Technical Report
LAX Master Plan EIS/EIR

10. Solid Waste Technical Report

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Prepared for:

Los Angeles World Airports

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Prepared by:

Camp Dresser & McKee Inc.

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1. INTRODUCTION

This Technical Report presents detailed information on methodology and baseline conditions related to solid waste generation, diversion, and disposal associated with implementation of the Los Angeles International Airport (LAX) Master Plan. This report provides data and analysis in support of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the LAX Master Plan prepared pursuant to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

This Technical Report provides information regarding solid waste disposal capacity, specific requirements of relevant solid waste plans and policies, solid waste generation factors and methodology used to project solid waste generation, and supporting calculations and data for the solid waste projections that is supplemental to the material presented in Section 4.19, *Solid Waste*, of the EIS/EIR. Impacts associated with the information contained in this Technical Report are addressed in the Section 4.19, *Solid Waste*, of the EIS/EIR.

2. GENERAL APPROACH AND METHODOLOGY

This analysis compares the municipal solid waste generation projected for the No Action/No Project Alternative and three build alternatives to baseline solid waste generation and conditions, characterized by existing solid waste sources, diversion mechanisms, and methods of collection and disposal. The analysis estimates on-airport solid waste generation under baseline conditions, as well as solid waste generation associated with areas proposed to be acquired as part of the LAX Master Plan and other airport programs – collectively, referred to as the Master Plan boundaries." This forms the "baseline" (see Section 3, *Affected Environment/Environmental Baseline*, below) against which impacts of the various alternatives were compared.

The acreage and location of land required for the proposed Master Plan improvements are unique to each of the three build alternatives. Consequently, each alternative would result in a different future footprint for LAX. In order for baseline conditions, the No Action/No Project Alternative, and the three build alternatives to be compared side by side, a single solid waste generation study area was used. This composite study area is referred to as the "Master Plan boundaries." Total solid waste generation within the Master Plan boundaries was then calculated (as described below) for baseline conditions as well as all alternatives at both the 2005 and 2015 planning horizons.

The solid waste generation study area encompasses all of the land within the Master Plan boundaries. The Master Plan boundaries include the existing airport and the total (composite) area considered for acquisition under the three build alternatives, the Aircraft Noise Mitigation Program (ANMP) properties currently being acquired by Los Angeles World Airports (LAWA) known as Manchester Square and Belford, and the LAX Expressway alignments. Under baseline conditions, land within the ANMP acquisition areas is assumed to remain in its existing use; under the No Action/No Project Alternative, it is assumed to be vacant. For each of the build alternatives, it is assumed that all proposed acquisition has been completed and existing land uses demolished. Each alternative proposes a different configuration of land acquisition; thus, not all land within the Master Plan boundaries would be acquired by any one alternative. Land uses within areas not acquired would be unaffected by the Master Plan. The Alternative B off-site fuel farm sites are discussed separately from the Master Plan boundaries.

Several different sources, means, and factors were used for calculating solid waste generation. Solid waste generation factors are typically provided in terms of solid waste generation (in tons or pounds per day or year) per unit (e.g., square foot of building space, ton of cargo, employee). Solid waste generation is projected by multiplying the factor by the appropriate number of units. All solid waste generation values presented in the impact analysis represent estimates and are projected based on the factors and methods described below.

In order to determine whether the increase in solid waste generation associated with the LAX Master Plan would be significant, the total quantity of solid waste generated by each of the three build alternatives and the No Action/No Project Alternative was projected. Projected solid waste generation was compared to the anticipated capacity at the appropriate regional solid waste disposal facilities. Total solid waste generation within the Master Plan boundaries was considered.

Airport, non-airport, and construction and demolition activities generate solid waste. Because different types of activities are associated with individual land uses, different factors were used to determine the

volumes of waste generated by each use. The following provides a discussion of the methodology used to determine solid waste from such uses.

2.1 Airport Land Use Solid Waste Generation

For on-airport land uses, baseline on-airport solid waste generation was estimated during the LAX Waste Audit and Recovery Program Update described below in Section 3, *Affected Environment/Environmental Baseline*. Factors to project solid waste generation for the No Action/No Project Alternative and the three build alternatives were developed based on the historical volumes of waste generated by the main two functional activities at the airport (passenger-related and cargo-related), as discussed below.

Historical solid waste volumes were obtained from the LAX Waste Audit and Recovery Program Update. In the waste audit, waste volumes were analyzed by generator activity. Seven major activities were identified, including administrative, cargo, in-flight, maintenance, terminal, restaurant, and other. Based on the activity-related volumes in **Table 1**, Composition of LAX Waste Requiring Disposal by Activity Type (1994), waste generation rates were developed for the two primary functional activities, passenger-related activities and cargo-handling activities.

Table 1

Composition of LAX Waste Requiring Disposal by Activity Type (1994)

	Quantity of Waste Generated by Activity Type (tons per year [tpy])							
	Passenger-Related						Cargo	Total[1]
Type of Waste	Administrative	Inflight	Maintenance	Terminal	Restaurant	Other		
Paper	1,371	4,304	948	3,890	892	548	873	12,825
Plastic	41	232	80	148	108	21	297	929
Glass	8	72	10	200	203	41	3	537
Metals	9	450	316	175	684	44	80	1,757
Green Materials	26	14	87	0	0	167	80	373
Other Organics	237	2,555	1,374	753	7,483	218	1,162	13,782
Special Wastes	9	0	3	0	0	0	2	13
Salvageable/ Composite	338	236	25	5	33	16	112	764
Other	239	588	655	1,348	149	275	764	4,019
Total[1]	2,277	8,451	3,498	6,518	9,552	1,330	3,374	34,999
Percent of Total Waste Stream	6.5	24.1	10	18.6	27.3	3.8	9.6	100

[1]Information may not total due to rounding

Source: Recycling by Nature, Los Angeles International Airport Waste Audit and Recovery Program Update, June 1995.

Cargo-handling activities generated 3,374 tons (or 6.75 million pounds) of waste for disposal in 1994. During this same period, approximately 1.5 million tons of cargo were handled at LAX. Using these figures, cargo-handling activities generate approximately 4.5 pounds of solid waste per ton of cargo.

For purposes of this analysis, all non-cargo wastes generated at LAX were assumed to be a function of the annual number of passengers, both originating and destination and connecting. In 1994, approximately 31,625 tons of non-cargo waste was generated for disposal. Based on the 51 million annual passengers (MAP) using LAX in 1994, waste generation was determined to be approximately 620 tons per MAP.

As of 1994, Los Angeles World Airports (LAWA) was diverting approximately 20 percent of the waste generated at LAX. In 1996, the baseline year, LAWA was also diverting approximately 20 percent of the waste generated at LAX. In order to account for anticipated future diversion, in compliance with Assembly Bill (AB) 939, it is assumed that 50 percent diversion would be accomplished by 2000,[1] and this diversion rate is reflected in both the 2005 and 2015 horizon year analyses. The cargo- and passenger-related solid

[1] Information on the achievement of solid waste diversion goals for the year 2000 is not yet available. Data for the entire year must be compiled and analyzed before achievement can be determined. This information typically becomes available in spring or summer of the following year.

waste generation factors were adjusted to reflect the 50 percent diversion, by considering the percent diversion being achieved at the time the data used to develop the factors was collected. The resulting factors are summarized in **Table 2**, Airport Solid Waste Generation Factors.

Table 2

Airport Solid Waste Generation Factors

Activity	Unadjusted Factor[1]	Factor with 50 Percent Diversion Adjustment[2]
Cargo	4.5 lbs/tons	2.8 lbs/tons
Passengers	620 tons/MAP	387 tons/MAP

[1] This factor is representative of baseline conditions.
[2] This factor was used to project solid waste generation for 2005 and 2015.

Source: Camp Dresser & McKee Inc., 2000.

For the alternatives, the projected annual tonnage of solid waste was calculated by multiplying the forecasted tonnage of cargo by the cargo factor (2.8 pounds of solid waste per ton of cargo) and by multiplying the forecasted MAP by the passenger factor (387 tons per MAP). The resulting cargo- and passenger-related values were added to determine the total annual tonnage of solid waste generated by each alternative.

2.2 Non-Airport Solid Waste Generation

For non-airport land uses, including planned and proposed uses within LAX Northside/Westchester Southside and current uses in the ANMP acquisition areas and acquisition areas, solid waste generation factors from the *1995 Annual Report on Disposal and Diversion in the City of Los Angeles*[2] were used. These factors are supplied in terms of the tons per day of solid waste per square footage (s.f.) of building space, dwelling units (DU), or employees. **Table 3**, Non-Airport Land Use Solid Waste Generation Factors, lists the solid waste generation factors used for non-airport land uses.

The solid waste generation factors are based on 1995 solid waste disposal data. In 1995, approximately 44.5 percent of solid waste in the City of Los Angeles was diverted. In order to account for anticipated future diversion, in compliance with AB 939, it is assumed that 50 percent diversion would be accomplished by 2000, and this diversion rate is reflected in both the 2005 and 2015 horizon year analyses. The land use generation factors were adjusted to reflect the 50 percent diversion.

As the solid waste generation factors for industrial, retail, and hotel land uses are based on the number of employees, projected square footages for these land uses were converted using employee factors developed by Hamilton, Rabinowitz & Alschuler (HRA)[3] or Institute of Transportation Engineers (ITE) trip generation factors.[4] These conversion factors are identified in **Table 4**, Employee Factors.

[2] City of Los Angeles, Integrated Solid Waste Management Office, 1995 Annual Report on Disposal and Diversion in the City of Los Angeles, 1995.
[3] Hamilton, Rabinowitz, and Alschuler, Inc., Economic Impacts of the Los Angeles International Airport and the LAX Master Plan Alternatives on the Los Angeles Regional Economy, September 20, 1998.
[4] Institute of Transportation Engineers (ITE), Trip Generation, 1997.

Table 3

Non-Airport Land Use Solid Waste Generation Factors

Non-Airport Land Use Category	Units	1995 Factor (tpy/unit)	Factor with 50 Percent Diversion Adjustment
Residential (Single Family)	DU	1.36	1.23
Residential (Multi Family)	DU	0.918	0.827
Hotel	Employee	1.65	1.49
Office	Sq Ft	0.001	0.0009
Retail	Employee	1.55	1.40
Light Industrial[1]	Employee	0.865	0.779
Institutional[2]	Sq Ft	0.001	0.0009
R/D Business Park	Sq Ft	0.001	0.0009

[1] Light Industrial factor is an average of the seven manufacturing categories.
[2] Includes college, high school, elementary school, and library land use. In the absence of an institutional factor, the office generation factor was used.

