

# URO Phase 2 Recycling Research



**Solid Waste Advisory Committee  
Universal Recycling Ordinance: Phase 2  
May 17, 2010**

# Contents and Purpose

- **Provide an overview of other cities' recycling ordinances to spark additional questions and research**
- **Define components for URO Phase 2 based on:**
  - Restaurant Waste Characterization
  - Hierarchy of Food Scrap Management
  - Local and National Practices



## **Basic Recycling Requirements: Section 15-6**

### ***Existing Commercial (CMFRO)***

- Effective UNTIL 9/30/2012
- 100+ employees onsite
- Onsite recycling of 2 materials
- File recycling plan with SWS
- Educate employees and tenants about program
- Quarterly volume reports to SWS

### ***URO Phase 2 will affect:***

1. Food and Beverage Industry
2. Retail Stores
3. Industrial and Manufacturing

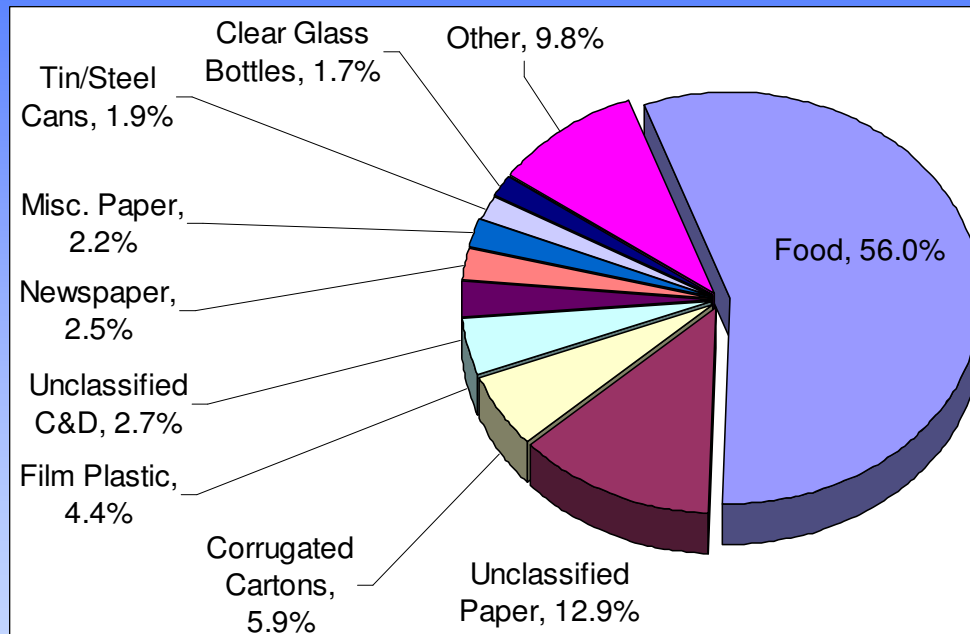
### ***NEW Commercial URO (Phase1)***

- Effective AFTER 10/1/2012
- Phased implementation over 4 years
- Onsite recycling of 5 materials
- File recycling plan form with SWS
- Educate employees and tenants
- Quarterly volume reports to SWS
- Required for building >25,000 ft<sup>2</sup> in 2015

***This is the 1<sup>st</sup> time most Phase 2 businesses will be affected by a Recycling Ordinance***

# Restaurant Waste Characteristics

**On average, Food Scraps make up more than 50% of the materials discarded**



Source: California Integrated Waste Management Board, 2006  
Waste Characterization Study

| <u>Material Type</u>             | <u>Est. Pct</u> |
|----------------------------------|-----------------|
| <b>Food</b>                      | <b>56.00%</b>   |
| <b>Unclassified Paper</b>        | <b>12.90%</b>   |
| <b>Uncoated Cardboard</b>        | <b>5.90%</b>    |
| <b>Film Plastic</b>              | <b>4.40%</b>    |
| <b>Unclassified C&amp;D</b>      | <b>2.70%</b>    |
| <b>Newspaper</b>                 | <b>2.50%</b>    |
| <b>Other Miscellaneous Paper</b> | <b>2.20%</b>    |
| <b>Tin/Steel Cans</b>            | <b>1.90%</b>    |
| <b>Glass Containers</b>          | <b>1.70%</b>    |

