

## INDUSTRY GROUP 04: RETAIL TRADE – RESTAURANTS (EATING & DRINKING PLACES)\*

SIC Major Group: 58  
NAICS Code: 722

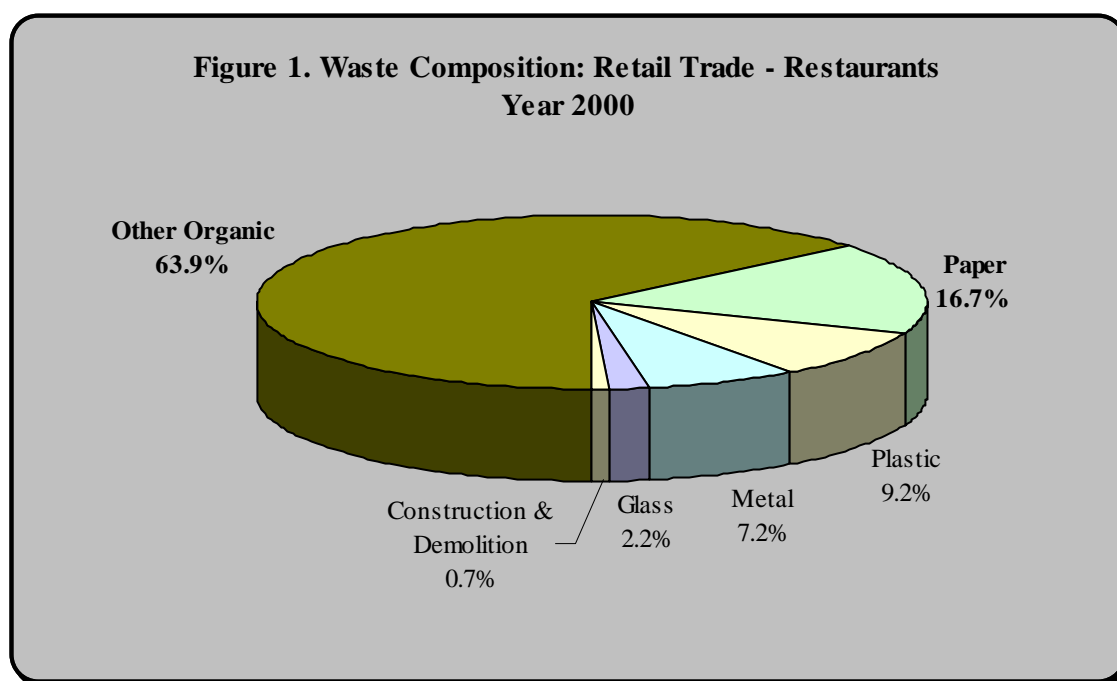
### INTRODUCTION

The City of Los Angeles is a recognized leader amongst the major cities in the United States in solid waste prevention and recycling programs. Los Angeles has well exceeded the California state mandate of achieving and maintaining a 50% waste diversion rate for the year 2000. To identify the materials still reaching landfill disposal, and to assist local businesses in creating their own waste diversion programs, we are providing information on waste disposal and diversion for specific industry groups.

**Major Group 58:** *Restaurants (Eating And Drinking Places)* includes retail establishments selling prepared foods and drinks for consumption on the premises; and also lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. Restaurants, lunch counters, and drinking places operated as a subordinate service facility by other establishments are not included in this industry, unless they are operated as leased departments by outside operators.

