



## MEMORANDUM

**To:** Zero Waste Advisory Commission

**From:** Bob Gedert, Director  
Austin Resource Recovery Department

**CC:** Marc A. Ott, City Manager  
Robert D. Goode, Assistant City Manager

**Date:** May 5, 2016

**Subject:** Austin's 2015 Community Diversion Study Report

The purpose of this memo is to provide the City Council with a copy of Austin's 2015 Community Diversion Study, and summarize observations and recommendations presented in the study. This study is a key component to evaluating the City's progress towards achieving its 2005 City Council adopted Zero Waste goal.

### Background

Zero Waste means diverting 90% of waste from landfills and incinerators by 2040 often through reduction, reuse, recycling, and/or composting. In 2011, the City Council adopted the Austin Resource Recovery Department Master Plan which estimated that approximately 75% of the waste generated in the City was collected by private haulers, making it difficult to measure the community's progress toward Austin's Zero Waste goal. However, the Master Plan committed to conducting regular studies of the community's diversion efforts every 5 years (Master Plan, page 230). More recently, in 2013, the Zero Waste Audit conducted by the City Auditor recommended that the Department "implement a mechanism to account for waste information outside City control...to be able to report complete information related to established zero waste goals." Consistent with Council's commitment to Zero Waste, the Master Plan, and the Auditor's findings, Austin Resource Recovery ("Department") contracted with CB&I Environmental Engineering ("CB&I") to conduct the 2015 Community Diversion Study ("Study").

In partnership with a variety of stakeholders, the Study compiled data about waste, recyclables, and organics managed by private haulers; analyzed materials that go to landfill and recycling facilities; observed what materials end up in the dumpster; and surveyed businesses about reuse and donation activities. This study is the first time Austin has performed a comprehensive evaluation of the community's diversion efforts. Therefore, the Study's findings are based on conservative analyses and extrapolations in the interest of transparency and repeatability.

- **Findings**

Based on the data gathered, Austin's Community Diversion Rate is 42%. This means that of all the

material generated at homes, apartments, commercial and industrial properties in the Austin community, 42% is diverted from the landfill primarily through reduction, reuse, recycling or composting. Additionally, the Study found that: Austin Resource Recovery actually manages less than 15% of the waste stream, leaving approximately 85% under private control and management;

- A large proportion of materials sent to the landfill are compostable (residential 44%, commercial 38%);
- Austinites generate approximately 11.8 pounds of discarded materials per person each day

### **Observations and Recommendations**

Most of CB&I's recommendations are provided as lessons learned with the intent of improving Austin's next 5-year diversion study planned in 2020. Staff generally concurs with CB&I's recommendations regarding steps to improve the study itself. The following CB&I observations and recommendations warrant additional discussion:

- ***Implement a routine data collection protocol for reduced, reused, and repurposed material quantities, securing data annually from known businesses providing these services in the city.***
  - **ARR Response:** Concur. ARR directly manages less than 15% of the waste stream, while the private sector manages the remaining 85%. Even if the Department were to achieve a higher diversion rate among curbside residential customers, the impact to the citywide diversion rate would be nominal. Austin therefore must rely on private sector action to increase the citywide diversion rate. Additionally, to monitor progress, the City must have clear, reliable, and consistent data (held by the private sector) that contributes to the citywide diversion and disposal rates.

Currently, the City receives self-reported data from haulers twice per year. This information is aggregate information of trash, recycling, and organic materials that are privately hauled during a six month period. On pages 47 and 51 of the Study, respectively, CB&I suggests that the Department, "give greater scrutiny to the data reported by licensed haulers," and engage in "[f]urther discussion with the licensed haulers to understand the method by which they track and compile the data they report to the City...[to] assist in confirming the accuracy of the data." Additionally, there are no national standards for monitoring or quantifying materials that are reduced, reused, and/or repurposed. Like other commercial sectors, private haulers are not held to the same data reporting standards as the public sector. Moving forward, staff will work with local haulers and leaders in the reuse industry to identify opportunities for more accurate and consistent data monitoring and reporting that would allow data verification across the community.

- ***Annual Diversion Plans available at the time of the Study provide data for only approximately 20% of commercial properties in the city. [T]he URO [Universal Recycling Ordinance] will be fully implemented when this study is next performed in 2020, providing greater information for future analysis. (2015 Community Diversion Study, Data Limitations, page 54)***
  - **ARR Response.** Concur. The Universal Recycling Ordinance and related administrative rules have been in effect for less than three years. The Business Outreach team is dedicated to the successful implementation of Zero Waste in Austin's business community and have accomplished the following:
    - Provided outreach to over 3,500 individuals within the business community for property-specific recycling inquiries and related events in FY15,