***What are other Cities doing to divert disposal from restaurants?***

# Food Scrap Best Use Hierarchy

1. Minimize and reduce food scrap generation
2. Feed people first (food banks, shelters, soup kitchens)
3. Feed animals (livestock, zoos, pet food)
4. Industrial uses (rendering, fuel conversion)
5. Compost the rest (local food production?)

Source: US Environmental Protection Agency





# Cities Considered

- San Francisco, CA
- Boulder, CO
- Chicago, IL
- Denton, TX
- Durham, NC
- Gainesville, FL
- Honolulu, HI
- Issaquah, WA
- Portland, OR
- San Diego, CA
- Seattle, WA

## Why these Cities?

- Robust Ordinances
- Innovative Practices
- Similar Climate
- Similar Population Size



## City of San Francisco, CA (pop. 805,000)



- “Charter” relationship with single commercial hauler
- Decades of recycling experience

### “Product Ban” Ordinance (2006)

- Bans polystyrene foam disposable food service ware
- Requires biodegradable or recyclable food service wares
  - “Unless no affordable alternative exists”
  - Waivers issued through administrative “waiver” process



## City of San Francisco, CA (continued)



### Mandatory Recycling and Composting Ordinance (2008)

- Requires all persons and entities to source-separate recyclables, compostable, and trash
- **Requires “Adequate refuse collection services” defined as:**
  - Recycling
  - Composting
  - Trash collection
- **Establishes container standards:**
  - Color coding
  - Placement or storage





## City of San Francisco, CA (continued)



- **Requires collectors and transfer stations to:**
  - Report all tonnages, by material type, annually
- **Enforced jointly by:**
  - Department of Environmental Services
  - Department of Health
  - Department of Public Works
- **Applies to owners/managers of:**
  - Multifamily and Commercial properties
  - Food vendors, including mobile vendors
  - Haulers, transfer stations, and processing facilities

## City of San Francisco, CA (continued)



### Food Vendor component of ordinance:

- **Food vendors supply collection infrastructure for:**
  - Source-separated recyclables, compostable, and trash
  - Employees, contractors, and customers
- **Containers (carts or dumpsters) must be:**
  - Sufficient in number and size to handle anticipated quantities
  - Well signed & color-coded to identify materials collected
  - Located for equal convenience for users

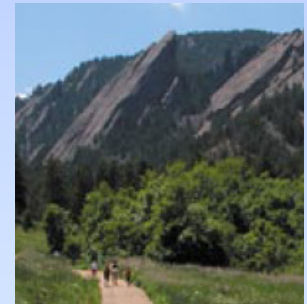
## City of Boulder, CO (pop. 97,000)



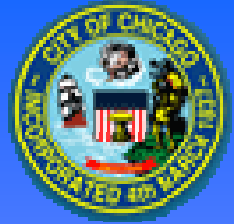
**Open-market: City licensed haulers/service providers**

### **Ordinance No. 7585 (2008) - Hauler requirements:**

- Collect recyclables, compostable materials, and trash
- Pay monthly Trash Tax
  - \$0.85 per cubic yard for businesses and multifamily units
- Report annual tonnages to City
- Collect no less than every other week:
  - Min. 32 gallons of compostables (no max.)
- Distribute City-created brochures to clients



# City of Chicago (pop. 2.7 million)



**Private haulers serve large commercial customers**

## **Commercial Recycling Ordinance (1995)**

- Develop plan
- Educate new tenants or employees
- Source separate 2 materials from list
  - Plus another material or practice certain source reduction measures
  - only 1 material if waste audit shows it to be 51%