### GENERAL WASTE COMPOSITION

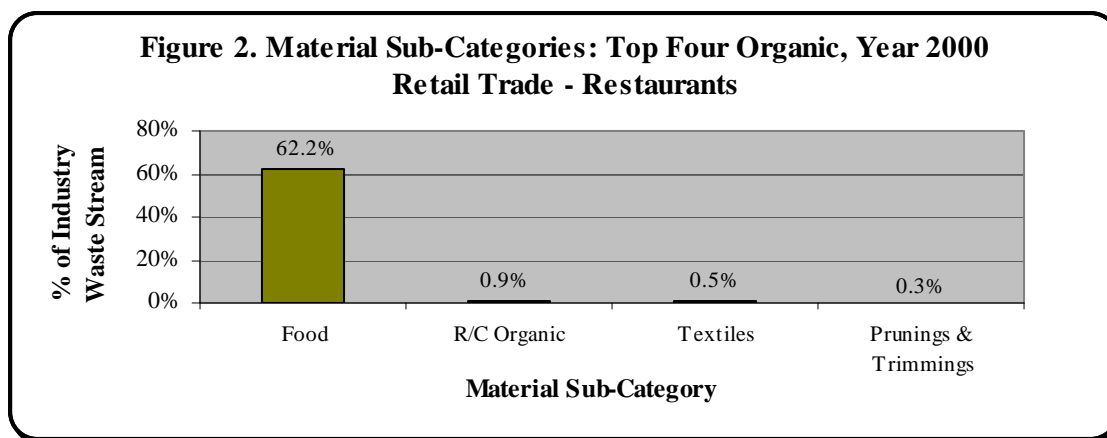
The **Retail Trade – Restaurants** industry disposed 261,108 tons of waste in 2000 or approximately 7.4% of the total City of Los Angeles disposed waste stream (3,544,611 tons). Figure 1 displays the total waste composition by material category. The two categories that comprise the majority of the waste stream, *Other Organic* (63.9%) and *Paper* (16.7%), are further discussed in the “Detailed Waste Composition” section that follows.



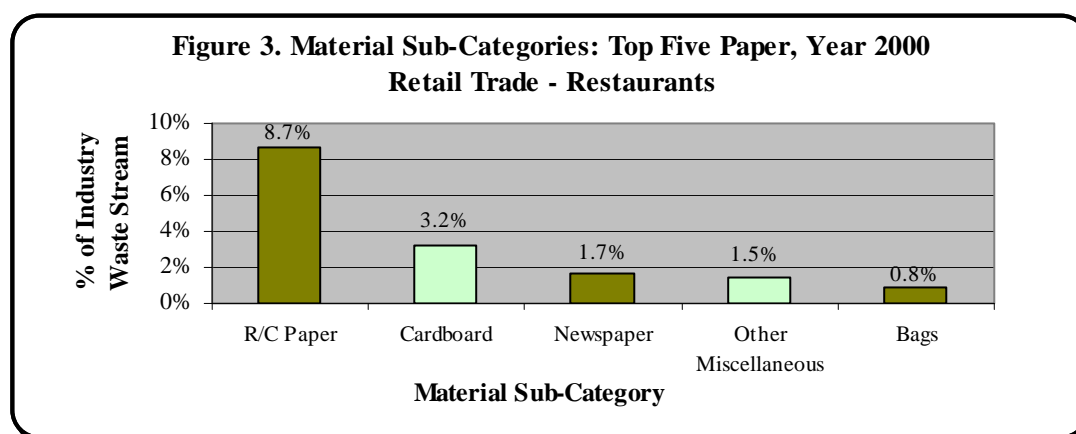
\* For additional information or assistance, please contact the City of Los Angeles, Public Works, Bureau of Sanitation, **Solid Resources Citywide Recycling Division** at (213) 473-8228.

## DETAILED WASTE COMPOSITION

As Figure 2 indicates, the top three material sub-categories of *Other Organic* materials disposed (by weight) are Food, Remainder/Composite Organic (R/C Organic)<sup>1</sup>, and Textiles, followed by Prunings & Trimmings.



As Figure 3 indicates, the top three material sub-categories of *Paper* disposed are Remainder/Composite Paper (R/C Paper)<sup>2</sup>, Cardboard, and Newspaper, followed by Other Miscellaneous<sup>3</sup> and Bags.



<sup>1</sup> According to the California Integrated Waste Management Board, “Remainder/Composite Organic” means organic material that cannot be put in any other type or subtype. This type includes items made mostly of organic materials, but combined with other material types and does not include any subtypes. Examples include leather items, carpets, cork, hemp rope, garden hoses, rubber items, hair, carpet padding, cigarette butts, diapers, feminine hygiene products, small wood products (such as Popsicle sticks and tooth picks), and animal feces.

<sup>2</sup> According to the California Integrated Waste Management Board, “Remainder/Composite Paper” means items made mostly of paper but combined with large amounts of other materials such as wax, plastic, glues, foil, food, and moisture. Examples include waxed corrugated cardboard, aseptic packages, plastic-coated paper milk cartons, waxed paper, tissue, paper towels, blueprints, sepia, onion skin, fast food wrappers, carbon paper, self adhesive notes, and photographs.

