

▶ A Collaborative
Effort of Waste
Diversion by
Travis County
and its Citizens

FY2016

TRAVIS COUNTY WASTE DIVERSION PROGRAM



This report presents solid waste management activities including but not limited to operational waste diversion programs, household hazardous waste and community outreach. The report breaks down how each material is managed sustainably followed with highlights of department recycling contributions in Fiscal Year 2016.



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Executive Summary

What is Waste Diversion?

The United States Environmental Protection Agency (EPA) defines waste diversion as the prevention and reduction of generated waste through source reduction, recycling, reuse, or composting. Waste diversion generates a host of financial, social, and environmental benefits including conserving energy, reducing disposal costs, and reducing the burden on landfills and other waste disposal methods.

There are strong initiatives focused on conservation and resource management being implemented in the county seat, Austin. Waste management is now only one piece of a holistic outlook on examining how a government can save resources and be fiscally responsible. Travis County is a jewel that has great potential for growth in green initiatives. There is opportunity for improvement through recycling participation, energy conservation initiatives and other conservation practices.

Highlights

Travis County has made significant strides in the past year; some highlights include:

- Partnership with CARE for the 2nd annual Healthy Planet Healthy People Event
- Recycling programs generated revenue¹ of \$35,983.09 including electronics recycling revenue of \$14,201.64² (which was not previously tracked in the annual reports)
- In FY2016 TNR and FMD collaborated on providing dual stream recycling and trash containers for all public spaces.
- The T-Shirts for Hunger Project was selected as the 1st place winner of the Texas Environmental Leadership Award under the Outstanding Recycling Partnership category by State of Texas Alliance for Recycling (STAR).
- A partnership between Travis County and the City of Austin created a permanent kiosk for year-round public use for safe disposal of their expired or unused prescription drugs.

The waste management program is an essential tool for managing these materials in ways that satisfy the policy directives of the Commissioners Court.

¹ Revenue is generated from the following contracts: Texas Disposal Systems, Austin Pallet Recycling, CES, Austin Metal and Iron and CMC.

² Electronics recycling revenue is derived from Dell Purchasing Contract as a line item.

These efforts produce public and environmental benefits that far exceed the monetary value of recycling revenues and avoided disposal costs.

Purchasing Goals

The County's purchasing goal (see Section 111.005 of the Travis County Waste Management Policy) is to spend at least eight percent (8%) of its annual consumables budget (such as office supplies) on materials with recycled content or that provide some other specific conservation benefit. To be considered, these materials must also meet the program feasibility criteria for cost and operational efficiency.

Travis County has never been able to fully evaluate cost savings and environmental benefits of the purchasing policy. The Purchasing Office's tracking methodology is designed to address important requirements other than verifying compliance with the recycling goal. The existing methodology does not readily lend itself to tracking environmental parameters of products. Nevertheless, it is possible to gauge recycled content based upon external information provided by key vendors like Office Depot (OD). OD is currently one of the only vendors who provide such information.

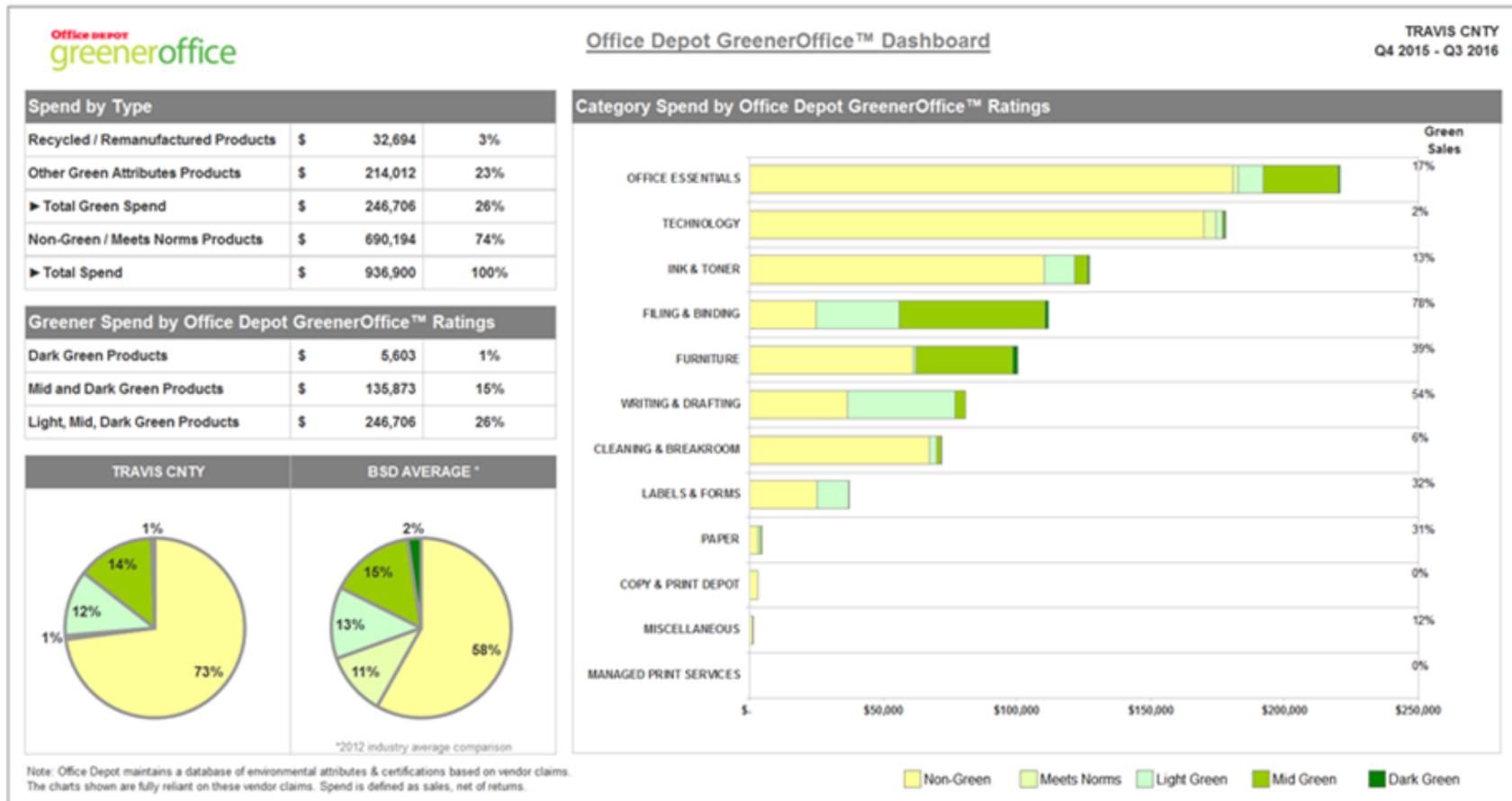
Additionally, the County continues to purchase recycled products such as:

- Re-manufactured toner cartridges
- Re-refined Oil
- Re-refined antifreeze
- Resource Recovery Materials

This diagram shows actual purchases by Travis County from Office Depot and the recycled content of those products. The two pie charts contrast Travis County recycled content to industry averages of all Office Depot customers.

From Q4 2015 - Q3 2016, TRAVIS CNTY purchased \$936,900 in office supplies

- 3% of spend was on recycled / remanufactured products and 23% of spend was on products with other green attributes
- 15% of spend was considered mid green or dark green according to Office Depot GreenerOffice™ Ratings
- 26% of spend was considered light, mid, or dark green according to Office Depot GreenerOffice™ Ratings



County Resource Recovery

The Travis County Commissioners' Court adopted the Travis County Waste Management Policy (WMP) on December 17, 1996. The primary goals of the policy are to:

- Reduce material and waste disposal costs;
- Reduce the volume of material sent to landfills;
- Reduce the use of limited natural resources;
- Prevent environmental pollution associated with waste disposal; and
- Promote the purchase and use of recycled materials.

