

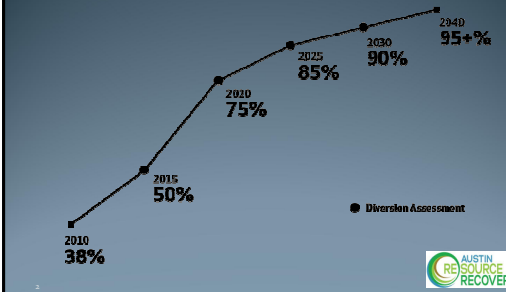
Austin Pilot Restaurant Recycling Project

Universal Recycling Ordinance Committee
Zero Waste Advisory Commission
April 17, 2012

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Austin Zero Waste Goals



Restaurant Recyclables

- Cardboard Boxes
- Mixed Office Paper
- Packaging Plastic and Containers
- Aluminum Cans and Metals
- Plastic Beverage Bottles
- Wood Pallets and Crates
- E-Waste – PC Equipment, Obsolete Hardware
- C & D – Construction and Demolition
- Kitchen and Yard Organic Waste - Composting



OVERVIEW

- Purpose, goals, and objectives
- Timeline
- Featured Businesses
- Observations
- Next Steps



Pilot Project Purpose

- Integrate reduction and recycling into existing services
- Work with diverse set of food service businesses
- Use local service providers
- Evaluate challenges & benefits of recycling



Pilot Project Goals & Objectives

- Provide info for developing Phase 2 of URO
- Demonstrate how food service businesses can support City's Zero Waste Goals
- Document businesses' potential costs to recycle
- Identify challenges & potential solutions
 - Adding recycling & composting to existing services
 - Placing containers given restrictions in size, space, & lease agreements
 - Optimizing container sizes & service frequencies
 - Educating the food service workforce



Pilot Project Goals & Objectives

- Council Recommendations
- Expand Recycling and Composting in Restaurants
- Understand Costs
- ID challenges & solutions



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Pilot Project Timeline

8/3/2011 – Awarded contracts to Ecology Action and Organics “By Gosh”

9/23/2011

- Confirmed participating restaurants, substituting several volunteers
- Documented existing services (baseline) and assessed needs

10/2011 to 1/2012

- Contractors implemented & managed additional services
- Restaurant Recyclers reported service levels for several businesses

2/2/2012 – Contractors submitted 1st reports



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Pilot Project Timeline

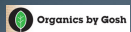
2/2/2012 – 1st Report from Contractors:

- Service levels
 - Service frequencies
 - Numbers, types, sizes of outside containers
- Internal material handling systems
- Employee education
- Lessons learned



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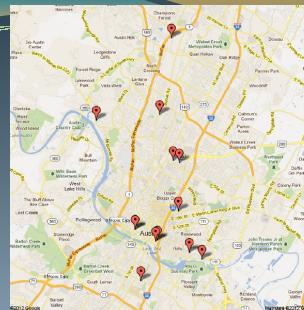
Thanks to our partners!



- 24 Diner
- Arkie's Grill
- County Line on the Lake
- Curra's Grill
- El Mercado
- Epoch Coffee
- Fleming's Prime Steakhouse & Wine Bar
- Foreign & Domestic
- Hoover's Cooking
- Moonshine Patio Bar & Grill
- Pink Avocado
- Rio's Brazilian Café



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Diverse set of locations, size, types of food, level of service, food delivery



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Featured WasteSMART Partners

- Strange Brew
- Dominican Joe's
- Tarka Indian Kitchen
- House Pizzeria
- Simplicity Wine & Spirits
- Hopdoddy's



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Pilot Project Implementation

- Provided containers
- Educated employees
- Placed signage
- Initiated service
- Monitored, troubleshooted, and refined



