INDUSTRY GROUP 01: SERVICES – OTHER*

SIC Major Groups: 72, 75, 76, 79, 81, 83, 84, 86, 87
NAICS Codes: 812, 811, 713, 5411, 624, 712, 813, 541

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.

The ***Services – Other*** industry includes nine SIC Major Group categories, as indicated above. A description of each category is provided in the table below.

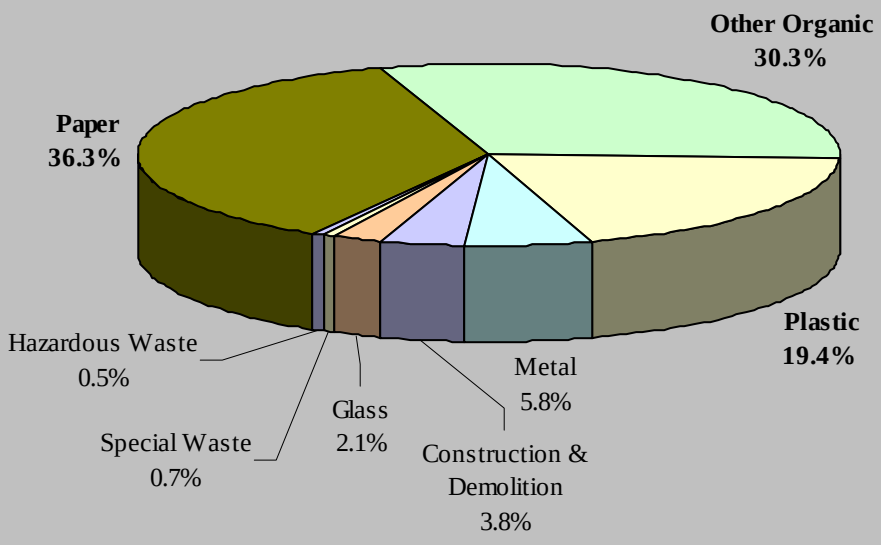
SIC/NAICS CODES	DESCRIPTION
72/812 – Personal Services	Includes establishments primarily engaged in providing services generally to individuals, such as laundries, dry-cleaning plants, portrait photographic studios, and beauty and barbershops. Also included are establishments operating as industrial launderers and those primarily engaged in providing linen supply services to commercial and business establishments.
75/811 – Automotive Repair, Services, and Parking	Includes establishments primarily engaged in furnishing automotive repair, rental, leasing, and parking services to the general public.
76/811 – Miscellaneous Repair Services	Includes establishments engaged in miscellaneous repair services, not including repair to structures, electronic computer and computer peripheral equipment repair, automotive repair, clothing repair, and shoe repair.
79/713 – Amusement and Recreation Services	Includes establishments primarily engaged in providing amusement or entertainment services, not elsewhere classified.
81/5411 – Legal Services	Includes establishments staffed by members of the bar and are engaged in offering legal advice or legal services.
83/624 – Social Services	Includes establishments providing social and rehabilitation services to those persons with social or personal problems requiring special services and to the handicapped and the disadvantaged. Also includes organizations soliciting funds to be used directly for these and related services.
84/712 – Museums, Art Galleries, and Botanical & Zoological Gardens	Includes museums, art galleries, arboreta, and botanical and zoological gardens. These establishments are often of historical, educational, or cultural interest.
86/813 – Membership Organizations	Includes organizations operating on a membership basis for the promotion of the interests of their members. Examples are trade associations; professional membership organizations; labor unions and similar labor organizations; and political and religious organizations.
87/541 – Engineering, Accounting, Research, Management and Related Services	Includes establishments primarily engaged in providing engineering, architectural, and surveying services; accounting, auditing, and bookkeeping services; research, development, and testing services; and management and public relations services.

* 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.