The policy directs County departments to minimize the amount of waste materials they generate through the implementation of waste reduction strategies and procedures and provides implementation guidelines. Unless otherwise directed by law, the means for achieving the County's goals must meet feasibility criteria related to clearly demonstrable conservation benefits, as well as cost and operational efficiency.

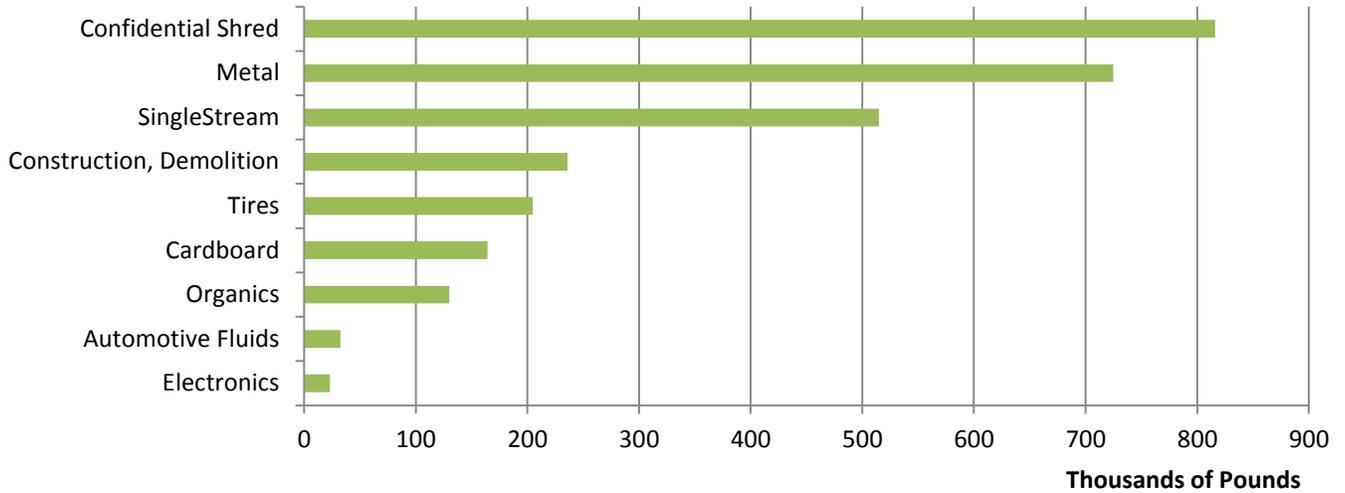
Travis County's waste streams are very diverse due to the variety of operations and services county government provides. This includes forty-three facilities ranging in activity from offices, to road vehicle maintenance, and management of correctional complexes. Many materials are captured and managed as commodities and recycled. The policy provides guidance for the treatment of several specific County waste streams. The program has evolved and expanded in the past twenty years. This report examines the waste streams by individual media. The decrease in single stream recycling service costs reflects not conducting waste characterization studies in FY2016.

| Commodity | FY2015 | FY2016 | Change FY15 – FY16 |
|---|---------------------------|---------------|-------------------------------|
| Landfill Services | \$171,059.47 ³ | \$177,990.11 | 4% |
| Single Stream Recycling Services | \$72,947.73 | \$68,744.99 | -6% |

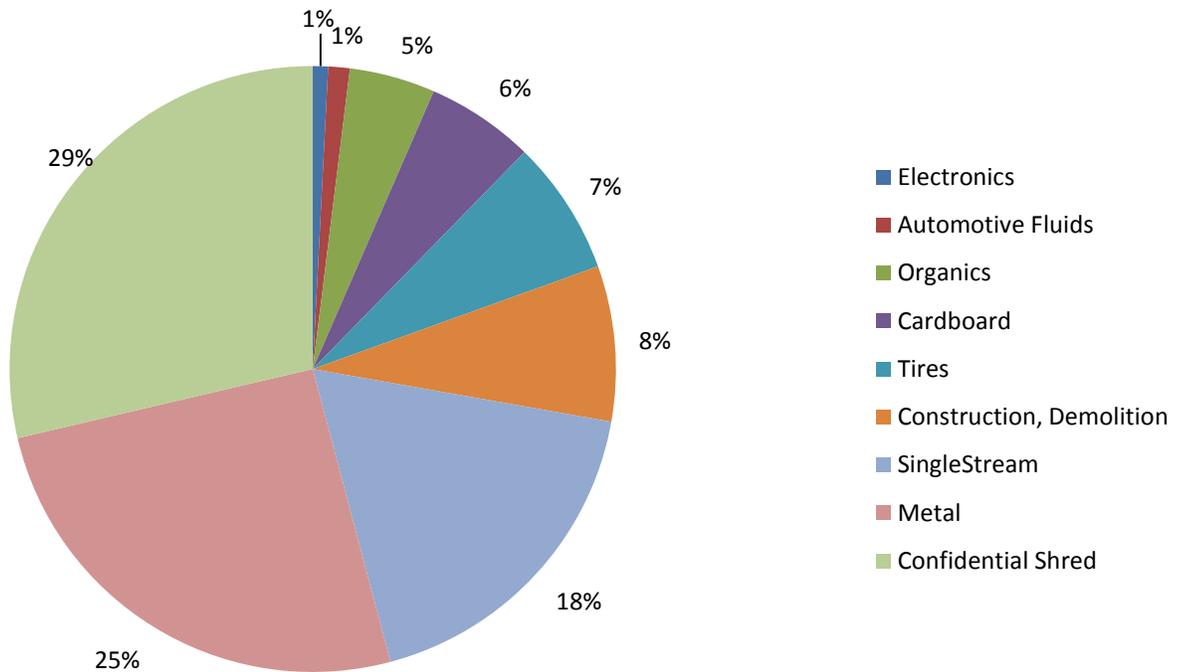
³ The cost includes 40yd roll-offs for brush, right of way litter, and concrete disposal.

The following three figures display the recycling of each commodity class by weight, percentage of weight, and by revenue gained.

FY2016 Weight of Recycled Materials by Commodity Class

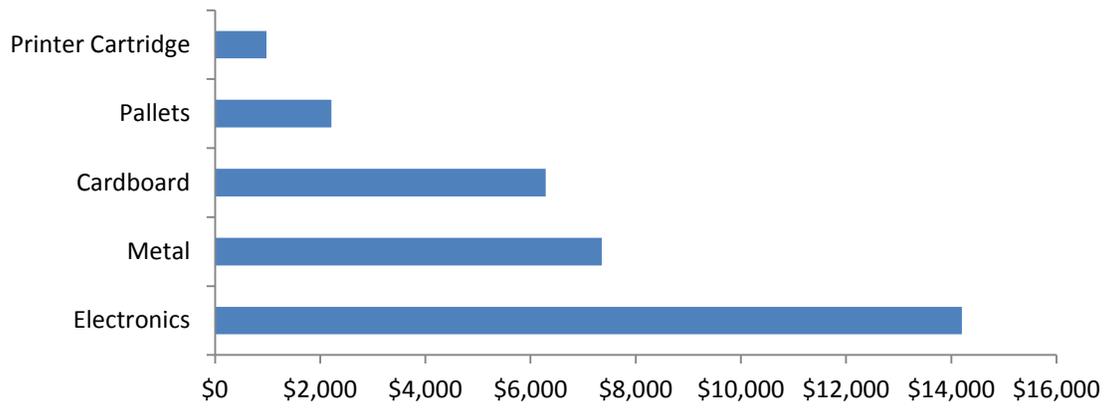


FY2016 Weight of Recycled Materials Percentage by Class⁴



⁴ The unit of measure is in pounds.