- Contracted with CD&P to perform direct outreach to over 1,002 affected businesses,
- Conducted 13 ‘lunch and learn’ sessions with over 298 attendees,
- Conducted two last minute Annual Diversion Plan trainings with 14 businesses attending,
- Implemented a Zero Waste rebate program and issued \$31,240 in rebate dollars for 2,200 businesses
- Engaged over 700 of the 2,375 properties affected by the Universal Recycling Ordinance to resolve compliance issues, with a 97% resolution rate in FY15,
- Transferred 29 businesses to Austin Code for enforcement and potential citations
- Engaged in focus groups with tenants of large, medium, and small multifamily properties to test various marketing messages and get a better understanding of what they are experiencing with recycling on their property

All of these efforts require dedicated staff time. During FY17, because enforcement of the Universal Recycling Ordinance is largely complaint-driven, the Department will focus additional attention on tenant education and encouraging tenants to call 311 if their property does not have recycling services available.

The Department is committed to full implementation of the Universal Recycling Ordinance (URO). The recycling portions of the URO will be fully implemented after FY18. The organics diversion requirements of the URO will be fully implemented after FY20. Staff recommends continuing with full implementation of these ordinances to ensure consistency and to allow reporting by properties and businesses in Austin to be compared year-by-year. Full implementation of the URO will allow businesses to improve and expand diversion efforts and allow staff to provide more comprehensive assistance to smaller properties and businesses affected in later years.

- ***Give greater consideration to analyzing the disposal rate as part of the Study.***
  - **ARR Response.** Concur. The Department agrees with CB&I’s additional comments that “[t]he disposal rate is a second measure of progress that is reasonably considered alongside the diversion rate and...is more directly quantified and reliable.” Zero Waste is about reducing, reusing, and then recycling and composting all remaining material. Currently, policy makers and stakeholders focus extensively on the diversion rate and give little attention to the disposal rate. Since information about material reduction, reuse, and repurposing is difficult to gather, CB&I’s 2015 diversion study may understate the impact of these efforts on Austin’s diversion rate. In other communities, the per capita landfill (and incinerator) disposal rate has been used to measure progress towards Zero Waste since the source of diversion is less important to these communities than the result of less materials being burned or buried. For future studies, staff will consider methods to measure either the disposal rate, the diversion rate, or both to provide a more comprehensive, cost-effective analysis of Austin’s progress towards Zero Waste.
- ***Comparing Austin’s diversion rate and commercial waste characterization to other cities is not possible at this time.***
  - **ARR Response:** Concur. As a City committed to Zero Waste, ARR was eager to find out how Austin compared to other cities and any national standards. However, there are no national or international standards for capturing data that contribute to either the disposal rate or the diversion rate which makes it difficult to provide an apples-to-apples comparison. While this is

disappointing, it also offers the City of Austin an opportunity to play a key role in developing standards that allow for consistent data reporting and equal comparison of diversion rates from community to community. The Department will reach out to the Zero Waste International Alliance, US Zero Waste Business Council, the ReUse Alliance, and other national entities to initiate this conversation with the goal of establishing reliable apple to apple comparisons of community diversion rates.

### **Next Steps**

As this Study is the first of its kind for the Austin community, staff is carefully reviewing and considering all of CB&I's recommendations and observations. Staff will follow up with a more detailed response to each recommendation and observation in August 2016.

In the interim, Austin Resource Recovery is actively identifying opportunities to improve and expand residential services with the goal of increasing diversion in its operations. Although the City only controls 15% of the waste stream, recent data and public input indicates that achieving Zero Waste among residential customers is possible.

Data from CB&I's 2014 Waste Characterization Study of residential trash collected by the Department, which is included in this Study, found that:

- 46% of what is found in the trash stream could have been composted; and
- 44% of what is found in the trash stream could have been recycled:
  - 23% is recyclable paper
  - 13% is recyclable plastic
  - 8% is recyclable metal and glass

Additionally, feedback from the public indicates varied interest in expanding diversion services. Of the 6,600 residential customers participating in an online survey, 42% supported expansion of both weekly recycling and curbside organics. However, factoring in feedback from neighborhood Conversation Corps meetings and a virtual town-hall meeting attended by about 4,000 participants, the Department received concerns about affordability and rate increases to accommodate expanded services. As the Department plans for additional services, this feedback from a wide variety of customers will be helpful in developing an approach that is well-received in the community.

In the coming months, the Department will present its FY2017 Proposed Budget. Based on general feedback from the public as well as ongoing dialogue with the Zero Waste Advisory Commission, the Department's FY2017 Proposed Budget includes funding to continue citywide implementation of the curbside organics collection program while maintaining every-other-week recycling collection. While significant attention will be focused on curbside organics education, the Department remains committed to educating customers about recycling and expanding the types of materials that can be recycled at the curb.

In order to achieve Zero Waste, the City must offer convenient services that enable customers to divert 90% of the waste stream. Currently, the Department offers convenient curbside recycling options. Citywide implementation of the curbside organics program will provide customers with an opportunity to divert new materials from the waste stream and allow us to make significant progress towards Zero Waste.