



To: Zero Waste Advisory Commission
From: Sam Angoori, P.E., Interim Director
Austin Resource Recovery Department
Date: August 9th, 2017
Subject: **Director's Monthly Report to the Zero Waste Advisory Commission**

Master Plan Update

At the July 12 meeting of ZWAC, I proposed a schedule for developing revisions to the ARR Master Plan, with recommendations that ZWAC takes four months to review the plan from August to December of 2017. All commissioners were provided a copy of the extensive 321 page master plan at the beginning of their terms, and a copy is available online at www.austintexas.gov/department/master-plan

Funding for this project will be requested in the FY19 budget. Here is a recap of the proposed schedule discussed at last month's meeting.

- August - December 2017: review the existing plan for areas of focus
- January 2018: discuss focus areas
- January - February 2018: develop scope of work for the project
- February 20 18 – June 2018 – work on the Request for Proposals (RFP), send out the RFP in accordance with City of Austin's competitive solicitation process.
- July 2018: staff returns to ZWAC with RCA requesting recommendation approval of the of the consultant
- August 2018: Council approval to authorize and negotiate an agreement the recommended consultant.
- October 2018: consultant begins work, coinciding with the start of FY19.

Commissioners and the general public will be given opportunities to provide input to the consultant during the process to ensure that the programs the community feels are important, or lacking, may be addressed. Master Plan program implementation accomplishments as of May, 2017 are listed below.

Universal Recycling Ordinance

- Completed public workshops to develop new rules for Phase 1 of the ordinance.
- Conducted stakeholder meetings on Phase 2 of the ordinance and presented ordinance amendments to City Council.
- Conducted outreach to property managers to inform them of the ordinance requirements and timing; provided training.
- Hired and trained Austin Recycling Ambassadors to provide on-going technical assistance to commercial businesses.

Organics Composting

- Year 1 of organics collection pilot program; conducted research on adding food scraps and compostable paper to yard trimmings collection program; identified neighborhoods for pilot program.
- Year 2 of organics collection pilot program; conducted follow-up stakeholder education; evaluated results; assessed and refined program.
- Contracted and implemented pilot program for food scrap collection at restaurants in cooperation with Greater Austin Restaurant Association members.
- Conducted community-based social marketing to educate participants about organics collection pilot effort.
- Informed residents and businesses about the quality of compost products; provided a composting grading system to encourage “highest and best” use of compost products through support of US Composting Council
- Initiated Master Composter and Junior Composter certification program through support of US Composting Council
- Assessed and refined new composting incentives program; expanded program; developed compost program outreach materials; presented new public education on household and community garden on-site composting.
- Full implementation of organics collection from ARR customers for composting: Organics pilot began in 2013; 14,322 customers are currently participating in the pilot.

Completed Ordinance Processes:

- Construction & Demolition Ordinance
- Hauler Registration Ordinance
- Single-Use Bags Ordinance

Brownfields

- Transferred Brownfields Program and staff to Austin Resource Recovery.
- Facilitated land reuse and redevelopment discussions with economic developers, financiers, manufacturers, government officials, consultants, and other interested parties.
- Provided Brownfield forums to educate developers and Brownfield property owners about potential land reuse opportunities.
- Applied and approved for US EPA Cleanup loan: A Revolving Loan Fund application was submitted December 2015 and was approved by Environmental Protection Agency in May of 2016
- Formed Regional Brownfield Forum with representatives to: educate, strategize solutions, resources, & partnerships.

Improved Services

- Textiles Collection: pilot program launched December 2016.
- Assigned a Storm Debris Management response team; developed and planned for resources necessary to implement a Storm Debris Management Action Plan; implemented plan.

- Added aluminum foil and scrap metal to ARR recycling program.
- Added durable plastic to ARR recycling program.
- Expanded battery take-back program.
- Expanded hours of operation at the HHW Collection Facility.
- Implemented Clean Austin collection program ARR customers.
- Identified appropriate recycling container placement for the public area recycling program.
- Procured first 50% of the recycling containers for public area recycling program; ARR has installed over 100 recycling containers in the downtown area.
- Researched and purchased more climate-friendly equipment: Alley and Street Flushing Services
- Researched and purchased more climate-friendly equipment: Litter Control Services
- Increased Event Recycling and Composting Container inventory for container loan program

Collections Improvements

- Researched and purchased new equipment to better handle larger dead animal collections.