Source: City of Los Angeles, Integrated Solid Waste Management Office, 1995 Annual Report on Disposal and Diversion in the City of Los Angeles, 1995.

Table 4

Employee Factors

Non-Airport Land Use Category	Factor	Source
Light Industrial	650 s.f. per employee	HRA
Retail	530 s.f. per employee	HRA
Hotel	23 employees per 25 rooms	ITE

Source: Camp Dresser & McKee Inc., 1998.

2.3 Construction and Demolition Waste

Quantitative factors for the generation of waste by construction and demolition activities have not been developed by the City of Los Angeles Solid Resources Citywide Recycling Division (SRCRD), the California Integrated Waste Management Board (CIWMB),[5] the Solid Waste Association of North America, or the Construction Materials Recycling Association. However, solid waste factors for construction and demolition for certain land uses are available from the Metro Regional Environmental Management (Metro), a regional government that serves the Portland, Oregon, metropolitan area. Metro has performed numerous studies regarding solid waste generation and disposal and has developed quantitative factors for waste generated by the demolition of residences, commercial demolition and construction, and commercial remodeling, based upon the square footage of the land use. These construction and demolition factors are presented in **Table 5**, Construction and Demolition Solid Waste Generation Factors.

[5] Hall, Tim, Integrated Waste Management Specialist, California Integrated Waste Management Board, Personal Communication, April 25, 2000.

Table 5

Construction and Demolition Solid Waste Generation Factors

Land Use	Construction Factor (lbs./s.f.)	Demolition Factor (lbs./s.f.)
Commercial	8	72
Commercial Remodeling	12	N/A
Residential	N/A	70

Source: Metro Regional Environmental Department Solid Waste Department of Portland, Oregon (Metro), Characterization of Construction Site Waste, July 30, 1993.

As quantitative factors for construction and demolition waste are not available for California, the Metro factors were used for this analysis. It is important to note that these factors are used to *estimate* quantities of construction and demolition debris and these projections represent only a rough estimate of what the solid waste quantity may be. There are differences between the data and conditions used to develop the Metro factors and those that would exist during demolition and construction under the LAX Master Plan. For example, the factor for demolition of commercial buildings is based on data collected using light woodframe buildings. Although some of the structures that would be demolished as a result of Master Plan implementation would be of similar construction, others would be concrete structures. As a result, the actual quantity of solid waste generated as a result of demolition could be higher than presented in this section. Additionally, a range of construction and demolition solid waste factors was given by Metro. In order to account for differences in construction materials and present a conservative analysis, the factor at the highest end of the range for both construction and demolition was used in developing the construction and demolition waste projections. In addition, no diversion was assumed, although construction and demolition waste is often recycled or otherwise diverted from landfill disposal.

3. AFFECTED ENVIRONMENT/ENVIRONMENTAL BASELINE

The solid waste management system at LAX encompasses the collection, handling, and disposal of solid waste generated by on-airport uses, including passengers, visitors, LAWA uses, and tenant activities. The greatest variety of solid waste is generated by tenant activities, which include airlines, cargo handlers, caterers, flight service operators, concessionaires, and service and aviation-related support businesses. Solid waste management is conducted by both LAWA and private companies.

The solid waste management system at LAX is one component of a larger solid waste system encompassing the entire Los Angeles region. Collection services within the city are provided by private companies operating in the Los Angeles region, and waste is transported to several regional landfills. Due to the relationship of on-airport activities to the regional solid waste system, this Technical Report also provides a discussion of the regional environment.

The following discusses waste disposal capacity in Southern California. In light of landfill capacity problems throughout the state, the state legislature has enacted several diversion requirements and various state and local entities have developed plans to address the projected capacity shortfall. The following also provides a discussion of these requirements and plans, including AB 939 diversion requirements and city and county plans and policies regarding solid waste generation, disposal, and diversion.

3.1 Municipal Solid Waste Disposal Capacity

As mentioned previously, solid waste in the city of Los Angeles and the region is collected by municipal agencies and private refuse haulers. Waste collected by these entities is disposed of mainly at landfills within Los Angeles County, with a small fraction of waste disposed of at transformation facilities and landfills outside Los Angeles County. Recycling facilities are not addressed in this section, nor are landfills that accept only inert materials, such as construction and demolition debris. These kinds of facilities are discussed later in this section.

There are eight major landfills currently accepting municipal waste in Los Angeles County**. Figure 1,** Locations of Active Regional Solid Waste Disposal Facilities, illustrates the locations of these landfills. **Table 6,** Regional Municipal Solid Waste Landfills, provides pertinent information including owner/operator, permitted daily capacity, average daily tonnage, approximate closure date for each of these landfills, and approximate distance from LAX. There are several other smaller landfills in Los Angeles County that are not listed in **Table 6**, but are currently accepting waste. Most of these facilities are also restricted from receiving waste from outside of a specified wasteshed.

Table 6

Regional Municipal Solid Waste Landfills

Landfill	Owner/Operator	Permitted Daily Capacity (tpd)[6]	Average Daily Tonnage (tpd)	Approx. Closure Date	Approx. Distance From LAX (miles)
Antelope Valley	Waste Management Inc.	1,400	600	2016	67
Bradley West	Waste Management Inc.	10,000	7,000	2002[5]	30
Calabasas	LACSD[3]	3,500	900	2018	33
Chiquita Canyon	Republic Services of California	5,000	1,610	2019	40
Lancaster	Waste Management Inc.	1,000	800	2040	82
Puente Hills[1]	LACSD	12,000	11,500	2003[4]	31
Scholl Canyon[1]	LACSD	3,400	1,200	2023	32
Sunshine Canyon	Browning-Ferris Industries	6,600	6,000	2005[2]	82
Total		42,900	29,610		

1 Puente Hills and Scholl Canyon do not accept waste from the City of Los Angeles. Calabasas does not accept waste from portions of the city of Los Angeles, including the LAX area.

2 Sunshine Canyon, located in an unincorporated area of Los Angeles County, is pursuing expansion of its facility into an area under the jurisdiction of the City of Los Angeles, which would substantially increase its capacity and extend their closure date for an additional 26 years.

3 County Sanitation Districts of Los Angeles County

4 Puente Hills is pursuing extension of their closure date for an additional ten years

5 Bradley West is permitted until 2007; however, its approximate closure date is expected in 2002 due to its limited capacity.

6 Tons Per Day

Sources: Burns, John, Waste Management Inc., Personal Communication, January 25, 2000; Krumwiede, Kay, Waste Management Inc., Personal Communication, August 17, 2000; Mays, John, Browning-Ferris Industries, Personal Communication, January 25, 2000; Mendoza, Larry, County Sanitation Districts of Los Angeles County, Personal Communication, January 21, 2000; Rohoff, Sam, Republic Services of California, Personal Communication, January 26, 2000; Walker, Hugh, Waste Management Inc., Personal Communication, August 24, 2000; California Integrated Waste Management Board, California Waste Facilities, Sites, & Operations Database Solid Waste Information System (SWIS) Database, Available: http: www.ciwmb.ca.gov/SWIS/SWISsrch.htm [May 19, 2000].

Of the eight major regional landfills currently accepting waste, due to their proximity, waste generated within the city of Los Angeles is generally disposed of at only three landfills: Bradley West, Calabasas, and Chiquita Canyon. Bradley West and Calabasas receive approximately 60 percent of the city's solid waste, although Calabasas does not accept waste from the LAX area, which is outside its specified wasteshed.[6] The Calabasas Landfill is operated by the County Sanitation Districts of Los Angeles County (LACSD); the other two landfills are privately owned and operated.

A portion of city-generated waste is also disposed of through transformation. Transformation involves the incineration of municipal solid waste in order to generate energy. Two facilities in Los Angeles County transform waste: Commerce Waste to Energy (WTE) and Southeast Resource Recovery WTE. In the fourth quarter of 1995, approximately 17,000 tons of municipal solid waste was transformed in these two facilities.[7]

6 Los Angeles County Public Works, Solid Waste Quarterly Disposal Quantity Reporting for the City of Los Angeles, July 1999.

7 City of Los Angeles, Integrated Solid Waste Management Office, 1995 Annual Report on Disposal and Diversion in the City of Los Angeles, 1995.

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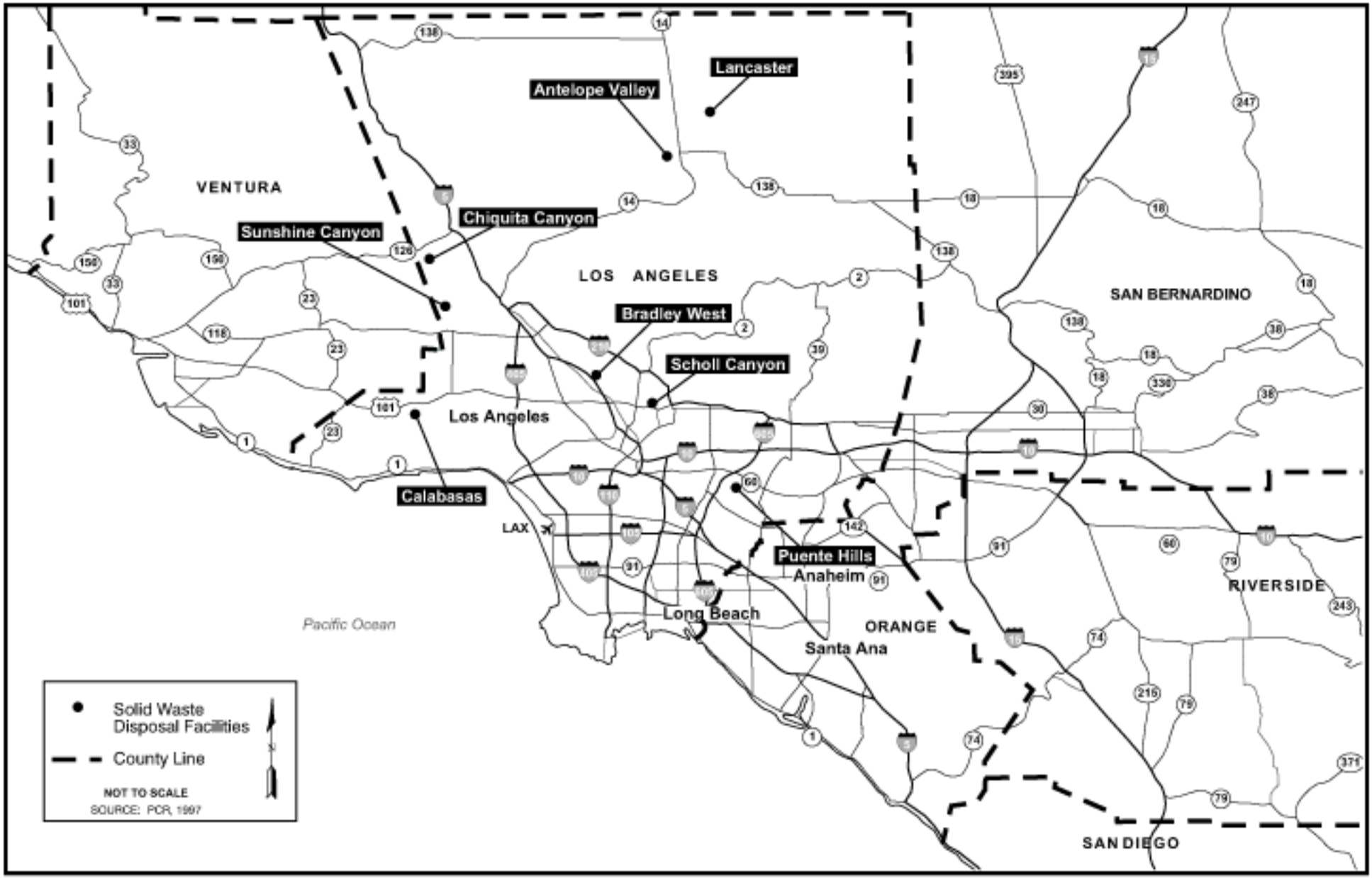