- **Materials Collected:**

|                                |                           |                      |
|--------------------------------|---------------------------|----------------------|
| Newspaper                      | Magazines, catalogs       | Corrugated cardboard |
| High-grade paper               | Glass bottles, jars       | Plastic containers   |
| Mixed paper                    | Aluminum cans, foil, pans | Wooden pallets       |
| Steel and bi-metal cans        | Plastic film              | Fluorescent bulbs    |
| High-intensity discharge lamps | Fats, oils, and greases   |                      |

## **City of Chicago** (pop. 2.7 million)



### **Compost Ordinance date (2007)**

- Exempts small-scale compost operations from city permit requirements
- Requires them to be well-managed
- Ordinances that require diversion of organics may lead to on-site composting.
  - Are onsite composting solutions for Austin businesses acceptable?



# City of Denton (pop. 113,383)



## City of Denton

- Exclusive waste hauler agreement
- City operates landfill

## Ordinance No. 2005-256 (2005)

- Commercial Collection Service applies to those properties without residential collection (4 or more dwelling units)
- The City offers open-top or compacting roll-off containers for trash and recycling
- Applies to every owner, occupant, tenant, or lessee of any building, or structure
- Permit required to haul special waste or recyclables

## City of Denton (continued)



### City provides Recycling to Businesses:

- Recycling services not mandated
- Free waste audits
- Employee education



# City of Durham, NC (pop. 228,000)



## City contracts with one hauler for commercial waste

### North Carolina state laws

- 2008: Businesses with ABC permits required to recycle beverage containers
- 2009: Disposal ban on plastic bottles, motor-vehicle oil filters, wooden pallets, and oyster shells

### Commercial Recycling Ordinance

- Passed 1997, effective 1998
- Requires all waste generators to recycle:
  - Aluminum and Steel cans
  - Plastic bottles
  - Glass bottles and jars
  - Corrugated cardboard
  - Newspaper
  - Computer equipment/televisions (2011)



## City of Durham, NC (continued)



- **Enforcement**

- Originally penalized haulers at city-owned landfill for contaminated loads
- Violators charged double to dispose
- Durham Solid Waste Management Department has Enforcement Officers on staff



## City of Gainesville, FL (pop. 124,000)



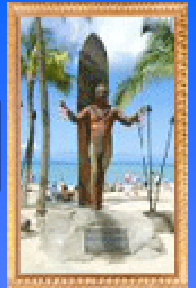
### City awards non-exclusive waste hauling franchises and registers recyclables haulers

#### Mandatory Commercial Recycling Ordinance (1997)

- Elements: Hotels, Motels, Restaurants, Bars, Retail Stores, Offices, Institutions and Construction Projects
- Commercial generators collect these recyclables if they exceed 15% of their waste stream (difficult to verify):
  - Corrugated cardboard and pasteboard
  - Newspaper, office paper and junk mail (AND shredded paper)
  - Metal cans
  - Glass bottles and jars
  - Plastic bottles, jugs, jars and tubs (#1 thru 7)



# City of Honolulu, HI (pop. 388,000)

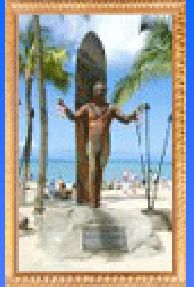


## Private haulers compete in open market

## Ordinances in 1990s ban disposal or require recycling

- Materials banned from commercial or government disposal:
  - Yard trimmings
  - Electronic scrap
  - Cardboard
  - Tires, auto batteries, white goods and scrap metals (1994)
  - Zero Waste Plan recently approved (2011)
- Businesses required to recycle:
  - **Glass containers** from bars and restaurants (1996)
  - **Paper** from office buildings (1996)
  - **Food waste** from hotels, restaurants, food courts, grocers, food manufacturers, and hospitals (Ordinance 96-20 passed in 1997)
  - **Newspaper, cardboard, office paper, aluminum, glass, and plastics** from city facilities (1990)

## City of Honolulu, HI (continued)



- **Food scraps handled by 5 local compost companies.**
  - Starches (including bread, dough, noodles and rice)
  - Dairy & Bakery Wastes
  - Egg Shells
  - Cooking Oil
  - Vegetable and Fruit Wastes (including pineapple tops and "boats," watermelon rinds, onions and potatoes)
  - Juice and Beverages (including Beer and Cider)
  - Full Milk Cartons
  - Coffee Grounds
  - Tea Bags
  - Meat and Fish Waste
  - Deli Waste
- **Opt-Out:** If charge for recycling exceeds tipping fee.