GENERAL WASTE COMPOSITION

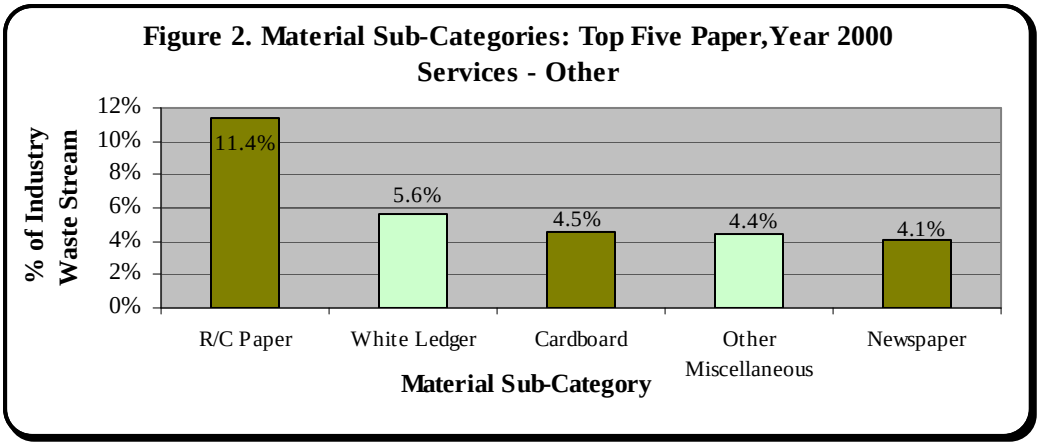
The ***Services – Other*** industry disposed 129,866 tons of waste in 2000 or approximately 3.7% of the total City of Los Angeles disposed waste stream (3,544,611 tons). Figure 1 displays the total waste composition by material category. The three categories that make up the majority of the waste stream, *Paper* (36.3%), *Other Organic* (30.3%), and *Plastic* (19.4%), are further discussed in the "Detailed Waste Composition" section that follows.

Figure 1. Waste Composition: Services - Other, Year 2000

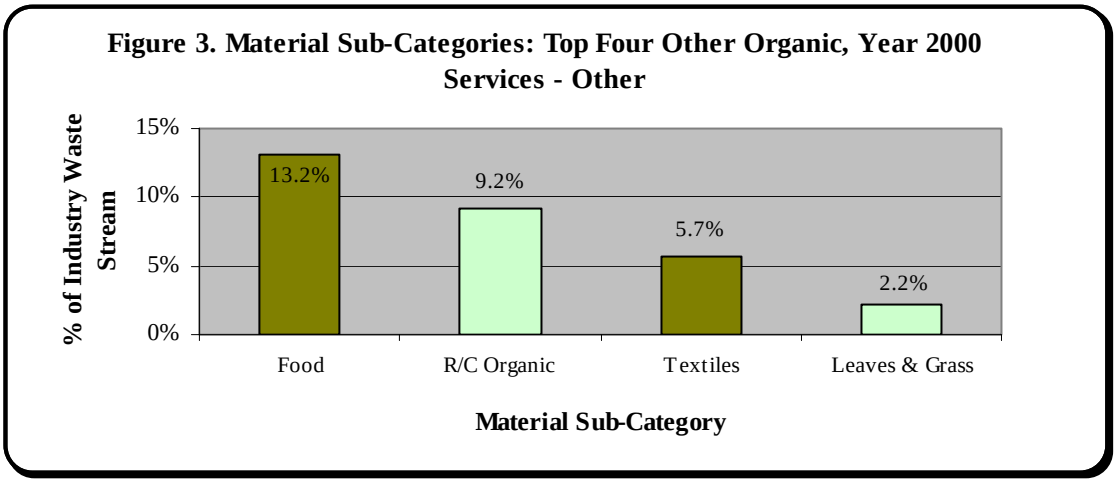


DETAILED WASTE COMPOSITION

As Figure 2 indicates, the top three material sub-categories of *Paper* waste (by weight) are Remainder/Composite Paper (R/C Paper)[1], White Ledger, and Cardboard, followed by Other Miscellaneous Paper[2] and Newspaper.



