest for municipalities. It will take away control of those local programs and all of the work we've done over the last 50 years to get people to recycle.

JP: I have seen a push for everyone to recycle. I have seen it flow through corporate accounts all the way down to the small contractors. From HOAs to municipalities, it is no longer an add on but a necessity in the bidding process. As an industry, it is important to educate our customers on recycling. Contamination in single stream unless monitored and addressed becomes "almost garbage". Recycling today cannot be done for free. Once customers are educated on the basic cost involved from collection, to processing, to shipping to end processer they accept responsibility of the charges. There are true costs involved that most commodities cannot stand on their own to recover these costs once they are processed.

What is the biggest overall change that you've seen so far?

WF: On the recycling side of the industry, we are experiencing a continued move toward single-stream recycling and the implementation of hundreds of new or expanded programs as municipalities seek higher recycling rates. That said, the industry struggled with anemic paper prices while continuing to deal with China's Green Fence initiative—an effort by customs officials in China who vigorously inspect and, when necessary, reject material that they consider to be sub-par loads of recyclables. The program increased random inspection of containers of all forms recyclables including metal, plastic, textiles, rubber and paper.

On the waste collection side of the business, the move to natural gas fueled vehicles has been dramatic. Compared to diesel fuel, natural gas prices remain relatively low. Additionally, the natural gas filling station infrastructure has grown considerably allowing companies and municipalities to invest in converting their fleets to natural gas.

DW: There has been a huge push for CNG conversion in our market.

ML: There is a lot of discussion about mixed waste processing—that seems to be on a lot of people's agendas as well. And although we've been doing that here in California for many years, it does seem to be gaining attention in other areas of the U.S., prompting discussion and debates.

Is there a particular type of technology that has really stood out this year in moving the waste and recycling industry forward?

WF: While there is a big focus on natural gas vehicles, I was impressed with the strides that diesel engine manufactures have made in with clean-engine technology. The diesel engines today are designed to control and greatly reduce emissions.

DW: CNG... I hate to be repetitive but that's been huge!

JP: With the higher demand for single-stream recycling, the cost of sorting systems is reducing. The technology associated with sorting systems has pushed to become very efficient. When single-stream processing facilities were first introduced they were not realistic for smaller private companies to become involved. There are now systems that drastically reduce the cost to sort single-stream sorting on a lower volume scale.

What the most important issues that needs to be addressed right now?

WF: Safety remains a top concern. Everyone is talking about the need for safety and how important it is. Unfortunately, we have not seen the needle significantly move in terms of fatalities and injuries. The industry has to do a better job and the current approach is not getting the results we need to keep people safe. It's time to stop talking and start acting to make our people safe.

DW: Planning for the long term with CNG and the large amount of fleet conversions. Single-stream is also greatly improving daily but still has a way to go.

JP: I would second to the topic of an ongoing safety program. With insurance rates at a sky high safety should be everyone's priority for more reasons than one. To be specific, I have had conversations with many large and small companies in our industry about this topic. From members of Waste Management to local private companies of the south east, we have all voiced commonalities. The frustrating part is when our trucks do everything right in an incident and we are still penalized financially. I've mentioned to our staff we are driving billboards and our society as sue happy as it is today sees these as giant "hit me" targets. I can recall a specific example from my conversations in two separate incidents where the waste haulers driver was not even close to at fault and cost that particular company \$90,000 + in real money lost at the bottom line. The driver was hit while stopped at a traffic light, and in the other case hit while someone ran a red light. I would like to see companies rewarded for safety records, not penalized because of "Geographical trends".

Do you think the next year will be positive or negative?

WF: I'm an optimist and I tend to focus on the positives. For many years, I've looked at society's waste stream as an opportunity for greater resource recovery. We need to garner as much value and resources from the waste stream as possible. It will also be interesting to see the impact of China's developing middle class and their consumption and waste generation rates. China's new middle class could have a significant impact on the supply and demand for recyclables.

ML: I think it will be a very positive year. We'll see some advances in technologies, particularly with emphasis on greenhouse gas reduction. We'll also see more programs put in place to get materials out of the landfill and do other things with them. We are always going to need landfills for those residual materials that we haven't figured out what to do with yet, but we'll continue to see advances in our programs, policies, technologies, that will advanced the diversion of material and increase our recovery of those materials. Those in our industry should also be aware of EPR for printed paper and packaging and make sure they understand the effects and the implications of it.

DW: So far if the last two quarters of this year were a pace setter for this year, I think we will continue to soar back to some sort of normalcy that we used to enjoy.