## City of Issaquah, WA (pop. 12,000)



**City-contracted hauler collects recyclables and garbage from residential and commercial sites**

### **Phased-in Recycling for Food Service Packaging**

- Phase 1: Jan. to Oct 2010
  - City provides education, awareness, incentives
- Phase 2: Oct 2010 to June 2011
  - Polystyrene containers banned
  - Recyclable or Compostable service ware required
  - Businesses must provide recycling and compost containers for customers eating on-site
  - Property managers and landlords provide space for recycling or compost service for tenants
  - Some waivers
- Phase 3: July 2011 – waivers expire

# City of Portland, OR (pop. 584,000)



**Permitted commercial haulers compete in open market**

## **Commercial Recycling Requirements**

- 1987: Haulers required to offer recycling services
- 1990: Polystyrene Foam Container Ban at restaurants, grocery stores and other retailers
- 1996: Businesses required to recycle 50% including:
  - all types of paper
  - plastic bottles
  - aluminum cans
  - glass containers
- Hauler fees, City provides containers, educational materials, and administrative support

# City of San Diego, CA (pop. 1.31 million)



## Commercial haulers compete in open market

### Phased Recycling Ordinance (2007):

- January 2008: Existing City customers with recycling services
- February 2008
  - Apartments and condos (100+ units)
  - Commercial (20,000+ sq ft)
  - Special events
- January 2009
  - Apartments and condos (50+ units)
  - Commercial (10,000+ sq ft)
- January 2010: All apartments, condos, and commercial facilities
- July 2011: add rigid plastics including clean food waste containers, jugs, tubs, trays, pots, buckets, and toys



## City of San Diego (continued)



- **Requirements**

- Commercial materials: those listed for multi-family plus *“other materials for which markets exist,”* such as scrap metal, wood pallets, and food waste
- Properties use Department container and signage guidelines
- Haulers:
  - Submit annual reports of solid waste and recyclables collected
  - Notify their customers of the ordinance and requirements
- Funded by \$10/ton trash fee on haulers
- Enforced by the Environmental Services Department

## City of Seattle, WA (pop. 610,000)



**Two franchise haulers have exclusive territories**

### **Commercial Recycling Ordinance No. 121372 (2003):**

- As of 2005, bans recyclable materials (mixed paper, glass, metal, plastics) and yard debris (not currently food scraps) from commercial garbage
- Seattle Public Utilities sets collection rates for commercial trash, recyclables, and compostable materials for the two franchise haulers.
- Prices for commercial compost collection service are 32% less than for regular garbage service.

## City of Seattle, WA (continued)



### **Expanded polystyrene (EPS) Ban Ordinance No. 122751 (2006):**

- Phased-in ban on selling or providing food in (EPS) food service products
  - After 1/1/2010, no EPS for raw meat or seafood
  - After 1/1/2009, no EPS for all other food (except for pre-packaged food sealed in EPS prior to receipt)
- After 7/1/2010, food service businesses with on-site dining shall provide:
  - Only compostable or recyclable single-use service ware
  - Collection containers for service ware and transport to appropriate facilities

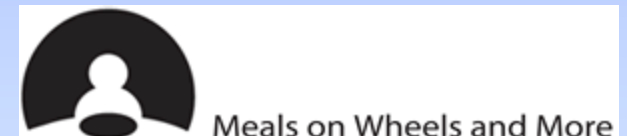
# Food Scrap Reduction Hierarchy

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



# 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.



# Examples of Containers and Labels



# Examples of Containers and Labels

City of Seattle



McDonald's Northeast pilot program (1991)