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Outside Containers

For Recyclables

- 55-gallon plastic barrel – mixed or single-stream
- 60- to 95-gallon cart – mixed or single-stream
- 1.3-cu yd Gaylord box – corrugated
- 6-cu yd slotted dumpster – corrugated
- 8-cu yd dumpster – single-stream



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Outside Containers

For Compostables

- 55-gallon plastic barrel
- 55- to 68-gallon cart
- 3- or 4-cu yd rear-load container



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Outside Containers – Tubs, Carts, Barrels



Outside Containers – Dumpsters

Inside Containers

- Bus tubs
- 5-gal. buckets
- 23-gal. "Slim Jims" color-coded
- 32-gal. Brute
- Plastic liners for all streams or only trash




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Inside Containers

Employee Education

- Consult with manager during set up
- Staff training by service provider
- Bilingual trainings for each shift
- Bilingual posters
- Bilingual container labels inside & out



Signage

Featured Businesses

- County Line on the Lake
- 24 Diner
- Moonshine
- Fleming's
- Hoover's Cooking
- Foreign & Domestic
- El Mercado
- Rio's Brazilian Café
- Epoch Coffeehouse




THE COUNTY LINE

Featured in American Statesman article ["Recycling in the Restaurant"](#)

Materials	Cu Yd / Week		Services / Week	
	Before	After	Before	After
Trash	48	24	3	3
Cardboard	24		3	
Recyclables		24		3
Compostables		12		2
Total	72	60	6	8

- Recycling Service Rate = 60%
- Costs up



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Materials	Cu Yd / Week		Services / Week	
	Before	After	Before	After
Trash	54	18	3	3
Cardboard	16		2	
Recyclables	3	32	1	4
Compostables		5		2
Total	73	55	6	9

- Recycling Service Rate = 67%
- Costs down



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Materials	Cu Yd / Week		Services / Week	
	Before	After	Before	After
Trash	48	18	4	3
Cardboard				
Recyclables		18		3
Compostables		24		3
Total	48	60	4	9

- Recycling Service Rate = 70%
- Costs up




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- Shares with other Domain stores
 - Compacting roll-off for trash
 - Slotted FEL for corrugated cardboard
- Separate carts for
 - Glass
 - Mixed paper
 - Plastic
 - Metal
- Reduced waste by about 50%
- Featured in [YNN video](#)







Materials	Cu Yd / Week		Services / Week	
	Before	After	Before	After
Trash	32	24	4	3
Cardboard				
Recyclables		12		3
Compostables		6		2
Total	32	42	4	8

- Recycling Service Rate = 43%
- Costs up

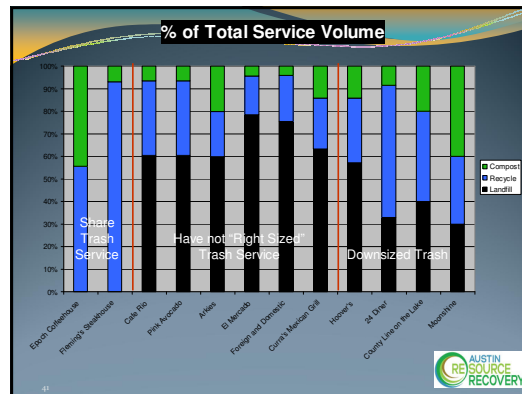
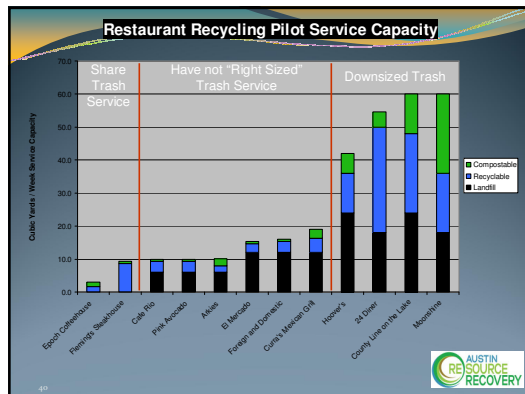