JP: Writing down a goal and creating a habit increases the chances for success. I believe 2015 will be a good year for many dimensions of our industry. Our industry has undergone many changes in recent years. 2014 articles discussed truck technology increasing, ways to become safer on the road and in the maintenance shops, CNG as an alternative fuel, employee retention, and the increased demand by consumers and businesses to recycle. All of these and many others will continue to steer our industry in 2015 and beyond. Hopefully the goals we make individually for 2015 will change our industry collectively for the future. Success comes in many ways and not just at the bottom line. Let's set trends this year that will benefit our industry and everyone affected by it.

Staff Hires and Promotion Updates

New Employee	Promotion, Temp to Regular, Retirement	Title/ Division
Blanche Schaefer		Intern, Strategic Initiatives
Benjamin Degado		ARR Operator
Aparna Kumar		Intern, Strategic Initiatives
	Promotion - Robert Baker	Environ. Program Specialist Sr.

Positions Currently to be Filled

Position	# Open	Manager	Posting Status
Financial Specialist	1	Jessica Frazier	Top candidate selected
Temporary, Admin Senior	1	Jessica Frazier	Screening Applications
Temp, Waste Diversion Planner	2	Jessica King	Position to be Posted
Planner Senior	1	Jessica King	Interviews scheduled
Public Information Specialist	1	Jessica King	Interviews scheduled
Public Information Specialist Sr.	1	Jessica King	Position to be Posted
Administrative Specialist	1	Jessica King	Interviews scheduled
Program Specialist	1	Bob Gedert	Top candidate selected
OSH Specialist Senior	1	Jeff Dilbert	Interviews scheduled
ARR Crew Leader	1	Ron Romero	Screening Applications
ARR Operator	3	Ron Romero	Interviews scheduled
ARR Operator, Senior	3	Ron Romero	Top candidate selected
ARR Operator, Senior	1	Donald Hardee	Screening Applications
Environ. Program Specialist	1	Donald Hardee	Position to be posted
ARR Crew Leader	4	Richard McHale	Screening Applications
ARR Operator, Senior	1	Richard McHale	Position to be posted
Temporary, ARR Associate	2	McHale/Romero	Position posted

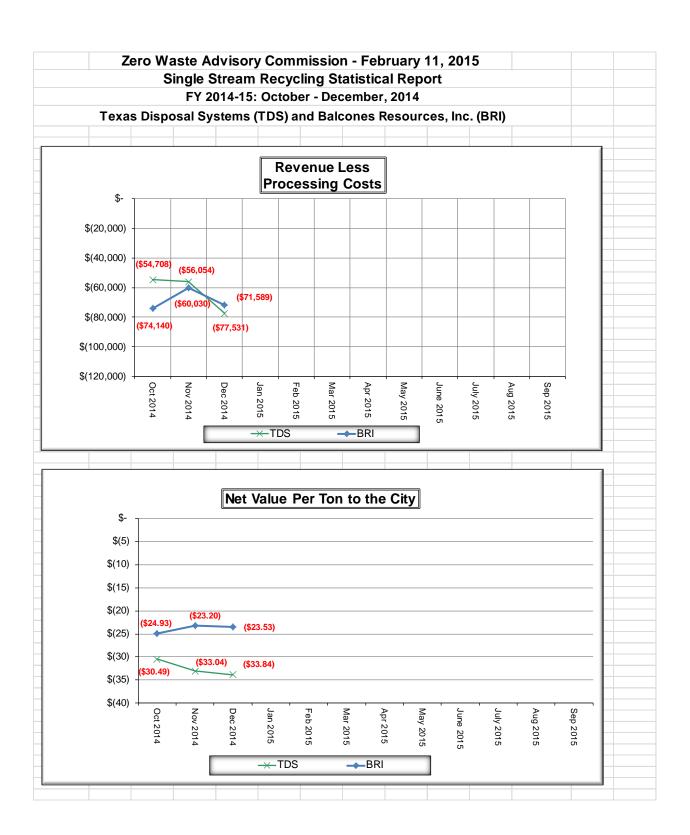
Zero Waste Advisory Commission - February 11, 2015 Single Stream Recycling Statistical Report

FY 2014-15: October - December, 2014

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

Month and	Contractor	Tons	Cont	Contractor Payments			Landfill Cos	t Avoidance
Year	Contractor	Delivered	Revenue	Processing Cost	Net Amount Due/(Owed)	\$ per ton value	Cost Per Ton	Total
October	TDS	1,794.16	\$109,458	\$164,166	(\$54,708)	(\$30.49)	\$21.01	\$37,695
2014	BRI	2,973.81	\$161,505	\$235,645	(\$74,140)	(\$24.93)	\$21.01	\$62,480
	Total	4,767.97	\$270,963	\$399,811	(\$128,848)	\vdash	<u> </u>	\$100,175
November	TDS	1,696.79	\$99,202	\$155,256	(\$56,054)	(\$33.04)	\$21.01	\$35,650
2014	BRI	2,587.55	\$146,047	\$206,077	(\$60,030)	(\$23.20)	\$21.01	\$54,364
	Total	4,284.34	\$245,249	\$361,333	(\$116,085)			\$90,014
December	TDS	2,291.38	\$132,131	\$209,661	(\$77,531)	(\$33.84)	\$21.01	\$48,142
2014	BRI	3,042.85	\$169,341	\$240,930	(\$71,589)	(\$23.53)	\$21.01	\$63,930
	Total	5,334.23	\$301,472	\$450,592	(\$149,120)			\$112,072
FY	2014-15 Totals	14,386.54	\$817,683	\$1,211,736	(\$394,053)			\$302,261

