



TRANSPORTATION AND NATURAL RESOURCES

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MEMORANDUM

March 14, 2014

TO: Members of the Commissioners' Court

FROM: Shaun Auckland, Conservation Coordinator
Jon A. White, Environmental Officer

Handwritten signatures of Shaun Auckland and Jon A. White are placed over the names in the 'FROM' field.

SUBJECT: FY2013 Annual Report for Travis County Waste Management Program

This annual report details the ongoing performance and progress of the Travis County Waste Management Program for FY2013 (Oct 1, 2012 - Sept 30, 2013) as required under the County's Waste Management Policy.

BACKGROUND:

Texas Health and Safety Code, Section 361.425 establishes county requirements for recycling. Under this law, counties must establish and operate programs to separate and collect recyclable materials generated. Several common classes of materials (e.g. aluminum, steel containers, packaging, cartons, office paper, and cardboard) are specifically targeted for recovery. In addition, Section 361.426 specifies a county government shall give preference to purchasing products made of recycled material and that may be recycled when materials have served their intended use.

To address these requirements, the Travis County Commissioners' Court adopted the Travis County Waste Management Policy 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.

The policy provides guidance for the treatment of several specific County Waste Streams. The program has evolved and expanded in the past eighteen years. This report examines the waste streams by individual media with information regarding select departments in the Appendices 1-3.

FY2013 Highlights

Some of the highlights of FY2013 include:

- Earned \$68,582.87 in revenue from recycling, more than paying for the annual cost of our recycling contract in FY2013.
- Initiated all county facility recycling with Texas Disposal Systems and Texas Facilities Commission.
- Began a fluorescent light bulb, ballast, and battery take back program.
- Lake Travis Underwater Clean-up had the highest number volunteers (1,015) in its twenty year history.
- In FY2013, 29% of the County's total Office Depot purchases were of products with recycled content¹.

¹ This information is provided by Office Depot's Green Business Review report for FY2013. The report includes total green expenditures, ink/toner, and copy paper.

FY2013 PERFORMANCE AND PROGRESS

Contents

Purchasing Goals:..... 4

- A. Single Stream Recycling:..... 5
- B. Corrugated Cardboard..... 7
- C. Metals..... 8
- D. Automotive..... 8
- E. Electronics..... 9
- F. Composting..... 9
- G. Wood Material..... 10
- H. Textiles..... 11
- I. Plastic Film..... 11
- J. Household Hazardous Waste Program:..... 11
- K. Other..... 13

