# 3.13 PUBLIC SERVICES AND UTILITIES

## INTRODUCTION

This section evaluates the public services and utilities in the SCAG region that may be affected by the 2004 RTP. The potential impacts of the 2004 RTP on the public resources including police protection services, fire protection services, school facilities, and solid waste removal are identified. The chapter also identifies mitigation measures for the impacts and evaluates the residual effects.

## ENVIRONMENTAL SETTING

The environmental setting describes the public services and utilities that may be affected by the 2004 RTP. The environmental setting addresses police protection services, fire protection services, education facilities, and solid waste disposal in the region.

### Police Protection Services

Individual County Sheriff Departments are responsible for providing police protection within the unincorporated areas of the county as well as those incorporated cities that contract with the County Sheriff to protect their city. Typically, the County Sheriffs assist newly incorporated municipalities serve their citizens by offering an established police force to protect the jurisdiction as it grows.

City police departments are found mostly in the older and larger SCAG cities. The CHP serves the State Route and Interstate highway system throughout the SCAG region. The CHP cooperates with County and City Police Departments when the need arises. Table 3.13-1, below, shows the number of jurisdictions directly providing police services and the number of jurisdictions contracting with the counties.

### Fire Protection Services

County Fire Departments provides fire prevention/suppression and emergency services to the unincorporated areas of the county as well as those municipalities that contract with the County for fire protection. As with police services, City Fire Departments are more prevalent among older and larger municipalities. Table 3.13-2, below, shows the number of jurisdictions directly providing fire services and the number of jurisdictions contracting with the counties.

### Educational Facilities

There are almost 3.2 million students enrolled from kindergarten to twelfth grade in the SCAG region. Almost 150,000 teachers teach these students. Table 3.13-3 lists the student and teacher totals by county. Table 3.13-4 displays the average current construction costs for new school facilities.

**Table 3.13-1: Police Service Providers for Jurisdictions within SCAG Counties**

| County | Jurisdictions Served By | |
|---|---|---|
| | County | City |
| Imperial | 0 | 7 |
| Los Angeles | 43 | 46 |
| Orange | 12 | 22 |
| Riverside | 13 | 12 |
| San Bernardino | 5 | 20 |
| Ventura | 6 | 5 |

Sources: Imperial County Sheriff Department (personal communication August 15, 2003).
Los Angeles County Sheriff Department. (n.d.). Patrol stations. Retrieved August 15, 2003, from http://www.lasd.org/stations/station_index.html.
Orange County Sheriff-Coroner Department. (2000). *OCSD patrol areas*. Retrieved August 15, 2003, from http://www.ocsd.org/
Riverside County Sheriff Department. (n.d.). *City/community-station/agency listing*. Retrieved August 15, 2003, from http://www.co.riverside.ca.us/sheriff/department/city-com.htm.
Wendy Britz (personal communication August 15, 2003).
Ventura County Sheriff's Department. (n.d.) *Patrol services*. Retrieved August 15, 2003, from http://www.vcsd.org/patrol.htm

**Table 3.13-2: Fire Protection Service Providers for Jurisdictions within SCAG Counties**

| County | Jurisdictions Served By | |
|---|---|---|
| | County | City |
| Imperial | 3 | 4 |
| Los Angeles | 57 | 32 |
| Orange | 23 | 12 |
| Riverside | 16 | 9 |
| San Bernardino | 5 | 20 |
| Ventura | 6 | 5 |

Sources: Imperial County Emergency Services (personal communication August 15, 2003).
County of Los Angeles Fire Department. (n.d.). *2001 statistical summary*. Retrieved August 15, 2003, from http://www.lacofd.org/CRO/pfd/2001%20Stat%20Summary.pdf.
Orange County Fire Authority. (n.d.). *OCFA partner cities and the county*. Retrieved August 15, 2003, from http://www.ocfa.org/about/index.htm.
Riverside County Fire Department (personal communication August 18, 2003).
San Bernardino County Fire Department. (n.d.). *About our fire department*. Retrieved August, 15, 2003, from http://www.sbcfire.org/.
Ventura County Fire Department. (n.d.). *Ventura county fire protection district annual report 2001-2002*. Retrieved August 15, 2003, from http://fire.countyofventura.org/publicinformation/publications/annual_reports/annualreport2002.pdf.

## Solid Waste Disposal and Transfer Facilities

Over the past ten years, disposal tonnage has decreased significantly in the SCAG region as the emphasis on recycling to meet the requirements of AB 939 has served to divert tonnage from landfills and conserve landfill capacity. Table 3.13-5 shows data from the California Integrated Waste Management Board (CIWMB) regarding the number of tons disposed in the year 2000 for each county in the SCAG region.

**Table 3.13-3: Kindergarten through Grade 12 Enrollment and Teachers in the SCAG Region for the 2002-03 School Year (SY)**

| County | 2002-03 SY Kindergarten-Grade 12 Enrollment | 2002-03 SY Teachers |
|---|---|---|
| Imperial | 34,420 | 1,744 |
| Los Angeles | 1,736,248 | 82,447 |
| Orange | 512,105 | 23,659 |
| Riverside | 349,607 | 16,259 |
| San Bernardino | 407,228 | 18,949 |
| Ventura | 144,352 | 6,777 |
| **SCAG Region** | **3,183,960** | **149,835** |

Source: California Department of Education, Educational Demographics Unit. (2003, August 18). *Enrollment in California public schools by county by district by grade 2002-2003* [Data file]. Available from California Department of Education Web site, http

California Department of Education, Educational Demographics Unit. (2003, August 18). *Number of teachers in California public schools by county, district, gender and ethnic group, 2002-03* [Data file]. Available from California Department of Education W

**Table 3.13-4: Construction Costs for New Schools**

| Type of School | Cost Per Student* | Students Per School | Construction Cost Per School | Square Feet Per Student | School Site Size (Acres)** | Cost Per Square Foot | Land Cost at 25% of Construction Cost | Total Cost (Millions $) |
|---|---|---|---|---|---|---|---|---|
| Elementary | $12,664 | 600 | $7,598,400 | 71 | 9.6 | $178 | $1,899,600 | $9.50 |
| Middle | $13,198 | 1,000 | $13,196,800 | 85 | 20.9 | $155 | $3,299,200 | $16.50 |
| High | $17,424 | 1,800 | $31,363,200 | 92 | 44.5 | $189 | $7,840,800 | $39.20 |

* Costs based on historical funding provided in the School Facility Program and the required local match. Includes design fees, furniture and equipment, and construction.