As Figure 3 indicates, the top three material sub-categories of *Other Organic* waste are Food, Remainder/Composite Organic (R/C Organic)[3], and Textiles, followed by Leaves & Grass.



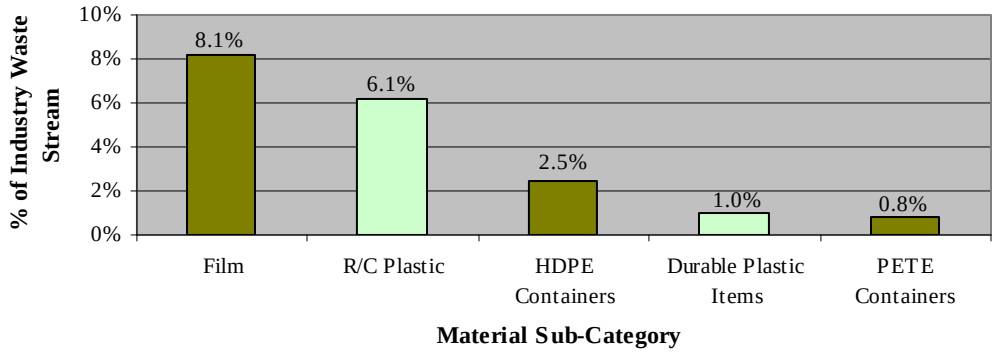
[1] According to the California Integrated Waste Management Board, "Remainder/Composite Paper" means items made mostly of paper but combined with large amounts of other materials such as wax, plastic, glues, foil, food, and moisture. Examples include waxed corrugated cardboard, aseptic packages, plastic-coated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

[2] 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.

[3] 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.

As indicated in Figure 4, the top two material sub-categories of *Plastic* waste are Film and Remainder/Composite Plastic (R/C Plastic)[4], followed by HDPE (#2) Containers, Durable Plastic Items, and PETE (#1) Containers.

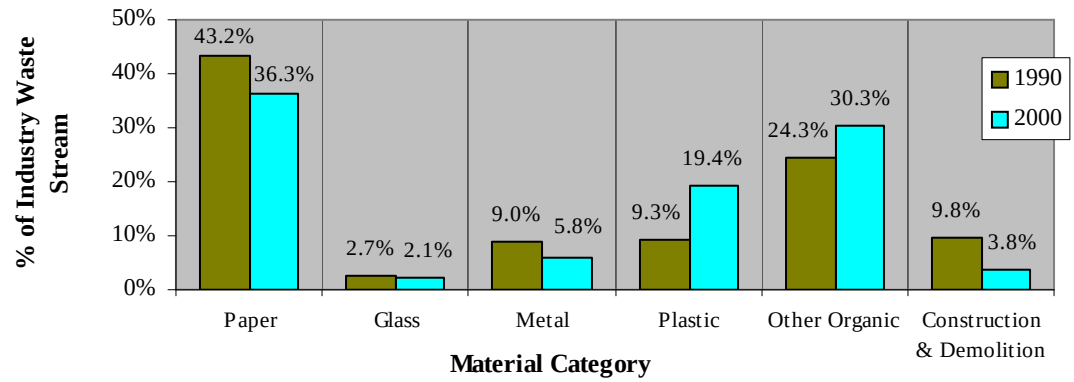
Figure 4. Material Sub-Categories: Top Five Plastic, Year 2000
Services - Other



WASTE DISPOSAL TRENDS

Overall, ***Services – Other*** industry waste has decreased by 64,076 tons between 1990 and 2000, starting with 193,942 tons in 1990 and decreasing to 129,866 tons by the year 2000. As indicated in Figure 5, most material categories experienced a fluctuation of at least 3.2% with respect to the percentage of the waste stream that they comprise, with the exception of *Glass*, which remained relatively stable between 1990 and 2000. Nonetheless, *Paper*, *Other Organic*, and *Plastic* materials continue to comprise the majority of the total industry waste stream during the year 2000 and should be targeted for waste diversion programs by businesses in this industry.