CONCLUSIONS..... 15

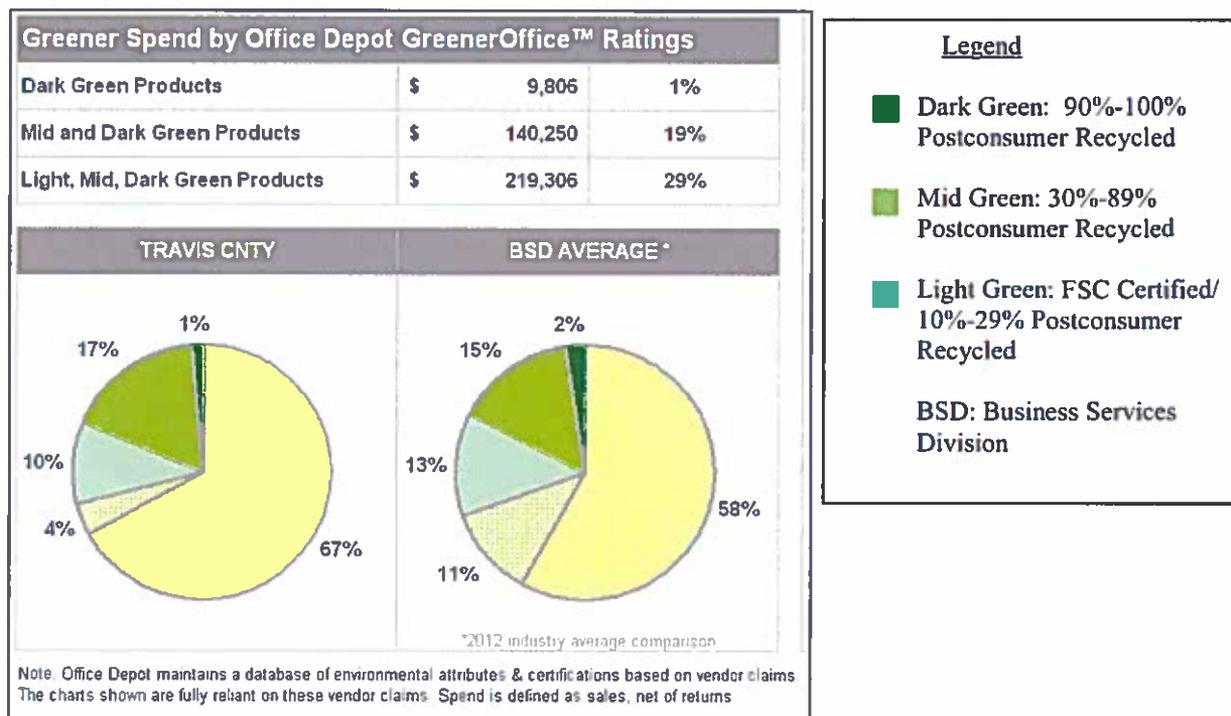
Appendix 1 - 3..... 16

- 1. Del Valle Correctional Facility..... 16
- 2. Parks Division..... 18
- 3. Community Programs..... 19

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 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.

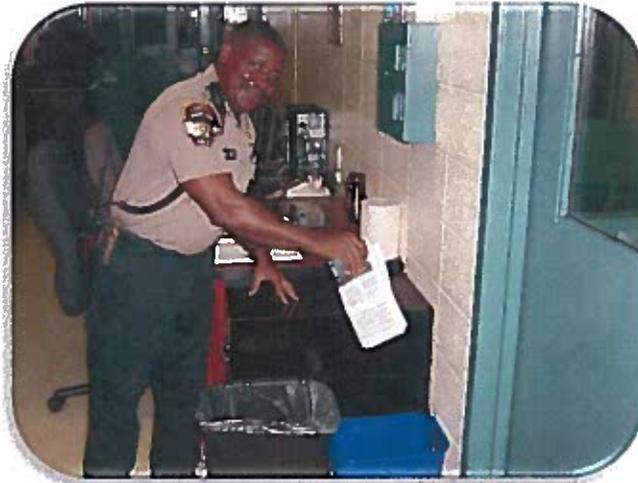
Travis County’s purchasing policy is constrained to evaluate cost savings but not environmental benefits. Development of a comprehensive tracking methodology to verify compliance with the recycling goal has not been developed by the Travis County Purchasing Office. However, it is possible to gage recycled content based upon external information provided by one significant vendor: Office Depot (OD). In FY2013, 29% of purchases from OD included recycled content of significance². The figure below shows the OD expenditures by “greenness” rating and by percent of recyclable content. Numerical values are cumulative.



Additionally, the County is very active in pursuing opportunities to purchase recycled products from vendors beyond Office Depot, as described in this annual report and including:

- Re-manufactured toner cartridges
- Re-refined oil
- Re-refined antifreeze
- Packaging from computers/electronics

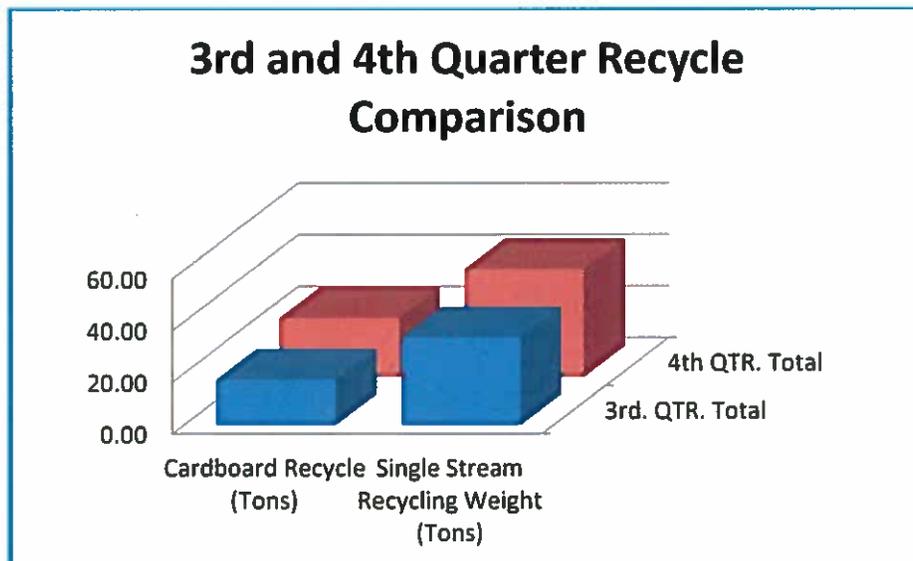
² This information is provided by Office Depot’s Green Business Review report for FY2013. To be considered significant, a commodity has 10% or greater recyclable content. The report includes expenditures including ink/toner, and copy paper.