Los Angeles International Airport Master Plan	**Locations of Active Regional Solid Waste Disposal Facilities**	Figure 1

The total remaining landfill capacity (assuming the implementation of potential capacity expansions) available to the city of Los Angeles in 1992, the last date for which data are available, was 63.1 million tons.[8] As of December 31, 1995, the remaining permitted Class III (municipal waste) landfill capacity in Los Angeles County was estimated at 102.3 million tons.[9] This figure includes landfills in Los Angeles County that do not currently receive waste from the city of Los Angeles. Based on the countywide average 1995 disposal rate, excluding waste being imported to the county, this capacity will be exhausted by 2007. This figure does not include landfills that have obtained additional permitted capacity since 1995; however, three major landfills accepting municipal solid waste closed in 1996, which may accelerate the rate at which the remaining permitted capacity is exhausted. A permitted daily capacity shortfall may occur in the near future.

The mid- to long-term solid waste disposal capacity availability in Los Angeles County is uncertain and is based on a variety of dynamic parameters, including new regulations, the ability to permit expanded or new sites, the economic viability of recycling, flow control legislation, and waste generation rates. Other factors governing solid waste disposal include increasing solid waste management costs and more restrictive regulations governing landfill operations.

Even with maximum levels of source reduction, recycling, composting and other diversion (as discussed below), and assuming that potential expansions at existing landfills are permitted, new landfill sites will be a necessary part of the solid waste management system in the region. With many of Los Angeles County's currently permitted landfills facing closure or expiration of their permits, additional landfill sites must be located and approved or operating permits at existing landfills must be extended, or there will be a severe shortfall in solid waste disposal capacity within the Los Angeles region.

With many of Los Angeles County's currently permitted landfills facing closure or expiration of their permits, additional landfill sites must be located and approved or operating permits at existing landfills must be extended, or there will be a severe shortfall in solid waste disposal capacity within the Los Angeles region as indicated in **Table 6**, plans are underway to enable the expansion of the Sunshine Canyon landfill into an area under the jurisdiction of the city of Los Angeles. In addition, LACSD is planning to seek a 10-year extension of its operating permit for the Puente Hills Landfill. LACSD is also pursuing regional solutions for future solid waste disposal. Recently, LACSD signed agreements to purchase Eagle Mountain Landfill in Riverside County and Mesquite Regional Landfill in Imperial County. Eagle Mountain and Mesquite Regional Landfill are proposed municipal landfills. Neither of the landfills are currently operating. Both of these landfills have received the necessary environmental and local permits for operation and could provide over a hundred years of disposal capacity for Los Angeles County residents and businesses. However, the purchase agreements are not yet finalized and could be subject to legal challenge. For purposes of this analysis, it is assumed that landfill capacity will remain constrained until such time as future capacity at these and other landfills is assured.

3.2 Solid Waste Diversion and Disposal Capacity Regulations, Plans, and Policies

3.2.1 AB 939 Diversion Requirements

In September 1989, the State of California passed the California Integrated Waste Management Act (AB 939), establishing specific solid waste diversion goals for cities and counties. AB 939, also known as the Recycling Act, required each city and county to divert 25 percent of its solid waste from landfill disposal, through source reduction, recycling, and composting, by the end of 1995. AB 939 also required cities and counties to divert 50 percent of their waste streams by the year 2000. These percentages are based on the volume of waste generated in the 1990 baseline year. AB 939 required each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach these goals. AB 939 established financial penalties of up to $10,000 per day for noncompliance with the diversion mandates. AB 939 also established the California Integrated Waste Management Board (CIWMB) and authorized it to monitor and enforce the mandates of the Act.

AB 939 established the following hierarchy for integrated waste management:

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[8] Envicom Corporation, et. al., Draft City of Los Angeles General Framework EIR, prepared for the City of Los Angeles, Department of City Planning, January 1995.

[9] Los Angeles County Department of Public Works, Environmental Programs Division, Countywide Siting Element, June 1997.

- Source reduction
- Recycling and composting
- Transformation
- Environmentally safe disposal

AB 939 encourages source reduction activities as the preferred management approach. Recycling is the second best alternative, including composting of green and food wastes. Waste that is disposed of through transformation, the combustion or incineration of waste, is not considered diverted under AB 939. Landfilling is the least preferred solid waste disposal alternative.

Subdivision (c) of Section 41781 of AB 939 provides for exceptions or adjustments to the diversion goals due to changing conditions. Subdivision (c) states: "[t]he amount of solid waste from which the required reductions are measured shall be the amount of solid waste existing on January 1, 1990, with future adjustments for increases or decreases in the quantity of waste caused only by changes in population or changes in the number or size of governmental, industrial, or commercial operations in the jurisdiction."

3.2.2 County of Los Angeles Plans

Los Angeles County prepared a County Integrated Waste Management Plan (CoIWMP) identifying actions planned by the county, and by cities within the county, to meet the mandatory diversion goals of AB 939. The CoIWMP includes all jurisdictions' SRREs, Household Hazardous Waste Elements (HHWE), Nondisposal Facilities Elements (NDFE), Summary Plans, and the Countywide Siting Element (CSE). The CSE provides a description of the areas and strategies that may be used to address state mandates for adequate transformation and disposal capacity during a 15-year planning period and is discussed in greater detail below.

The county's SRRE, adopted by the County Board of Supervisors and CIWMB, identifies programs and policies that the county will implement in order to achieve AB 939 diversion requirements. These policies and programs include, the Countywide Yard Waste Management Program (formerly the Countywide Backyard Composting Program) to reduce the amount of green waste disposed in landfills, the Countywide Christmas Tree Recycling program, and revisions in procurement policies for county departments to encourage the purchase of materials with recycled content. In addition, the Countywide Public Education/Awareness Program serves to promote recycling, source reduction, and material reuse among the residents and businesses in Los Angeles County. The county also has a curbside recycling program in portions of its unincorporated areas.[10]

Recognizing the impending waste disposal shortfall, the County Board of Supervisors adopted the Solid Waste Management Action Plan to identify potential new landfill sites and promote the development of new landfills at appropriate sites. The study resulted in the listing of the six highest ranking potential landfill sites currently not being used in the county. These sites included Blind, Browns, Elsmere, Mission-Rustic-Sullivan, Townsley, and Toyon II canyons. (Currently, the only site currently under consideration for a new landfill is Blind Canyon.) The study also considered expansion of the existing landfills such as Azusa Land Reclamation, Chiquita Canyon, Puente Hills, and Sunshine Canyon. In addition, the Action Plan developed a solid waste management strategy for maintaining adequate solid waste disposal capacity in the county. Specifically, the Board included the following actions:

- A policy of managing solid waste in Los Angeles County through a reasonable balance of public and private operations and facilities including a regional public landfill system.
- A policy providing for 50 years of permitted landfill capacity to be held in public ownership, with appropriate land use protections, for use through public, private, or public/private joint venture operations.
- Implementation of statewide public education/awareness programs regarding solid waste issues and the necessity for recycling.
- Support for the revision of all existing permits at the Azusa Land Reclamation, Chiquita Canyon, North Valley (Sunshine Canyon), Puente Hills, and Scholl Canyons landfills to provide for the maximum technically and environmentally feasible expansion of the sites.

[10] Los Angeles County Department of Public Works, Environmental Programs Division, Countywide Siting Element, June 1997.

- Request that the Council and Mayor of Los Angeles proceed with actions necessary to open the Toyon II Landfill and expand Lopez Canyon Landfill to utilize the available capacity of these locations.[11]
- Request that the Council and Mayor of Los Angeles and the Sanitation Districts Board support the Action Plan and participate equally with the county in the cost of feasibility studies and request that these agencies, in cooperation with the Director of Public Works and Chief Administrative Officer, recommend a method of financing acquisition of landfill capacity.

Committed to provide a solution to the current landfill situation, the Board of Supervisors continues to direct and monitor current efforts including:

- Negotiations through various agencies and representatives to site new landfills or expansion of existing ones.
- Quarterly status report on the Action Plan.

In addition to these efforts, the county has developed Recycling Market Development Zones to promote the use of recycled materials. Recycling Market Development Zones play a major role in the development of diverted materials in Los Angeles County. To date, five Recycling Market Development Zones have been established in the county. Other market development programs have included "buy recycled" procurement policies by cities and the county, promotion of the use of rubberized asphalt, and the sharing of market development information among jurisdictions.

As indicated previously, the removal of solid waste from the county to a remote site by rail-haul has been considered. The county currently sends no waste to remote locations by rail-haul, but may consider this option in the future as part of its contingency plan for waste disposal.