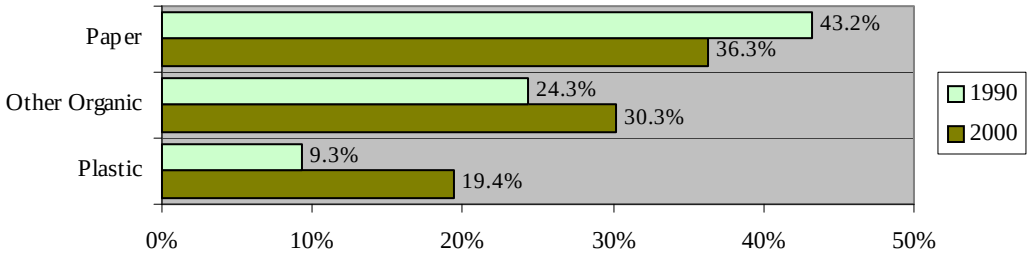
Figure 5. Waste Disposal Trends: Services - Other



[4] According to the California Integrated Waste Management Board, "Remainder/Composite Plastic" means plastic that cannot be put in any other type or subtype. This type includes items made mostly of plastic but combined with other materials and does not include any subtypes. Examples include auto parts made of plastic attached to metal, plastic bubble packaging, drinking straws, foam drinking cups, produce trays, egg cartons, foam packing blocks, packing peanuts, cookie trays found in cookie packages, plastic strapping, foam plates/bowls, and new Formica, vinyl, or linoleum.

Figure 6 depicts waste disposal trends of *Paper*, *Other Organic* and *Plastic* waste for the years 1990 and 2000. The amount of *Paper* disposed decreased by approximately 7% between 1990 (43.2%) and 2000 to 36.3% of the total waste stream. *Other Organic* waste increased by 6% from 24.3% of the disposed waste stream in 1990 to 30.3% in 2000. *Plastic* waste increased since 1990 when it comprised 9.3% of the total industry waste stream to 19.4% by 2000, for a total increase of 10.1%. Overall industry waste has decreased since 1990, yet opportunities to divert the top three material categories continue to exist as discussed in the "Waste Diversion Tips" section that follows the section on "Waste Diversion Accomplishments".

Figure 6. Waste Disposal Trends: Services - Other
Paper, Other Organic, and Plastic Materials



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:

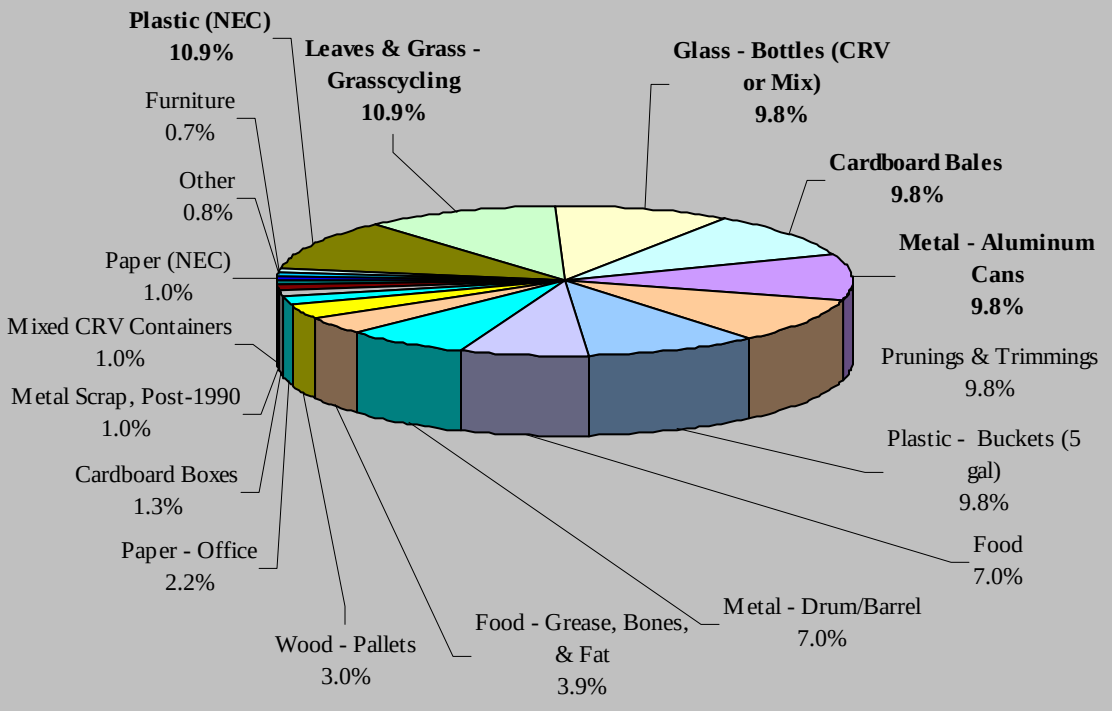
- **Source Reduction** – preventing waste at its source by using less of a material in the first place and/or repeatedly using an item or items
- **Recycling** and **Composting** – *recycling*: the process by which materials otherwise destined for landfills are collected, remanufactured, and purchased; 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 ***Service – Other*** industry diverts 70,794 tons of waste from landfill disposal each year through waste prevention, reuse, recycling, and composting programs. Figure 7 depicts the material sub-category types that were diverted from landfills in 2000. The top five materials diverted are Plastic (NEC)[5], Leaves & Grass – Grasscycling, Glass – Bottles (CRV[6] or Mix), Cardboard Bales and Aluminum Cans.

[5] Plastic (NEC) means Plastic, Not Elsewhere Classified.

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), the top five are Paper Trimmings, Durable Plastic Items – Crates (Milk), Dishes/Flatware, Textiles – Rags, and Appliances – Large White Goods. Also, Paper (NEC) means Paper, Not Elsewhere Classified.

Figure 7. Waste Diversion Material Sub-Category Types, Year 2000
Services - Other



WASTE DIVERSION TIPS

Figures 2, 3 and 4 above indicate that *Paper*, *Other Organic* and *Plastic* materials comprise the majority of the ***Services - Other*** industry waste stream. Businesses in this industry should target these material categories for waste diversion programs through **source reduction** and **recycling** 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, 2 and 3 contain tips for achieving waste diversion programs for the top sub-categories (by weight) of the *Paper*, *Other Organic*, and *Plastic* material categories.

[6] CRV means California Redemption Value.