1. Cleotis Wimberley at the Jail facility.

On January 8, 2013, the Commissioners Court approved funds establishing a single-stream recycling program for all Travis County work locations. As of April 1, 2013, Texas Disposal Systems (TDS) and Texas Facilities Commission (TFC) are the providers for single-stream pickup services for Travis County work locations. This service offers 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. Each quarter, a report on the Travis County website provides information on how much material has been generated and recycled.

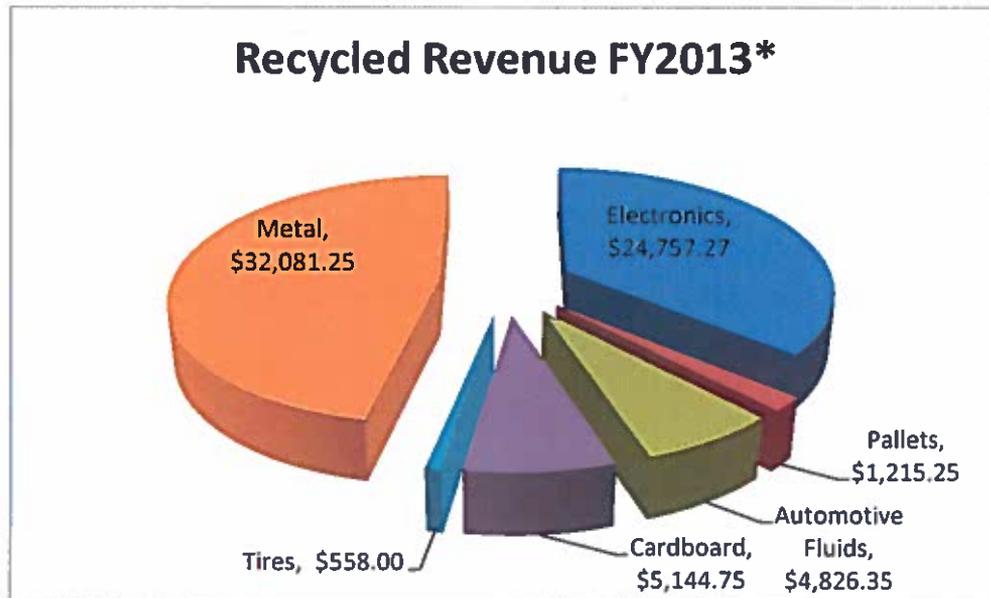


2. Travis County operational recycling includes cardboard and single stream.

- Electronics (computers, monitors, keyboards, cellular phones, etc.,)

County Waste Streams:

Travis County’s waste streams are very diverse. This report reviews the main categories of recyclable materials. In the fiscal year of 2013 recycled revenue contributions of \$68,582.87 were directed to Travis County general funds.³



A. Single Stream Recycling:

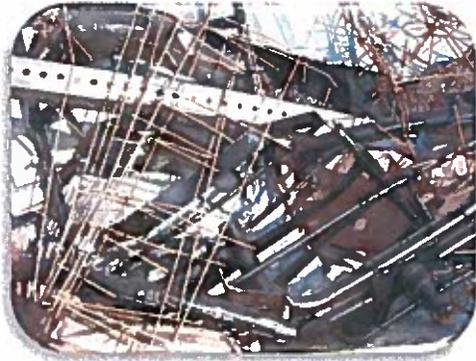
Recycling from 1996 to 2012 focused on specific departments/divisions that volunteered to participate in a recycling program, missing some large quantity generators of recyclable waste. Facilities/buildings throughout our organization were not comprehensively examined for the potential of implementing a holistic recycling program. Travis County spent an estimated \$200,000⁴ in FY2013 on waste that was destined for landfill disposal. Therefore, in early FY2013 Travis County TNR re-examined the gaps in our recycling program and found several ways to further divert waste from landfill disposal towards recycling.