** Based on the number of students per school and the guidelines in School Site Analysis and Development, 2000 Edition.

Source: California Department of Education. (2003). School facilities. In *Fact book 2003-Handbook of education information* (pp.90). Sacramento, CA: Author.

**Table 3.13-5: Tons Disposed in the SCAG Region**

| County | 2000 Total |
|---|---|
| Imperial | 184,333 |
| Los Angeles | 10,408,422 |
| Orange | 4,748,572 |
| Riverside | 2,036,579 |
| San Bernardino | 1,069,438 |
| Ventura | 912,233 |
| SCAG Region | 19,359,577 |
| California | 36,954,946 |

Source: California Integrated Waste Management Board. (2002, October 11). *2000 county summary tonnage report*. Retrieved February 3, 2003, from http://www.ciwmb.ca.gov/Landfills/tonnage/2000/County.htm.

In viewing facilities on a county-by-county basis, it is important to note that landfills in one county may import waste generated elsewhere. Currently, Orange County offers capacity to out-of-county waste at a “tipping fee” low enough to attract waste from Los Angeles and San Bernardino Counties. The expansion of the El Sobrante Landfill, in western Riverside County, was approved

with an allowance for this facility to accept out-of-county waste. On occasion over the past several years, waste generated in Los Angeles County has been disposed of at the Simi Valley Landfill in Ventura County. Table 3.13-6 provides detailed information on permitted active or planned solid waste landfills in the SCAG Region.