<sup>3</sup> According to the California Integrated Waste Management Board, “Other Miscellaneous” Paper means items made mostly of paper that do not fit into any of the above subtypes. Paper may be combined with minor amounts of other materials such as wax or glues. This subtype includes items made of chipboard, ground wood paper, and deep-toned or fluorescent dyed paper. Examples include cereal and cracker boxes, unused paper plates and cups, goldenrod colored paper, school construction paper, butcher paper, and hard cover and soft cover books.

## WASTE DISPOSAL TRENDS

Overall, **Retail Trade – Restaurants** waste has increased by 111,271 tons since 1990 (149,837 tons). Even though the disposed waste decreased to 121,724 tons between 1990 and 1995, it increased to 261,108 tons by the year 2000. As Figure 4 indicates, the *Paper* and *Other Organic* material categories demonstrate the most variation in volume between the years 1990, 1995, and 2000 and they comprise the majority of the waste stream (at least 81%) during all years. These materials should be targeted for waste diversion programs by businesses in this industry.

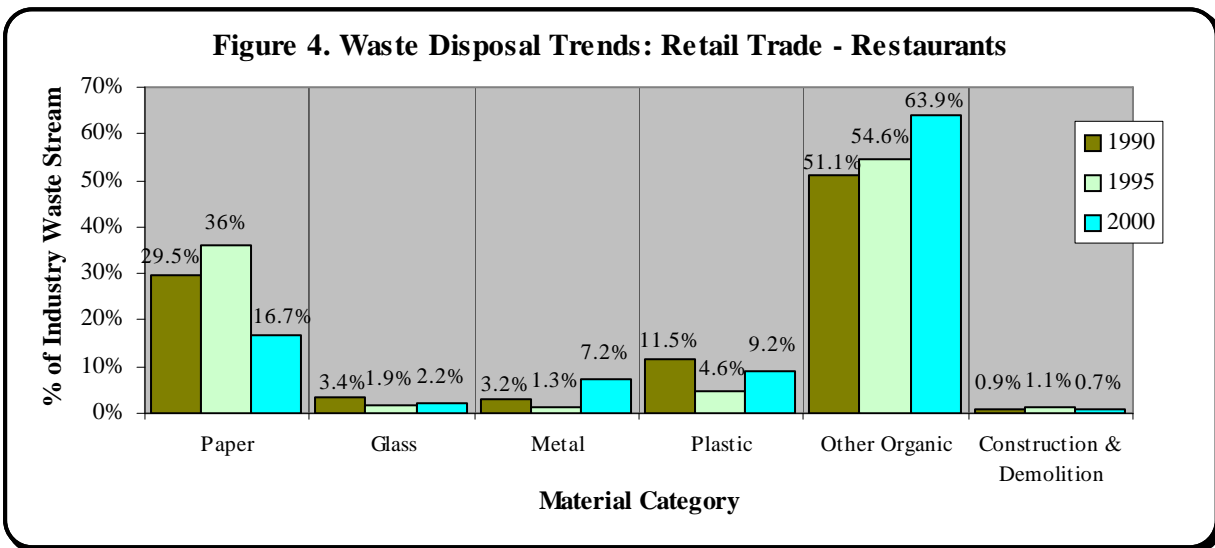
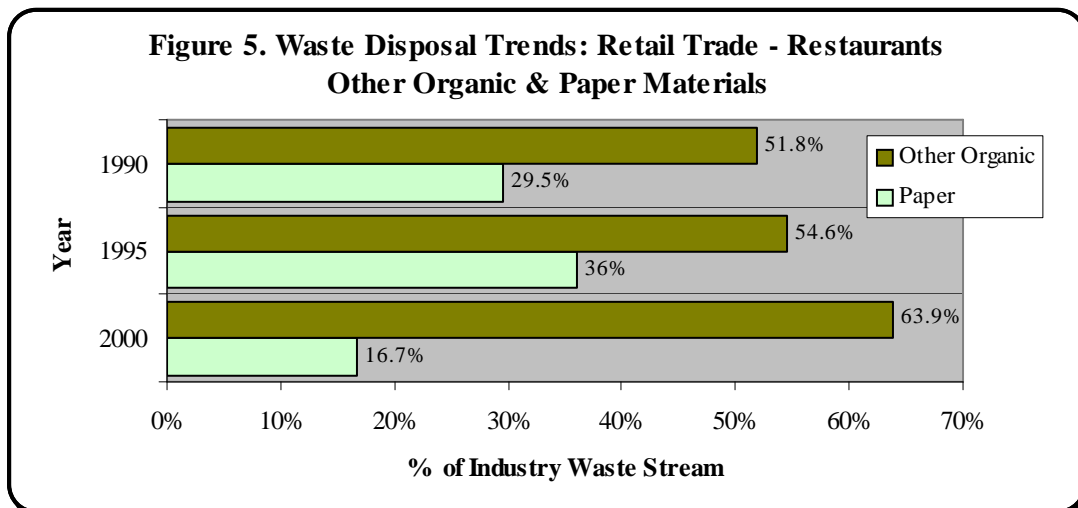