FY2016 Recycling Revenue by Commodity Class



Office Recycling

Recycling from 1996 to 2012 focused on specific departments/divisions that volunteered to participate in a recycling program, missing some large quantity generators of recyclable waste. Facilities/buildings throughout the County were not comprehensively examined for the potential of implementing a holistic recycling program. On January 8, 2013, the Commissioners Court approved funds establishing a single-stream recycling program for all Travis County locations. Since April 1, 2013, Texas Disposal Systems (TDS) and Texas Facilities Commission (TFC) are the providers for single-stream pickup services for Travis County locations except 700 Lavaca. It is serviced by Balcones Recycling. These recycling services offer the opportunity for all employees to access consistent recycling services.

Single-stream is where all clean & rinsed recyclable material (plastics 1-7, mixed paper, aluminium, glass and flattened cardboard) can be placed in one cart. Attached in the appendix is a detailed recycling flyer that staff can post in their office(s) that shows what is recyclable in a work location.

- Travis County recycled 257 tons of single stream material in FY 2016.
- Travis County spent an estimated \$96,352 in FY 2016 on waste that was destined for landfill disposal.
- Records Management Division purchased 6,649 cases of paper for business use.
- Through confidential management the county has recycled 408 Tons of paper.

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15 – FY16 |
|--|-----------------|---------------------------|----------------------|
| Single Stream (Mixed) | 427,858 lbs. | 735,203 lbs. | 72% |
| Confidential ⁵ Management Shred | 247,100 lbs. | 816,000 lbs. ⁶ | 230% |

⁵ Confidential Management Shred is managed by the Communication and Records Services Department. The number represented in the graph is material from Balcones Recycling (31.09 tons) and Iron Mountain (Vault Media Storage 0, Regular File Storage 153.568 tons, and Shred bins 223.384 tons.)

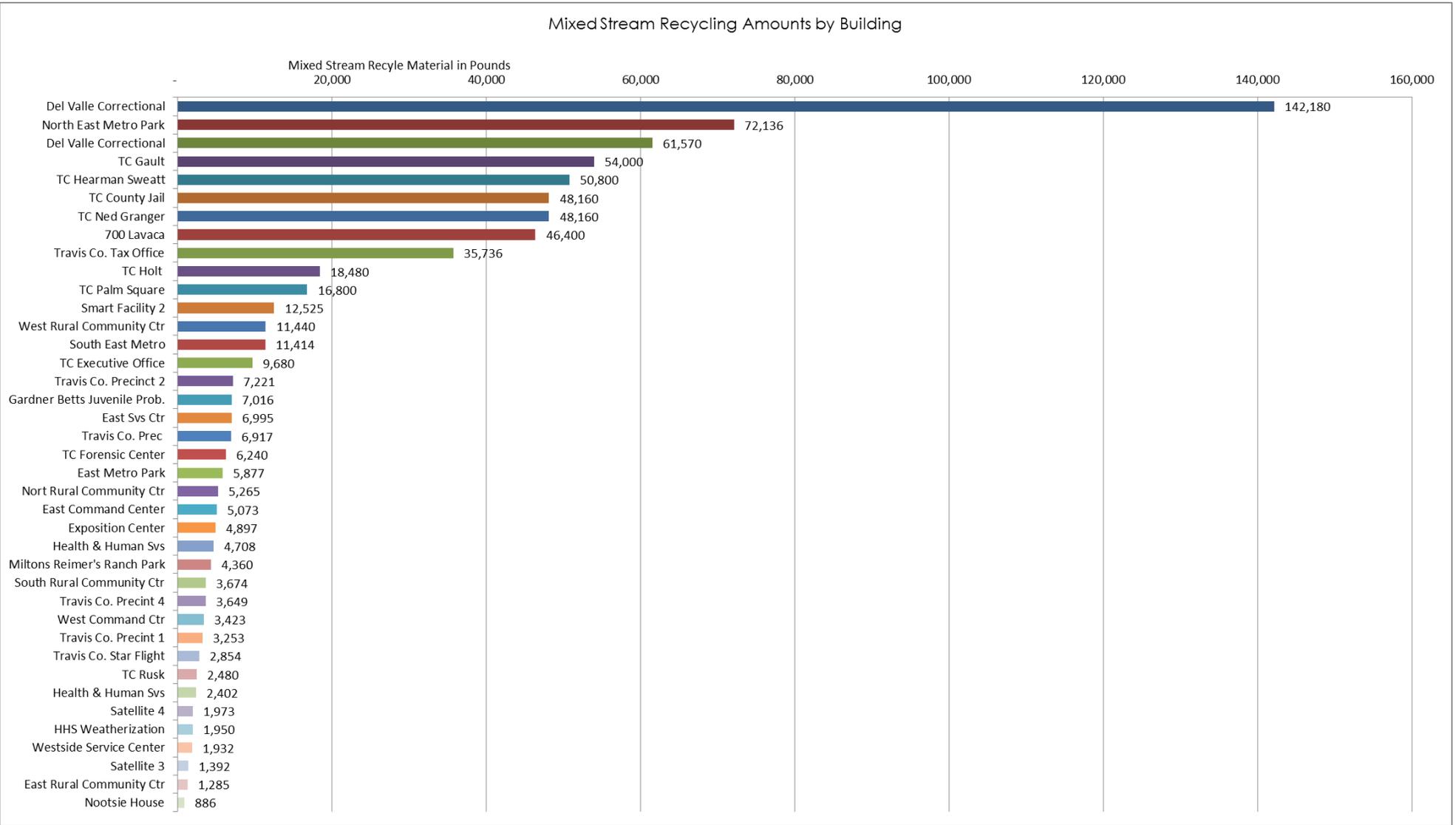
⁶ The increase in confidential management shred is due to an increase in services for various departments and change in processes.



"I really feel that since we started most people have just begun to see the recycling as just a regular part of the day."
Kelly Overdorff



MixedStream Recycling Amounts by Building



Corrugated Cardboard

The County recycles cardboard to implement goals from the Texas Health and Safety Code and Waste Management Policy (WMP). Cardboard in the recycling industry is known as Old Corrugated Cardboard (OCC). This past year the price for OCC has fallen from an average \$75.36 a ton to a low of \$64.50.

- Travis County recycled 164,200 lbs. of corrugated material in FY 2016⁷.
- The Travis County Del Valle Correctional Facility currently is the only revenue-generating location for cardboard.
- The Health and Human Services (HHS) Community Centers generate a substantial amount of cardboard each week. Although recycled, no revenue is gained because HHS would need to separate it and collaborate with other departments to transport the material for pick up at Del Valle.

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15-FY16 | Revenue FY2015 | Revenue FY2016 |
|-----------|-----------------|-----------------|--------------------|----------------|----------------|
| Cardboard | 180,440 | 164,200 | -9% | \$6,479.25 | \$6,290.59 |



⁷ The total recycled cardboard includes material picked up by vendor (Texas Disposal Systems). The County receives 86% of the revenue (based on tonnage) using the Official Board Market, SW Region Index.

Metals

Chapter 111 of the Travis County Policies, Procedures, and Regulations Manual states “scrap metals shall be recycled, not landfilled.” This program has been very successful throughout the County and especially at the Transportation and Natural Resources satellite offices, Purchasing Assets Warehouse and the Correctional Complex. Vendor roll-offs are placed at the Assets Warehouse, Eastside Service Center, Westside Service Center, and Del Valle Correctional Facility, and Weatherization office.