**Table 3.13-6: Permitted Active or Planned Solid Waste Landfills in the SCAG Region**

| Solid Waste Landfill | County | Closure Date | Permitted Throughput (Tons/Day) | Remaining Capacity (Cubic Yards) | Remaining Capacity Date | Permitted Capacity (Cubic Yards) |
|---|---|---|---|---|---|---|
| Imperial Solid Waste Site | Imperial | 8/1/2022 | 130 | 292,814 | 5/21/2001 | 1,936,000 |
| Calexico Solid Waste Disposal Site | Imperial | 12/31/2142 | 150 | 1,961,536 | 5/21/2001 | 850,000 |
| Ocotillo Solid Waste Site | Imperial | 3/1/2004 | 9 | 14,134 | 1/1/2000 | 516,267 |
| Holtville Solid Waste Site | Imperial | 8/1/2012 | 20 | 39,773 | 1/1/2000 | 654,800 |
| Palo Verde Solid Waste Site | Imperial | 6/30/2029 | 5 | 96,162 | 5/21/2001 | 516,000 |
| Brawley Cut and Fill Site | Imperial | 2/27/2007 | 75 | 644,879 | 5/21/2001 | 2,044,000 |
| Niland Solid Waste Site | Imperial | 11/1/2008 | 55 | 103,554 | 5/21/2001 | 131,000 |
| Hot Spa Solid Waste Site | Imperial | 3/1/2027 | 10 | 78,605 | 1/1/2000 | 516,266 |
| Salton City Solid Waste Site | Imperial | 2/1/2019 | 10 | 115,305 | 5/21/2001 | 2,581,300 |
| Picacho Cut And Fill Site | Imperial | 1/1/2000 | 15 | 105,845 | 5/21/2001 | 645,333 |
| Allied Imperial Landfill | Imperial | 1/1/2012 | 1,135 | 3,706,958 | 8/9/2001 | 4,324,200 |
| Monofill Facility | Imperial | 1/1/2011 | 500 | 201,339 | 5/18/2001 | 514,000 |
| Mesquite Regional Landfill | Imperial | 12/31/2096 | | 970,000,000 | 5/30/2001 | 970,000,000 |
| Antelope Valley Public Landfill I | Los Angeles | 7/1/1999 | 1,400 | 2,978,143 | 6/6/2001 | 6,480,000 |
| Scholl Canyon Sanitary Landfill | Los Angeles | 1/1/2019 | 3,400 | 18,229,167 | 5/25/2001 | 69,200,000 |
| Azusa Land Reclamation Co. Landfill | Los Angeles | 1/1/2025 | 6,500 | 34,100,000 | 3/31/1996 | 66,670,000 |
| Burbank Landfill Site No. 3 | Los Angeles | 1/1/2053 | 240 | 5,048,000 | 6/7/2001 | 8,200,000 |
| Lancaster Landfill and Recycling Center | Los Angeles | 8/2/2012 | 1,700 | 22,645,000 | 6/6/2001 | 22,645,000 |
| Chiquita Canyon Sanitary Landfill | Los Angeles | 11/24/2019 | 6,000 | 26,024,360 | 6/15/2001 | 45,889,550 |
| Puente Hills Landfill #6 | Los Angeles | 11/1/2003 | 13,200 | 20,200,000 | 10/12/2001 | 106,400,000 |
| Calabasas Sanitary Landfill | Los Angeles | 1/1/2028 | 3,500 | 25,400,000 | 1/1/2002 | 69,700,000 |
| Pebbly Beach (Avalon) Disposal Site | Los Angeles | 1/1/2033 | 49 | 0 | 1/30/2002 | 143,142 |
| San Clemente Island Landfill | Los Angeles | 1/1/2032 | 82 | 209,816 | 6/7/2001 | 235,459 |
| Sunshine Canyon SLF County Extension | Los Angeles | 1/1/2004 | 6,600 | 16,000,000 | 5/30/2001 | 23,720,000 |
| Savage Canyon Landfill | Los Angeles | 1/1/2025 | 350 | 8,345,437 | 4/1/2001 | 20,500,000 |
| Bradley Landfill West And West Extension | Los Angeles | 1/1/2007 | 10,000 | 4,725,968 | 3/5/2002 | 38,600,000 |
| Prima Deshecha Sanitary Landfill | Orange | 12/31/2040 | 4,000 | 89,400,000 | 6/7/2001 | 81,000,000 |
| Olinda Alpha Sanitary Landfill | Orange | 12/31/2013 | 8,000 | 50,242,370 | 12/31/2001 | 74,900,000 |
| Frank R. Bowerman Sanitary LF | Orange | 12/31/2022 | 8,500 | 81,600,000 | 6/7/2001 | 117,000,000 |
| Badlands Disposal Site | Riverside | 1/1/2018 | 4,000 | 15,036,809 | 7/30/2001 | 27,959,140 |
| Lamb Canyon Disposal Site | Riverside | 1/1/2024 | 1,900 | 9,179,274 | 7/30/2001 | 18,496,797 |
| Edom Hill Disposal Site | Riverside | 1/1/2003 | 2,651 | 1,587,085 | 7/30/2001 | 10,038,052 |
| Oasis Sanitary Landfill | Riverside | 1/1/2086 | 41 | 151,372 | 7/30/2001 | 870,000 |
| Desert Center Landfill | Riverside | 1/1/2011 | 60 | 36,522 | 7/30/2001 | 117,032 |
| Blythe Sanitary Landfill | Riverside | 5/31/2034 | 400 | 2,746,023 | 7/30/2001 | 6,123,000 |
| Mecca Landfill II | Riverside | 1/1/2005 | 400 | 30,407 | 7/30/2001 | 372,480 |
| El Sobrante Landfill | Riverside | 1/1/2030 | 10,000 | 3,674,267 | 6/6/2001 | 184,930,000 |
| Eagle Mountain Landfill | Riverside | | | 559,694,000 | 3/21/2001 | |
| California Street Landfill | San Bernardino | 9/1/2007 | 350 | 473,888 | 5/1/2001 | 4,000,000 |
| Victorville Refuse Disposal Site | San Bernardino | 9/1/2005 | 1,600 | 721,913 | 7/3/2001 | 7,700,000 |
| Barstow Refuse Disposal Site | San Bernardino | 1/1/2012 | 525 | 218,492 | 7/3/2001 | 3,580,000 |
| Colton Refuse Disposal Site | San Bernardino | 1/1/2006 | 3,100 | 380,716 | 7/3/2001 | 13,297,000 |
| Mid-Valley Sanitary Landfill | San Bernardino | 4/1/2033 | 7,500 | 694,058 | 7/3/2001 | 62,000,000 |
| Landers Disposal Site | San Bernardino | 1/1/2007 | 381 | 463,785 | 7/3/2001 | 3,080,000 |
| USMC - 29 Palms Disposal Site | San Bernardino | 1/1/2007 | 57 | 435,387 | 8/25/1998 | 2,195,000 |
| Fort Irwin Sanitary Landfill | San Bernardino | 1/1/2405 | 100 | 14,738,590 | 5/30/2001 | 19,000,000 |
| Mitsubishi Cement Plant Cushenbury L.F. | San Bernardino | 1/1/2034 | 40 | 227,000 | 5/24/2001 | 520,400 |
| San Timoteo Solid Waste Disposal Site | San Bernardino | 5/1/2016 | 1,000 | | | 20,400,000 |
| Toland Road Landfill | Ventura | 5/31/2027 | 1,500 | 20,796,998 | 6/1/2001 | 30,000,000 |
| Simi Valley Landfill and Recycling Center | Ventura | 6/27/2022 | 3,000 | 9,473,131 | 6/15/2001 | 43,500,000 |

Source: California Integrated Waste Management Board. (2003). Solid waste information system. Retrieved May 19, 2003, from http://www.ciwmb.ca.gov/swis/Search.asp.

To serve future need, two major remote desert landfills have obtained operating permits and CEQA/NEPA clearance. Both landfills are designed to accept waste-by-rail and have sufficient capacity to serve a large portion of the region's future disposal needs. The proposed Eagle Mountain Landfill is located in the eastern Riverside County desert, approximately 50 miles west

of the Arizona border and 10 miles north of I-10. It has a capacity of almost 560 million cubic yards. The proposed Mesquite Regional Landfill, located near Glamis in Imperial County, is even larger, with a capacity of 970 million cubic yards. In addition, other waste-by-rail facilities are available outside of the region.

**Waste Diversion and Recycling**

Since the enactment of AB 939 in 1989, local governments have implemented recycling programs on a widespread basis, making efforts to meet the 25% and 50% diversion mandates of AB 939. Statewide, the CWIMB reports that diversion increased from 10% in 1989 to 42% in 2000 and to 48% in 2002.[1]

Table 3.13-7 shows the progress of local jurisdictions meeting AB 939 diversion requirements. The table shows the number of jurisdictions with diversion rates over 50%, the number with diversion rates between 25% and 50%, and the number with diversion rates below 25%. These diversion rate estimates, from the CIWMB, are based on the State-approved formula which utilizes the number of tons reported disposed and information regarding increases in population, employment and/or taxable retail sales.

**Urban Transportation Features**

Elements of the transportation infrastructure, including roadways, freeways, bridges, and railroads, among others, are a large component of the urban environment and affect public services and utilities. A discussion of urban transportation features is included below.

*Freeways, Highways, and Roadways*

On public roadways, there is a constant need for emergency services including police, fire, and paramedic services. Safety and a constant flow of traffic are maintained by the aforementioned public services on all freeways, highways, and roadways in the SCAG region.