- Began collecting separately
 - Non-meat prep scraps
 - Table scrapings, which had meat
- Learned better to mix the two
 - Diluted meat
 - More material meant more frequent collection
 - Increased from 2 to 3 services/wk





Pilot Project Observations

- Start-up Costs
- On-going Costs
- Material Streams
- Material Handling & Containers – Inside & Out
- “Right Sizing” Services

AUSTIN RESOURCE RECOVERY

Pilot Project Observations

More Observations

- Multi-Tenant Facilities
- Sanitation
- Employee Education
- Customer Participation



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Start-up Costs

- Infrastructure (e.g., Dumpster Corral)
- Inside bins
- Staff training
- Signage and printed materials

On-going Costs

- Diversion collection services
- Compostable bin liners
- Pest control
- Internal labor
- Billing



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Material Collection Streams

- Recyclables
 - Single-stream vs. source separated
 - Hybrid: some separate, some combined
- Commingling recyclables
 - Fewer containers & simpler sorting
 - Can lead to contamination



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Material Handling - Inside

Food scraps are twice as heavy as trash

- More work to transfer outside
- Compostable paper - reduces density
- Use stackable, manageable-size containers (5-gallon buckets, bus tubs) inside to transfer outside
- Place empty carts by back door and roll to "waste corral" when full



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Material Handling - Inside

Compostable bags

- More expensive
- Weak, easily ripped
- Confusion - wrong bags for compost
- Do without and rinse bins; but increases water use



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Material Handling - Inside

- More work to
 - Keep materials separate
 - Keep straws, butter foils, etc out of compostables
- No room for more containers
- Inconvenient or no trash containers can lead to contamination
- Multiple container types & sizes gives business flexibility



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Material Handling - Outside

- Long distance to haul materials to outside containers, particularly if shared
- Containers can be difficult for service provider to access
- Many container options provide flexibility
- Contamination from passersby – locking lids
- Pests, Rain
- No room for more containers
 - One less parking space can cut sales
 - Historic areas already crowded, even in alleys



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Material Handling - Outside

- Carts & barrels
 - May be easier for food business
 - Easier to place
 - May have more pest-resistant lid
- But
 - More labor intensive for the vendor
 - Less margin of error in reaching capacity
 - Heavy when filled with wet food



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“Right Sizing” Services

- Hard for food business to offset service costs
- Weekly & seasonal business cycles
- Inflexible long-term contracts
- Landlord-provided service



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Multi-tenant Facilities

- Landlords
 - Provides trash service through lease
 - May not share savings in trash service with businesses that reduce waste
- Require whoever contracts for trash service to provide diversion services as well



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Sanitation

- Tradeoff between collecting material infrequently in large quantities to control costs and more frequently to minimize sanitation or nuisance issues
- Pest-resistant containers
- Food-contaminated recyclables



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Employee Education

- Initial & on-going expense
- Employee turnover means additional training
- Clear signage (color-coded, pictures)
- Incorporate into “new employee orientation”
- Implement collection streams one at a time



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Customer Participation

- Difficult to educate customers
- Clear, picture-based signage required



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Bottom Line

Property owner (or collection service provider) should:

- Ensure adequate capacity for diversion services
- Provide employee education
- Provide clear signage, including clearly marked containers, inside and out



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Potential Recommendations: Phase-in, Opt-out

Phases to Consider:

- Phase in diverting compostables after recyclables
- Instead of phasing-in by square footage, do so according to weekly trash service capacity

Opt-out Option:

- Demonstrate being a small-quantity generator

Service Provider Requirement Option:

- Instead of requiring properties to provide diversion services, require trash service providers to provide it



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Potential Recommendations: Cost Containment

To minimize cost impact on businesses:

- Allow full flexibility in
 - Container types and sizes
 - Levels of commingling
- Provide enough lead time for businesses to sign flexible trash service agreements
- City could:
 - Provide employee education materials and signage
 - Offer on-site compliance assistance
 - Arrange for discounted bulk pricing for inside bins