- FY 2016, an estimated total of 724,901 pounds of metal were recycled.⁸

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15-FY16 | Revenue FY2015 | Revenue FY2016 |
|-------------------|-----------------|-----------------|--------------------|----------------|----------------|
| All Metals | 362,306 lbs. | 724,901 lbs. | 100% | \$21,408.95 | \$7,355.52 |



“You're only paid for what you do not throw away in regards to metal recycling”
 Shaun Auckland,
 Transportation and Natural Resources

⁸ The revenue declined due to sharp drops in commodity prices.

Automotive

Texas law prohibits dumping used oil on land or into sewers or waterways. This includes the use of used oil as a dust suppressant. Texas has also banned used oil filters from being placed in or accepted for disposal in a landfill. The Waste Management Policy states all fleet maintenance wastes including waste tires used motor oil, used oil filters, antifreeze/coolant, lead-acid batteries, and Freon should be recycled or disposed of properly.

- Travis County purchases and uses re-refined oil and antifreeze in all County vehicles.
- Used oil filters are banned from Texas landfills.
- Travis County's tire vendor is Reliable Tire. Reliable removes fleet tires and those collected from illegal disposal along county right-of-way and charges \$0.11 per pound.

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15-FY16 | Revenue FY2015 | Revenue FY2016 |
|---|------------------------|------------------------|---------------------------|-----------------------|-----------------------|
| Motor Oil In gallons | 4,856 | 4,572 | -6% | \$4,023.67 | -\$1,785 ⁹ |
| Antifreeze In gallons | 287 | 480 | 67% | - | N/A ¹⁰ |
| Tire Casings for Re-tread | 400 units | 126 ¹¹ | -68% | \$429 | \$433 |
| Shredded Tires | 126,340 lbs. | 204,760 lbs. | 62% | -\$13,897.40 | -\$22,523.60 |
| Fleet Lead Acid Batteries¹² | 413 | 599 | 45% | \$0 | \$0 |
| Used Oil Filters | 12 drums | 26 drums | 116% | \$0 | \$0 |

⁹ Vertex Oil began charging for collection of material.

¹⁰ Data was not provided by vendor

¹¹ Vendor providing service was not in compliance with TCEQ rules, Travis County discontinued services. Travis County is exploring opportunities to contract with other tire casing vendors.

¹² These numbers represent batteries recycled through a takeback program with Interstate battery at our fleet locations.



Inventory Specialist, Darryl Bonhomm, goes above and beyond his position description to make sure all automotive fluids, batteries and filters are recycled.

Electronics

In the operations of an agency, electronics are an element of staff's everyday job function. Electronics include, computers or other devices and associated peripherals, keyboards, monitors, cell phones, telephones, deskside printers, scanners, televisions and batteries.

These items eventually have an end to their lifecycle, when the systems become obsolete. Travis County manages obsolete electronics two ways. One is through an agreement with Dell, Inc. to take-back all Dell manufactured equipment for recycling or reuse. Travis County receives a portion of the revenue from the electronics Dell recycles. For a full list of items Dell accepts please view the Appendix. The items Dell does not accept are inventoried and managed through auction. The electronics managed through auction are not weighted or separated from other auction items.

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15-FY16 | Revenue FY2015 | Revenue FY2016 |
|--------------------------|-----------------|-----------------|--------------------|----------------|----------------|
| Dell Components | 32,773 lbs. | 23,181 lbs. | -29% | \$23,681.70 | \$14,201.64 |
| Other Electronics | 0 | 0 | - | \$0 | \$0 |



“Much of what we call “e-waste” is not waste at all but rather whole electronic equipment or parts that can gain new life through reuse or recycling. By recycling products safely, we protect the health of people and the planet.” - Dell

Organic Materials

Organic materials such as yard trimmings, food scraps, and wood waste typically make up about one-third (by weight) of the municipal solid waste stream. These items are considered Source Separated Organics (SSO) in which the material is separated from other waste streams at the source.

Chapter 111 of the Travis County's Waste Management Policy addresses the management of food waste, brush or yard trimmings, and dead animal waste stating all of the above materials should not be landfilled. For example, "cafeteria food wastes shall be considered for composting."

The animal composting program was implemented by Transportation and Natural Resources (TNR) to save costs on transportation of dead animals collected from the "right of way". TNR Road and Bridge operations staff uses compostable bags for collection.

This year there is only one County location composting food waste. The composting program at Travis County Correctional Complex was managed on an as-needed basis. The compost is utilized in the on-site, 3.5 acre non-certified organic garden.

In Travis County, TNR Parks, FMD Grounds keeping staff, and TNR Road & Bridge maintain lawns, trees, shrubs, rights of way, and other landscaping in their day-to-day activities. The Facility Grounds keeping staff collects clippings and woody debris by the truckload and delivers it to the contracted landfill to be utilized in the landfill's compost program. Trimmings from TNR Road & Bridge right of way work contributes to mulch used for the animal composting program. The TNR Parks arborist cuts dead trees and then chips them into mulch. The mulch is utilized at each County Park for spreading around trees, conserving water needed for irrigation.

| Commodity | FY2015 | FY2016 | % Change FY15-FY16 |
|------------------------------|---------------|---------------|-------------------------------|
| Compost for Gardening | 3000 lbs. | 2,500 | -17% |
| Animal Composting | 143,760 lbs. | 93,040 lbs. | -35% |



*"Composting is the aerobic, biological decomposition of organic materials. Living microbes combine with oxygen to cause decomposition. The end result is a nutrient-rich, soil-additive called "compost".
Keep America Beautiful"*

Pallets and Construction Demolition Debris

In 2009 Commissioners Court approved a Green Building Policy to address construction and demolition waste. FMD was authorized to use the principles of LEED to the greatest extent practical and reasonable for renovation and rehabilitation projects budgeted below one million dollars and each project will be assessed for the appropriate certification level with the goal of maximizing long-term benefits, such as operating and maintenance savings, while minimizing up-front costs. The types of material generated are packaging such as pallets, construction and demolition debris. In FY2016, 118 tons of construction and demolition debris were recycled¹³.

The Del Valle Correctional Facility, Eastside and Westside Service Centers are the current locations for recycling of pallets. The Del Valle Correctional Facility collects unneeded pallets from all Sheriff's Office facilities. FMD works with a vendor to separate and process construction and demolition debris to be reused or processed by a recycling company.

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15-FY16 | Revenue FY2015 | Revenue FY2016 |
|----------------------------|------------------------|---------------------------|---------------------------|-----------------------|-----------------------|
| Pallets | 6,914 units | 3,120 ¹⁴ units | -54% | \$1,364.50 | \$2,209.50 |
| Construction Debris | 0 | 118 tons | 100% | N/A | N/A ¹⁵ |



¹³ Facilities Management hires Tri-recycling to manage construction debris.

¹⁴ The date provided by Sherriff's department does not match vendor records.

¹⁵ Costs for managing this material is not provided by Facilities Management.

Plastic Film

Currently Travis County facilities that receive the single-stream recycling service can recycle a wide range of plastics, but not plastic film. The WMP states to recycle all plastic “whenever feasible”. Plastic film includes soft clear bags like the ones used for packing of vegetables, bread and shipping wrap, which is made of Low Density Polyethylene (LDPE). In 2013, the Del Valle Correctional facility began collecting all plastic film generated at their site. They are baling the plastic using a grant funded baler.

| Commodity | FY2015 Recycled | FY2016 Recycled |
|--------------|-----------------|-----------------------|
| LDPE Plastic | 2 bales | 0 bales ¹⁶ |



“Data released by the United States Environmental Protection Agency shows that somewhere between 500 billion and a trillion plastic bags are consumed worldwide each year.”
- National Geographic



¹⁶ The program was discontinued in FY2016.