Materi	al Compos	sition Perce	entages		
	Previou	ıs Audit	Current Audit		
	TDS	BRI	TDS	BRI	
Material	4/26/14	4/12/14	10/18/14	11/1/14	
ONP #8 (Old Newspaper)	15.74%	25.52%	20.71%	24.77%	
OCC (Corrugated Cardboard)	15.77%	10.58%	14.64%	10.69%	
Mixed Paper	12.28%	12.00%	10.40%	13.82%	
Plastic Bottles - PETE	2.93%	2.27%	2.72%	2.23%	
HDPE Natural	1.18%	0.88%	1.06%	0.80%	
HDPE Color	1.08%	0.91%	0.95%	0.52%	
Mixed Plastics 3-7	3.19%	2.02%	3.72%	2.71%	
UBC (Used Beverage Cans)	1.02%	0.50%	1.19%	1.06%	
Tin Cans	1.18%	1.06%	1.57%	1.60%	
Scrap Metal	0.74%	0.82%	0.83%	0.71%	
Glass	27.21%	27.51%	28.12%	28.70%	
Residual - trash	17.69%	15.93%	14.08%	12.39%	
Total	100.00%	100.00%	100.00%	100.00%	



Zero Waste Advisory Commission

Single Stream Recycling Statistical Report

FY 2013-14: October, 2013 through September, 2014

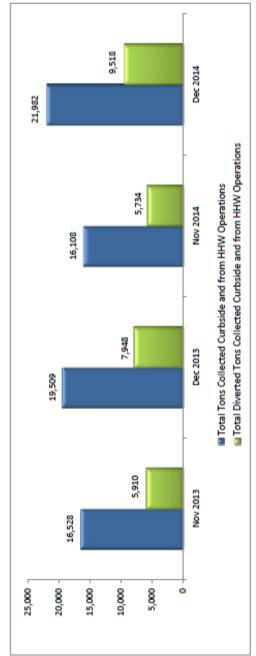
Texas Disposal Systems (TDS) and Balcones Resources, Inc. (BRI)

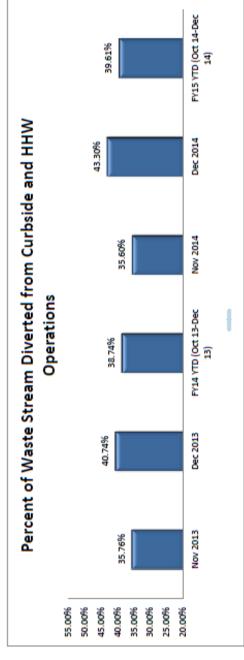
Month, Year	Contractor	Tons Delivered	Revenue	Processing Cost	Net Amount Due/(Owed)
Ontah ar 2012	TDS	1,824.24	\$108,623	\$168,473	(\$59,850)
October, 2013	BRI	2,910.84	\$177,974	\$230,825	(\$52,850)
	Total	4,735.08	\$286,598	\$399,298	(\$112,701)
	TDS	1,682.84	\$99,569	\$153,980	(\$54,411)
November, 2013	BRI	2,775.04	\$165,885	\$220,429	(\$54,544)
	Total	4,457.88	\$265,454	\$374,409	(\$108,955)
	TDS	2,237.24	\$130,657	\$204,707	(\$74,051)
December, 2013	BRI	2,781.35	\$167,489		(\$53,423)
	Total	5,018.59	\$298,146		(\$127,474)
January, 2014	TDS	2,108.75	\$123,783		(\$69,167)
	BRI	2,963.60	\$175,333	\$234,864	(\$59,531)
	Total	5,072.35	\$299,116	\$427,814	(\$128,698)
February, 2014	TDS	1,821.99	\$108,246	\$166,712	(\$58,466)
rebluary, 2014	BRI	2,392.85	\$142,235	\$191,172	(\$48,937)
	Total	4,214.84	\$250,482	\$357,884	(\$107,403)
	TDS	1,875.52	\$115,807	\$171,610	(\$55,803)
March, 2014	BRI	2,470.59	\$152,032	\$197,124	(\$45,092)
	Total	4,346.11	\$267,839	\$368,733	(\$100,894)
	TDS	1,954.76	\$119,253	\$178,861	(\$59,608)
April, 2014	BRI	2,757.04	\$151,574	\$219,052	(\$67,478)
	Total	4,711.80	\$270,827	\$397,912	(\$127,085)
	TDC	2 470 65	\$422.240	£400,420	(0.07.040)
May, 2014	TDS BRI	2,179.65	\$132,219	\$199,438	(\$67,219)
	Total	2,572.14 4,751.79	\$140,352 \$272,571	\$204,897 \$404,335	(\$64,545) (\$131,764)
		,	•	, ,	
June, 2014	TDS	2,012.96	\$121,013	\$184,186	(\$63,173)
	BRI	2,618.97	\$141,425	\$208,482	(\$67,057)
_	Total	4,631.93	\$262,438	\$392,668	(\$130,230)
July, 2014	TDS	2,301.98	\$137,844	\$210,631	(\$72,787)
July, 2014	BRI	2,485.29	\$133,677	\$198,249	(\$64,572)
	Total	4,787.27	\$271,521	\$408,880	(\$137,359)
	TDS	2,066.90	\$125,679	\$189,122	(\$63,443)
August, 2014	BRI	2,223.71	\$121,132	\$178,225	(\$57,093)
	Total	4,290.61	\$246,811	\$367,347	(\$120,536)
	TDC	2.540.00	\$4E4.00E	\$222 EQ4	(\$70.405)
September, 2014	TDS BRI	2,540.99 2,153.26	\$154,065 \$117,864	\$232,501 \$172,832	(\$78,435) (\$54,968)
	Total	4,694.25	\$271,929	\$405,333	(\$54,968) (\$133,404)
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FY	2013-14 Totals	55,712.50	\$3,263,731	\$4,730,234	(\$1,466,503)