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Potential Recommendations: Land Development Code

- Allow Administrative Approval to:
 - Increase allowable impervious cover by maximum 100 ft² for dedicated recycling equipment
 - Decrease parking requirement by 1 parking space if dedicated for recycling purposes
- Amend permitting process to require comprehensive waste management plan (recycling, composting, landfill)



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Next Steps

Next 6 months:

- Extend pilot project contracts
- Give participating businesses time to stabilize and “right size” services
- Add more food sources, such as post-consumer, customer bussing
- Experience Summer
- Add mobile vendors



Address observations in URO-2 Rules




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City of Austin Resources

- Business Outreach Services
- On-Site Assessments & Consulting
- Downtown Grease Recycling – Pilot
- Reduction of Non-Recyclable Packaging
- Future Task Force to Study Packaging Issues
- CBD Single Stream Recycling – 100 restaurants and clubs

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DOWNTOWN RECYCLING JUST GOT EASIER

Now recycling is more convenient for downtown Austin businesses*

- Recycle more materials
- No sorting required
- No additional cost

*Downtown Recycling and Trash Service District

Questions? Visit austintexas.gov/downtownrecycling

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RECYCLING ONLY SOLAMENTE RECICLABLES

KEEP TRASH OUT / MANTENGA LA BASURA AFUERA

Paper & Mail
Papel y Correo

Hard Plastic Containers (Empty) 1-7
Contenedores de Plástico duro vacíos 1-7

Newspapers & Magazines
Periódicos y Revistas

Glass (Empty)
Vidrio vacío

Aluminum, Tin & Steel Cans (Empty)
Latas de aluminio, y Hierro vacías

Flattened Cardboard & Paperboard
Cartón aplastado

Prohibited items (marked with red X):
Plastic Bags (Bolsas de plástico), Food (Comida), Paper cups, plates, napkins, towels (Tazas, platos, servilletas y toallas de papel), Dishware (Loza), Dishwasher Paper (Papel de lavavajillas), Waxed Cardboard (Cartón encerado)

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Food Scrap Reduction Hierarchy

1. Minimize generation
2. Feed people
3. Feed animals
4. Industrial uses
5. Compost leftovers


Food Donations

Donating surplus food:

1. Feeds hungry people
2. Saves disposal costs
3. Reduces solid waste.
4. Protects the environment

Logos: Capital Area Food Bank of Texas, USFCA Farmers' Market, Meals on Wheels and More

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Good Samaritan Food Donation Laws

- **Federal Emerson Good Samaritan Food Act (1996):**
 - National standards for food donations so interstate donors have consistent liability information
- **Texas Good Faith Donor Act (1981):**
 - Persons who donate apparently wholesome food to a nonprofit organization for distribution to the needy are not subject to civil or criminal liability.

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Green Partnerships

National Restaurant Association: Survey Findings

- 65 % of restaurant operators embrace recycling and have recycling programs in place
- 60 % of consumers prefer restaurants that recycle
- 51 % of consumers are willing to pay more at restaurants that recycle

www.restaurant.org/sustainability/restaurantrecycle

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National Restaurant Association “Conserve” Program

- www.restaurant.org/sustainability/restaurantsrecycle
- <http://conserve.restaurant.org>



ConSERVE
SUSTAINABILITY EDUCATION PROGRAM

Sustainability Within Reach

- Industry-titled best practices
- Educational videos by industry experts
- Money-saving techniques
- Personalized action plan






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Green Partnerships

Green Restaurant Association

- Water Efficiency
- Waste Reduction and Recycling
- Sustainable Furnishings and Building Materials
- Sustainable Food
- Energy
- Disposables
- Chemical and Pollution Reduction






www.austingreen.com


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Questions



www.austintexas.gov/Show.do?cat=72&id=26384

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