Community Engagement

- Worked with Austin Independent School District in establishing a site for a Teacher Creative Reuse Center
- Participated in development, promotion, and implementation of Green Business Leaders Program
- Provided an information clearing house for Austin businesses to support “waste pairings”
- Developed and contracted for comprehensive Youth Education Program: Keep Austin Beautiful
- Conducted community-based education about City Facility reuse, recycling and composting programs; provided technical assistance to City Departments and City Facilities; ensured City Facility compliance with Universal Recycling and Composting Ordinance.
- Coordinated with Office of Sustainability to form an Inter-Departmental Green Team; meet to identify opportunities for partnerships and provide leadership in Zero Waste.
- Increased training sessions to include community gardens and garden stores on on-site. Composting: Approximately 25 classes held per year.
- Established a Zero Waste training program; conducted trainings for new city hires.

Facilities

- Evaluated sites and cost involved in constructing and operating a North HHW Collection Facility.
- Re-purposed the Transfer Facility into a Resource Recovery Center.
- Prepare Todd Lane Transfer Facility for bulk collection and drop-off; transfer Resource Recovery program to Todd Lane.

Research

- Researched methane gas recovery systems. Report determined that gas quality was not sufficient for a gas-to-energy system to be profitable
- Researched and implemented more climate-friendly sweeper routes.
- Explored public/private partnerships for storm debris management.
- Participated in national and international Extended Producer Responsibility policy development.
- Researched impact of single-use plastic bag ordinance.

ReUse

- Identified sources of materials that could be made available to secondary materials process.
- Identified the companies, locally and nationally, that use the materials produced by Austin generators, to recruit these businesses to locate in the region.

- Prepared list of local reuse operations, manufacturers and composters using reclaimed and recycled materials; conducted media outreach and developed publications to encourage residents and businesses in Austin to embrace the “Re-Made in Austin” brand
- Prepared list of local Zero Waste businesses and amended the purchasing policy to provide preference for Zero Waste businesses. ARR and Office of Sustainability created Austin’s Green Business Leader Program; purchasing preferences for sustainability attributes is ongoing
- Supported the development of a “Re-Made in Austin” alliance of manufacturers that use recycled feed-stocks to share resources and promote the recycling and recycled content
- A consultant presented an evaluation of the [Re]Manufacturing Hub to the Zero Waste Advisory Commission in May 2017.

In progress:

- As appropriate, implement weekly recycling and biweekly trash collection among ARR customers when residential diversion reaches 60%. Weekly recycling in the FY18-22 Forecast to be implemented in October 2020 (impacts FY20 and FY21)
- Conduct stakeholder meetings and present Council with Event Recycling ordinance: currently Austin Center for Events is working on ordinance with stakeholders.
- Conduct community-based social marketing on pilot effort for on-call bulk item and brush collection

On hold indefinitely:

- Site four locations for Austin Reuse Centers; not financially feasible.
- Install improved gas recovery system; not financially feasible.

See Appendix A for some initial thoughts about the scope of work for master plan update process, shared with staff by three ZWAC members.

PARD Recycling Update and Plan

As reported at the last ZWAC meeting, a number of PARD’s public facilities already have recycling in place: all PARD recreation centers, all museums and cultural centers, Zilker Nature Center, PARD’s two softball complexes (Havins Fields at Walnut Creek Metro Park and Krieg Fields on Pleasant Valley Road), five of PARD’s six golf courses, four of PARD’s highest use parks (Zilker, Bartholomew, Bull Creek and Northwest/Beverly Sheffield), and 14 of PARD’s 51 pool/splash pad facilities (which are the five pools open year-round plus nine other high-use pools).

This leaves 37 seasonal pool/splash pad facilities (specifically 11 splash pads, 23 neighborhood pools and 3 wading pools), one golf course (Grey Rock), and a number of parks scattered throughout the PARD system still in need of recycling. (Four of the 37 pools are currently closed for repairs.)