*Trains*

An additional transit mode in the region is passenger rail operations (mainly Amtrak, Metrolink, and LACMTA facilities), which occupy existing railroad tracks and right-of-way areas. In terms of routes and overall passengers served, this mode is limited. Railyard facilities within the region are predominately located within industrial core areas and include the Port of Los Angeles, Long Beach, East Los Angeles, Hobart, City of Industry (Los Angeles County), West Colton, and BNSF (San Bernardino County). Additional freight facilities are also located in less densely populated areas such as Barstow and Yermo (San Bernardino County).

[1] California Integrated Waste Management Board. (2003, February 21). Solid waste generation and diversion, 1989-2002. Retrieved August 15, 2003, from http://www.ciwmb.ca.gov/LGCentral/Rates/Diversion/RateTable.htm.

**Table 3.13-7: Diversion Rate Summary**

| County | Diversion Rate Range (Percentage) | Year/Number of Jurisdictions | | | |
|---|---|---|---|---|---|
| | | 1998 | 1999 | 2000 | 2001 |
| **Imperial** | 0-24 | 3 | 1 | 1 | 2 |
| | 25-49 | 2 | 3 | 5 | 4 |
| | 50- | 1 | 3 | 2 | 2 |
| | Not Reporting | 2 | 1 | 0 | 0 |
| | Preliminary | 0 | 6 | 6 | 8 |
| **Los Angeles** | 0-24 | 2 | 18 | 11 | 15 |
| | 25-49 | 52 | 47 | 48 | 58 |
| | 50- | 13 | 20 | 29 | 16 |
| | Not Reporting | 22 | 4 | 1 | 0 |
| | Preliminary | 3 | 9 | 8 | 89 |
| **Orange** | 0-24 | 1 | 2 | 2 | 2 |
| | 25-49 | 19 | 19 | 13 | 18 |
| | 50- | 12 | 11 | 17 | 12 |
| | Not Reporting | 0 | 0 | 0 | 0 |
| | Preliminary | 0 | 2 | 2 | 32 |
| **Riverside** | 0-24 | 1 | 1 | 0 | 0 |
| | 25-49 | 13 | 14 | 8 | 16 |
| | 50- | 10 | 10 | 17 | 9 |
| | Net Reporting | 1 | 0 | 0 | 0 |
| | Preliminary | 0 | 2 | 2 | 25 |
| **San Bernardino** | 0-24 | 2 | 0 | 0 | 1 |
| | 25-49 | 16 | 19 | 18 | 20 |
| | 50- | 3 | 6 | 7 | 4 |
| | Not Reporting | 4 | 0 | 0 | 0 |
| | Preliminary | 0 | 6 | 8 | 25 |
| **Ventura** | 0-24 | 2 | 3 | 2 | 3 |
| | 25-49 | 5 | 4 | 4 | 5 |
| | 50- | 3 | 3 | 5 | 3 |
| | Not Reporting | 1 | 1 | 0 | 0 |
| | Preliminary | 0 | 5 | 5 | 11 |

Source: California Integrated Waste Management Board. (2003). *Countywide, regionwide, and statewide jurisdiction diversion progress report*. Retrieved February 3, 2003, from http://www.ciwmb.ca.gov/LGTools/mars/jurdrsta.asp

*Airports*

The SCAG region includes numerous airports serving both commercial and private airplane flights. Major commercial airports in the region include Los Angeles International Airport, Bob Hope Airport, and Long Beach Airport in Los Angeles County; John Wayne Airport in Orange County; Ontario International Airport in San Bernardino County; and Palm Springs International Airport in Riverside County. Emerging airports include Palmdale Airport in Los Angeles County; San Bernardino International Airport and Southern California Logistics Airport in San Bernardino

County; and March Inland Port in Riverside County. Each of these airports requires police, fire, and emergency medical services for safety and security purposes and generates solid waste.

*Ports*

The adjacent shipping ports of Los Angeles and Long Beach represent the major shipping location in the SCAG region and also one of the most important shipping locations along the western United States. Port Hueneme in Ventura County is the third shipping port in the region. Ports require public services and utilities for the safety and well being of workers and visitors.

## REGULATORY SETTING

The regulatory setting describes the federal, state, and local agencies that have jurisdiction over public services and utilities. The regulations pertinent to public services and utilities that each of these agencies enforce are also described.

### Federal Agencies and Regulations

40 CFR, Part 258 Subtitle D of the RCRA establishes minimum location standards for siting municipal solid waste landfills. Because California laws and regulations governing the approval of solid waste landfills meet the requirements of Subtitle D, the USEPA has delegated the enforcement responsibility to the State of California. California laws and regulations governing these facilities are summarized below.

### State Agencies and Regulations

#### *California Code of Regulations (CCR)*

Pursuant to CCR Title 23, Division 3, Article 2 (Waste Classification and Management) and Article 3 (Waste Unit Classification and Siting), Class III (municipal solid waste) landfills are sited in accordance with criteria that are similar to those found in Subtitle D of RCRA.

CCR Title 27 includes various regulations pertaining to siting, design, construction and operation of solid waste landfills.

CCR, Title 14, Chapter 3 establishes minimum standards for solid waste handling and disposal. Article 6.0 of Chapter 3 establishes minimum standards for solid waste transfer stations. Composting facility operating requirements are found in Chapter 3.1.

### Other State Regulations

The Integrated Waste Management Act of 1989 (AB 939) requires that cities and counties divert 25% of solid waste from landfills by 1995 and divert 50% by the year 2000.

***California Integrated Waste Management Board (CIWMB)***

The CIWMB has numerous responsibilities in implementing the federal and state regulations summarized above. The CIWMB is the state agency responsible for permitting, enforcing and monitoring solid waste landfills, transfer stations, material recovery facilities (MRFs), and composting facilities within California. Permitted facilities are issued Solid Waste Facility Permits (SWFPs) by the CIWMB. The CIWMB also certifies and appoints Local Enforcement Agencies (LEAs), county or city agencies which monitor and enforce compliance with the provisions of SWFPs. The CIWMB is also responsible for monitoring implementation of AB 939 by the cities and counties.

