

## INDUSTRY GROUP 15: SERVICES – MOTION PICTURE\*

SIC Major Group: 78  
NAICS Code: 512

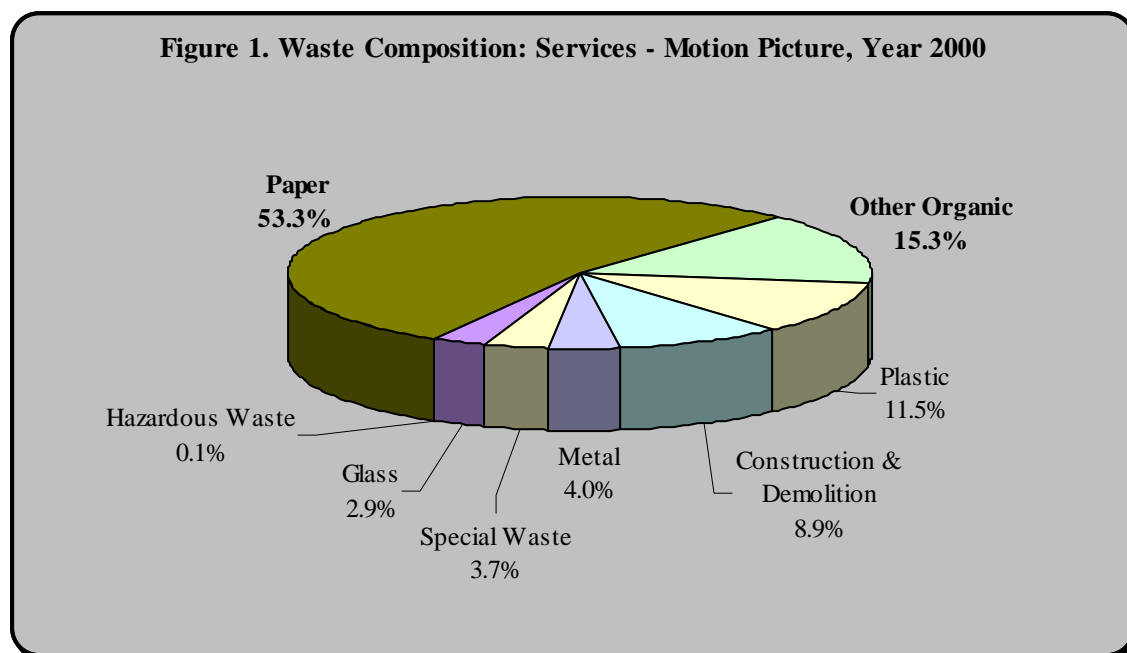
### INTRODUCTION

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 78:** *Services – Motion Picture* includes establishments primarily engaged in the production of theatrical and non-theatrical motion pictures and videotapes for exhibition or sale, including educational, industrial, and religious films. The four major studio facilities in Los Angeles, which produce motion pictures and television programs, are ABC, CBS (including Studio Center and Television City facilities), Paramount, and Twentieth Century Fox. Studio facilities include production, post-production, and supporting services.

### GENERAL WASTE COMPOSITION

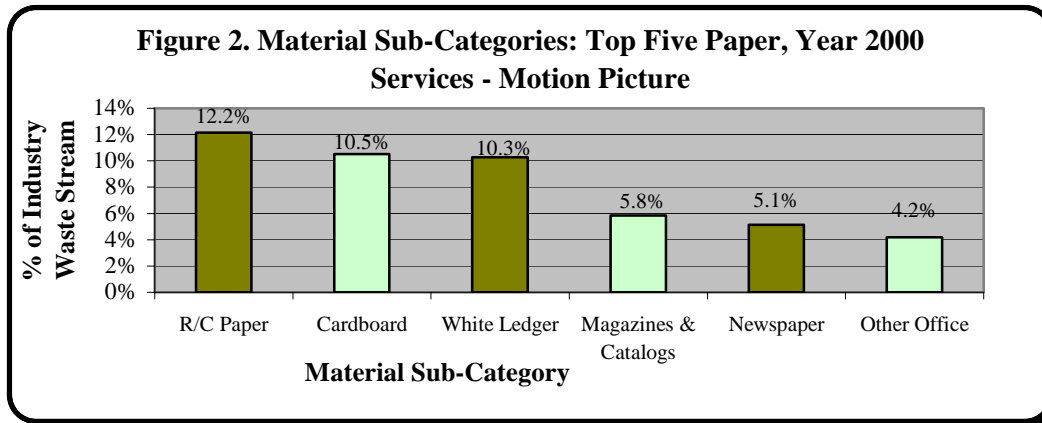
The *Services – Motion Picture* industry disposed 39,271 tons of waste in 2000 or approximately 1.1% of the total City of Los Angeles disposed waste stream (3,544,611 tons). Figure 1 displays the total waste composition by material category. The two categories that comprise the majority of the waste stream, *Paper* (53.3%) and *Other Organic* (15.3%), are further discussed in the “Detailed Waste Composition” section that follows.