ARR staff is working with PARD to develop a complete inventory of existing waste management and recycling services and infrastructure, and determine priority locations and the number of recycling containers and carts needed. As requested by ZWAC, ARR staff investigated the feasibility of providing retired ARR recycling carts to PARD but these carts were unusable due to graffiti or damage to the cart.

Preliminary analysis is also being conducted to assess the feasibility of adding the remaining pools or other PARD facilities to ARR routes. ARR must assess whether these facilities are along existing routes and what the impact on ARR's operations and budget would be if these additional stops and time were added. Once the priority locations are identified, ARR staff will be better able to assess the feasibility of serving PARD properties with ARR service. (Please note that 14 pools with recycling currently in place are being serviced by ARR. In addition, 23 other PARD public facilities have recycling via service through the City's corporate dumpster contract.)

In an effort to offer recommendations on the most efficient ways to implement recycling, ARR staff previously conducted site visits to a number of PARD facilities but additional joint planning between ARR and PARD will be conducted over the next few months. For example, previous ARR recommendations to paint existing trash cans blue or apply recycling stickers may need to be revisited, and there may be other opportunities to decrease the number of trash containers in conjunction with the Leave No Trace campaign efforts, which would also reduce the number of paired recycling receptacles that will be needed.

ARR, PARD and the Watershed Department have entered into a three-year agreement to jointly support the Leave No Trace campaign, which is a national cooperative education program that helps foster stewardship of public lands through education and training. ARR is providing funding to support the campaign as well as staff time to collectively share the campaign's messages. The campaign will promote recycling opportunities in the parks as part of the "Dispose of Waste Properly" principle. More information about the effort is available at austintexas.gov/LNT.

The Downtown Austin Alliance also recently issued a solicitation for waste management and recycling services at Republic Square Park and composting services were included as a potential additional service, which could help PARD advance a composting pilot at this location.

Given the budgetary impact to PARD of rolling out recycling system-wide or at any significant level, ARR could work with PARD to refine PARD's plan to implement recycling by targeting the next highest-use facilities that could be serviced by ARR. It would make most sense to conduct this work after Council approves the FY 2017-2018 budget so that PARD can evaluate their approved budget for funds that could be used for the purchase and installation of recycling containers, as well as assess staffing levels available to service the recycling containers. Given this, a plan could be presented to ZWAC at the January 2018 meeting.

[Re]Verse Pitch Update

ARR staff is planning for the third iteration of the [Re]Verse Pitch Competition. The [Re]Verse Pitch Competition is a social innovation program to help turn valuable raw materials that are currently leaving local businesses, non-profits, and institutions as waste into the foundation of new social enterprises. Local entities "pitch" these waste materials to current and aspiring social entrepreneurs who work with mentors and advisors to develop repurposing business ideas. The inaugural event was held in fall 2015 and the second competition took place in conjunction with SXSW Eco 2016. The competition received a

Gold Excellence in Economic Development Award from the International Economic Development Council in 2016.

The 2016 competition winner, GrubTubs, recently received a \$360,000 grant from the WeWork Creator Awards as the Scale Level winner. GrubTubs uses food waste to feed and grow black soldier flies, “grubs,” which become food for chickens. Since the competition ended, GrubTubs has leased space in South Austin and is working with the Central Texas Food Bank to be able to accept their inedible canned goods that are currently being sent to the landfill. GrubTubs will now move on to the Global Finals in New York City. Another 2016 [Re]Verse Pitch participant, Re:3D, was also a finalist at the WeWork Creator Awards and received a \$180,000 grant to design an industrial 3D printer that can use recycled plastic.

ARR is planning a [Re]Verse Pitch educational and networking event for November 2017 to generate momentum for the competition launch in early 2018. The November event will introduce attendees to circular economy principles and business success stories, as well as provide an overview of the [Re]Verse Pitch Competition structure and ways to get involved.

More information on the 2016 and 2015 competitions can be found at <http://reversepitch.org>.