Table 1. Waste Diversion Tips: Paper

R/C PAPER	TONS PER YEAR (2000): 14,805	% OF INDUSTRY WASTE STREAM: 11.4%
Source reduce	Since this material is not recyclable, see the definition for R/C Paper on page 3 and identify innovative ways to reduce or eliminate the use of this material, as applicable to your business. 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. Utilize reusable drinking cups/mugs instead of disposable paper cups. Replace "Post-it notes" by using reused paper and paper clipping it to documents. "Post-its" are a contaminant for recycling because of the self-adhesive strip. In employee restrooms, replace paper towel dispensers with hot air hand dryers.
WHITE LEDGER	**TONS PER YEAR (2000): 7,284**	**% OF INDUSTRY WASTE STREAM: 5.6%**
Source reduce	Generate less paper waste by practicing the following: ▪ Reduce paper usage: store files electronically, post memos in central locations/bulletin boards to avoid copying for everyone, circulate one copy of memos and reports for review, review documents on-line instead of printing hard copies for everyone, use electronic manuals, practice electronic billing and faxing, use electronic catalogs to order goods on-line, practice double-sided photocopying ▪ Make scratch pads out of single-sided paper Conduct employee education to ensure a successful paper reduction program, which will reduce paper purchasing costs; decrease postage, handling, storage, reproduction, filing, retrieval of files, and any other associated costs; and reduce recycling and/or disposal costs.
Recycle	Source-separate for recycling collection. Consider joining together with other nearby offices to share recycling costs.
CARDBOARD	**TONS PER YEAR (2000): 5,862**	**% OF INDUSTRY WASTE STREAM: 4.5%**
Source reduce	Encourage suppliers to deliver 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 share the costs for recycling service.
OTHER MISCELLANEOUS	**TONS PER YEAR (2000): 5,718**	**% OF INDUSTRY WASTE STREAM: 4.4%**
Recycle	Source-separate for recycling collection. Keep separate from food to ensure recyclability. When food is discarded with Other Miscellaneous paper it becomes R/C Paper and cannot be recycled.
NEWSPAPER	**TONS PER YEAR (2000): 5,266**	**% OF INDUSTRY WASTE STREAM: 4.1%**
Source reduce	Use fewer newspapers by sharing between departments or consider using the electronic version instead of the paper version.
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.

Table 2. Waste Diversion Tips: Other Organic

FOOD	TONS PER YEAR (2000): 17,092	% OF INDUSTRY WASTE STREAM: 13.2%
Source reduce	Only pack/order what you eat to minimize food waste. If there is a significant quantity of food waste, consider donating edible portions to local food banks, charity groups, and animal feed processors.	
Recycle	Recycle food scraps and leftovers with a food waste recycler or composter. Recycle meat scraps, including bones and fat, with a rendering plant.	
R/C ORGANIC	**TONS PER YEAR (2000): 11,996**	**% OF INDUSTRY WASTE STREAM: 9.2%**
Source reduce	Since this material is not recyclable, see the definition for R/C Organic on page 3 and identify innovative ways to reduce or eliminate the use of this material, as applicable to your business.	
Recycle	Consider separating and recycling the recyclable parts of the material.	
TEXTILES	**TONS PER YEAR (2000): 7,360**	**% OF INDUSTRY WASTE STREAM: 5.7%**
Source reduce	Use more durable textiles that last longer to minimize waste.	
Recycle	Source-separate for recycling collection.	

Table 3. Waste Diversion Tips: Plastic

FILM	TONS PER YEAR (2000): 10,582	% OF INDUSTRY WASTE STREAM: 8.1%
Source reduce	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	Source-separate for recycling collection.	
R/C PLASTIC	**TONS PER YEAR (2000): 7,970**	**% OF INDUSTRY WASTE STREAM: 6.1%**
Source reduce	Since this material is not recyclable, see the definition for R/C Plastic on page 4 and identify innovative ways to reduce or eliminate the use of this material, as applicable to your business. Utilize reusable drinking cups/mugs instead of disposable plastic cups, such as Styrofoam. Reuse packaging materials such as plastic bubble packaging, foam packing blocks, packing peanuts, and plastic strapping or send to a facility that may be able to use the items, such as Mailboxes, Etc. or local schools.	
Recycle	Consider separating and recycling the recyclable parts of the material. There may be HDPE, PETE, or film plastic components of a R/C Plastic that can be source-separated and 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 4 below.