³ The recycling revenue total is \$39,483.94 posted in 1490110001 (TNR) and \$27,735.84 posted in 1150010001 (Purchasing electronics and metal from warehouse). An additional \$1363.09 was received according to project records but is not reflected in the SAP accounting.

⁴ The Planning and Budget office’s report stated that the total spent with Waste Management was \$199,480.33

C. Metals

This program has been very successful throughout the County and especially at the satellite offices and the correctional facility. Vendor roll-offs are placed at Assets Warehouse, Eastside Service Center, Westside Service Center, and Del Valle Correctional Facility for easy access. In FY2013, an estimated total of 357,658 pounds of metal were recycled for estimated revenue of \$29,593.26.



2. A photo of the inside of a roll-off filled with scrap metals recycled at the Eastside service center.



1. A photo of the inside of a roll-off filled with tinsplate steel cans collected for recycling by the kitchen staff at the Del Valle Jail.

In office settings Travis County recycles aluminum cans by placing them in the single stream recycle carts. By placing aluminum cans in the single stream recycle carts it is hard to measure the amount generated/recycled and does not generate revenue directly.

D. Automotive

Oil & Antifreeze

Travis County recycled 4,536 gallons of used oil and 336 gallons of antifreeze in FY2013 generating \$4,762.80 in revenue and avoiding disposal costs. Travis County also purchases and uses re-refined oil and antifreeze in all County vehicles.

The following quote from a TCEQ used oil brochure sums up the value of this program:

Only one gallon of used oil is needed to produce 2.5 quarts of lubricating oil, whereas 42 gallons of crude oil would be needed for the same 2.5 quarts of oil. Refining used oil takes 70% less energy than refining crude oil."

Used Oil Filters

A registered transport company must properly dispose of the oil filters collected by fleet services. Travis County recycled 22 barrels of spent oil filters in FY2013. The normal cost of \$50 per barrel was

Travis County recycled 116.7 tons of single stream material in FY2013⁵. It will take time to fully implement the program through infrastructure and education. The employee participation program, Green Leader Program, will advance infrastructure and education. As employee participation grows Travis County should see an increase in volume of material. In the future, the formation of Green Teams will facilitate greater promotion of single stream recycling as well, by county staff. Issues to be addressed include contamination control such as trash going into recycling containers.

The County as a whole purchased an estimated 277.6 tons of paper for business use. Additional paper is mailed to us or filed with us in the conduct of our enterprises. In FY2013 the County recycled 237 tons of paper material⁶.



3. Baled cardboard from the Del Valle Correctional Facility.

B. Corrugated Cardboard

Travis County recycled 73.21 tons of corrugated material in FY2013⁷. As inter-departmental participation grows Travis County should see an increase in volume. The Travis County Del Valle Correctional Facility currently is the only revenue generating location of cardboard. The County rents a vertical cardboard baler that is operated by staff and inmates. The location generates on average 8 tons a month for estimated revenue of \$4,323.96.

⁵ This tonnage is based on the combination of Texas Facilities Commission estimated weight of 51 tons, Texas Disposal Systems estimated weight of 24.8 tons plus cardboard recycling of 40.91 tons.

⁶ The total of paper recycled includes confidential documents picked up by Iron Mountain for shredding, as well as office paper picked up by our current (TDS, TFC) and previous recycling vendors (Acco and Abibow) The estimated tons of paper purchased is based on records management department orders.

⁷ The total recycled cardboard includes material picked up by our previous vendor (ACCO) and current vendor (Texas Disposal Systems). The County receives 86% of the revenue per ton using the Official Board Market, SW Region Index.

reduced to zero as part of the contract for purchasing re-refined oil. Used oil filters are banned from Texas landfills.