Actions Taken by City Council since last ZWAC Meeting

August 3, 2017 Council Agenda: Under the City Code, Council must conduct a public hearing to receive public comment on any proposed rate changes for garbage collection rates. Staff requested to set a public hearing to receive public comments on the ARR rate changes for the Fiscal Year 2017-2018 Proposed Budget. Council approved August 17, 2017, at 4:00 p.m. as time and date for this item.

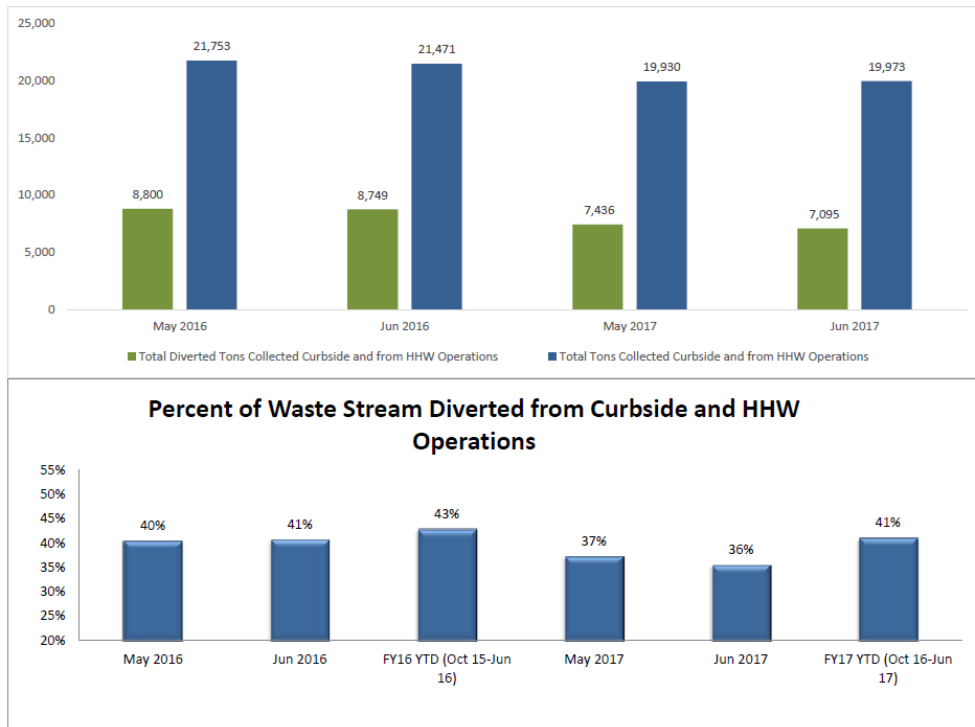
July 21, 2017 Council Message Board: The Council Working Group on Waste Management Policy posted recommendations on policy issues relating to waste disposal policy and the City's Anti-Lobbying Ordinance. The report has been uploaded to the Council Message Board website below <http://austincouncilforum.org/viewtopic.php?f=2&t=942>