Employee Programs

In 2013, the Travis County Commissioners' Court approved two policies to encourage diversion within county operations. Travis County and the City of Austin executed the Zero Waste Inter-local Agreement to establish common goals, provide for coordinated efforts, and cooperate to implement zero waste strategies. The Commissioners also approved an implementation plan for expansion of recycling throughout all County facilities and operations consistent with the City of Austin Universal Recycling Ordinance (URO) where practical. Additionally, the inter-local agreement states Travis County will implement employee and public education campaigns.

Green Team Program

In May 2015, the Travis County Commissioners Court approved an Order regarding recycling participation by all departments and offices of Travis County to optimize reuse, conservation and material recovery. The order created the Green Team Program with full participation encouraged by all departments and offices of Travis County. Since May 2015:

- Three bi-annual Green Team trainings have occurred.
- The Green Team website and SharePoint were created as a resource.
- Overall departmental participation rate is at 50%.
- 58% of the overall County office spaces have a member.
- 32% of the members have completed the Green Team training
- The program demonstrates institutional practices that promote the use of renewable resources while decreasing waste produced through County operations and by County suppliers.



“A green team can have a dramatic benefit on a company's environmental and financial performance.”
Corporate Social Responsibility

Healthy Planet Healthy People

Each year, Earth Day is celebrated nationally to mark the anniversary of the beginning of the modern environmental movement when over 20 million Americans took to the streets, parks, and auditoriums to express their support for a healthy, sustainable environment. With that same spirit of living in a healthy, sustainable environment in mind and in celebration, Travis County TNR, Travis County Sheriff's Office, Facilities Management and CARE Program¹⁷ partnered to host Healthy Planet, Healthy People. At the event there were partner organizations and county vendors hosting booths with helpful information to encourage staff to be better stewards of our workplaces and planet.

<https://www.flickr.com/photos/128633430@N06/26553644576/in/album-72157667445546005/>

| Event | FY2015 | FY2016 | % Change FY15-FY16 |
|---------------------|---------------|---------------|-------------------------------|
| Participants | 450 | 320 | -28 |
| Vendors | 48 | 45 | -6% |

*“Communications were good, it seemed well organized and a good selection of vendors”
- Participating Vendor*



¹⁷ Care acronym: Check-ups, A Healthy Outlook, Regular Exercise, Eating Right

Recycling Infrastructure Support

There are a few infrastructure needs for a productive employee recycling program. Staff will need to understand their container requirements through a recycling assessment also known as a waste audit. A recycling assessment is a meeting to discuss what services the department/division provides current Travis County conservation programs, and a tour of their office space. Once staff understands their requirements they can request more recycling containers. Presentations were given throughout the year at division and departmental meetings to understand what can be recyclable verses what needs to be sent to the landfill.

- Container request form created.
- An estimated 271 employees were trained through presentations.
- Two new locations were added to the recycling services contract.
- In FY2016 TNR and FMD collaborated on providing dual stream recycling and trash containers for all public spaces.

| Commodity | FY2015 | FY2016 | % Change FY15-FY16 |
|-------------------------------|--------|--------|--------------------|
| Recycling Assessments | 13 | 0 | -100% |
| Containers Distributed | 115 | 437 | 158% |
| Presentations | 7 | 1 | -85% |



“Employees who feel they can make an impact on social and environmental issues while on the job are twice as satisfied with work as those who don't.”
 - Net Impact Study: “What Workers Want in 2012”

Conserve Lunch and Learn

At its simplest, Conserve Lunch and Learn is an informal training event scheduled during the lunch hour. Employees who attend bring their lunches and eat them during the training session. The presentations have a focus on the environment with a variety of topics relating to conservation.

- Wizzie Brown from Travis County Extension office presented on beneficial insects.
- City of Austin, presented “Composting with an Expert”
- Laura Seaton presented Creative Escape to promote reuse
- Kevin Anderson, Coordinator of the Austin Water Center for Environmental Research presented “Waters the Land: Texas Rivers”

| Lunch & Learns | FY2015 | FY2016 | % Change FY15-FY16 |
|-------------------|--------|--------|--------------------|
| Presentations | 4 | 4 | 0% |
| Average Attendees | 25 | 25 | 0% |

*If you've got a Garden ...
you've got **BUGS!***




Lunch & Learn
Thursday
August 11, 2016
Noon to 1:00 p.m.
700 Lavaca MFR B

Bring your lunch and join us and Texas A&M Agrilife Extension Prog Specialist-IPM bug expert **Wizzie Brown** and learn all about who is enjoying your garden besides you!



Lunch and Learn
Thursday, May 5th, 2016
Noon- 1:00 pm
700 Lavaca St, MFR B

Composting with an Expert!

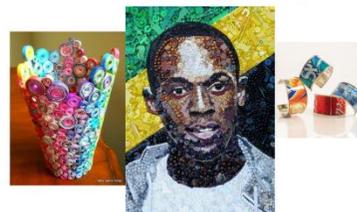
Join Composting Coordinator Noelle Bugaj for an informative Lunch&Learn about composting! Bring your lunch and get tips on how to make your compost truly *black gold!*



LUNCH & LEARN

Waters the Land: Texas Rivers
Coordinator of the Austin Water Center for Environmental Research at Hornsby Bend, Kevin Anderson, will discuss the interconnectivity of Texas Rivers.
GRAB YOUR LUNCH AND JOIN US!
Thursday, NOVEMBER 19TH
12:00 PM
700 LAVACA ST., 1ST FLOOR RM 1-113

Today is National Reuse Day!



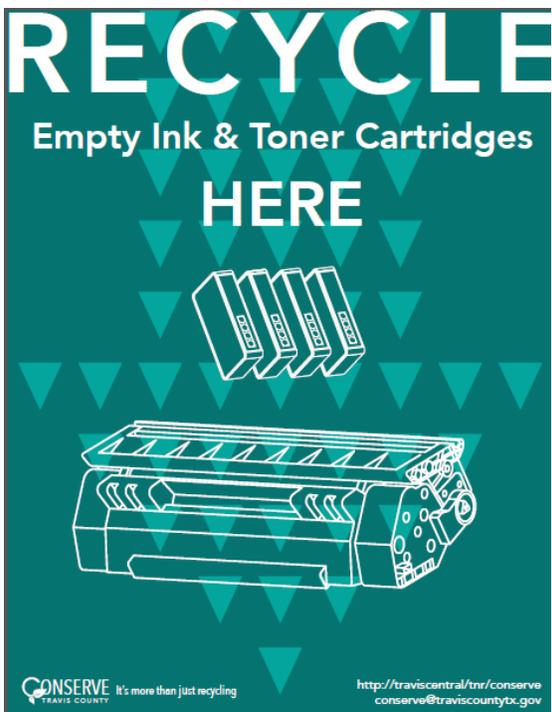
Join us for an impromptu **Lunch&Learn Art Project**
Today! 700 Lavaca MFR C @ Noon
Grab your lunch and come be inspired on how creative reuse can be!
Call Laura @ ext 44237 for more information!

Toner Ambassador Program

Chapter 111, Section 111.006.A.4, states “Spent toner cartridges shall be recycled and remanufactured toner cartridges purchased”. Travis County uses over 3,786 inkjet and toner cartridges each fiscal year, which creates a significant amount of waste. When Travis County utilizes this toner recycling program it helps save disposal costs for up to 12,240 pounds of material.