Through the CSE of the CoIWMP, which was finalized in June 1997, the countywide need for 15 years of disposal capacity was addressed. The CSE establishes goals, policies, and guidelines for proper planning and siting of solid waste transformation and land disposal facilities on a countywide basis. It offers strategies and establishes siting criteria to be used as an aid to evaluate sites proposed for development of solid waste transformation and landfill disposal facilities. The CSE's major recommendations include opening new landfills at Elsmere Canyon and Blind Canyon, although Elsmere Canyon has since been removed from consideration.

3.2.3 City of Los Angeles Plans

In response to AB 939, the city of Los Angeles Department of Sanitation, Solid Resources Citywide Recycling Division (SRCRD) prepared an SRRE and a City Solid Waste Management Policy Plan (CiSWMPP). The CiSWMPP is a long-term (30-year) policy and planning document that contains goals, objectives, and policies covering all aspects of solid waste management within the city. The CiSWMPP also projects citywide diversion goals and disposal capacity needs over a 30-year planning period (1990 to 2020).

The SRRE and the CiSWMPP are companion documents developed in an integrated planning process. Together, these documents provide the framework for achieving compliance with AB 939. The city is encouraging compliance with the SRRE by implementing programs to achieve the mandated 50 percent reduction in the waste stream that is disposed of at city-owned facilities. The city expects that private generators will implement similar programs, with city assistance, for the waste streams that they control. Specific programs implemented by the city to meet the mandated solid waste diversion levels are outlined later in this section.

The primary responsibility of the SRCRD is to develop a plan for achieving the city's waste diversion goals. The SRCRD also develops and administers the various programs and promotional campaigns that are part of the city's waste diversion strategy. These waste diversion strategies include commercial, household hazardous waste, used oil, and organics programs. The SRCRD is responsible for the development and implementation of effective source reduction, recycling, buy-recycled, and reuse programs and policies. The SRCRD accomplishes this by providing technical assistance to industry, governmental agencies, and various community groups seeking to increase responsible waste management along with outreach programs, educational programs, public events, and workshops. In

[11] Los Angeles County Department of Public Works, Waste Management Division, Los Angeles County Source Reduction and Recycling Element, August 1993.

addition, the SRCRD promotes the development of sustainable commercial markets for recyclable materials and recycled content products.

3.2.3.1 City of Los Angeles SRRE

The City of Los Angeles SRRE serves as a guidance document and strategic action plan for diverting solid waste from landfills. The source reduction, recycling, composting, special waste, and public education goals are defined by specific programmatic elements including tasks, roles, responsibilities, and an implementation schedule. The SRRE is a 10-year programmatic plan (1990 to 2000) divided into two 5 year periods. It has been updated annually and is based on an ongoing evaluation of programs and waste analysis. The plan establishes diversion objectives for specific programs and targeted generators that, in combination, demonstrate that the city would exceed the 1995 and 2000 diversion objectives of the CiSWMPP. It also presents an analysis of the projected 15 year disposal capacity requirements for the city of Los Angeles based on achieving the 1995 and 2000 diversion objectives of the SRRE and, with continual increased diversion, the CiSWMPP long-term diversion objectives.

Because city departments control a significant portion of the waste stream generated within its jurisdiction, the city has developed city department diversion programs. Since 1990, city staff targeted 19 of the city's 50 departments because of their potential to maximize diversion of the city's waste stream. Of the 19 city departments, 8 dispose and divert waste that directly affects citywide diversion; others indirectly affect the waste stream and public awareness through lease agreements, public funded projects, contractual services, and department policies. **Table 7**, City of Los Angeles Department Solid Waste Diversion, shows diversion levels from 1995 through 1997 for each of these eight departments.

Table 7

City of Los Angeles Department Solid Waste Diversion

City Department	Diversion[1] (tons) 1995	1996	1997
Bureau of Sanitation	394,774	550,980	579,671
Bureau of Street Services	288,795	270,621	305,668
Department of Recreation and Parks	105,570	105,570	105,570
Department of Airports (renamed Los Angeles World Airports)	9,796	6,727	21,060
Harbor Department (renamed Los Angeles World Ports)	3,759	13,268	15,115
Department of Water and Power	14,067	9,470	9,372
Department of General Services/City Facilities Recycling	2,471	3,280	3,917
Los Angeles Convention Center	91	29,000	36,000
Total	**819,323**	**988,916**	**1,076,373**

[1] Does not include several thousand tons of inert recycling and minor tonnage from several departments.

Source: City of Los Angeles Solid Resources Citywide Recycling Division, AB 939 1996 and 1997 Annual Updates Executive Summary, October 30, 1998.

Education programs provide residents, the city's business community, and city employees with information on how each sector would become involved in diversion efforts. Education programs that have met with success include:

- General Services Department's City Facilities Recycling Program: This program continues to win awards for its innovative recycling and employee education program.
- Bureau of Sanitation's Solid Resources Citywide Recycling Division Commercial Outreach Effort: This program targets specific business groups and materials with innovative programs and publications.

Several city departments have implemented very successful market development programs that include:

- General Services Department's Closed Loop Purchasing Program: This program promotes the purchase of envelopes made from recycled feedstock from the city's own office paper recycling programs.
- Bureau of Street Services Recycled Content Products Purchasing Program: This program purchases recycled-content street barricades and signs.

- General Services Department Buy-Recycled 2000 Program: This program identified eight product categories for standardized recycled-content procurement.
- Bureau of Sanitation's Blue Recycling Containers Purchase Contract: This program required recycled content for its second generation curbside recycling program.

Most of the major recycling programs under the SRRE have been implemented and met with a fair degree of success. However, many opportunities for recycling within the city departments remain. This waste can be cost-effectively diverted rather than sent to landfills. Diversion of this material would contribute to the reduction in the city's waste stream. Notable programs in this category include:

- Bureau of Sanitation's Second Generation Curbside Recycling Program has expanded curbside recycling by providing 90-gallon or 60-gallon recycling containers to city residents. Participation in the program has increased curbside diversion, as well as reduced scavenging.
- Bureau of Sanitation and the Department of Recreation and Parks Green Waste/Co-Composting Projects cooperatively co-compost green waste from city parks with biosolids from the Hyperion Treatment Plant and manure from the Los Angeles Zoo.
- Bureau of Street Services and Sanitation Green Water Mulching Project, a joint partnership, grinds and spreads curbside-collected green waste and street tree trimmings. The city uses these materials for weed abatement at the Van Norman Dam.
- Airports and Harbor Departments (i.e., LAWA and Los Angeles World Ports) have made concerted efforts to enhance existing diversion and buy-recycled programs and to initiate new programs. Both departments expanded diversion of their administrative and operational waste, as well as setting forth plans for tenant recycling initiatives.[12]

3.2.3.2 City Solid Waste Management Policy Plan

The CiSWMPP is the long-range solid waste management policy plan for the city, while the SRRE is the strategic action policy plan for diverting solid waste from landfills. The objective of the CiSWMPP is to reduce at the source or recycle a minimum of 50 percent of the city's waste by 2000. The CiSWMPP calls for the disposal of the remaining waste in local and possibly remote landfills. The CiSWMPP establishes citywide diversion objectives by 25 percent by 1995, 50 percent by 2000, and 70 percent by 2020. The CiSWMPP provides direction for the solid waste management hierarchy and integrates into all facets of solid waste management planning. It ensures that disposal practices do not conflict with diversion goals. It also serves as an umbrella document for the city's SRRE as well as other citywide solid waste management planning activities.

The following five goals of the CiSWMPP reflect the importance of source and materials recovery to the success of the plan and, therefore, the intent of the city to follow the integrated waste management hierarchy that forms the basis of AB 939:

- Maximum Waste Diversion: The goal is to create an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the waste requiring disposal.
- Adequate Recycling Facility Development: To expand the siting of facilities that enhance waste reduction, recycling, and composting throughout the city beyond the current limits of the zoning code in ways that are economically, socially, and politically acceptable.
- Adequate Collection, Transfer, and Disposal of Mixed Solid Waste: The city shall ensure that all mixed solid waste that cannot be reduced, recycled, or composted is collected, transferred, and disposed in a manner that minimizes adverse environmental impacts.
- To develop an environmentally sound solid waste management system that protects public health and safety, protects natural resources, and utilizes the best available technology to accommodate the needs of the city.
- The city shall operate a cost-effective integrated waste management system that emphasizes source reduction, recycling, reuse, and market development and is adequately financed to meet operational and maintenance needs.

[12] City of Los Angeles Solid Resources Citywide Recycling Division, AB 939 1996 and 1997 Annual Updates Executive Summary, October 30, 1998.

3.3 Waste Generation, Reduction, and Recycling at LAX

3.3.1 Solid Waste Management at LAX

Solid waste generated at LAX is collected by a combination of private waste haulers and LAWA. LAWA provides limited solid waste service at the airport, including the operation of compactors (whose waste is subsequently collected by a private waste hauler) and collection of litter containers located throughout the airport. In addition, LAWA oversees waste collection for some tenants via contracts with Waste Management Inc. and Western USA Waste. Most LAWA tenants, including major airlines and other on-site businesses, contract directly with private haulers for collection and ultimate disposal of solid waste. Private waste collection companies provide the necessary bins and service their customers' collection needs on a scheduled basis.

The number and mix of waste haulers at LAX frequently changes due to market conditions and competitive contracting. Currently, Waste Management Inc. and Western USA Waste handle the solid waste generated by LAWA and in the terminals. Some individual tenants contract separately for solid waste collection. Waste Management Inc. transports waste from LAX to American Transfer in Gardena, while Western USA Waste conveys LAX generated waste to its transfer facility in Carson. Much of the waste collected at LAX is disposed of at the Bradley West Landfill located in the city of Los Angeles.

3.3.2 Recycling at LAX

LAWA is not directly responsible for compliance with AB 939. However, LAWA has participated in the city's waste diversion program by implementing an aggressive source reduction and recycling program at LAX. LAWA tenants are also required to decrease their solid waste disposal rates by 50 percent in accordance with AB 939 goals. Tenants may implement their own diversion programs or they may participate in LAWA's programs. However, there are no penalties for not meeting the diversion goals.