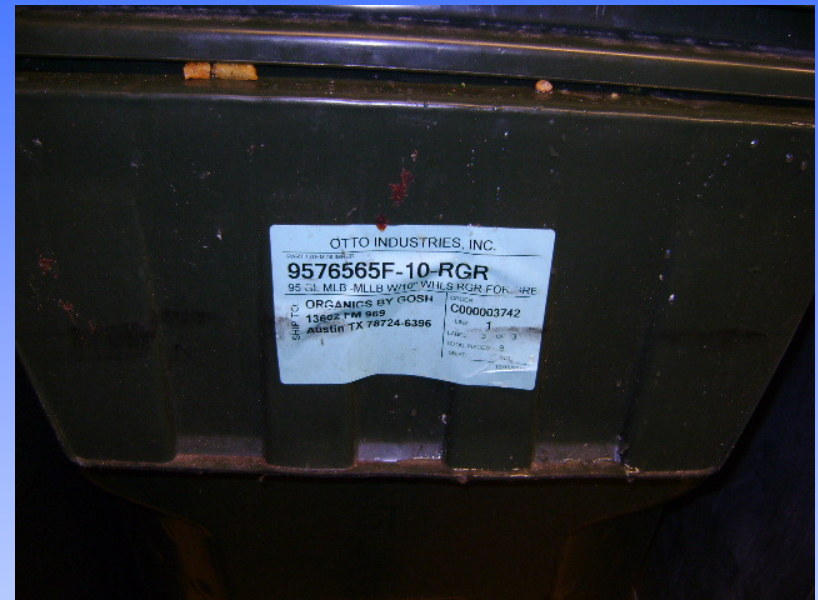


Lowe's Hardware





# Austin Examples: Hopdotty Burgers



# Austin Examples: Strange Brew Coffee





# Austin Examples: Various

## Tarka Indian Restaurant



## Black Star Co-op



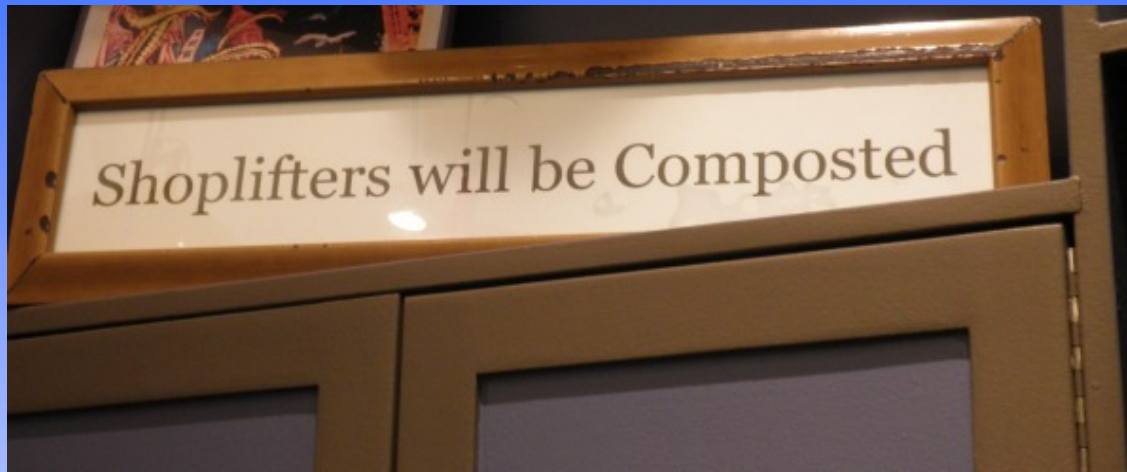
## Whole Foods Market



## House Pizzeria



## Questions?



<http://www.articlesbase.com/videos/5min/268426584>

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