Table 4. Other Waste Diversion Ideas

ITEM	SUGGESTED ACTIONS
Beverage Containers	Encourage employees to use their own reusable mugs instead of disposable plastic (Styrofoam) and paper drinking cups. Recycle aluminum cans and plastic & glass bottles.
Equipment and Scrap Materials	Donate reusable equipment, furniture or scrap materials to local charities. List available items for donation on the County of Los Angeles' materials exchange web site, also known as LaCoMAX, at *http://ladpw.org/epd/lacomax/*
Green Waste	If your facility has a lawn, reduce grass trimmings by leaving clippings directly on the lawn instead of bagging them for disposal. Not only will this reduce waste, but it will also lead to a healthier lawn by returning nitrogen to the soil. Landscape using plants that grow slowly or have enough space so they do not need to be constantly trimmed.
Pallets	Reuse pallets or ask suppliers to take them back. For excess pallets, store them on site for collection by a pallet reuse company.
Toner Cartridges	Send computer printer and photocopier toner cartridges back to the vendor for re-manufacturing.
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 ***Services – Other*** 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 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 LOS ANGELES COUNTRY CLUB

Address:	10101 Wilshire Blvd. Los Angeles, CA 90024	**Type of Business:** **SIC Major Group:** **Employees:**	Golf & Country Club 86 265
Contact Person(s):	Doug Martin		
Contact Number:	(323) 272-2134	**Trash Hauler:**	BFI Waste Systems

BUSINESS OVERVIEW

The Los Angeles Country Club is a private golf and country club that offers members the opportunity to play golf on a challenging, quality course along with food and beverage services, and facilities for parties and other special events. While fairly typical in terms of the day-to-day operations of a country club, the Los Angeles Country Club is somewhat unique with respect to their approach to waste management. In particular, the Los Angeles Country Club is committed to grasscycling[7], composting, and other waste reduction efforts, which are detailed below.

[7] According to the California Integrated Waste Management Board, grasscycling is the natural practice of leaving clippings on the lawn when mowing. The clippings quickly decompose, returning nutrients to the soil.

The Los Angeles Country Club includes 300 acres, 210 of which are landscaped and mowed. The fairways measure 60 acres, while the greens are 6 acres. Their non-green recycling programs have been in place for 3 years while grasscycling has been taking place for 15 years.

MATERIALS DIVERTED

The table below presents the eight waste diversion programs practiced by the Los Angeles Country Club, which divert materials from landfills through recycling and reuse activities on an annual basis.

MATERIAL	ANNUAL TONS	RECYCLER	DESCRIPTION
Lawn trimmings	1,524	N/A	Grasscycling occurs at the rate of approximately 15,246 pounds (7.62 tons) of lawn trimmings per acre on a 200-acre area
Green Waste	2,689	California Biomass	Recycle landscaping trimmings from trees, bushes, and plants by sending to California Biomass for composting and mulch production
Metal drums	0.05	N/A	Reuse 4 (25-pound metal drums) each year
Cardboard	432	N/A	Recycle 24 bales per month
Food waste	285	West Coast Food Recycling	Recycle food waste using a 45-gallon drum that is emptied three times per week
Glass bottles	40	N/A	Recycle 10 cases per day
Aluminum Cans	0.5	N/A	Recycle 20 cases per week
Plastic buckets	0.25	N/A	Recycle 18 (5-gallon) buckets per month
TOTAL	**4,971**		**YEAR 2000**

COST SAVINGS / REVENUE

In 2000, the savings from the following programs equaled $38,100. Savings/Revenues information for the other programs is not available.

PROGRAM	SAVINGS
Cardboard recycling	$3,600
Miscellaneous Source Reduction programs	$4,000
Greenwaste	$8,200
Scrap Metal	$500
Concrete and Asphalt Recycling	$800
Clippings from fairways & greens (labor)	$12,000
Clippings from fairways & greens (disposal costs)	$9,000
TOTAL SAVINGS	**$38,100**

SUMMARY OF RESULTS

The Los Angeles Country Club has made a long-term commitment to waste reduction in order to sustain cost savings and an environmentally responsible waste management policy. The Los Angeles Country Club diverts a total of 4,971 tons of materials from disposal at local landfills each year. Significant diversion rates are realized through the practice of grasscycling and composting of other green waste trimmings. The success of grasscycling and composting at the Los Angeles Country Club can serve as an example to other golf courses seeking ways to increase diversion rates and provide an environmentally sound golfing experience.