***Regional Water Quality Control Boards (RWQCB)***

New or expanded landfills must submit Reports of Waste Discharge to RWQCBs prior to landfill operations. In conjunction with the CIWMB approval of SWFPs, RWQCBs issue Waste Discharge Orders which regulate the liner, leachate control and removal, and groundwater monitoring systems at Class III landfills.

**Local Agencies and Regulations**

***South Coast Air Quality Management District (SCAQMD)***

The SCAQMD regulates emissions from landfills. Landfill owners/operators must obtain permits to construct and operate landfill flares, cogeneration facilities or other facilities used to combust landfill gas. Owner/operators also are subject to the provisions of SCAQMD Rule 1150.1 (Control of Gaseous Emissions from Landfills). This rule requires the submittal of a compliance plan for implementation of a landfill gas control system, periodic ambient monitoring of surface emissions, and the installation of probes to detect the lateral migration of landfill gas.

## METHODOLOGY

This section summarizes the methodology used to evaluate the expected impacts of implementation of the proposed Plan on existing public services and associated environmental effects.

**Comparison with the No Project**

The analysis of public services includes a comparison between the expected future conditions with the Plan and the expected future conditions if no Plan were adopted. This evaluation is not included in the determination of the significance of impacts; however, it provides a meaningful perspective on the effects of the 2004 RTP.

**Determination of Significance**

The public services analysis evaluates utilities and public services that are most likely to be affected by the implementation of the projects, programs, and policies identified in the Plan.

Impacts to public services were evaluated with SCAG data related to projected population, housing, and employment growth and available data on public services within the six-county region. The methodology for determining the significance of these impacts applies the significance criteria below to the expected future (2030) demand for public services and compares future demand with the Plan to the existing capacity for public services.

## SIGNIFICANCE CRITERIA

A significant impact is defined as "a substantial or potentially substantial, adverse change in the environment" (Public Resources Code § 21068). The proposed Plan would have a significant impact if implementation would:

- Create a substantial need within the region for construction of additional public facilities, such as fire and police stations, schools or other public facilities; or
- Uncover and potentially sever underground utility lines; or
- Generate a substantial increase in the amount of solid waste that exceeds the region's available landfills' capacity to handle and dispose of the waste.

## IMPACTS AND MITIGATION MEASURES

Implementation of the 2004 RTP would affect public services and utilities. Expected significant cumulative impacts would include demand for more police, fire, and emergency personnel and facilities, demand for more school facilities and teachers, an increase in households in areas subject to wildfires, and demand for additional solid waste services.

Both short-term construction related impacts and long-term or permanent impacts from new facilities potentially would result from implementation of the proposed Plan. Below are descriptions of the types of direct impacts foreseeable from new transportation projects proposed in the 2004 RTP. Indirect, cumulative impacts from implementation of the proposed Plan in combination with increases in growth and development are also identified. It should be noted, however, that project specific impacts may vary and appropriate mitigation measures would need to be developed on a project-by-project basis.

All mitigation measures shall be included in project-level analysis as appropriate. The lead agency for each individual project in the Plan shall be responsible for ensuring adherence to the mitigation measures prior to construction. SCAG shall be provided with documentation of compliance with mitigation measures through SCAG's monitoring efforts, including SCAG's Intergovernmental Review Process.

**Impact 3.13-1: Construction and implementation of the 2004 RTP would affect the level of transportation-related public services facilities, such as police and fire/emergency personnel and associated stations or other public facilities in the SCAG Region.**

Police services, fire protection, and emergency medical services within the SCAG region are provided by numerous agencies within multiple jurisdictions (see Tables 3.13-1 and 3.13-2). Depending upon the timing, location, and duration of construction activities, several of the proposed projects, including grade crossings, arterials, interchanges, and auxiliary lanes, could delay emergency vehicle response times or otherwise disrupt delivery of emergency services. By closing off one or more lanes of a roadway in the SCAG region, emergency routes would be impaired. The closure of these lanes could potentially cause traffic delays and ultimately prevent access to calls for service. While these impacts would be brief in nature, they could be potentially significant. As part of project specific environmental review, the project implementation agency shall determine the degree of impact to emergency services.

Overall, project construction-related impacts to emergency vehicle response times and access could be reduced through adherence to road encroachment permits by the implementing agency. A traffic control plan should be prepared as part of the construction mitigation strategy to further reduce impacts on traffic and emergency response vehicles.

In addition, there is the potential need for increased police, fire, and medical services at the construction sites of 2004 RTP projects for security and safety purposes. However, construction sites are typically secured and have security onsite. The impact of the construction sites themselves on police, fire and emergency medical services is anticipated to be short-term in nature and less than significant.

There are several types of projects included within the 2004 RTP that, upon completion, would require different levels of police, fire, and medical services. Projects involving new roadways are anticipated to require police, fire, and emergency medical services for safety purposes.

Transit-related projects would, in many cases, involve the construction of transit stations. These transit stations, upon completion, would require police, fire, and emergency medical services. In some cases, such as the Los Angeles Metropolitan Transportation Authority (LACMTA), the governing transit authority provides security. Additionally, the increased use of transit modes of transportation, such as buses and trains, would involve an increased need for police, fire, and emergency medical services for protection and rescue services.

Rail projects, other than transit stations, are anticipated to require minimal amounts of additional fire, police, and emergency medical services for safety purposes.

The improvement of and the increased usage of non-motorized transportation methods, such as bicycle routes, are anticipated to require minimal amounts of additional police, fire, and emergency medical services. If restrooms or drinking fountains are incorporated into non-motorized transportation projects, these uses would require a minimal amount of police, fire, and emergency medical personnel for security and safety.