Figure 5 provides a closer look at waste disposal trends for *Other Organic* and *Paper* materials. Although some progress was made between 1990 and 1995 in reducing the amount of *Other Organic* materials that were landfilled, by 2000 they comprised 63.9% of the waste stream. Overall, the amount of *Other Organic* materials has increased since 1990 when *Other Organic* materials comprised 51.8% of the waste stream, versus 54.6% in 1995 and 63.9% in 2000. Disposal of *Paper* increased between 1990 and 1995 from 29.5% to 36% then significantly decreased to 16.7% of the waste stream by 2000. Although, taken together, waste in the top two material categories has decreased, opportunities to reduce *Other Organic* and *Paper* waste continue to exist, as discussed in the “Waste Diversion Tips” section that follows the section on “Waste Diversion Accomplishments”.



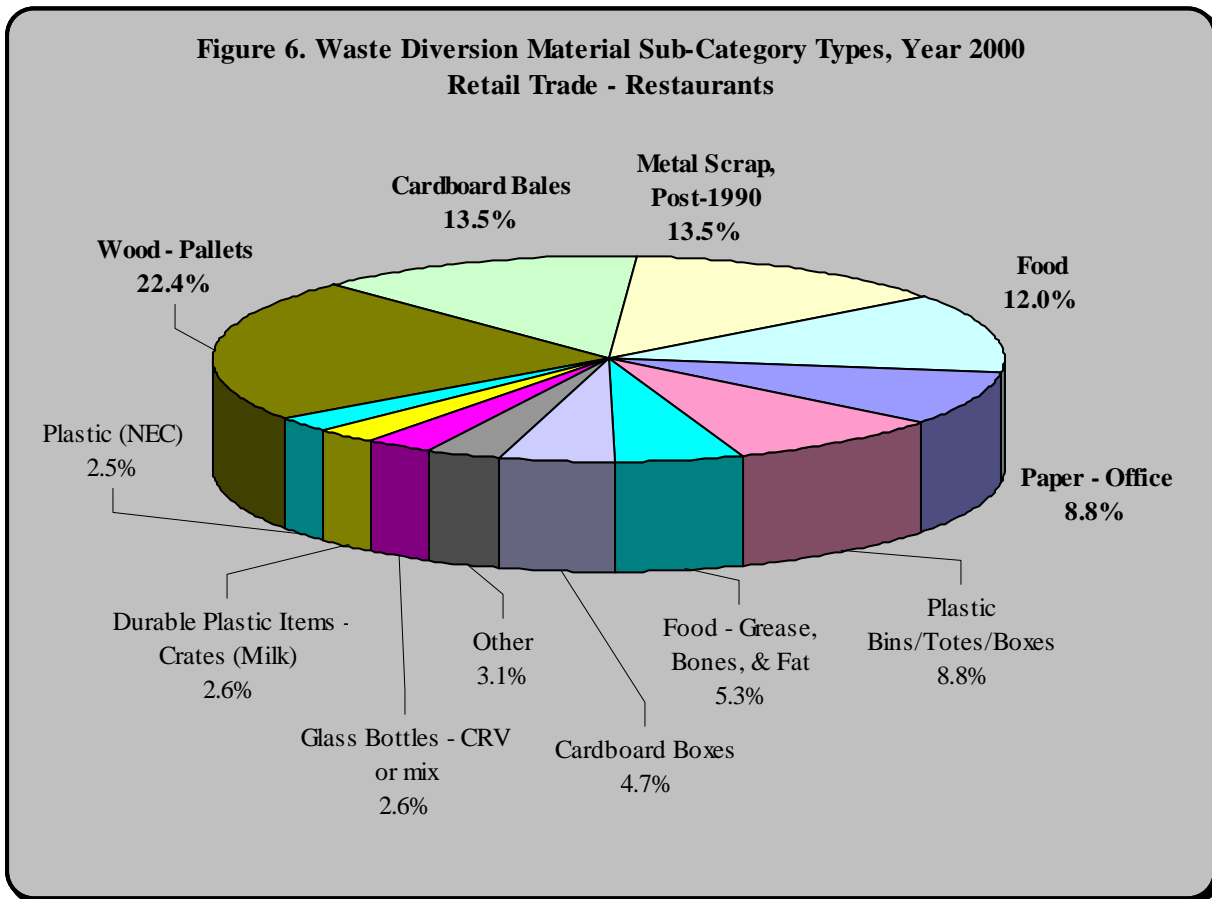
**WASTE DIVERSION ACCOMPLISHMENTS**

Businesses can reduce the volume of materials that are disposed in landfills, and in turn save money on disposal costs, by following the solid waste management hierarchy as set forth by the California Integrated Waste Management Board. The hierarchy sets out a preferred approach for dealing with waste. In order of preference this is:

- **Source Reduction** – preventing waste at its source by using less of a material in the first place and/or repeatedly using an item or items
- **Recycling and Composting** – *recycling*: the process by which materials otherwise destined for landfills are collected, remanufactured, and purchased; and *composting*: the biological decomposition of organic materials such as leaves, grass clippings, brush, and food waste into a soil amendment
- **Transformation** – incineration of municipal solid waste; not including composting or biomass conversion
- **Landfilling** – the process by which residual solid waste is placed in a landfill, which is a physical facility used for the disposal of residual solid wastes (trash and garbage) on the earth's surface and between layers of earth