The Toner Ambassador Program puts toner recycling into the generator's hands. A volunteer from each department or office space registers with the toner recycling program as a collection site. Volunteers are recognized for their work with a certificate and letter of appreciation. The Toner Ambassador collects the cartridges then ships them with a prepaid shipping label.

| Commodity | FY2015 | FY2016 | % Change FY15-FY16 | Revenue FY2015 | Revenue FY2016 |
|----------------------------------|--------|--------|--------------------|----------------|----------------|
| Toner Cartridges Recycled | 2,148 | 2,669 | 24% | \$1,150.75 | \$980.12 |
| Toner Ambassadors | 51 | 50 | -1% | N/A | N/A |



“The boxes did not take up any space I put them in our copier rooms and it’s working great.” Celia Satterwhite, Court Clerk I, Constable Pct. 1

Universal Waste

Universal waste is a category of waste materials designated as “hazardous waste”, but containing materials that are very common which include batteries, pesticides, and mercury-containing equipment and lamp bulbs. Travis County operations generate these types of wastes which are addressed in the WMP. The policy states collection bins shall be established for batteries in accordance with 40 CFR 261.24 and 30 TAC Chapter 335, Subchapter R. Another material addressed for proper disposal in WMP policy is used florescent light bulbs. These light bulbs should be recycled instead of landfilling them.

In 2014, TNR began to address the need for proper disposal of universal wastes by purchasing pre-paid containers for disposal of the above mentioned items. Departments currently participating in proper disposal of florescent light bulbs, ballasts, and batteries are Facilities Management, Sheriff's Office, and County Clerk.

| Commodity | FY2015 Recycled | FY2016 ¹⁸ Recycled | % Change FY15-FY16 |
|-------------------------------|-------------------|-------------------------------|--------------------|
| Florescent Lamps | 4,306 | N/A | N/A |
| Lamp Ballasts | 3,387 | N/A | N/A |
| Dry Cell Batteries | 527 lbs. | N/A | N/A |
| Rechargeable Batteries | N/A ¹⁹ | 438 lbs. | N/A |



“Streamlined universal waste regulations promote environmentally sound collection practices and increase the proper recycling or treatment of such wastes.”
Texas Commission for Environmental Quality

¹⁸ Vendor changed reporting platform. Data not yet available at time of publication.

¹⁹ Amount recycled for FY15 is not available.

Facilities Management Dept.

Travis County Facilities Management Department (FMD) plays a vital role in the County's recycling program. The custodial staff manages all the material that staff generates in their day to day activities. TNR works in partnership with FMD by purchasing the recycle containers and FMD delivers the containers to various departments.

- FMD has been promoting green building initiatives as well as supporting recycling by distributing recycling containers.
- Moving department delivered 101 office side containers and 26 Slim Jims to 10 of departments.
- Custodial staff attended a "Recycle Right" presentation given by the Conservation Coordinator.



*"With the help and commitment of facility managers to the recycling process, you can have a successful and cost-effective recycling program."
- Keep America Beautiful*



Office Side



Slim Jim

Purchasing Department

The Purchasing Department supports many different activities including management of the thousands of items classified as fixed assets. These assets range from electronics, vehicles, equipment, and office products. When these items are obsolete or no longer useful for a department the items are transported to the Purchasing warehouse and managed by the Fixed Assets division of the Purchasing Department. Fixed assets are classified as either capital assets (assets with a useful life greater than one year and a value greater than \$5,000) or low value assets (assets with a value less than \$5,000 that must be secured and tracked because of liability issues).

| Commodity | FY2015 Recycled | FY2016 Recycled | % Change FY15- FY16 | Revenue FY2015 | Revenue FY2016 |
|-----------------|-----------------|-----------------|---------------------|----------------|----------------|
| Dell Components | 32,773 lbs. | 23,181 lbs. | -30% | \$23,681.70 | \$14,201.79 |



“Every single purchase has hidden human health, environmental, and social impacts.”
National Association of Counties

Transportation and Natural Resources

Transportation and Natural Resources (TNR) Road and Bridge and Parks have several recycling initiatives that have been established since 1998. Road and Bridge manages the automotive recycling program, tires, metal, and dead animal composting. Parks has been very active in implementing new waste reduction and environmental practices into their parks.

- Reimers Ranch participates in the Night Sky program.
- Road and Bridge has supported the Christmas Tree Recycling program for twenty years.
- Five of Travis County Parks currently have recycling provided to the visitors.



*"Truthfully, I feel good about supporting our efforts preserving our environment and to encourage sustainability." Dan Chapman
Park Ranger Chief*



Citizen Programs

The Zero Waste Inter-local encourages public education campaigns to promote the reduction of waste and strive to achieve the goal of zero waste by 2040. Travis County does this through outreach and citizen programs. There are two citizen programs promoting zero waste and environmental stewardship. The volunteer based programs are T-Shirts for Hunger and the Pharmaceutical Take-back event.

Outreach

Travis County reaches the public through use of social media, Conserve website, and Travis County cable channel 17 to promote programs.

| Outreach | FY2015 | FY2016 | % Change FY15-FY16 |
|------------------------|--------|--------|--------------------|
| Presentations | 4 | 1 | -75% |
| Website Hits | 4,193 | 8,234 | 96% |
| Outreach Events | 7 | 6 | -14% |



*“Much of recycling program success lies in how well-informed the community is, since they are the key participants.”
Carton Council*

T-Shirts for Hunger

T-Shirts for Hunger is a project created in partnership with TNR, Travis County Sheriff's Correctional Department (TCSO) and Travis County Health and Human Services (HHS). Used, unwanted t-shirts are collected from the community and correctional facility inmates sew the t-shirts into reusable bags that are used to distribute food at the seven Travis County Community Center's food pantries. The program teaches inmates sewing skills and provides County constituents reusable bags. The T-Shirts for Hunger Project was selected as the 1st place winner of the Texas Environmental Leadership Award under the Outstanding Recycling Partnership category by State of Texas Alliance for Recycling (STAR).

- The program has the potential to save HHS from spending \$5,811 on plastic bags each year.

| T-Shirts for Hunger Program | FY2015 | FY2016 | % Change FY15-FY16 |
|--------------------------------|------------|------------|--------------------|
| T-Shirts Collected | 2,998 lbs. | 5,304 lbs. | 77% |
| Reusable Shopping Bags Created | 104,930 | 185,640 | 77% |



The clients often ask, "Am I allowed to keep this bag - or do I have to give it back?" They definitely see it as a valuable gift. They also often say they like the cloth bags better than plastic – because they hold more groceries and don't break. One client in particular started crying when she found out she could keep the bags – she said it would make a huge difference to her and her family since they were living out of their car.

Joy Stollings,
Community Center Manager

Pharmaceutical Take-back

In 2016, Travis County expanded opportunities for citizens to properly dispose of expired medications. Three County Constable offices participated in the bi-annual Drug Enforcement Administration (DEA) take-back event. A partnership between Travis County and the City of Austin created a permanent kiosk for year-round public use for safe disposal of their expired or unused prescription drugs.