Throughout the SCAG region, public service and utility providers have historically accommodated increases in demand. For the most part, the 2004 RTP transportation projects would not generate a substantial, direct need for additional police, fire, and emergency medical services. Only new facilities, such as transit stations, could require potentially significant levels of police, fire, and

medical services. Fire and medical services are anticipated to be sufficient in their local jurisdictions to handle the increase in demand generated by facilities like transit stations. Any new transit police staff or facility that would be deemed necessary (by the project level CEQA documentation) will need to be funded by the appropriate transit authority, if necessary.

Based on the demand for public service and utility for similar projects and on the current capacities of existing fire, police, and medical services, the total projected demand for each of these types of projects is not anticipated to be significant.

School facilities would not be directly affected by implementation of the 2004 RTP. The cumulative effect of the resulting population growth and distribution would affect schools. This will be discussed in the cumulative impact section of this chapter.

Before mitigation the direct demand for public services and utilities would be potentially significant.

**Mitigation Measures**

**MM 3.13-1a:** The project implementation agency shall ensure that prior to construction all necessary local and state road and railroad encroachment permits are obtained. The project implementation agency shall also comply with all applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits may require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction. Traffic control plans should include the following requirements:

1. Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.
2. Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.
3. Scheduling of truck trips outside of peak morning and evening commute hours.
4. Limiting of lane closures during peak hours to the extent possible.
5. Usage of haul routes minimizing truck traffic on local roadways to the extent possible.
6. Inclusion of detours for bicycles and pedestrians in all areas potentially affected by project construction.
7. Installation of traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.
8. Development and implementation of access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of

emergency vehicle access, affected jurisdictions shall be asked to identify detours for emergency vehicles, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures.

9. Storage of construction materials only in designated areas.

10. Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary.

**MM 3.13-1b:** The project implementation agency shall identify projects in the 2004 RTP that require police protection, fire service, and emergency medical service and shall coordinate with the local fire department and police department to ensure that the existing public services and utilities would be able to handle the increase in demand for their services. If the current levels of services at the project site are found to be inadequate, infrastructure improvements and/or personnel requirements for the appropriate public service shall be identified in each project's CEQA documentation.

**Significance after Mitigation**

The impact would be **less than significant** with mitigation.

**Impact 3.13-2: Construction necessary to implement the 2004 RTP may uncover and potentially sever underground utility lines (electric and natural gas).**

Any groundbreaking in the SCAG region has the potential to encounter underground utility lines and potentially break those lines. However, the project implementation agency is normally required to incorporate the locations of existing utility lines into the construction schedule prior to construction. Prior knowledge and avoidance during construction of existing utility lines would reduce this impact to less than significant.

**Mitigation Measures**

**MM 3.13-2a:** Prior to construction, the implementing agency shall identify the locations of existing utility lines. The contractor shall avoid all known utility lines during construction.

**Significance after Mitigation**

The impact would be **less than significant** after mitigation.

**Impact 3.13-3: Construction necessary to implement the 2004 RTP would affect the demand for solid waste services in the SCAG region.**

Several of the projects within the 2004 RTP have the potential to generate a significant amount of solid waste during construction, such as new transit lines, capacity enhancement facilities, and Maglev projects through grading and excavation activities. Construction debris would be recycled or transported to the nearest landfill site and disposed of appropriately. Currently, several landfills in the SCAG region function at or below their permitted capacity. Therefore, the projects proposed under the 2004 RTP are not anticipated to generate a significant amount of solid waste during construction. Nevertheless, the amount of debris generated during project construction would need to be evaluated prior to construction on a project by project basis. The mitigation measures described below would help to reduce the impact to less than significant.

Several projects within the 2004 RTP would involve the construction of roadways, rails, and facilities at various locations throughout the SCAG Region. It is assumed that these projects, upon completion, will require additional public services and utilities to handle increased demand for solid waste services. These increases would need to be evaluated on a project by project basis.

In some cases, transit-related projects would involve the construction of transit stations. These transit stations would generate incremental amounts of solid waste. In general, a 10,000 square foot transit station could be expected to generate approximately 9 tons of solid waste per year, which would be less than one apartment building with 14 one-bedroom units.[2] Additionally, the increased use of transit methods of transportation, such as buses and trains, would involve a minimal increase in the demand for solid waste collection.

Rail projects, other than transit-related rail, are not anticipated to require additional solid waste service unless they involve the construction of additional railways or facilities.

The improvement of and increased usage of non-motorized transportation methods, like bike routes, are not anticipated to require additional levels of solid waste. If restrooms are incorporated into non-motorized transportation projects, these uses would also require minimal amounts of solid waste (for trash receptacles) services.

The Maglev system would have approximately fourteen stations. Each station would be approximately twelve acres in size and would require solid waste services.[3]

The SCAG region has existing capacity for solid waste and has several landfills that are scheduled to be open through the life of the plan, as shown previously in table 3.13-6. Provided that the Eagle Mountain Landfill in Riverside County and the Mesquite Regional Landfill in Imperial

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[2] Calculations derived from conversion factors for retail land uses by the County of Sanitation Districts of Los Angeles County, 1991.

[3] Lockheed Martin-Mission Systems. (2002, December). Southern California association of governments maglev deployment program: Phase 1 – Predeployment analysis executive summaries. Gaithersburg, MD: Author.

County open as planned, there is sufficient capacity for waste disposal in the region. However, there may be insufficient waste disposal capacity where the waste is being generated. Solid waste may need to be shipped by truck or rail from urbanized areas to the remote disposal locations in Riverside and Imperial Counties.

## Mitigation Measures

**MM 3.13-3a:** Projects identified in the 2004 RTP that require solid waste collection will coordinate with the local public works department to ensure that the existing public services and utilities would be able to handle the increase. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation.