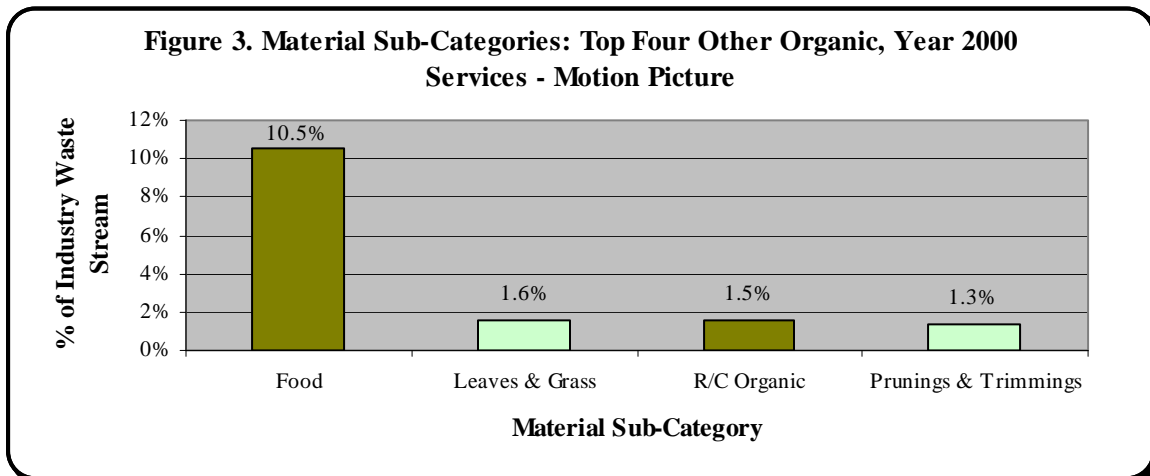
\* For additional information or assistance, please contact the City of Los Angeles, Public Works, Bureau of Sanitation, **Solid Resources Citywide Recycling Division** at (213) 473-8228.

## DETAILED WASTE COMPOSITION

As Figure 2 indicates, the top material sub-categories of *Paper* disposed (by weight) are Remainder/Composite Paper (R/C Paper)<sup>1</sup>, Cardboard, White Ledger, Magazines & Catalogs, Newspaper and Other Office<sup>2</sup> Paper.



As Figure 3 indicates, the top material sub-category of *Other Organic* materials disposed is Food, followed by Leaves & Grass, Remainder/Composite Organic (R/C Organic)<sup>3</sup>, and Prunings & Trimmings.



<sup>1</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, sepi, onion skin, fast food wrappers, carbon paper, self adhesive notes, and photographs.

<sup>2</sup> According to the California Integrated Waste Management Board, "Other Office" Paper means other kinds of paper used in offices. Examples include manila folders, manila envelopes, index cards, white envelopes, white window envelopes, notebook paper, ground wood computer paper, junk mail, and carbonless forms. This subtype does not include "white ledger," "colored ledger," or "computer paper".

<sup>3</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.

# WASTE DISPOSAL TRENDS

Motion picture industry waste has decreased between 1990 (48,123 tons) and 1995 (38,844 tons) and increased between 1995 and 2000 (39,271 tons). Overall, motion picture industry waste has decreased by 8,852 tons since 1990. As Figure 4 indicates, the *Paper*, *Other Organic*, and *Plastic* material categories demonstrate the most variation in the percentage of the waste stream that they comprise between the years 1990, 1995, and 2000. Yet, *Paper* and *Other Organic* materials continue to comprise the majority of the waste stream in the year 2000 and should be targeted for waste diversion programs by businesses in this industry.