Tires

This year Travis County changed our vendor from Liberty Tire to Reliable Tire. Reliable removes fleet tires and those collected from illegal disposal along county right-of-way and charges \$0.11 per pound. In 2013 the County spent \$10,290.08 removing approximately 44,609 lbs. These tires are taken to registered tire recycling centers.



4. Tires waiting to be picked up for recycling, on average Travis County collects on average 1,200 tires per trailer load.

Lead-Acid Batteries

There were 592 vehicle batteries recycled in FY2013, preventing lead and acid waste in these batteries from adversely affecting the county's groundwater, surface water, and the public's health.

E. Electronics

Cell Phones

The Travis County surplus warehouse collects all phones that are not picked up by inmates once released. These phones are then internally transferred to the Sheriff's Office Victim Services Unit for use in supporting their program.

Computers and Monitors

There is an agreement with Dell to take-back all Dell manufactured equipment for recycling or reuse. Travis County receives a portion of the revenue from the electronics Dell recycles. In FY2013, this revenue was \$24,757.27.

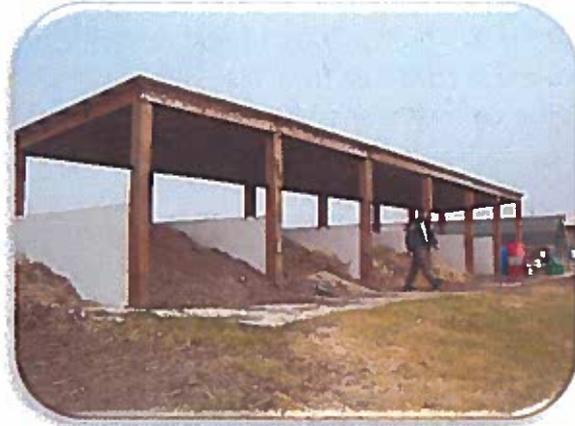
F. Composting

Pre-consumer Food Scraps

A program at the Del Valle Correctional Facility composts an average 1,044 lbs. of food scraps each month. The compost created supports the on-site, 3.5 acre organic garden. The food grown is harvested and used to feed the inmates with a cost savings of \$5,708.00.



5. Composting of animals collected from the "right of way".



6. Post-consumer composting at Del Valle Correctional facility.

Animal Composting

The animal composting program has implemented to save costs on transportation of dead animals collected from the "right of way". Travis County staff uses compostable bags for collection. The animals are placed in a roll-off with a mulch cover which then is composted by the vendor. The vendor uses this compost for soil additives sold at stores.

G. Wood Material

Pallets

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 Sherriff's Offices facilities. The vendor picks them up once there is an adequate number collected. The pallets are then graded for payment based on the material's value to be sold, repaired or mulched. This past fiscal year there were 2,322 pallets collected for revenue of \$1,259.50.

Woody Debris

In Travis County, the Parks Division, Facilities Grounds Division, and Road & Bridge Division maintain lawns, trees, shrubs, rights of way, and other landscaping in their day to day activities. The Facility Grounds Division collects clippings and woody debris by truckload and delivers it to the contracted landfill to be utilized in the landfill's compost program. The Parks Division arborist cuts dead trees and then chips them into mulch. The mulch is utilized on-site for trees. The mulch from Road & Bridge Division is used for the animal composting program.

H. Textiles

Several of the departments in Travis County utilize textiles in their day to day services. The jail's warehouse manager currently finds many different ways to re-use the material onsite such as cutting large towels into smaller pieces for wash cloths. In the future the County will continue to work on ways to quantify their diversion methods.

I. Plastic Film

Currently Travis County facilities that receive the single-stream recycling service can recycle a wide range of plastics, but not plastic film. 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.



7. Del Valle correctional facility bales plastic bags, bread bags and other plastic film.

J. 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 and the County pays for a full time employee and a percentage of the disposal costs.