- Prevents the usual methods for disposing of unused medicines—flushing them down the toilet or throwing them in the trash—both pose potential safety and health hazards.
- County and City leaders held a news conference to unveil a public kiosk for prescription drug take-back. Speakers at the conference were Carlos Lopez, Travis County Constable; Brigid Shea, Travis County Commissioner; Kathie Tovo, Austin Mayor Pro Tem; Gina Giachetti, DEA Group Supervisor Austin Office; Dr. Phil Huang, Medical Director & Health Authority for Austin/Travis County HHS; Jane Burazer, Austin Water Assistant Director

| Pharmaceutical Take-back | FY2015 | FY2016 | % Change FY15-FY16 |
|-------------------------------------|---------------|---------------|---------------------------|
| Amount Collected from Events | 90 lbs. | 474 lbs. | 426% |
| Kiosk | N/A | 102.37 lbs. | N/A |



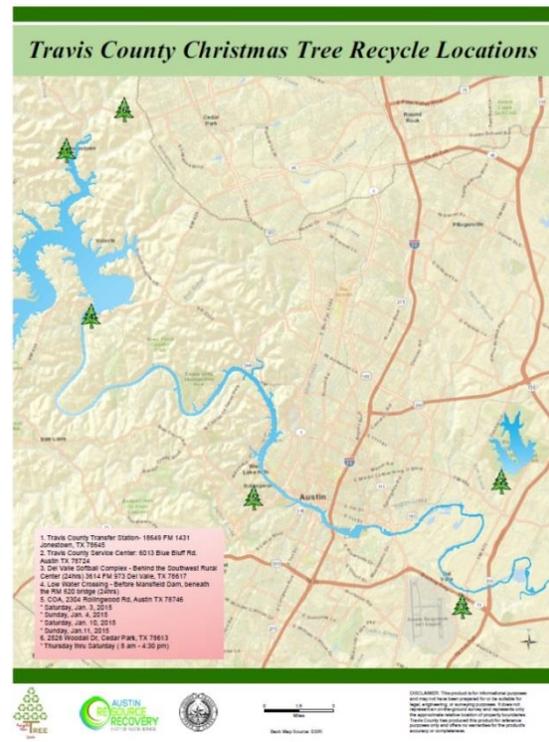
“The kiosk will help keep the county's waterways clean by giving residents a permanent place to dump medications” Jane Burazer, Austin Water Assistant Director of Treatment

Christmas Tree Program

The Travis County Christmas Tree recycling program has been established for twenty years to provide the county residents a way to properly dispose of their trees.

- The program is set-up for rural residents.
- This program gives a tree another life; all of the trees are mulched.

| Event | FY2015 | FY2016 | % Change FY15-FY16 |
|---------------------------|--------|--------|--------------------|
| Number of Trees Collected | 1195 | 595 | -50% |
| Collection Sites | 3 | 3 | - |



Lake Travis Underwater Cleanup

The Lake Travis Underwater Cleanup is the largest scuba diving and shoreline cleanup in Texas. The event is hosted by the Colorado River Alliance, Keep Austin Beautiful, and Travis County Parks. Each year, local dive shops, residents, and other volunteers gathered to collect trash from the bottom of Lake Travis and shoreline, while also raising public awareness of the importance of Lake Travis, the Highland Lakes and shoreline parks.

- 21 cleanup locations along and in Lake Travis: 10 shoreline and 11 dive cleanups which equals to 26 miles of shoreline cleaned.
- 2170 volunteer hours contributed to clean in and along the lake.

| Event | FY2015 | FY2016 | % Change FY15-FY16 |
|-----------------------------|------------|-----------|-----------------------|
| Number of Volunteers | 884 | 868 | -1.8 |
| Litter Removed | 5.17 tons | 2.46 tons | -52% |
| Litter Recycled | 1,580 lbs. | 1,366 | -13% |



“Thank you again for coordinating [one of the] the largest cleanups in Texas!”
- LTUCU Volunteer



Partnerships

Travis County has several partnerships with current service providers, local non-profits and incorporated cities to move our mission and zero waste goals forward. These partnerships are created through inter-local agreements, service agreements and mutual interests in the environment.



City of Austin

In 2014, an agreement was formally executed between Travis County and the City of Austin (CoA) to share the goal of developing, promoting, and applying zero waste and sustainability strategies for the benefit of current and future generations.

The CoA Resource Recovery Department continues to be an active collaborator on several waste diversion programs with Travis County. Travis County has partnered with CoA to have household battery collection locations at several County facilities.

Household Hazardous Waste Program

Travis County continues to maintain an inter-local agreement with the City of Austin under which County constituents can use the City's hazardous waste collection facility. The County pays for a full time employee and a percentage of the disposal costs.

- The facility has been mandated by the City of Austin Resource Recovery Director to increase diversion as much as possible.
- Items dropped off at the facility are evaluated for reuse.

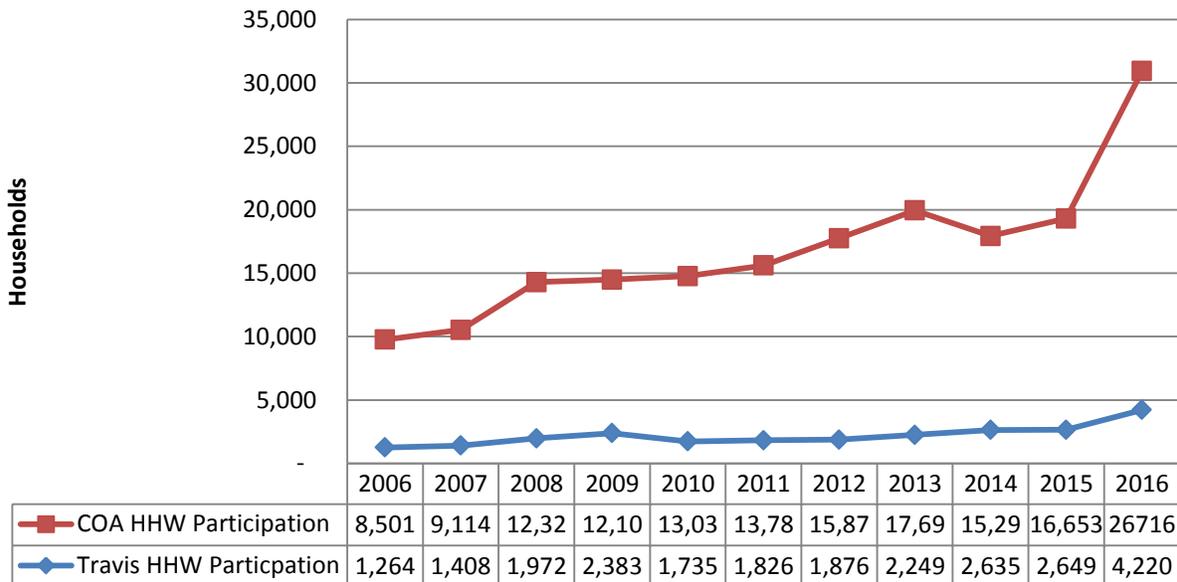
| Commodity | FY2015 | FY2016 | % Change FY15-FY16 | Cost FY2015 | Cost FY2016 |
|--------------------------------|--------|--------|--------------------|--------------|--------------|
| County Households Served | 2,649 | 4,220 | 59% | \$114,615.35 | \$137,336.94 |
| Diversion (lbs.) ²⁰ | 43% | 48% | 11% | - | - |



Busy, but helpful staff, well-organized. I love the painted road to lead you where you need to go. Great service!
Beth Andries

²⁰ Diversion for household hazardous waste facility are materials measured in pounds diverted through programs such as Austin ReBlend, Restore, DRAW, and recycling oil.