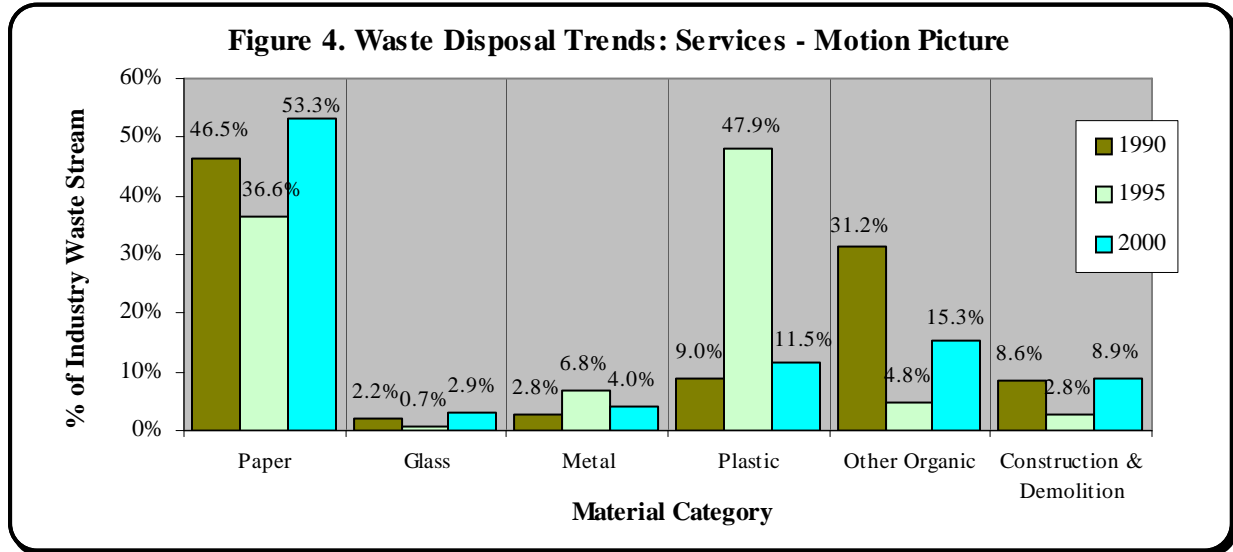
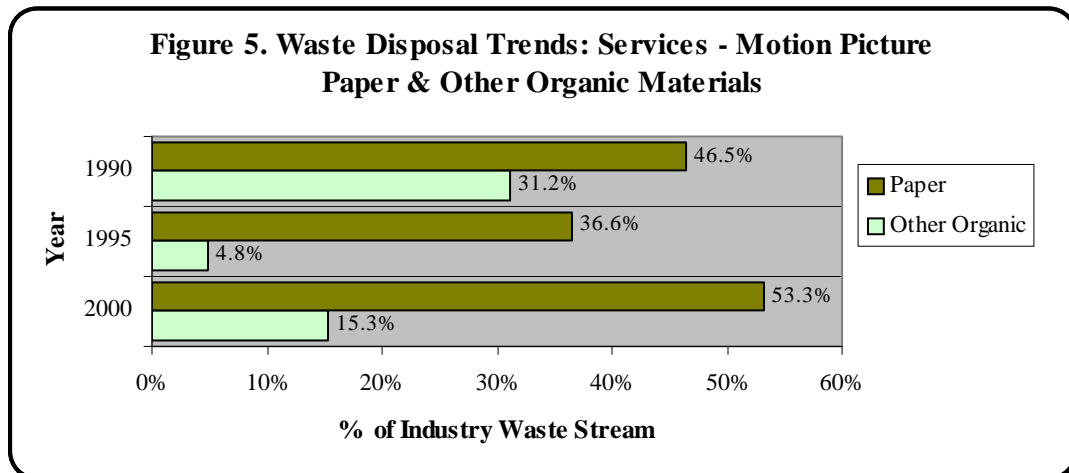


Figure 5 provides a closer look at waste disposal trends for *Paper* and *Other Organic* materials. Although some progress was made between 1990 and 1995 in reducing the amount of *Paper* that was landfilled, by 2000 *Paper* comprised 53.3% of the motion picture industry waste stream. Overall, the amount of *Paper* has increased since 1990 when paper comprised 46.5% of the waste stream, versus 36.6% in 1995 and 53.3% in 2000. Disposal of *Other Organic* materials decreased drastically between 1990 and 1995 from 31.2% to 4.8% then increased to 15.3% of the waste stream by 2000. Opportunities to divert these materials from landfills are 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