Statistical Reports

Austin Resource Recovery Curbside Collection and HHW Operations

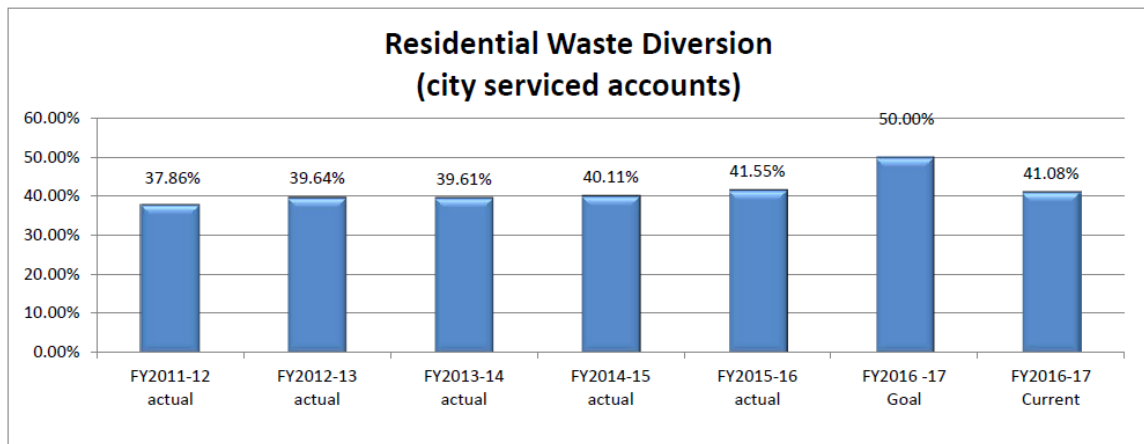
Description of Services	LAST FISCAL YEAR				CURRENT FISCAL YEAR				
	FY 2015	FY 2016	May 2016	Jun 2016	FY16 YTD (Oct 15-Jun 16)	May 2017	Jun 2017	FY17 YTD (Oct 16-Jun 17)	FY 2017 Goal
Tons Disposed									
Tons of curbside Trash	130,784	129,266	11,511	11,648	96,660	11,228	11,481	99,298	124,800
Tons of Curbside Bulk Disposed	9,525	11,869	1,406	1,036	8,437	1,224	1,350	7,548	7,581
HHW Operations Tons Disposed	432	468	35	38	337	42	48	351	360
Total Disposed Tons Collected Curbside and from HHW Operations	140,741	141,603	12,952	12,722	105,434	12,494	12,879	107,197	132,741
Tons Diverted									
Tons of curbside recycling	57,324	58,879	5,008	5,007	44,612	5,059	4,986	44,342	65,825
HHW Operations Tons recycled/reused	311	436	35	47	317	59	48	338	270
Tons of Curbside Yard Trimmings	28,036	32,605	2,589	2,957	27,632	1,836	1,478	24,580	40,407
Tons of Curbside Bulk Recycled	171	276	28	10	240	19	25	113	142
Tons of Curbside Brush Collected	7,776	8,460	1,140	728	6,123	463	557	5,362	8,000
Total Diverted Tons Collected Curbside and from HHW Operations	93,618	100,656	8,800	8,749	76,924	7,436	7,095	74,735	114,644
Total Tons Collected Curbside and from HHW Operations	234,359	242,259	21,753	21,471	184,358	19,930	19,973	181,932	247,385
Percent of Waste Stream Diverted by Curbside and HHW Operations	39.95%	41.55%	40.46%	40.75%	42.81%	37.31%	35.52%	41.08%	46.34%
Pounds of Trash collected per customer per pickup	25.96	25.83	27.61	27.94	25.80	26.61	27.13	26.24	24.59
Number of Trash customers	191,580	192,476	192,438	192,438	192,171	194,749	195,349	194,069	195,199
Pounds of Recycled materials collected per customer per pickup (every other week)	23.20	23.69	24.20	24.03	23.97	24.14	23.73	23.60	26.39
Pounds of Yard Trimmings collected per customer per week	5.67	6.56	6.26	7.10	7.42	4.38	3.52	6.54	6.21
Number of Recycling and Yard Trimmings customers	190,088	191,156	191,013	192,326	190,878	193,475	194,002	192,717	191,864
Number of PAYT pickups	52	52	4.33	4.33	39.00	4.33	4.33	39.00	52
Total tons of Dead Animals Collected from COA rights-of-way and the animal shelter	62	39	3	3	31	5	3	34	67
Estimated tons of curbside recycling processed by vendors as residual - based on bi-annual sample route audit	8,684	9,556	833	786	7,187	868	862	7,010	N/A
Tons of Curbside Textiles Collected	N/A	N/A	N/A	N/A	N/A	17	16	208	N/A
Tons of Curbside Compost Collected	4,252	4,123	419	289	3,267	362	330	4,174	N/A

Austin Resource Recovery Curbside Collection and HHW Operations



Reporting Status and Diversion Results for All Categories of Waste Generation							
Category of Waste Generation	FY2011-12 actual	FY2012-13 actual	FY2013-14 actual	FY2014-15 actual	FY2015-16 actual	FY2016 -17 Goal	FY2016-17 Current
Residential Waste Diversion (city serviced accounts)	37.86%	39.64%	39.61%	40.11%	41.55%	50.00%	41.08%
Commercial / Industrial Waste Diversion	information not available*						
Institutional Waste Diversion	information not available*						