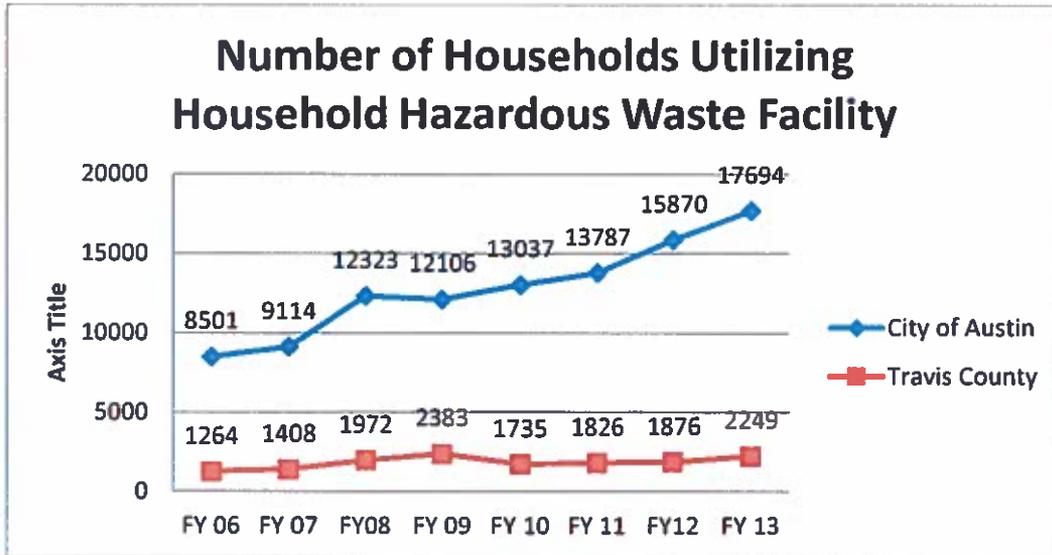


8. An employee is examining a customer's items at the City of Austin Household Hazardous Waste Facility.



9. An employee is sorting batteries for proper disposal and recycling.

In FY2013, 2,249 constituents used the facility ensuring proper disposal of their hazardous waste instead of disposal into household trash, into the sanitary sewer, or illegal dumping. The total cost for disposal in FY2013 is \$61,426.92. The county also funds one full time employee with those costs not completely finalized at this time.



The facility has been mandated by City of Austin Resource Recovery Director to increase diversion as much as possible. In FY2013 the facility increased diversion from 32% to 38.69%⁸. One of the diversion initiatives is the increase in the re-use of good latex paint through Austin ReBlend. The facility inspects and evaluates the latex paint that is dropped off for disposal. If the paint is deemed good for reuse, it is re-blended and then given out to the public for free.



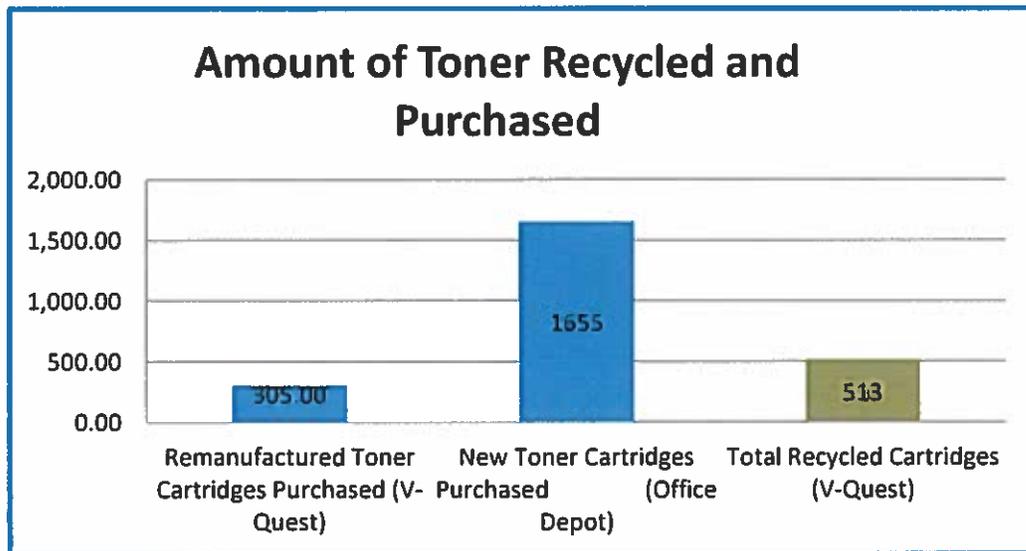
10. The above photographs are a demonstration of the ReBlend process. The facility collects good latex paint in 55 gallon drums, then mixes the paint for an average of 45 minutes, and pours it into 3 gallon buckets.