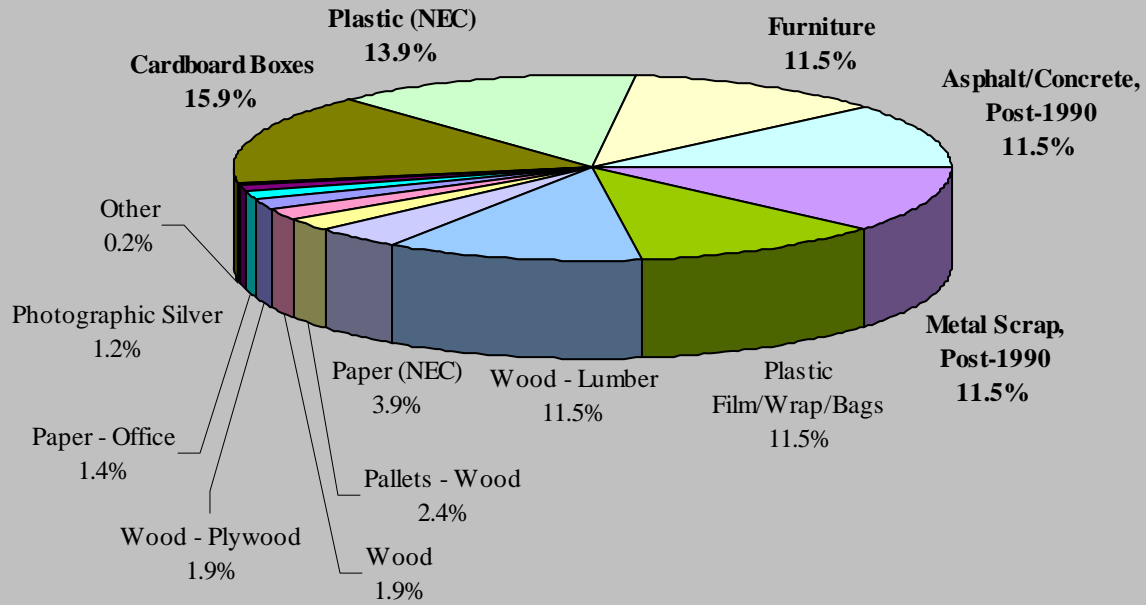
Businesses in the City of Los Angeles have made significant accomplishments in the diversion of solid waste from landfills. The City of Los Angeles conducted waste diversion and recycling audits during the year 2000 and collected information indicating that the *Services – Motion Picture* industry diverts 56,411 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 Cardboard Boxes; Plastic (NEC)<sup>4</sup>; Furniture; Asphalt/Concrete, Post-1990; and Metal Scrap, Post-1990.

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<sup>4</sup> 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), these are Metal Scrap, Pre-1990; and Toner Cartridges.

**Figure 6. Waste Diversion Material Sub-Category Types, Year 2000  
Services - Motion Picture**



## WASTE DIVERSION TIPS

Figures 2 and 3 indicate that *Paper* and *Other Organic* materials comprise the majority of the *Services – Motion Picture* 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 1a, 1b, and 2 contain tips for achieving waste diversion programs for the top sub-categories (by weight) of the *Paper* and *Other Organic* material categories.

**Table 1a. Waste Diversion Tips: Paper**

R/C PAPER		TONS PER YEAR (2000): 4,775	% OF INDUSTRY WASTE STREAM: 12.2%
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>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.</p> <p>In employee and customer restrooms, replace paper towel dispensers with hot air hand dryers.</p>		
CARDBOARD		TONS PER YEAR (2000): 4,129	% OF INDUSTRY WASTE STREAM: 10.5%
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.		
WHITE LEDGER		TONS PER YEAR (2000): 4,034	% OF INDUSTRY WASTE STREAM: 10.3%
Source reduce	<p>Generate less paper waste by practicing the following:</p> <ul style="list-style-type: none"> <li>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</li> <li>Make scratch pads out of single-sided paper</li> </ul> <p>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.</p>		
Recycle	Source-separate for recycling collection. Keep separate from food to ensure recyclability. When food is discarded with paper it becomes R/C Paper and cannot be recycled.		