In order to develop its source reduction and recycling program, solid waste generation, disposal, and diversion patterns had to first be identified. In 1991, Recycling by Nature, in close cooperation with LAWA, undertook the preparation of the Los Angeles International Airport Waste Audit and Recovery Program. This program was the first comprehensive audit of solid waste activities at LAX. The purpose of the program was to provide reliable solid waste information for LAX, develop a system-wide database, and recommend a comprehensive integrated materials recovery and source reduction plan for LAX. The final report for the audit was issued in 1992 and updated waste audits were prepared by Recycling by Nature in 1995 and 2000.[13, 14] The 1992 baseline report and the 1995 report serve as the basis for the following discussion, as they most closely represent conditions in the baseline year (i.e., 1996).

The audit quantified waste generation by eight generator categories. Based on this information, Recycling by Nature developed baseline quantities of solid waste for 1990 and a program for achieving the waste diversions mandated by AB 939 (i.e., 25 percent diversion by 1995 and 50 percent by 2000). The program consists of a combination of source reduction, recycling, and composting of food wastes and includes the collection and separation of recyclable material at a proposed on-site 80 ton-per-day materials processing facility. The plan is proposed to be implemented in five phases. **Table 8,** Recommended LAX Integrated Materials Recovery and Source Reduction Program, identifies specific programs to be implemented in each phase. The proposed plan would reduce wastes disposed of by LAX by a minimum of 58 percent.

There are several waste recovery efforts ongoing at LAX to assist the city in meeting the AB 939 mandates and to reduce disposal costs. Some of these materials recovery programs have been in place at LAX since 1989. Cardboard, metals, and wood pallets are the largest constituents of the recycled waste stream. Aluminum used beverage containers (UBC) recovery is a small portion of the waste recovery effort, with most of the recycled UBC coming from the airlines. There is also an extensive concrete and asphalt recycling program at LAX.

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[13] City of Los Angeles Board of Public Works, Integrated Solid Waste Management Office, Los Angeles International Airport Waste Audit and Recovery Program, January 1992.

[14] City of Los Angeles Department of Airports, Bureau of Construction and Maintenance, Los Angeles International Airport Waste Audit and Recovery Program Update for 1993 and 1994, June 1995.

Table 8

Recommended LAX Integrated Materials Recovery and Source Reduction Program

Implementation Phase	Programs
I	Pallet/wood recovery, LAWA OCC recovery.
II	Purchasing program, source reduction, recovery depots (newsprint, aluminum/glass UBC), OCC recovery, magazine recovery, hand towel program, film plastics recovery, food bank.
III	In-flight recovery, administrative/terminal source separation, LAWA collection, collection modification.
IV	Establish materials processing facility.
V	Existing programs, food waste composting.

UBC = Used Beverage Container
OCC = Old Corrugated Cardboard

Source: Recycling by Nature, Los Angeles International Airport Waste Audit and Recovery Program Update for 1993 and 1994, June 1995.

In 1990, about 2,950 tons of material was diverted from the waste stream, representing a diversion of approximately six percent. The updated waste audit reports that about 7,800 tons of material were diverted from the disposal waste stream in 1994, a diversion of about 20 percent. In addition, an estimated 1,000 tons of waste were avoided through source reduction. As of the 1999 reporting year, LAX has achieved a diversion rate of 54 percent.[15] **Table 9**, Waste Stream Recovery at LAX, identifies the materials recovery programs being conducted at LAX. Not all of the generators within each category participate in the recovery programs. Several new waste reduction programs were implemented at LAX following completion of the 1995 update. One involves the recycling of food waste and kitchen scraps into animal feed at rendering plants. Another program is aimed at increasing the amount of usable leftover food that is distributed to food banks and other charitable organizations that feed the hungry. The third program reduces the amount of demolition debris to be landfilled by including requirements in contracts for recycling of such debris. These programs should aid LAX in increasing the amount of solid waste diverted from the disposal stream.

Table 9

Waste Stream Recovery at LAX

Waste Type	Primary Type of Waste Recovered	Percent of Total Materials Recovery
Administrative	Office, computer, and mixed waste paper; paper towels, newspapers, UBC.	5.3%
Cargo	High-grade paper, film plastic, pallets, OCC.	33.7%
Inflight	UBC, plastic cups, newspapers, magazines, pillowcases.	24.4%
Maintenance	Ferrous/non-ferrous metals, OCC.	9.6%
Terminal	Cardboard at the Bradley Terminal; cardboard and high-grade paper at the Host centralized receiving area and commissary.	0.5%
Restaurant	Food wastes, paper products.	15.7%
Other	Fast food containers, mixed paper.	10.8%

UBC = Used Beverage Container
OCC = Old Corrugated Cardboard

Source: Recycling by Nature, Los Angeles International Airport Waste Audit and Recovery Program Update for 1993 and 1994, June 1995.

[15] LAWA, LAX – Summary of Recycling Statistics for 1999 Calendar Year, 2000.

3.3.3 Baseline Solid Waste Generation

The following describes the baseline solid waste generation that was used as a basis for comparison with the alternatives. The baseline waste generation figures developed for the initial LAX waste audit conducted in 1991 were determined by collecting disposal tonnage levels, materials recovery levels and source reduction levels for 1990. These figures were updated in 1995 to include 1994 data. The updated waste audit quantified an annual volume of waste requiring disposal of about 35,000 tons for LAX in 1994. The volume of waste generated at LAX in 1994 represented slightly more than one percent of the total city waste stream. Approximately 7,800 tons of solid waste, or about 20 percent, were diverted from the disposal waste stream in 1994. In addition, approximately 1,000 tons of waste were avoided through source reduction. **Table 10**, Summary of Waste Disposal, Source Reduction, Recycling, and Diversion at LAX (1990-1995), presents a summary of waste disposal, diversion, and generation at LAX. **Table 11**, Baseline Solid Waste Generation, presents the baseline solid waste generation used in this analysis.

Table 10

Summary of Waste Disposal, Source Reduction, Recycling, and Diversion at LAX (1990 – 1995)

Year	1990	1991	1992	1993	1994	1995
Disposal (tons)	47,413	46,162[1]	48,272[2]	37,898[5]	34,999	39,141
Source Reduction	0[3]	0[3]	50	500	1,000	1,518
Recycling	2,951	4,711	8,795	7,547	7,807	8,278
Total	**50,364**	**50,873**	**57,117**	**45,945[4]**	**43,806**	**48,937**
Diversion	5.9%	9.3%	15.4%	17.5%	20.1%	20.0%

1 Waste disposal is adjusted for anomalies in passenger traffic caused by the Persian Gulf War.
2 Reflects an increase of approximately 2,000,000 passengers from 1991 to 1992.
3 Source reduction did occur at LAX in 1990 and 1991; however, it could not be measured.
4 Includes adjusted conversion factors.
5 Solid waste generation at LAX decreased between 1992 and 1993 due to heightened security following the Persian Gulf War. Fewer passengers traveled and no visitors were allowed past security.

Source: City of Los Angeles, Integrated Solid Waste Management Office, 1995 Annual Report on Disposal and Diversion in the City of Los Angeles, 1995.

Table 11

Baseline Solid Waste Generation

Land Use	Solid Waste Factor (per year)	Units	Total Generation (tpy)
LAX			
Airport Land Uses			
Cargo	4.5 lbs/tons	1,896,764 tons	4,268
Passengers	620 tons/MAP	58.0 MAP	35,960
Subtotal Airport Uses			**40,228**
Non-Airport Uses			
Belford			
Residential(Multi Family)	0.918 tons/(DU)	583 DU	535
Subtotal Belford			**535**
SUBTOTAL AIRPORT AND NON-AIRPORT USES			**40,763**
Non-Project Uses Within Master Plan Boundaries			
Manchester Square			
Residential(Single Family)	1.360 tons/DU	280 DU	381
Residential(Multi Family)	0.918 tons/DU	1,706 DU	1,566
Subtotal Manchester Square			**1,947**
Land Within Acquisition Areas			
Residential(Single Family)	1.360 tons/DU	57 DU	78
Residential(Multi Family)	0.918 tons/DU	69 DU	63
Hotel[1]	1.650 tons/employee	1,916 employee	3,162
Office	0.001 tons/S.F.	1,108,312 S.F.	1,108
Retail[2]	1.551 tons/employee	280 employee	434
Light Industrial[3]	0.865 tons/employee	5,830 employee	5,043
Institutional	0.001 tons/S.F.	156,178 S.F.	156
Subtotal Acquisition Areas			**10,044**
SUBTOTAL NON-PROJECT USES			**11,991**
TOTAL MASTER PLAN BOUNDARIES			**52,754**

Notes: Information in the table may not always total, due to rounding.
Factors were adjusted to reflect 50 percent diversion.
There is no baseline solid waste generation associated with Continental City or LAX Northside.

DU = dwelling unit
lbs = pounds
MAP = million annual passengers
S.F. = square feet

1 Hotel use, assumes 650 S.F./room; 23 employees/25 room
2 Retail use, assumes 530 S.F./employee
3 Light industrial, assumes 650 S.F./employee

Source: Camp Dresser & McKee Inc., 2000.

These values include all waste from airline operations, maintenance activities, cargo activities, LAWA office buildings, and ancillary uses such as the fuel farm. **Table 1**, presents solid waste generation by activity type. However, the tonnage value for 1990 is not the baseline value that will be used to determine AB 939 compliance. The SRCRD is working with LAWA to develop a reasonable baseline tonnage upon which to base AB 939 compliance. Of particular concern is the calculation of the quantity of runway and tarmac pavement that was removed, crushed, and used as filler below new paving.[16] The baseline level has not yet been determined.

16 City of Los Angeles, Integrated Solid Waste Management Office.

3.4 Construction and Demolition Waste

Construction and demolition waste comprises 28 percent of the solid waste stream statewide, with wood waste as the largest component. Other major components include concrete, asphalt, and ferrous materials. However, a large portion of construction and demolition debris can be diverted from landfills through reuse and recycling. In Los Angeles County alone, there are operations that recycle concrete, rock, sand, petroleum-contaminated soil, brick, slump stone, ferrous materials, aluminum, copper, brass, appliances, plate glass, sawdust, asphalt millings and grindings, and wood waste. Generally, construction waste (e.g., lumber scraps) is more desirable than demolition waste, which is generally less uniform and may be commingled with other materials.[17] CIWMB does not track the generation, disposal and diversion of construction and demolition waste specifically. However, 33 percent of wood waste in the city of Los Angeles was diverted in 1990.[18]

A limited number of studies on the composition of solid construction and demolition waste have been performed. A study conducted by the Metropolitan Solid Waste Department of the City of Portland, Oregon, indicated that typical demolition of residential land uses results in 70 pounds of waste per square foot composed of 21 percent wood, 2 percent metal, 33 percent masonry, 22 percent salvage, and 22 percent miscellaneous waste. Commercial structure demolition generally results in waste that is 18 percent wood, 3 percent metal, 51 percent concrete, 22 percent brick, and 5 percent paperboard. These factors are summarized in **Table 5**, in Section 2, *General Approach and Methodology.* A large portion of construction and demolition waste can be diverted from landfills through reuse and recycling.