⁸ The Household Hazardous Waste Facility has a re-use store for the public to pick up usable material at no cost. This allows for the facility to re-coup some expenses associated with the facilities operation.

K. Other

Toner Cartridges

Travis County purchases remanufactured cartridges when compatible with the printing/copying equipment. V-Quest, one of our office supply vendors, provides a service to reuse and recycle used cartridges from departments/divisions when requested. The Xerox printers are managed by a separate vendor for maintenance and toner supplies with no current numbers on recycling.



11. The vendor for re-used cartridges provides a used toner recycling program.

Operational Chemicals (paint, batteries, mercury containing products and herbicides)

A contract is in place to remove hazardous and special wastes from County rights-of-way (ROW) and from county facilities. Also this year the Facilities Maintenance Division has started a program to properly dispose of fluorescent light bulbs, ballasts, and batteries. Veolia, Travis County's mail back vendor, recycles the items for their precious metals and chemicals. The non-recyclable products are disposed of properly.



12. Fluorescent light bulbs and batteries at the maintenance warehouse are collected for proper disposal.

This program initiative represents progress in diverting mercury-containing waste from going to a landfill. The program is a mail-back system with containers for each specific item, including light bulbs, batteries, ballasts, and thermostats. Once the container is full it is returned to the vendor for proper disposal. The cost of disposal is included in the container price. Travis County purchased enough containers for all county departments that manage the material for year for a total cost of \$19,909.00.

CONCLUSIONS

The County's operations are complex and diverse, requiring the purchase, use and disposal of a wide array of products and materials. This requires an extensive, collaborative effort involving various County departments, and the efforts of individual County employees. These individuals help us to develop management practices that are much more efficient and reduce adverse environmental impacts associated with County operations. A variety of methods are being used to avoid unnecessary waste disposal costs while at the same time ensuring that hazardous materials (oil, antifreeze, etc.) are not unnecessarily disposed of or released to the environment.

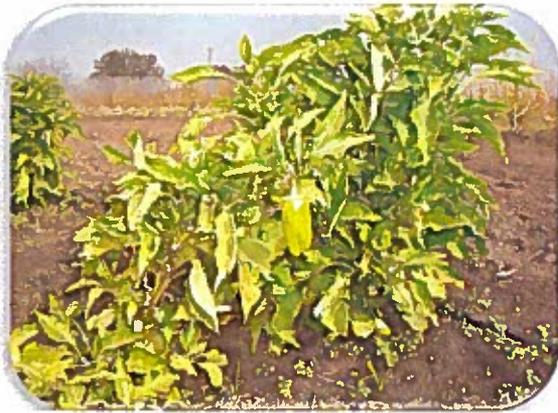
The waste management program is an essential tool for managing these materials in ways that satisfy the policy directives of the Commissioners Court. The FY2013 performance and progress results demonstrate compliance with the requirements of the waste management policy. Collectively, recycling programs generated revenue of \$68,582.87. Less electronics recycling revenue of \$24,757.27 (which was not previously tracked in the annual reports), we still had an increase of \$1,243.23 in revenue from FY2012. These efforts produce public and environmental benefits that far exceed the monetary value of recycling revenues and avoided disposal costs.

In the past ten years, Travis County's population has grown along with the cities within it. 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.

Appendix 1 - 3

1. Del Valle Correctional Facility

The Del Valle Correctional facility has many sustainable initiatives implemented: garden, composting and recycling program. The staff at the facility is encouraged to be innovative in being fiscally responsible through implementing green initiatives. These practices are passed on to the inmates in the facility as new skill sets such as gardening and cooking with fresh produce.