**Table 1b. Waste Diversion Tips: Paper**

<b>MAGAZINES &amp; CATALOGS</b>		<b>TONS PER YEAR (2000): 2,294</b>	<b>% OF INDUSTRY WASTE STREAM: 5.8%</b>
Source reduce	Use fewer magazines and catalogs by sharing between departments and order the electronic version instead. Remove yourself from catalog mailing lists.		
Recycle	Source-separate for recycling collection. Keep separate from food to ensure recyclability. When discarded with food Magazines & Catalogs become R/C Paper and cannot be recycled.		
<b>NEWSPAPER</b>		<b>TONS PER YEAR (2000): 4,034</b>	<b>% OF INDUSTRY WASTE STREAM: 5.1%</b>
Source reduce	Use fewer newspapers by sharing between departments or consider ordering the electronic version instead.		
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.		
<b>OTHER OFFICE</b>		<b>TONS PER YEAR (2000): 1,668</b>	<b>% OF INDUSTRY WASTE STREAM: 4.2%</b>
Source reduce	<p>See the definition of Other Office 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>Reuse manila folders by flipping folding over and using the other side.</p> <p>Reuse manila envelopes by adhering mailing labels over previously used addresses.</p> <p>Reduce junk mail by removing your name from mailing lists.</p>		
Recycle	<p>Source-separate for recycling collection with “mixed paper”, which includes different types of paper. Ask your recycler what types they are willing to take.</p> <p>Keep separate from food to ensure recyclability. When food is discarded with Other Office Paper, it becomes R/C Paper and cannot be recycled.</p>		

**Table 2. Waste Diversion Tips: Other Organic**

<b>FOOD</b>		<b>TONS PER YEAR (2000): 4,118</b>	<b>% OF INDUSTRY WASTE STREAM: 10.5%</b>
Source reduce	<p>Donate edible food from the lot and from off-the-lot productions to local food banks. California's "Good Samaritan" law protects the donor from liability if the food is properly stored and handled.</p> <p>Compost produce scraps on site or donated to local farmers for composting / animal feed.</p>		

## 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.
R/C Plastic <sup>5</sup>	Since this material is not recyclable, see the definition for R/C Plastic below to identify types of this material that your businesses uses, and that you can reduce or eliminate the use of.  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.  Utilize reusable drinking cups/mugs instead of disposable plastic cups, such as Styrofoam.
Videotape and Tape Reels	Recycle videotape and tape reels that are no longer in use.
Sets, Props & Wardrobe	Reuse sets, props and wardrobes whenever the opportunity arises. ABC photographs and stores scenic elements that are catalogued on the computer for reuse.
Recycled-Content Products	Switch to products with recycled content, including paper (letterhead, envelopes, and copy paper) and plastic lumber.
Wood/Lumber	Use steel instead of wood scaffolding for set construction purposes.  Disassemble sets and reuse the lumber to build new sets.
Paper	Publish studio phone directories electronically rather than on paper. In March of 1977, Fox printed its last studio phone directory, moving to a strictly online system. The move eliminated the printing of more than 600,000 pages – or about 3 tons annually, saving \$25,000 in materials alone.
Recyclable Paper	Eliminate brightly colored papers for scripts because of the difficulty in bleaching bright colors for recycling.
Beverage Containers	Recycle aluminum cans and plastic and glass bottles by setting up recycling containers for these items and arranging for recycling services.
Equipment & Scrap Materials	Donate reusable manufacturing equipment, office equipment, 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 <a href="http://ladpw.org/epd/lacomax/">http://ladpw.org/epd/lacomax/</a> .
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.
Construction Materials	For construction projects, mandate recycling and waste reduction in contracts. Items that can be recycled include lumber, metal, drywall, asphalt, and concrete.

<sup>5</sup> 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.



## 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 – Motion Picture* 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 working relationships with industry-related associations such as the Entertainment Industry Development Corporation, the Environmental Media Association, the Alliance of Motion Picture & Television Producers, and the Motion Picture Association of America for the purposes of enhancing training programs and communicating plans and progress with waste diversion programs.
- Assisting in the design of tracking programs in order to document 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.

## WASTE DIVERSION PROFILES: MAJOR MOTION PICTURES & TELEVISION STUDIOS<sup>6</sup>

The following five profiles exemplify the extraordinary efforts undertaken by major motion pictures and television studios in the City of Los Angeles.

**ABC Studios** – ABC Television Studio enjoys very stable production, with primarily long-running daytime dramas and some news programming, as well as some independent productions. All solid waste is sorted offsite. ABC officials conduct spot checks of the hauler facility to ensure proper handling. An incredible 85 percent of sets, props and wardrobe are reused. Scenic elements are photographed and stored, and cataloged on computer, and in hard copy to facilitate reuse.