Waste generated by construction and demolition activities is considered to be inert material and can be disposed of at unclassified landfills, which include a greater number of facilities than those that accept municipal solid waste. These facilities are often abandoned gravel pits. Facilities in the Los Angeles area that accept inert waste include Azusa Land Reclamation, CalMat Landfill, Nu-Way Live Oak Landfill, Peck Road Gravel Pit, Reliance Pit #2, and Strathern Landfill. As of December 31, 1995, the total remaining permitted inert waste capacity in Los Angeles County was estimated to be approximately 53.1 million tons. Based on the average 1995 disposal rate, this capacity will not be exhausted for 96 years. Therefore, there is anticipated to be no shortfall in disposal capacity for inert waste within the county.

4. ENVIRONMENTAL CONSEQUENCES

To determine projected solid waste generation under each of the alternatives, the appropriate solid waste generation factor for each airport and non-airport land use was multiplied by the appropriate activity or land use information included in the alternatives. **Table 12**, Activity and Land Uses Included in the Alternatives, presents a comparison of the cargo- and passenger-related activity land use types included in the alternatives. **Table 13** through **Table 24** below present projected solid waste generation for each of the alternatives. A discussion of the environmental consequences of the solid waste generation projected for each alternative is included in Section 4.19.6, *Environmental Consequences*, of the EIS/EIR.

[17] California Integrated Waste Management Board California Integrated Waste Management Board, Available: http://www.ciwmb.ca.gov [February 2, 1998].

[18] Cardozo, Catherine, California Integrated Waste Management Board, Personal Communication, February 2, 1998.

Table 12

Activity and Land Uses Included in the Alternatives

Land Use	Baseline Conditions	Alternative: No Action/No Project 2005	No Action/No Project 2015	A 2005	A 2015	B 2005	B 2015	C 2005	C 2015
LAX									
Airport Land Uses									
Cargo (tpy)	1,896,764	3,120,000	3,120,000	3,120,000	4,172,000	3,120,000	4,172,000	3,120,000	4,172,000
Passengers (MAP)	58.0	71.2	72.8	71.2	97.9	71.2	97.9	71.2	89.6
Non-Airport Land Uses									
Belford									
Residential (Multi Family DUs)	583								
LAX Northside Development									
Office (S.F.)		632,000	1,580,000						
Hotel (Employees)		552	1,288						
Retail (Employees)		45	113						
Airport Related (S.F.)		300,000	750,000						
R/D Business Park (S.F.)		470,000	1,170,000						
Restaurant (S.F.)		28,000	70,000						
Continental City									
Office (S.F.)		1,200,000	3,000,000						
Retail (Employees)		75	189						
Westchester Southside									
Hotel (Employees)				481	1,203	481	1,203	481	1,203
Office (S.F.)				260,000	650,000	260,000	650,000	260,000	650,000
Retail (Employees)				83	208	83	208	83	208
R/D Business Park				388,000	970,000	388,000	970,000	388,000	970,000
Restaurant (S.F.)				16,000	40,000	16,000	40,000	16,000	40,000
Non-Project Uses Within Master Plan Boundaries									
Manchester Square[1]									
Residential (Single Family DUs)	280								
Residential (Multi Family DUs)	1,706								
Office (S.F.)				50,000	50,000				
Hotel (Employees)				354	708				
Industrial (Employees)				1,323	2,646				
Land Within Acquisition Areas[2]									
Residential (Single Family DUs)	57	57	57						
Residential (Multi Family DUs)	69	69	69	42	42	42	42		
Hotel (Employees)	1,916	1,916	1,916	142	142			1,246	1,246
Office (S.F.)	1,108,312	1,108.312	1,108,312	142,064	142,064			509,218	509,218
Retail (Employees)	280	280	280	86	86	114	114	138	138
Light Industrial (Employees)	5,830	5,831	5,831	1,841	1,841	128	128	3,013	3,013
Institutional[3] (S.F.)	156,178	156,178	156,178	85,902	85,902	85,902	85,902		

1 Under the No Action/No Project Alternative, existing uses would be demolished. For purposes of this EIS/EIR, no development is assumed. Ander Alternative A, Manchester Square would be redeveloped with commercial/light industrial uses independent of the Master Plan. Under Alternatives B and C, existing uses would be demolished, and the area would be incorporated into the overall Master Plan development.

2 Only a portion of the land within the acquisition areas would be acquired for each individual build alternative. No land within the acquisition areas would be acquired under the No Action/No Project Alternative. The land within the Master Plan boundaries that would not be acquired under a particular alternative is assumed to remain in its current use.

3 Includes college, high school, elementary school and library land use.

Source: Landrum & Brown, 2000.

Table 13

Projected Solid Waste Generation Within the Master Plan Boundaries Under the No Action/No Project Alternative

Land Use	Factor (per year)	2005 Units	2005 Total Generation (tpy)	2015 Units	2015 Total Generation (tpy)
LAX					
Airport Land Uses					
Cargo	2.8 lbs/tons	3,120,000 tons	4,368	3,120,000 tons	4,368
Passengers	387 tons/MAP	71.20 MAP	27,554	72.80 MAP	28,174
Subtotal Airport Land Uses			**31,922**		**32,542**
Non-Airport Land Uses					
LAX Northside					
Office	0.0009 tons/S.F.	632,000 S.F.	569	1,580,000 S.F.	1,422
Hotel[1]	1.490 tons/employee	552 employees	822	1,288 employees	1,919
Retail	1.400 tons/employee	45 employees	63	113 employees	158
Airport Related[2]	0.0009 tons/S.F.	300,000 S.F.	270	750,000 S.F.	675
R/D Business Park	0.0009 tons/S.F.	470,000 S.F.	423	1,170,000 S.F.	1,053
Restaurant[3]	0.0023 tons/S.F.	28,000 S.F.	64	70,000 S.F.	161
Subtotal LAX Northside			**2,212**		**5,389**
Continental City					
Office	0.0009 tons/S.F.	1,200,000 S.F.	1,080	3,000,000 S.F.	2,700
Retail	1.400 tons/employee	75 employees	106	189 employees	264
Subtotal Continental City			**1,186**		**2,964**
SUBTOTAL AIRPORT AND NON-AIRPORT USES			**35,320**		**43,895**
Non-Project Uses Within Master Plan Boundaries					
Land Within Acquisition Areas					
Residential (Single Family)	1.230 tons/DU	57 DU	70	57 DU	70
Residential (Multi Family)	0.827 tons/DU	69 DU	57	69 DU	57
Hotel[1]	1.490 tons/employee	1,916 employees	2,855	1,916 employees	2,855
Office	0.0009 tons/S.F.	1,108,312 S.F.	997	1,108,312 S.F.	997
Retail[2]	1.400 tons/employee	280 employees	392	280 employees	392
Light Industrial[4]	0.779 tons/employee	5,831 employees	4,543	5,831 employees	4,543
Institutional	0.0009 tons/S.F.	156,178 S.F.	141	156,178 S.F.	141
Subtotal Acquisition Areas			**9,055**		**9,055**
SUBTOTAL NON-PROJECT USES			**9,055**		**9,055**
TOTAL MASTER PLAN BOUNDARIES			**44,375**		**44,375**

Notes: Information in the table may not always total, due to rounding.
Factors were adjusted to reflect 50 percent diversion.

[1] Hotel uses, assumes 650 S.F./room; 23 employees/25 room
[2] Airport related and retail uses, assumes 530 S.F./employee
[3] Restaurant uses, assumes 0.00000696 tons/S.F./day
[4] Light industrial uses, assumes 650 S.F./employee

Source: Camp Dresser & McKee Inc., 2000.

Table 14

Projected Solid Waste Generation Within the Master Plan Boundaries Under Alternative A

Land Use	Factor (per year)	2005 Units	2005 Total Generation (tpy)	2015 Units	2015 Total Generation (tpy)
LAX					
Airport Land Uses					
Cargo	2.8 lbs/tons	3,120,000 tons	4,368	4,172,000 tons	5,841
Passengers	387.00 tons/MAP	71.20 MAP	27,554	97.9 MAP	37,887
Subtotal Airport Land Uses			**31,922**		**43,728**
Non-Airport Land Uses					
Westchester Southside					
Hotel[1]	1.490 tons/employee	481 employees	717	1,203 employees	1,793
Office	0.0009 tons/S.F.	260,000 S.F.	234	650 S.F.	585
Retail[2]	1.400 tons/employee	83 employees	116	208 employees	291
R/D Business Park	0.0009 tons/S.F.	388,000 S.F.	349	970,000 S.F.	873
Restaurant[3]	0.0023 tons/S.F.	16,000 S.F.	37	40,000 S.F.	92
Conference Center	0.0009 tons/S.F.	0 S.F.	0	0 S.F.	0
Subtotal Westchester Southside			**1,453**		**3,633**
SUBTOTAL AIRPORT AND NON-AIRPORT USES			**33,375**		**47,361**
Non-Project Uses Within Master Plan Boundaries					
Manchester Square[5]					
Office	0.0009 tons/S.F.	50,000 S.F.	45	50,000 S.F.	45
Hotel[1]	1.490 tons/employee	354 employees	528	708 employees	1,056
Light Industrial[4]	0.779 tons/employee	1,323 employees	1,031	2,646 employees	2,061
Subtotal Manchester Square			**1,603**		**3,162**
Land Within Acquisition Areas					
Residential (Single Family)	1.230 tons/DU	0 DU	0	0 DU	0
Residential (Multi Family)	0.827 tons/DU	42 DU	35	42 DU	35
Hotel[1]	1.490 tons/employee	142 employees	211	142 employees	211
Office	0.0009 tons/S.F.	142,064 S.F.	128	142,064 S.F.	128
Retail[2]	1.400 tons/employee	86 employees	121	86 employees	121
Light Industrial[4]	0.779 tons/employee	1,841 employees	1,434	6,841 employees	1,434
Institutional	0.0009 tons/S.F.	85,902 S.F.	77	85,902 S.F.	77
Subtotal Acquisition			**2,006**		**2,006**
SUBTOTAL NON-PROJECT USES			**3,609**		**5,168**
TOTAL MASTER PLAN BOUNDARIES			**36,985**		**52,529**

Note: Information in the table may not always total, due to rounding.
Factors were adjusted to reflect 50 percent diversion.