* "Commercial, industrial, and institutional materials are not separately quantified and reported because licensed haulers do not separately collect and manage these materials (e.g., a commercial collection route can include both commercial businesses and institutional facilities)." (Page 51 - Austin's 2015 Community Diversion Study)



Zero Waste Advisory Commission - August 9th, 2017

Single Stream Recycling Statistical Report

FY17: October 2016 - June 2017

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

Month and Year	Contractor	Tons Delivered	Contractor Payments			Net Value to the City	Landfill Cost Avoidance	
			Revenue	Processing Cost	Net Amount Due/(Owed)	\$ per ton value	Cost Per Ton	Total
October 2016	TDS	1,938.46	\$97,782	\$175,431	(\$77,649)	(\$40.06)	\$21.55	\$41,774
	BRI	2,560.51	\$80,302	\$191,070	(\$110,768)	(\$43.26)	\$21.55	\$55,179
	Total	4,498.97	\$178,083	\$366,501	(\$188,417)			\$96,953
November 2016	TDS	2,033.25	\$107,888	\$184,009	(\$76,122)	(\$37.44)	\$21.55	\$43,817
	BRI	2,950.92	\$91,498	\$214,105	(\$122,607)	(\$41.55)	\$21.55	\$63,592
	Total	4,984.17	\$199,385	\$398,114	(\$198,728)			\$107,409
December 2016	TDS	1,818.52	\$98,093	\$164,576	(\$66,483)	(\$36.56)	\$21.55	\$39,189
	BRI	3,280.63	\$102,662	\$232,435	(\$129,773)	(\$39.56)	\$21.55	\$70,698
	Total	5,099.15	\$200,755	\$397,011	(\$196,256)			\$109,887
January 2017	TDS	2,740.22	\$154,167	\$247,990	(\$93,823)	(\$34.24)	\$21.55	\$59,052
	BRI	2,757.55	\$92,743	\$202,695	(\$109,952)	(\$39.87)	\$21.55	\$59,425
	Total	5,497.77	\$246,910	\$450,685	(\$203,775)			\$118,477
February 2017	TDS	2,110.15	\$132,112	\$190,969	(\$58,857)	(\$27.89)	\$21.55	\$45,474
	BRI	2,436.68	\$90,979	\$183,764	(\$92,785)	(\$38.08)	\$21.55	\$52,510
	Total	4,546.83	\$223,091	\$374,732	(\$151,641)			\$97,984
March 2017	TDS	1,777.91	\$127,968	\$160,901	(\$32,933)	(\$18.52)	\$21.55	\$38,314
	BRI	3,360.68	\$136,726	\$236,838	(\$100,112)	(\$29.79)	\$21.55	\$72,423
	Total	5,138.59	\$264,694	\$397,738	(\$133,044)			\$110,737
April 2017	TDS	1,808.09	\$119,851	\$163,632	(\$43,782)	(\$24.21)	\$21.55	\$38,964
	BRI	2,707.85	\$104,433	\$199,763	(\$95,330)	(\$35.21)	\$22.55	\$61,062
	Total	4,515.94	\$224,283	\$363,395	(\$139,112)			\$100,026
May 2017	TDS	2,162.50	\$127,648	\$195,706	(\$68,058)	(\$31.47)	\$21.55	\$46,602
	BRI	2,896.43	\$88,036	\$210,890	(\$122,854)	(\$42.42)	\$21.55	\$62,418
	Total	5,058.93	\$215,684	\$406,596	(\$190,912)			\$109,020
June 2017	TDS	1,851.35	\$110,172	\$167,547	(\$57,376)	(\$30.99)	\$21.99	\$40,711
	BRI	3,134.92	\$95,554	\$224,421	(\$128,867)	(\$41.11)	\$21.99	\$68,937
	Total	4,986.27	\$205,726	\$391,968	(\$186,242)			\$109,648
FY17 Totals		44,326.62	\$1,958,612	\$3,546,740	(\$1,588,129)			\$960,140