The studio recently conducted a facility-wide cleanup to clear out accumulated outdated and unused materials. They have changed vendors for fluorescent tubes to a vendor who recycles the used tubes. All but small 3-inch commercial tape reels are recycled, and the studio continues to search for a source to take the 3-inch reels. While the studio's diversion rate far exceeds AB 939's 50 percent requirement, studio officials believe they still have room for improvement.

**CBS Television City** – TV City, the only major studio designed specifically for television production, is home to a number of long-running game shows (including *The Price is Right*) and nationally syndicated talk shows (including *Dennis Miller* and *Politically Incorrect*.) Waste is sorted offsite. Some waste is sorted onsite, including videotape, which is picked up once every month or two by a separate company. Sets are generally reused. The studio also operates a donation program for used furniture, through Deseret Industries (affiliated with the Mormon Church), and donates used computers and electronic equipment to schools.

**CBS Studio Center** – CBS Studio Center is a rental facility that primarily serves series television productions. The facility operates 17 stages on 40 acres. Despite its name, not one CBS-produced or aired show currently shoots on the lot. All of the tenants operate independently, with basic services – including trash removal – provided through the rental agreement. Some of the series are long-running shows, such as *3<sup>rd</sup> Rock from the Sun* and *Just Shoot Me*. Others include a mix of newer shows, and some short-lived series. The lot also is home to one daytime drama, which shoots 50 weeks a year. While the studio facility employs just 50 people, during peak production times, 2,000-3,000 people are working on the lot. This creates a significant challenge to those working to increase waste diversion rates for the facility.

Currently, Studio Center sorts waste at the facility. Separate containers for wood are maintained at the studio mill. Glass, plastic, paper and cardboard are sorted by tenants. Janitors are required to keep the waste separated when emptying containers. Because of unacceptable levels of contamination in the recycling containers, the studio has hired laborers to further sort the waste. Faced with increasing costs for sorting as a result, the studio undertook a major education and awareness campaign to inform employees about waste handling protocols. The studio is also looking at uses for recycled plastic lumber and is willing to explore use of other products using recycled materials.

<sup>6</sup> Better World Group, 1999. Major Motion Picture and Television Studios Generator Study.

**Paramount Pictures** – Paramount Pictures studio in Hollywood is home to both feature films and television programming. Waste sorting is done both onsite and offsite. Wood, paper, and cardboard are sorted on the lot. The mixed office paper is further culled at the paper broker for cans and bottles. Furniture, equipment, paint and wood is donated to schools and nonprofit organizations through a group called LA Shares. Paramount has donated hundreds of used computers to schools, including a donation of 100 higher-end computers to Hollywood High School. Fluorescent tubes are sent to a bulb recycler for handling. The studio makes use of steel scaffolding and reuses props when possible. The studio also is increasing use of recycled plastic lumber, recently constructing ten outside staircases from plastic lumber.

**Twentieth Century Fox** – Fox has an extremely aggressive and successful waste diversion program. The program has been recognized with the WRAP Award for 1993, 1994, 1997, 1998, and 1999. Fox also has been recognized with a Certificate of Commendation from the City of Los Angeles for Make a Difference LA – 1998, and a Certificate of Appreciation from the City of Los Angeles for Materials for the Arts – 1993. For the past four years, Fox's diversion rate has averaged greater than 80 percent.

Fox uses a hauler with an aggressive offsite-sorting program. Unused food from the studio commissary is donated to Angel Harvest, a local food bank, at a rate of about 3,600 pounds per month. The studio also encourages productions that go off the lot on location to use Angel Harvest for leftover food. Furniture and equipment are donated through the Second Time Around program operated jointly with Warner Bros., and paint, wood and other materials are donated as well. In March of 1977, Fox printed its last studio phone directory, moving to a strictly online system. The move eliminated the printing of more than 600,000 pages – or about 3 tons annually, saving \$25,000 in materials alone. The studio also uses online communication to replace paper memos, with the ratio of electronic to paper lot-wide memos currently at about 20:1.

Fox also has made impressive strides in buying goods with recycled content. Studio letterhead and envelopes contain 60 percent post-consumer waste, and copy paper includes 30-60 percent post-consumer waste. All paper memos distributed lot-wide must be printed double-sided, including scripts, where possible. The studio moved away from using brightly colored paper for scripts and other uses because of the difficulties in bleaching bright colors for recycling.