Businesses in the City of Los Angeles have made significant accomplishments in the diversion of solid waste from landfills. The City of Los Angeles conducted waste diversion and recycling audits during the year 2000 and collected information indicating that the **Retail Trade – Restaurants** industry diverts 5,169 tons of waste from landfill disposal each year through waste prevention, reuse, recycling, and composting programs. Figure 6 depicts the material sub-category types that were diverted from landfills in 2000. The top five materials diverted are Wood – Pallets; Cardboard Bales; Metal Scrap, Post-1990; Food; and Paper – Office.

Please note that the “Other” category is comprised of a group of material types that individually were below 1.0% of the total diverted materials. In order from most to least (by weight), these are Plastic Buckets (5 gallon), Bread Racks, Mixed CRV<sup>4</sup> Containers, Food – Baked Goods, and Paper – Shredded. Also, Plastic (NEC) means Plastic, Not Elsewhere Classified.



## WASTE DIVERSION TIPS

Figures 2 and 3 indicate that *Other Organic* and *Paper* materials comprise the majority of the **Retail Trade – Restaurants** industry waste stream. Businesses in this industry should target these material categories for waste diversion programs through **source reduction**, **recycling** and **composting** activities. Most materials are eligible for recycling programs in their existing forms, except for Remainder/Composite (R/C) materials, which are not. Programs for R/C materials should focus on source reduction activities, unless an opportunity to separate recyclable components of the material exists, as discussed below. Tables 1 and 2 contain tips for achieving waste diversion programs for the top sub-categories (by weight) of the *Other Organic* and *Paper* material categories.

<sup>4</sup> CRV means California Redemption Value.