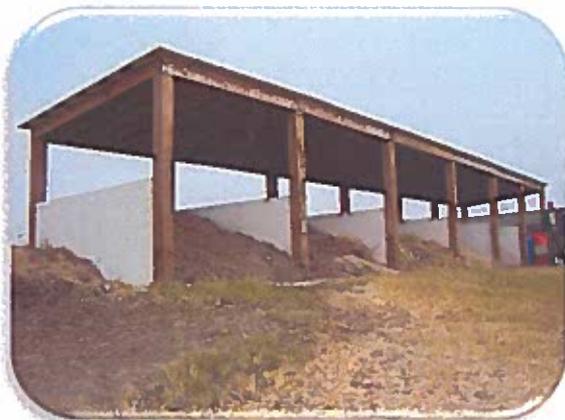


14. Bell peppers growing in the Del Valle Garden.



13. Peppers collected from the garden ready to be utilized for meals.

At the facility there is a three acre organic garden which is managed by a coordinator and inmate workers. The garden uses no pesticides, has no known pest issues, and the only fertilizer is compost generated on-site. The coordinator teaches the inmate workers how to plant and harvest. There is a strong diversity in seeds and seedlings that are chosen for planting. This introduces the staff and inmate workers to a variety of vegetables and greens. In 2013 the garden produced 5,964 lbs. of vegetables. These vegetables are integrated into the meals or frozen for future use.



15. Pre-consumer food scraps, shredded paper, and brushy waste are utilized for the compost.



16. The garden consists of three acres with rotating crops.

In 2009 the facility started a composting program (CAPCOG grant) recycling approximately 1,044 pounds of pre-consumer food waste per month from the prison kitchen and additional spoiled food and the waste from the vegetable garden.

The Del Valle recycling program has been in effect since 1991 when they began by collecting loose cardboard by the trailer load. In 2002 they began bailing the cardboard which increased the revenue price the total for FY2013 was \$3,964. The total collected by the Sherriff's Department in FY 2013 was 146,420 lbs. which was an increase of 26,780 lbs. of cardboard compared to FY2012.



18. Pallets collected for recycling.



17. Cardboard bailed by inmate workers.

2. Parks Division

The Parks Division has been collecting, sorting, and transporting aluminum cans and plastic for several years at Reimers Ranch and Hamilton Pool.

Fiscal year 2013 was the first year for the F1 event to work cooperatively with the parks division to provide recycling for the bike shuttle site located at Richard Moya Park. The recycling program provided twenty-five portable recycling collection containers at the park with an overall collection of seven bags.



19. The clear-stream recycling containers provided at Richard Moya Park for F1.



20. There were over 1,160 participants that biked from Austin for the shuttle to the F1 event.

In the Parks Division Reimer's Ranch, Hamilton Pool Park, and Northeast Metro Park began a single stream recycle program as a part of a successful pilot program instituted this year.



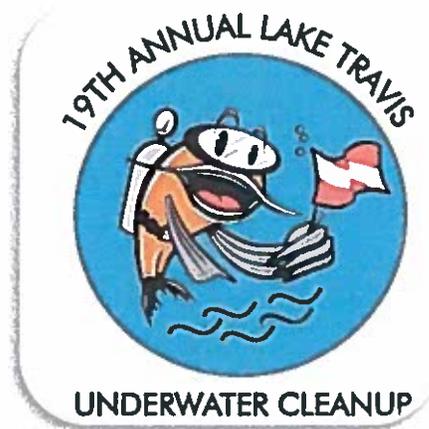
21. Tim Speyer, Northeast Metro Park's Supervisor, show casing the recyclables collected from the annual soccer event.

3. Community Programs

In FY2013 Travis County supported two community programs promoting conservation, the Lake Travis Underwater/Shoreline Clean-up and Christmas Tree Recycling. The Lake Travis Underwater/Shoreline Clean-up is a cooperative effort between Travis County, Keep Austin Beautiful and Colorado River Foundation. This year there were more than 1015 volunteers collecting material at twenty clean-up sites. There was a total of 3.61 tons of trash collected with 2.39 tons recycled.



23. Volunteers unloading the "trash barge" that had collected trash from the divers.



22. Every year the organizers develop a logo with "Finley the Fish" to be placed on media materials.

The Travis County Christmas Tree recycling program continued in FY2013 to provide the county residents a way to properly dispose of their tree. The City of Austin also provides a site at Zilker Park open to everyone with no residency requirement. The City of Austin partners with the county in providing the county drop-off locations on their website. The county provides two sites Del Valle Softball Field and RR 620 low water crossing. Transportation and Natural Resources (TNR) utilizes the trees as mulch. This past year, 380 Christmas Trees were collected.



24. One of the Travis County Christmas Tree drop-off sites.



25. Christmas Tree recycling flyer.