**MM 3.13-3b:** Each of the proposed projects identified in the 2004 RTP shall comply with applicable regulations related to solid waste disposal.

**MM 3.13-3c:** The construction contractor shall work with the respective County's Recycling Coordinator to ensure that source reduction techniques and recycling measures are incorporated into project construction.

**MM 3.13-3d:** The amount of solid waste generated during construction will be estimated prior to construction, and appropriate disposal sites will be identified and utilized.

## Significance after Mitigation

The impact would be **less than significant** after mitigation.

## Cumulative Impacts

A cumulative impact consists of an impact that is created as a result of the combination of the 2004 RTP together with other projects causing related impacts.

**Cumulative Impact 3.13-4: Urbanization in the SCAG region will increase substantially by 2030. The 2004 RTP, by increasing mobility and including land-use-transportation measures, influences the pattern of this urbanization. The 2004 RTP's influence on growth contributes to a less than significant impact to the response times of police, fire, and emergency services in the SCAG Region.**

Although the population will be increasing by approximately 6 million people and the urban area will increase by approximately 900 to 1,100 square miles by 2030, the transportation projects and land use strategies in the 2004 RTP would keep the average freeway speeds at approximately the same level that they are in the base year (2000). Because of this, response times for emergency

vehicles would not be impacted by the growth of population. Cities and counties shall work toward a consensus to implement the land use measures in the 2004 RTP that would allow the region to maintain its current travel speeds.

**Mitigation Measures**

Less than significant. None required.

**Significance after Mitigation**

The impact would not be cumulatively considerable and would be **less than significant**.

**Cumulative Impact 3.13-5: Urbanization in the SCAG region will increase substantially by 2030. The 2004 RTP, by increasing mobility and including land-use-transportation measures, influences the pattern of this urbanization. The 2004 RTP's influence on growth contributes to regional cumulatively considerable fire threat to development in the SCAG Region.**

Mountains and forests ring the Los Angeles Basin. As development encroaches on these natural lands, homes and businesses approach areas that are susceptible to wild fires. Today, approximately 415,000 households live in areas that are classified as high, very high, or extreme threat of wild fires, based on analysis of SCAG household data and data from the CDF's, Fire and Resource Assessment Program. The Plan development forecasts more households in these areas in 2030, increasing from 415,000 to 731,000. Table 3.13-8 depicts the wild fire threat to households for the base year (2000) and the Plan. Figure 3.13-1 depicts the wild fire threat in the SCAG region.

**Table 3.13-8: Wild Fire Threat to Households**

| Alternative | Fire Threat | | | | |
|---|---|---|---|---|---|
| | Little or No Threat | Moderate | High | Very High | Extreme |
| 2000 Base Year | 374,574 | 4,640,030 | 141,979 | 218,660 | 54,360 |
| Plan | 630,563 | 6,270,538 | 221,938 | 393,982 | 114,983 |

Source: SCAG Draft 2004 RTP, California Department of Forestry and Fire Protection, Fire and Resource Assessment Program. (2003). Fire threat [Data file]. Available from http://frap.cdf.ca.gov/data/frapgisdata/select.asp

**Mitigation Measures**

**MM 3.13-5a:** SCAG shall encourage local jurisdictions to strengthen and fully enforce fire codes and regulations.

**MM 3.13-5b:** SCAG shall encourage the use of fire-resistant materials when constructing projects in areas with high fire threat.

**MM 3.13-5c:** SCAG shall encourage the use of fire-resistant vegetation and the elimination of brush and chaparral in the immediate vicinity of development in areas with high fire threat.

**MM 3.13-5d:** SCAG shall help reduce fire threats in the region as part of the Growth Visioning process and as policies in the update of SCAG's Regional Comprehensive Plan and Guide.

**Significance after Mitigation**

The impact would remain **significant** because development would occur in areas that have a high, very high, or extreme threat of fire.

**Cumulative Impact 3.13-6: Urbanization in the SCAG region will increase substantially by 2030. The 2004 RTP, by increasing mobility and including land-use-transportation measures, influences the pattern of this urbanization. The 2004 RTP's influence on growth contributes to regional cumulatively considerable impacts to the staffing level of police and fire and emergency services in the SCAG Region.**

The forecast 6 million new people in the region will require police, fire, and other emergency personnel, beyond current staffing levels. SCAG's *Regional Comprehensive Plan* states that there is on average one police officer for every 263 civilians and one fire and emergency personnel for every 763 civilians.[4] To maintain these service levels, the region will need to hire 22,000 new police personnel and 7,000 fire and emergency personnel. The 2004 RTP projects that 500,000 to 700,000 acres of currently vacant land will be developed. This acreage equals approximately 900 to 1,100 square miles of area that will need to be serviced by police, fire, and other emergency personnel.

**Mitigation Measures**

**MM 3.13-6a:** Implementation agencies shall carefully evaluate the growth inducing potential of individual projects so that the full implications of the project are understood. Individual environmental documents shall quantify indirect impacts (growth that could be facilitated or induced) on public services and utilities to the extent feasible. Implementation agencies shall work with lead and responsible agencies to make any necessary adjustments to the applicable General Plan. Any such identified adjustment shall be communicated to SCAG.

[4] Southern California Association of Governments. (1994, May). Regional transportation plan and chapters of the regional comprehensive plan final environmental impact report (Vol. II, pp. 5.6, 5.8). Los Angeles: Author.

**Significance after Mitigation**

The demand to hire and train approximately 22,000 police personnel and 7,000 fire and emergency personnel would remain a **significant** impact.

**Cumulative Impact 3.13-7: Urbanization in the SCAG region will increase substantially by 2030. The 2004 RTP, by increasing mobility and by inclusion of land-use-transportation measures, influences the pattern of this urbanization. The 2004 RTP's influence on growth contributes to regional cumulatively considerable impacts to the number of school-age children and the demand for school facilities in different parts of the SCAG Region.**

Population in the SCAG region is anticipated to increase by approximately 6 million people, regardless of the 2004 RTP. The population of school-aged children (5-19) is anticipated to increase by approximately 1.1 million. This growth will require that additional schools and classrooms be built to accommodate the new students. This growth will result in a need for approximately 1,000 new schools.