**Table 1. Waste Diversion Tips: Other Organic**

<b>FOOD</b>		<b>TONS PER YEAR (2000): 162,506</b>	<b>% OF INDUSTRY WASTE STREAM: 62.2%</b>
Source reduce	<p>Donate edible food to charity organizations that feed the hungry.</p> <p>Send surplus food waste to an animal feed processor. Food must be free of wires, plastic bags, etc. as these items will kill the animals, even if ingested in small quantities. Some animal feed processors pick up the food free of charge if there is a large enough quantity or for a small fee if the quantity is small.</p> <p>Evaluate and adjust the size of your meal portions if they are consistently being returned unfinished. Offer half-portions to your guests and a children's menu for younger diners.</p> <p>Check your produce deliveries carefully for rotten or damaged product, and let your supplier know if you are unsatisfied with the quality you are receiving.</p>		
Recycle / Compost	<p>Recycle food scraps and leftovers with a food waste recycler/composter. If this is not cost-effective for your business, consider teaming up with other restaurants in your area to collectively set aside food waste, both pre- and post-consumption, for recycling/composting.</p> <p>Set up a rendering service for your waste grease, fat or used cooking oil.</p>		

**Table 2. Waste Diversion Tips: Paper**

<b>R/C PAPER</b>		<b>TONS PER YEAR (2000): 22,749</b>	<b>% OF INDUSTRY WASTE STREAM: 8.7%</b>
Source reduce	<p>Since this material is not recyclable, see the definition for R/C Paper on page 2 to identify types of this paper that your business uses, and that you can reduce or eliminate the use of.</p> <p>Prevent recyclable paper from becoming R/C Paper. Use separate containers for discarding paper and food waste. Tossing food into the same container as recyclable paper contaminates the paper, which can no longer be recycled.</p> <p>Utilize reusable drinking cups/mugs instead of paper cups.</p> <p>In employee and customer restrooms, replace paper towel dispensers with hot air hand dryers.</p> <p>Utilize reusable table linens instead of paper or plastic disposable ones.</p>		
<b>CARDBOARD</b>		<b>TONS PER YEAR (2000): 8,289</b>	<b>% OF INDUSTRY WASTE STREAM: 3.2%</b>
Source reduce	Encourage suppliers to deliver food and other goods in reusable containers (plastic, wood, or metal) that they take back. This practice reduces the need for disposal or recycling on your part, and may save your suppliers money, possibly reducing your costs.		
Recycle	Source-separate for recycling collection. If your business has large amounts of cardboard, obtain a baler. If your business does not generate enough cardboard to justify a baler, request a bin from your waste hauler or a local recycler. If this is too expensive, consider teaming up with other local businesses to split the costs for recycling service.		
<b>NEWSPAPER</b>		<b>TONS PER YEAR (2000): 4,369</b>	<b>% OF INDUSTRY WASTE STREAM: 1.7%</b>
Recycle	Source-separate for recycling collection. Keep separate from food to ensure recyclability. When food is discarded with Newspaper it becomes R/C Paper and cannot be recycled.		

## OTHER WASTE DIVERSION IDEAS

Even though the following materials are not part of the top material sub-categories, some comprise a large portion of the waste stream and should be targeted for waste diversion programs. Consider the waste diversion tips in Table 3 below.

**Table 3. Other Waste Diversion Ideas**

ITEM	SUGGESTED ACTIONS
Film Plastic	Use, or ask vendors to use large "rubber bands" instead of shrink-wrap to keep items secured on pallets. Reuse shrink-wrap as padding in shipments.  Recycle the stretch wrap used to secure boxes and supplies on pallets, damaged bags and other scrap plastic.
Pallets	Reuse pallets or ask suppliers to take them back. Store excess pallets on site for collection by a pallet reuse company.
Plastic Containers	Reuse empty plastic containers and buckets for storing food. If you have excess containers, donate them to schools, nurseries or churches, or offer them to your customers.
Table Linens	Use washable napkins and tablecloths where appropriate.
Beverage Containers	Provide cash discounts to customers who bring their own coffee mug or beverage containers.  Recycle glass, plastic and aluminum drink containers for a cash refund.
Condiment Dispensers	Use health department-approved refillable condiment dispensers instead of individual packets whenever possible.
Tin Cans	Rinse, clean and source-separate for recycling collection.
Food Service Items	Provide reusable flatware, plates, glasses, and mugs in dining areas instead of disposable paper and plastic utensils.  Use biodegradable flatware and plates where appropriate.
Equipment & Furniture	Donate equipment and furniture to local or international charity organizations. List available items for donation on the County of Los Angeles' materials exchange web site, LaCoMAX, at <a href="http://ladpw.org/epd/lacomax/">http://ladpw.org/epd/lacomax/</a> . Also, contact L.A. Shares at 213-485-1097 for donation information.
Recycled-Content Products	Purchase recycled-content products, such as office paper, toner cartridges, toilet paper, and paper towels. If too expensive, join a buying cooperative program to reduce costs. Contact the City for more information on recycled-content products.
Construction Materials	For construction projects, mandate recycling and waste reduction in contracts. Items that can be recycled include lumber, metal, drywall, asphalt, and concrete.