Austin Resource Recovery Curbside Collection and HHW Operations

			IAS	LAST FISCAL YEAR	AR	CURR	CURRENT FISCAL YEAR	YEAR	
	FY 2014	FY 2014 Goal	Nov 2013	Dec 2013	FY14 YTD (Oct 13-Dec 13)	Nov 2014	Dec 2014	FY15 YTD (Oct 14-Dec 14)	FY 2015 Goal
	127,924	123,000	10,155	11,049	30,819	9,785	11,863	31,930	123,000
2 Tons of Curtside Bulk Disposed	8,892	7,000	422	490	2,011	576	576	1,856	8,459
HHW Operations Tons Disposed	442	390	41	Z	86	13.03	25	78	330
Total Disposed Tons Collected Curbside and from HHW Operations	137,258	130,390	10,618	11,561	32,929	10,374	12,464	33,864	131,789
Tons of curbside recycling	55,494	64,000	4,220	5,129	14,099	4,288	5,335	14,528	60,000
HHW Operations Tons recycled/reused	296	150	21	20	7.1	10.98	21	62	220
-	27,357	31,000	1,247	2,460	5,046	1,003	3,725	6,033	29,037
Tons of Curbside Bulk Recycled	176	783	so.	10	43	11	18	42	180
Tons of Curbside Brush Collected	6,692	6,200	417	329	1,568	421	419	1,542	8,066
Total Diverted Tons Collected Curbside and	200 000	400 400	0000	7040	200 000	702.3	0	200 000	02 500
T Indianam operations	610,05	102,133	2,310	046,7	20,027	\$6/°C	2,516	707,22	51,303
Total Tone Collected Curbolds and Board Life								ľ	
Total Toris Corrected Curusine and Itorii nny	227,273	232,523	16,528	19,509	53,756	16,108	21,982	56,071	229,292
Percent of Waste Stream Diverted by Curbside									
and HHW Operations	39.61%	44%	35.76%	40.74%	38.74%	35.60%	43.30%	39.61%	43%
Pounds of Garbage collected per customer per plckup	25.96	24.64	25.01	27.05	25.21	23.58	28.53	25.69	24.64
Number of Garbage customers	189,543	192,000	187,522	188,221	188,098	191,705	191,598	191,201	193,800
Pounds of Recycled materials collected per customer per pickup (every other week)	22.73	25.64	21.07	25.46	23.38	20.83	25.87	23.57	25.64
Pounds of Yard Trimmings collected per customer per week	5.62	621	3.11	6.10	4.18	2.44	9.03	4.89	6.21
Number of Recycling and Yard Trimmings customers	187,286	192,000	184,974	185,697	185,566	190,156	190,058	189,663	193,800
Number of PAYT pickups	52	52	4.33	4.34	13	4.33	4.34	13	25
Total tons of Dead Animals Collected from COA rights- of-way and the animal shelter	61	55	7.00	6.00	19	6.00	6.00	19	88

Austin Resource Recovery Curbside Collection and HHW Operations





Austin Resource Recovery Curbside Collection and HHW Operations