The region also will need to hire new teachers. The regional average is approximately one teacher for every 22 students. To maintain the current regional average for kindergarten through twelve grade, approximately 50,000 teachers will need to be hired.

**Mitigation Measures**

**MM 3.13-7a:** Project implementation agencies shall undertake project specific review of the public utilities and services as part of project specific environmental review. For any identified impacts, project implementation agencies shall ensure that the appropriate school district has the school capacity, or is planning for the capacity, that the project will generate. Appropriate mitigation measures, such as new school construction or expansion, shall be identified. The project implementation agencies or local jurisdiction shall be responsible for ensuring adherence to the mitigation measures. SCAG shall be provided with documentation of compliance with any necessary mitigation measures.

**Significance after Mitigation**

The region's cumulative demand for approximately 1,000 new schools and approximately 50,000 new teachers would be a **significant** impact on public services.

**Cumulative Impact 3.13-8: Implementation of the 2004 RTP in combination with potential changes to the growth distribution potentially would uncover and potentially sever underground utility lines (electric and natural gas).**

Any groundbreaking in the SCAG region has the potential to encounter underground utility lines and potentially break those lines. To accommodate the projected growth, numerous new developments would be built and existing development would be recycled into new uses. These building activities would uncover and potentially sever different types of underground utility lines. However, the project implementation agency is normally required to incorporate the locations of existing utility lines into the construction schedule prior to construction. Prior knowledge and avoidance during construction of existing utility lines would reduce this impact to less than significant.

**Mitigation Measures**

**MM 3.13-8a:** Prior to construction, the implementing agency shall identify the locations of existing utility lines. The contractor shall avoid all known utility lines during construction.

**Significance after Mitigation**

The impact would be **less than significant**.

**Cumulative Impact 3.13-9: Urbanization in the SCAG region will increase substantially by 2030. The 2004 RTP, by increasing mobility and including land-use-transportation measures, influences the pattern of this urbanization. The 2004 RTP's influence would create a cumulatively considerable impact to the demand for solid waste services in the SCAG region.**

The population of the SCAG region is forecast to increase by approximately 6 million people by 2030. The Los Angeles County Sanitation District estimates that the average person in Los Angeles County disposes of 4.5 pounds of trash per day, 2 pounds of which is recycled and the rest of which is thrown away in landfills.[5] With 6 million new people, there can be an expected 27 million pounds of new trash generated, with 15 million pounds ending up in regional landfills.

The SCAG region has existing capacity for solid waste and has several landfills that are scheduled to be open through the life of the plan, as shown previously in table 3.13-6. Provided that the Eagle Mountain Landfill in Riverside County and the Mesquite Regional Landfill in Imperial County open as planned, there is sufficient capacity for waste disposal in the region through 2030. However, there may be insufficient waste disposal capacity where the waste is being generated. Solid waste may need to be transported by truck or rail from urbanized areas to the remote disposal locations in Riverside and Imperial Counties.

Cumulative impacts of transporting the waste of 23 million people to appropriate disposal areas would create a significant impact.

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[5] Los Angeles County Sanitation Districts. (n.d.) A few facts. Retrieved October 7, 2003, from http://www.lacsd.org/MagAds/MagAdsPdf/Almanac-155.pdf.

**Mitigation Measures**

**MM 3.13-9a:** SCAG shall encourage the CIWMB to continue to enforce solid waste diversion mandates that are enacted by the Legislature.

**MM 3.13-9b:** SCAG shall encourage local jurisdictions to continue to adopt programs to comply with state solid waste diversion rate mandates and, where possible, shall encourage further recycling to exceed these rates.

**MM 3.13-9c:** Future impacts related to management of solid waste shall be minimized through cooperation, information sharing, and program development during the update of the Integrated Solid Waste Management chapter of SCAG's RCPG and through SCAG's Energy and Environment Committee. SCAG shall consult with the CIWMB during this process.

**Significance after Mitigation**

While disposal capacity for the solid waste in 2030 has been identified, the cumulative impacts of collecting solid waste, transporting it to an available facility, and disposing of it would remain **significant**.

**Comparison with the No Project**

In the No Project alternative, the population of the SCAG region grows by 6 million people, however no regional transportation investments are made above the existing programmed projects. The population distribution follows past trends, uninfluenced by additional transportation investments.

***Direct Impacts***

Under the No Project Alternative, the need for public facilities and solid waste services for transportation projects would be less than under the Plan Alternative because fewer projects would be built. The potential that building the projects would disrupt or sever underground utility lines also would be less in the No Project Alternative than in the Plan Alternative because there are fewer transportation projects.

*The Plan impacts would be greater than the No Project impacts for Impacts 3.13-1, 3.13-2, and 3.13-3.*

***Indirect Impacts***

Cumulatively, the congestion that results because of a lack of additional transportation improvement projects and the population distribution would result in emergency vehicle response times that would be worse in the No Project Alternative than under the Plan Alternative.

The No Project Alternative is projected to result in approximately 761,000 households in areas where there is a high, very high, or extreme threat of wild fires, compared to 731,000 households under the Plan Alternative. The No Project Alternative thus would have a greater cumulative effect than the Plan Alternative in inducing growth in areas with high threats of wild fires.

The cumulative need for additional emergency personnel, schools, and solid waste services to accommodate the population would be the same in the No Project Alternative as in the Plan Alternative.

*The Plan Alternatives cumulative impacts would be less than the No Project Alternative's cumulative impacts for Cumulative Impacts 3.13-4 and 3.13-5 and approximately the same for Cumulative Impacts 3.13-6 through 3.13-9.*

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