## **RECYCLING TIPS**

### **INCREASING THE AMOUNT OF RECYCLABLE MATERIALS**

- Keep food and other contaminants separate from materials that are recyclable. For example, when food is discarded with paper, it becomes R/C Paper and cannot be recycled.

### **LARGE QUANTITIES OF RECYCLABLE MATERIALS**

- Determine the materials with the largest volumes of waste and target them for recycling. The greater volume of materials you generate, the more likely you are to be paid for the materials.

### **SMALL QUANTITIES OF RECYCLABLE MATERIALS**

- If you have recyclable materials in small quantities, consider paying for recycling collection as long as the cost is less than what you pay for waste disposal. Your company will “make money” by reducing its waste disposal costs.
- Consider teaming up with other businesses in your area to share recycling service costs and revenues.

### **WHEN RECYCLING COLLECTION SERVICES ARE NOT AVAILABLE**

- If recycling collection services are not available from your waste hauler or recyclers, work with employees or local individuals to collect and transport recyclable materials from the business.

## **POLICIES THAT BUSINESSES CAN IMPLEMENT**

Policies that will help businesses to implement and uphold waste diversion programs include:

- Develop and commit to responsible solid waste management plans with emphasis on source reduction and recycling activities.
- Continually monitor the effectiveness of solid waste management programs facility-wide and in individual departments.
- Dedicate the necessary funding and personnel resources to ensure the ongoing success of waste diversion programs.

## **MEASURES PROPOSED BY THE CITY OF LOS ANGELES**

In addition to programs and policies that businesses can implement on their own, the City proposes to provide the following support services to help the *Retail Trade – Restaurants* industry to divert waste from landfills:

- Technical assistance to businesses expressing an interest in developing and implementing effective waste diversion programs.
- Publicly recognizing and promoting businesses that demonstrate high solid waste diversion rates and a strong commitment to waste diversion.
- Establishing a working relationship with industry-related associations such as the California Restaurant Association for the purposes of enhancing training programs and communicating plans and progress with waste diversion programs.
- Assisting in the design of tracking programs for the purpose of documenting waste diversion programs.
- Tracking and monitoring industry disposal and diversion rates through periodic sampling and surveying of businesses and biannually re-evaluating waste diversion opportunities.
- Identifying sources of recycled-content products for the industry and providing guidelines for purchasing contract modifications that support procurement of recycled products.



**CASE STUDY LSG SKYCHEF – LAX**

<b>Address:</b>	7051 World Way W Los Angeles, CA 90045	<b>Type of Business:</b>	Food Preparation
		<b>SIC Code:</b>	5812
		<b>Employees:</b>	250
<b>Contact Person(s):</b>	Joyce Uhi Zoubul	<b>Trash Hauler:</b>	HDM Waste Disposal
<b>Contact Number:</b>	(310) 215-4555	<b>Recycler(s):</b>	See below.

**BUSINESS OVERVIEW**

LSG Skychef, the world's largest in-flight food service company, prepares meals for consumption during airplane flights.

**MATERIALS DIVERTED**

The following table presents the three materials that LSG Skychef – LAX diverts from landfills through recycling and reuse activities on an annual basis.

MATERIAL	ANNUAL TONS	RECYCLER	DESCRIPTION
Tin cans	15	N/A	Recycle 100 tin cans from fruits and vegetables per day
Wood pallets	104	N/A	Reuse wood pallets for shipping and receiving at the rate of approximately 40 pallets, three times per week
Cardboard	125	N/A	Recycle 5 cubic yards twice per week by utilizing an on-site cardboard baler
<b>TOTAL</b>	<b>244</b>		<b>YEAR 2000</b>

**COST SAVINGS / REVENUE**

A cost savings / revenue estimate for the waste reduction programs is not available.

**SUMMARY OF RESULTS**

LSG Skychef diverts a total of 244 tons of materials from disposal at local landfills each year. Significant diversion rates are realized through the practice of metal scrap recycling, wood pallet reuse, and cardboard recycling.