1 Hotel uses, assumes 650 S.F./room; 23 employees/25 room
2 Airport related and retail uses, assumes 530 S.F./employee
3 Restaurant uses, assumes 0.00000696 tons/S.F./day
4 Light industrial uses, assumes 650 S.F./employee
5 Under Alternative A, Manchester Square would be developed independent of the Master Plan.

Source: Camp Dresser & McKee Inc., 2000.

Table 15

Projected Solid Waste Generation Within the Master Plan Boundaries Under Alternative B

Land Use	Factor (per year)	2005 Units	2005 Total Generation (tpy)	2015 Units	2015 Total Generation (tpy)
LAX					
Airport Land Uses					
Cargo	2.8 lbs/tons	3,120,000 Tons	4,368	4,172,000 tons	5,841
Passengers	387.00 tons/MAP	71.20 MAP	27,554	97.9 MAP	37,887
Subtotal Airport Land Uses			**31,922**		**43,728**
Non-Airport Land Uses					
Westchester Southside					
Hotel[1]	1.490 tons/employee	481 employees	717	1,203 employees	1,793
Office	0.0009 tons/S.F.	260,000 S.F.	234	650,000 S.F.	585
Retail[2]	1.400 tons/employee	83 employees	116	208 employees	291
Conference Center	0.0009 tons/S.F.	388,000 S.F.	349	970,000 S.F.	873
Restaurant[3]	0.0023 tons/S.F.	16,000 S.F.	37	40,000 S.F.	92
R/D Business Park, Educational Facilities	0.0009 tons/S.F.	0 S.F.	0	0 S.F.	0
Subtotal Westchester Southside			**1,453**		**3,633**
SUBTOTAL AIRPORT AND NON-AIRPORT USES			**33,375**		**47,361**
Non-Project Uses Within Master Plan Boundaries					
Land Within Acquisition Areas					
Residential (Single Family)	1.230 tons/DU	0 DU	0	0 DU	0
Residential (Multi Family)	0.827 tons/DU	42 DU	35	42 DU	35
Hotel[1]	1.490 tons/employee	0 employee	0	0 employees	0
Office	0.0009 tons/S.F.	0 S.F.	0	0 S.F.	0
Retail[2]	1.400 tons/employee	114 employees	159	114 employees	159
Light Industrial[4]	0.779 tons/employee	128 employees	100	128 employees	100
Institutional	0.0009 tons/S.F.	85,902 S.F.	77	85,902 S.F.	77
Subtotal Acquisition			**371**		**371**
SUBTOTAL NON-PROJECT USES			**371**		**371**
TOTAL MASTER PLAN BOUNDARIES			**33,747**		**47,732**

Notes: Information in the table may not always total, due to rounding.
Factors were adjusted to reflect 50 percent diversion.

1 Hotel uses, assumes 650 S.F./room; 23 employees/25 room
2 Airport related and retail uses, assumes 530 S.F./employee
3 Restaurant uses, assumes 0.00000696 tons/S.F./day
4 Light industrial uses, assumes 650 S.F./employee

Source: Camp Dresser & McKee Inc., 2000.

Table 16

Projected Solid Waste Generation Within the Master Plan Boundaries Under Alternative C

Land Use	Factor (per year)	2005 Units	2005 Total Generation (tpy)	2015 Units	2015 Total Generation (tpy)
LAX					
Airport Land Uses					
Cargo	2.8 lbs/tons	3,120,000 tons	4,368	4,172,000 tons	5,841
Passengers	387.00 tons/MAP	71.2 MAP	27,554	89.6 MAP	37,675
Subtotal Airport Land Uses			**31,922**		**40,516**
Non-Airport Land Uses					
Westchester Southside					
Hotel[1]	1.490 tons/employee	481 employees	717	1,203 employees	1,793
Office	0.0009 tons/S.F.	260,000 S.F.	234	650,000 S.F.	585
Retail[2]	1.400 tons/employee	83 employees	116	208 employees	291
R/D Business Park, Educational Facilities	0.0009 tons/S.F.	388,000 S.F.	349	970,000 S.F.	873
Restaurant[3]	0.0023 tons/S.F.	16,000 S.F.	37	40,000 S.F.	92
Conference Center	0.0009 tons/S.F.	0 S.F.	0	0. S.F.	0
Subtotal Westchester Southside			**1,453**		**3,633**
SUBTOTAL AIRPORT AND NON-AIRPORT LAND USES			**33,375**		**44,149**
Non-Project Uses Within Master Plan Boundaries					
Land Within Acquisition Areas					
Residential (Single Family)	1.230 tons/DU	0 DU	0	0 DU	0
Residential (Multi Family)	0.827 tons/DU	0 DU	0	0 DU	0
Hotel[1]	1.490 tons/employee	1,246 employees	1,856	1,246 employees	1,856
Office	0.0009 tons/S.F.	509,218 S.F.	458	509,218 S.F.	458
Retail[2]	1.400 tons/employee	138 employees	193	138 employees	193
Light Industrial[4]	0.779 tons/employee	3,013 employees	2,347	3,013 employees	2,347
Institutional	0.0009 tons/S.F.	0 S.F.	0	0 S.F.	0
Subtotal Acquisition			**4,854**		**4,854**
SUBTOTAL NON-PROJECT USES			**4,854**		**4,854**
TOTAL MASTER PLAN BOUNDARIES			**38,230**		**49,003**

Notes: Information in the table may not always total, due to rounding.
Factors were adjusted to reflect 50 percent diversion.

1 Hotel uses, assumes 650 S.F./room; 23 employees/25 room
2 Airport related and retail uses, assumes 530 S.F./employee
3 Restaurant uses, assumes 0.00000696 tons/S.F./day
4 Light industrial uses, assumes 650 S.F./employee

Source: Camp Dresser & McKee Inc., 2000.

Table 17

Demolition Solid Waste Generation Under the No Action/No Project Alternative

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Cargo	72.0 lbs/S.F.	434,000	15,624	N/A	N/A
Non-Airport Land Uses					
Belford					
Residential	72.0 lbs/S.F.	851,165	30,642	N/A	N/A
Non-Project Uses Within Master Plan Boundaries					
Manchester Square					
Residential	72.0 lbs/S.F.	5,578,316	200,819	N/A	N/A
DEMOLITION TOTAL		**434,000**	**247,085**		

Source: Camp Dresser & McKee Inc., 2000.

Table 18

Construction Solid Waste Generation Under the No Action/No Project Alternative

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Cargo	8 lbs/S.F.	713,900	2,856	713,900	2,856
Ancillary	8 lbs/S.F.	8,000	32	8,000	32
Non-Airport Land Uses					
LAX Northside					
Office	8 lbs/S.F.	632,000	2,528	948,000	3,792
Hotel	8 lbs/S.F.	348,000	1,392	522,000	2,088
Retail	8 lbs/S.F.	24,000	96	36,000	144
Airport Related	8 lbs/S.F.	300,000	1,200	450,000	1,800
R/D Business Park	8 lbs/S.F.	470,000	1,880	700,000	2,800
Restaurant	8 lbs/S.F.	28,000	112	42,000	168
Continental City					
Office	8 lbs/S.F.	120,000	480	1,800,000	7,200
Retail	8 lbs/S.F.	40,000	160	60,000	240
CONSTRUCTION TOTAL			**10,736**		**21,120**

Source: Camp Dresser & McKee Inc., 2000.

Table 19

Demolition Solid Waste Generation Under Alternative A

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Ancillary					
Ground Handling	72.0 lbs/S.F.	158,000	5,688	0	0
Maintenance Facilities	72.0 lbs/S.F.	1,536,000	55,296	101,000	3,636
Flight Kitchen	72.0 lbs/S.F.	236,000	8,496	410,000	14,760
Central Utility Plant	72.0 lbs/S.F.	0	0	0	0
Airport Police	72.0 lbs/S.F.	12,000	432	0	0
CNG/LNG	72.0 lbs/S.F.	86,000	3,096	0	0
General Aviation	72.0 lbs/S.F.	12,000	432	0	0
FAA	72.0 lbs/S.F.	0	0	0	0
ARFF (Aircraft Rescue and Fire Fighting Facility)	72.0 lbs/S.F.	14,000	504	20,000	720
Fuel Farm	72.0 lbs/S.F.	0	0	908,000	32,688
Ground Run Up Enclosure	72.0 lbs/S.F.	0	0	0	0
LAWA	72.0 lbs/S.F.	256,000	9,216	0	0
Coast Guard	72.0 lbs/S.F.	39,000	1,404	0	0
Cargo	72.0 lbs/S.F.	513,000	18,468	382,000	13,752
Non-Airport Land Uses					
Belford					
Residential	72.0 lbs/S.F.	851,165	30,642	0	0
Non-Project Uses Within Master Plan Boundaries					
Manchester Square					
Residential	72.0 lbs/S.F.	5,578,316	200,819	0	0
Acquisition Areas					
Residential	72.0 lbs/S.F.	91,388	3,290	0	0
Hotel	72.0 lbs/S.F.	1,341,398	48,290	0	0
Office	72.0 lbs/S.F.	966,248	34,785	0	0
Retail	72.0 lbs/S.F.	102,482	3,689	0	0
Light Industrial	72.0 lbs/S.F.	2,592,748	93,339	0	0
Institutional	72.0 lbs/S.F.	70,276	2,530	0	0
DEMOLITION TOTAL			**520,417**		**65,556**

Source: Camp Dresser & McKee Inc., 2000.