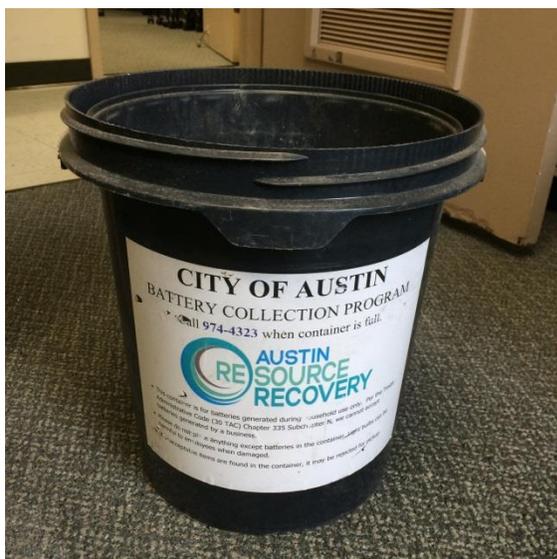
Household Hazardous Waste Participation



Household Battery Recycling

Recycling batteries helps sustain the environment, because batteries contain metals that can be harmful to the environment if not disposed of properly. Travis County staff has stepped forward with their concerns on battery disposal from home and work. These staff members made the commitment to monitor a battery collection site at their buildings. They contact CoA when there needs to be a collection.

| Battery Disposal | FY2015 | FY2016 | % Change FY15-FY16 |
|---------------------|----------|------------|--------------------|
| Number of Locations | 6 | 9 | 50% |
| Amount Recycled | 928 lbs. | 1,296 lbs. | 40% |



“As the proliferation of mobile devices and other battery-powered gadgets continue to grow rapidly, it’s more important than ever for consumers to know where to responsibly recycle their used batteries.”
 - Tim Warren, Call2Recycle



Keep Austin Beautiful & Anti-litter Education Program Partnership

Keep Austin Beautiful (KAB) is a non-profit organization whose mission is to provide resources and education to engage citizens in building more beautiful communities. Travis County and KAB have been in a partnership since 1993.

- Lake Travis Clean-up
- Adopt a Creek program
- Support cleanups in Travis County's Parks



"I keep Austin beautiful by picking up certain trash I see, when I am walking in the public parks with my wife and two sons" - Yeriel

Balcones Canyonlands Preserve

For the past 20 years, Travis County has purchased and protected more than 9,000 acres of beautiful Balcones Canyonlands.

Volunteer Workdays for FY2016:

- January 15, 2016 – 10 Keep Austin Beautiful volunteers spent 3.5 hours planting native trees on the New Life tract.
- April 2, 2016 – 12 Cub Scouts from Pack 1720 did a 2-hour cleanup at the Trails End tract.
- August 27, 2016 – In 2 hours, 25 Concordia freshmen collected 7,000 golf balls from the Steiner tract adjacent to the UT Golf Club.

| Debris Removal from Natural Spaces | FY2015 | FY2016 |
|---|---------------|---------------|
| Total Litter Removed | 2,370 lbs. | 850 lbs. |
| Hours Donated²¹ | 427 hrs. | 223.7 hrs. |



“Community volunteers are an integral part of our team, allowing us to accomplish more than we ever could with our staff alone. Their commitment, energy and expertise strengthen our program and broaden our impact. We couldn't do it without them! ”
 - Johanna Arendt, Natural Resources Balcones Canyon Lands



²¹ The total volunteer hours listed specifically for BCP tract cleanup.

Appendix

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Dell Take-back Program Summary

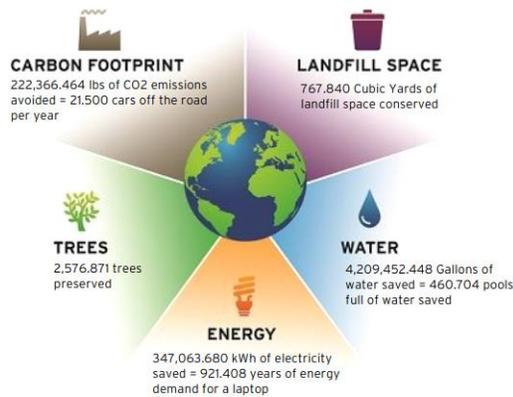
| Product Type | Billable | Product Type | Billable | |
|------------------------------|----------|------------------------------|-----------------|---------------------|
| AC Adapter | NO | Television | YES | |
| Battery | NO | Terminal | YES | |
| Cathode Ray Tube | YES | Toner | NO | |
| Computer Bag | NO | Uninterruptible Power Supply | YES | |
| Copier | YES | Workstation | YES | |
| Flat Panel | YES | Internal | External | Non Computer |
| Flat Panel Monitor | YES | CD Drive | Array | DVD Player |
| Hard Drive | NO | CDRW | Cables | Floppy disk |
| Hard drive | NO | Disk Controller | External Drive | Handheld Computer |
| Internal Computer Components | NO | Floppy Drive | Keyboard | Juke Box |
| LCD Monitor | YES | Motherboard | KVM | Laser Disc Player |
| Memory | NO | RAID Controller | Modem | Manuals |
| Misc. | NO | Sound Card | Mouse | MP3 Player |
| Monitor | YES | Video Card | Multiplexor | Paper Shredder |
| Networking Equipment | YES | Memory | Router | PDA |
| Non Computer Related Part | NO | Media Drive | Speakers | Plotter |
| Notebook | YES | | Tape Drive | Pointing Device |
| PC | YES | | Zip Drive | Power strip |
| Port Replicator | NO | | | Printer Tray |
| POS | YES | | | Radio |
| Printer | YES | | | Scanner |
| Processors | NO | | | Surge Protector |
| Projector | YES | | | TV Stand |
| Rack/Cabinet | YES | | | Typewriter |
| Scanner | YES | | | VHS Player |
| Server | YES | | | |
| SPAM | NO | | | |
| Storage | YES | | | |
| Switch | YES | | | |
| Telephone | NO | | | |

Iron Mountain Environmental Report



AF249 TRAVIS COUNTY ALL DEPARTMENTS

Your organization's eco-friendly decision to securely shred and recycle 153,568 short (US) ton(s) [307,136,700 Pounds] paper with Iron Mountain resulted in the following environmental benefits between October 2015 and September 2016:



UNDERSTANDING YOUR RESULTS

Once Iron Mountain securely shreds information, the processed materials are transported to paper mills for pulping. This destruction process provides benefits to both the security of your business and to the global environment by reducing pollution, preserving landfill space and likewise saving trees, water and energy resources.

The above results are calculated based on the shredding orders serviced on your account(s) during the time period referenced, using average container weight calculations. For additional information regarding the environmental benefits of Iron Mountain® Secure Shredding solutions, visit our website at www.ironmountain.com/services/secure-shredding.

REFERENCES

All calculations for metrics in this report were calculated by an independent third party named Quantis, a leading lifecycle assessment consulting firm specializing in supporting companies to measure, understand and manage the environmental impacts of their products, services and operations.

Assumes that, for each short ton of paper recycled, 17 trees are preserved (USEPA 2013a. Communicating the Benefits of Recycling. <http://www.epa.gov/osw/conservation/tools/localgov/benefits/>).

Assumes the density of dry office paper entering landfill is 5 cubic yards per short ton (Iron Mountain's measurement).

Assumes a notebook laptop computer is rated 120 watts, used eight hours a day, 365 days per year (estimation).

Assumes a household in-ground pool volume of 12' x 24' x 5' (estimation)

Assumes each short ton of CO2-eq emissions saved is the equivalent to 0.189 cars taken off road annually (USEPA 2013b. Greenhouse Gas Equivalencies Calculator. <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>).

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Recycling at Work Flyer

WHAT CAN I RECYCLE AT WORK?

¿QUÉ SE PUEDE RECICLAR EN EL TRABAJO ?

PAPER (MIXED & OFFICE)
PAPEL (MEZCLADO & DE OFICINA)

PLASTICS #1 - #7
PLÁSTICOS #1 - #7

FLATTENED CARDBOARD
CARTÓN APLANADO

ALUMINUM & STEEL CANS, FOIL, & PIE PLATES
LATAS DE ALUMINIO Y ACERO PLATO DE TARTA
Y PAPEL DE ALUMINO

PIZZA BOXES
CAJAS DE PIZZA

FOOD
COMIDA

PLASTIC BAGS
BOLSAS DE PLÁSTICO

STYROFOAM
POLIESTIRENO EXPANDIDO

PAPER TOWELS
TOALLAS DE PAPEL

SHARPS
OBJETOS AFILADOS



CONSERVE

To learn more please visit: <http://www.co.travis.tx.us/tnr/conserves>