Table 20

Construction Solid Waste Generation Under Alternative A

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Ancillary Buildings					
Ground Handling	8 lbs/S.F.	0	0	196,000	784
Maintenance Facilities - New	8 lbs/S.F.	232,000	928	609,000	2,436
Maintenance Facilities - Renovated	12 lbs/S.F.	82,000	492	0	0
Flight Kitchen	8 lbs/S.F.	266,000	1,064	322,000	1,288
Central Utility Plant	8 lbs/S.F.	16,000	64	0	0
Airport Police	8 lbs/S.F.	45,000	180	0	0
CNG/LNG	8 lbs/S.F.	30,000	120	0	0
General Aviation	8 lbs/S.F.	75,000	300	0	0
FAA	8 lbs/S.F.	0	0	0	0
ARFF (Aircraft Rescue and Fire Fighting Facility) – New	8 lbs/S.F.	59,000	236	20,000	80
ARFF – Renovated	12 lbs/S.F.	20,000	120	0	0
Fuel Farm	8 lbs/S.F.	0	0	563,000	2,252
Ground Run Up Enclosure	8 lbs/S.F.	0	0	79,000	316
LAWA	8 lbs/S.F.	312,000	1,248	0	0
Coast Guard	8 lbs/S.F.	60,000	240	0	0
Cargo – New	8 lbs/S.F.	1,782,000	7,128	1,237,000	4,948
Cargo - Renovated	12 lbs/S.F.	446,000	2,676	304,000	1,824
Terminal	8 lbs/S.F.	4,314,000	155,304	2,108,000	8,432
Non-Airport Land Uses					
Westchester Southside					
Hotel	8 lbs/S.F.	340,000	1,360	510,000	2,040
Office	8 lbs/S.F.	260,000	1,040	390,000	1,560
Retail	8 lbs/S.F.	44,000	176	66,000	264
R/D Business Park	8 lbs/S.F.	388,000	1,552	582,000	2,328
Restaurant	8 lbs/S.F.	16,000	64	24,000	96
Non-Project Uses Within Master Plan Boundaries					
Manchester Square					
Office	8 lbs/S.F.	50,000	200	0	0
Hotel	8 lbs/S.F.	250,000	1,000	250,000	1,000
Industrial	8 lbs/S.F.	860,000	3,440	860,000	3,440
CONSTRUCTION TOTAL			**178,932**		**33,088**

Source: Camp Dresser & McKee Inc., 2000.

Table 21

Demolition Solid Waste Generation Under Alternative B

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Ground Handling	72.0 lbs/S.F.	0	0	158,000	5,688
Maintenance Facilities	72.0 lbs/S.F.	1,536,000	55,296	101,000	3,636
Flight Kitchen	72.0 lbs/S.F.	138,000	4,968	169,000	6,084
Central Utility Plant	72.0 lbs/S.F.	0	0	0	0
Airport Police	72.0 lbs/S.F.	12,000	432	0	0
CNG/LNG	72.0 lbs/S.F.	86,000	3,096	0	0
General Aviation	72.0 lbs/S.F.	12,000	432	144,000	5,184
FAA	72.0 lbs/S.F.	0	0	0	0
ARFF (Aircraft Rescue and Fire Fighting Facility)	72.0 lbs/S.F.	14,000	504	0	0
Fuel Farm	72.0 lbs/S.F.	0	0	908,000	32,688
Ground Run Up Enclosure	72.0 lbs/S.F.	0	0	0	0
LAWA	72.0 lbs/S.F.	256,000	9,216	0	0
Coast Guard	72.0 lbs/S.F.	39,000	1,404	0	0
Cargo	72.0 lbs/S.F.	587,000	21,132	1,701,000	61,236
Non-Airport Land Uses					
Belford					
Residential	72.0 lbs/S.F.	851,165	30,642	0	0
Non-Project Uses Within Master Plan Boundaries					
Manchester Square					
Residential	72.0 lbs/S.F.	5,578,316	200,819	0	0
Acquisition Areas					
Residential	72.0 lbs/S.F.	91,388	3,290	0	0
Hotel	72.0 lbs/S.F.	1,404,993	50,580	0	0
Office	72.0 lbs/S.F.	1,108,312	39,899	0	0
Retail	72.0 lbs/S.F.	87,998	3,168	0	0
Light Industrial	72.0 lbs/S.F.	3,705,963	133,415	0	0
Institutional	72.0 lbs/S.F.	70,276	2,530	0	0
DEMOLITION TOTAL		**587,000**	**560,823**	**3,181,000**	**114,516**

Source: Camp Dresser & McKee Inc., 2000.

Table 22

Construction Solid Waste Generation Under Alternative B

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Ground Handling	8 lbs/S.F.	247,000	988	0	0
Maintenance Facilities – new	8 lbs/S.F.	706,000	2,824	71,000	284
Maintenance Facilities – renovated	12 lbs/S.F.	0	0	0	0
Flight Kitchen	8 lbs/S.F.	71,000	284	710,000	2,840
Central Utility Plant	8 lbs/S.F.	16,000	64	0	0
Airport Police	8 lbs/S.F.	45,000	180	0	0
CNG/LNG	8 lbs/S.F.	30,000	120	0	0
General Aviation	8 lbs/S.F.	172,000	688	0	0
FAA	8 lbs/S.F.	0	0	0	0
ARFF (Aircraft Rescue and Fire Fighting Facility) – New	8 lbs/S.F.	35,000	140	0	0
ARFF - Renovated	12 lbs/S.F.	0	0	0	0
Fuel Farm	8 lbs/S.F.	0	0	0	0
Ground Run Up Enclosure	8 lbs/S.F.	86,000	344	0	0
LAWA	8 lbs/S.F.	236,000	944	0	0
Coast Guard	8 lbs/S.F.	50,000	200	0	0
Cargo – new	8 lbs/S.F.	2,318,000	9,272	2,268,000	9,072
Cargo - renovated	12 lbs/S.F.	223,000	1,338	0	0
Terminal	8 lbs/S.F.	4,336,000	156,096	1,379,000	5,516
Westchester Southside					
Hotel	8 lbs/S.F.	340,000	1,360	510,000	2,040
Office	8 lbs/S.F.	260,000	1,040	390,000	1,560
Retail	8 lbs/S.F.	44,000	176	66,000	264
R/D Business Park	8 lbs/S.F.	388,000	1,552	582,000	2,328
Restaurant	8 lbs/S.F.	16,000	64	24,000	96
CONSTRUCTION TOTAL			**177,674**		**24,000**

Source: Camp Dresser & McKee Inc., 2000.

Table 23

Demolition Solid Waste Generation Under Alternative C

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Ground Handling	72.0 lbs/S.F.	0	0	0	0
Maintenance Facilities	72.0 lbs/S.F.	756,000	27,216	780,000	28,080
Flight Kitchen	72.0 lbs/S.F.	138,000	4,968	0	0
Central Utility Plant	72.0 lbs/S.F.	0	0	0	0
Airport Police	72.0 lbs/S.F.	12,000	432	0	0
CNG/LNG	72.0 lbs/S.F.	86,000	3,096	0	0
General Aviation	72.0 lbs/S.F.	0	0	12,000	432
FAA	72.0 lbs/S.F.	0	0	0	0
ARFF (Aircraft Rescue and Fire Fighting Facility)	72.0 lbs/S.F.	14,000	504	0	0
Fuel Farm	72.0 lbs/S.F.	0	0	0	0
Ground Run Up Enclosure	72.0 lbs/S.F.	0	0	0	0
LAWA	72.0 lbs/S.F.	0	0	23,000	828
Coast Guard	72.0 lbs/S.F.	0	0	39,000	1,404
Cargo	72.0 lbs/S.F.	384,000	13,824	159,000	5,724
Non-Airport Land Uses					
Belford					
Residential	72.0 lbs/S.F.	851,165	30,642	0	0
Non-Project Uses Within Master Plan Boundaries					
Manchester Square					
Residential	72.0 lbs/S.F.	5,578,316	200,819	0	0
Acquisition Areas					
Residential	72.0 lbs/S.F.	122,294	4,403	0	0
Hotel	72.0 lbs/S.F.	374,653	13,488	0	0
Office	72.0 lbs/S.F.	599,094	21,567	0	0
Retail	72.0 lbs/S.F.	75,217	2,708	0	0
Light Industrial	72.0 lbs/S.F.	1,830,978	65,915	0	0
Institutional	72.0 lbs/S.F.	156,178	5,622	0	0
DEMOLITION TOTAL			**395,204**		**36,468**

Source: Camp Dresser & McKee Inc., 2000.

Table 24

Construction Solid Waste Generation Under Alternative C

Land Use	Factor	2005 S.F.	2005 Waste Generation (tons)	2015 S.F.	2015 Waste Generation (tons)
LAX					
Airport Land Uses					
Ground Handling	8 lbs/S.F.	219,000	876	0	0
Maintenance Facilities – New	8 lbs/S.F.	118,000	472	716,000	2,864
Maintenance Facilities - Renovated	12 lbs/S.F.	0	0	0	0
Flight Kitchen	8 lbs/S.F.	146,000	584	75,000	300
Central Utility Plant	8 lbs/S.F.	40,000	160	0	0
Airport Police	8 lbs/S.F.	45,000	180	0	0
CNG/LNG	8 lbs/S.F.	36,000	144	0	0
General Aviation	8 lbs/S.F.	100,000	400	0	0
FAA	8 lbs/S.F.	0	0	0	0
ARFF (Aircraft Rescue and Fire Fighting Facility) - New	8 lbs/S.F.	71,000	284	0	0
ARFF - Renovated	12 lbs/S.F.	9,000	54	0	0
Fuel Farm	8 lbs/S.F.	0	0	478,000	1,912
Ground Run Up Enclosure	8 lbs/S.F.	0	0	90,000	360
LAWA	8 lbs/S.F.	207,000	828	0	0
Coast Guard	8 lbs/S.F.	50,000	200	0	0
Cargo - New	8 lbs/S.F.	2,657,000	10,628	1,570,000	6,280
Cargo - Renovated	12 lbs/S.F.	446,000	2,676	0	0
Terminal	8 lbs/S.F.	2,657,000	6,412	665,000	2,660
Non-Airport Land Uses					
Westchester Southside					
Hotel	8 lbs/S.F.	340,000	1,360	510,000	2,040
Office	8 lbs/S.F.	260,000	1,040	390,000	1,560
Retail	8 lbs/S.F.	44,000	176	66,000	264
R/D Business Park	8 lbs/S.F.	388,000	1,552	582,000	2,328
Restaurant	8 lbs/S.F.	16,000	64	24,000	96
CONSTRUCTION TOTAL			**28,090**		**20,664**

Source: Camp Dresser & McKee Inc., 2000.