

## 3.13 Security and Emergency Preparedness

This section evaluates the impacts of the 2008 RTP on the security of and emergency preparedness of the region. The chapter also identifies mitigation measures for the impacts and evaluates the residual effects.

### Environmental Setting

Southern California is home to significant natural disasters; including earthquakes, wildfires, flooding and mudslides. Although natural disasters, such as earthquakes and hurricanes, have produced significant regional casualties and property damage, none had the serious disruption to national travel and the national economy as the September 11th terrorist attacks. The September 11, 2001 terrorist created a new awareness of the vulnerabilities of transportation fleets and facilities. As concern about the threat of terrorism and consequences of natural disasters has grown, government (at all levels) has taken new measures to secure the welfare of its citizens. Transportation and transit agencies throughout the United States are taking increasing steps to protect their facilities against the threats of crime, terrorist activity, and natural disasters.

A large scale evacuation would be difficult in the SCAG region. The region already has severe traffic congestion and mobility issues. Currently, 18.4 million people reside in the region and over 5.14 million more people are expected to be added by 2035. Over six percent of the national population lives in the SCAG region, and for over half a century the region has been home to half the population of California. The region encompasses 38,000 square miles with a diverse geography, ranging from dense urban areas, to mountain ranges, to vast deserts.

The interdependency of the jurisdictions and organizations makes regional cooperation and coordination essential to security and emergency preparedness. Typically, no single agency is responsible for transportation security. At the local level, especially within transit agencies, safety may be handled within one office. However, it is far less likely that the security of a surface transportation mode is managed by one entity and that this entity is even controlled by the transportation organization. For example, highways and transit networks traverse multiple police jurisdictions, local fire departments generally fill the incident command role after terrorist events, regional command and control centers respond to both natural and intentional disasters, and federal agencies intervene as needed and based on specific guidelines such as the crossing of state boundaries.<sup>1</sup>

### Definitions

The complexity of the SCAG region, with a range of potential terrorism targets, presents significant challenges in coordinating and implementing effective homeland security programs.

<sup>1</sup> National Cooperative Highway Research Project 525 Vol. 3 Transportation Planning Process. Page 16.

The unexpected and complex nature of these natural and human-caused incidents require extensive coordination, collaboration and flexibility among all of the agencies and organizations involved in planning, mitigation, response and recovery.

**Safety** is defined as the protection of persons and property from unintentional damage or destruction caused by accidental or natural events.

**Security** is defined as the protection of persons or property from intentional damage or destruction caused by vandalism, criminal activity or terrorist attacks. The Transportation Research Board has classified emergency events that affect transportation agencies into several categories, which are illustrated below.<sup>2</sup>

## Transportation Security Vulnerabilities

### *Roadways and Freeway*

Freeway Lanes Miles (excluding carpool)	10,683 miles
HOV Lane Miles	752 miles
Regional Arterial (Major and Minor) Route Lane Miles	36,954 miles

### *Public Transit*

Buses	5,565 vehicles
Metro Rail	73 miles and 65 Stations
Metrolink	512 miles and 55 Stations

### *Aviation/Ports*

Total air carrier airports	10
Total general aviation airports	45
Total commuter airports	2
LAX ranks among world's airports	5 <sup>th</sup> in passengers and 7 <sup>th</sup> in air cargo tonnage
Share of US export container traffic	24 percent
Share of US import container traffic	41 percent

## International Border Crossings

Within the SCAG region, there are three international ports of entry along the Mexico-Imperial County border: two at Calexico (Calexico and Calexico-East); and, one at Andrade (near Yuma, Arizona). Traffic from these ports enters California on the I-8 corridor. U.S. Customs and the

<sup>2</sup> National Cooperative Highway Research Program Report 525 Volume 9 "Guidelines for Transportation Emergency Training Exercises" McCormick Taylor Inc. 2006

Border Protection Agency within the Department of Homeland Security (DHS) are charged with the management and control of the official ports of entry. Security planning includes local emergency services, as well as the California Highway Patrol (CHP).

The California Department of Transportation (Caltrans) District 11 has initiated the development of a Border Master Plan, to establish a process to institutionalize dialogue among local, state and federal stakeholders in the United States and Mexico. A key objective is to develop criteria that can be used in future studies to coordinate and prioritize projects related to existing and new Ports of Entry (POEs), as well as roads leading to the California Mexico POEs. Security is a consideration in the development of the Border Master Plan.

## Seaports

The DHS has designated the seaports of Long Beach, Los Angeles, and Port Hueneme as at risk for potential terrorist actions.<sup>3</sup> Security at the ports is the joint responsibility of the U.S. Coast Guard, the U.S. Customs and Border Protection Agency, federal and state Homeland Security offices, Port police agencies, Harbor Patrols and emergency service agencies. The U.S. Coast Guard leads the local Area Maritime Security Commission, which coordinates activities and resources for all port stakeholders.

The Port of Los Angeles has a dedicated police force, the Los Angeles Port Police, to patrol the area within the jurisdiction of the Port of Los Angeles. The Port Police enforce federal, state and local public safety statutes, as well as environmental and maritime safety regulations in order to maintain the free flow of commerce and produce a safe, secure environment that promotes uninterrupted Port operations. In addition, the Port Police partner with other law enforcement agencies, such as the Los Angeles Police Department, CHP, and Customs and Border Protection in the Cargo Theft Interdiction Program (CTIP), which investigates cargo theft, and the High Intensity Drug Trafficking Area, which targets drug trafficking at the Ports of Los Angeles and Long Beach. Furthermore, per the Maritime Transportation Security Act of 2002, the Port of Los Angeles works with the Coast Guard to develop security plans for facilities at the port.

Similar to the Port of Los Angeles, security at the Port of Long Beach entails physical security enhancements, police patrols, coordination with federal, state, and local agencies to develop security plans for the port area and investigate suspicious incidents, and obtaining federal funding to pay for these enhancements. As with the Port of Los Angeles, the Port of Long Beach works with the Coast Guard to develop security plans for facilities at the port.

In contrast to the Port of Los Angeles, however, the Port of Long Beach does not have its own dedicated police force. Instead, the Long Beach Police Department is responsible for patrolling the port area. In doing so, the Port reimburses the Long Beach Police and Fire Departments for their port related activities and expenses. The Port also funds its own Harbor Patrol to supplement law enforcement work conducted by other agencies such as the Coast Guard.

---

<sup>3</sup> Fiscal Year 2006 Infrastructure Protection Program. U.S. Department of Homeland Security, September 25, 2006

In addition to the above, several programs are in place to effectively monitor and screen seaport cargo. They include:

- **Investigations:** The federal Container Security Initiative (CSI) directs Customs agents, working with host governments, to inspect and examine all cargo containers deemed high-risk before they are loaded on U.S.-bound vessels. The CSI contains four core elements: Identifying high-risk containers; pre-screening containers before they reach U.S. ports of entry; using technology to prescreen high-risk containers; developing and using smart and secure containers.
- **Inspections:** The 24-hour rule requires manifest information on cargo containers to be delivered to U.S. Customs 24 hours before the container is loaded onto a vessel in a foreign port. Customs has the right to stop any container from being loaded, for any reason, while the container is still overseas.
- **Partnerships:** Most of the largest U.S. importers and their trading partners participate in the Customs-Trade Partnership Against Terrorism (C-TPAT), a public-private partnership designed to improve security standards throughout the cargo supply chain.
- **Technology:** U.S. Customs uses X-ray, gamma ray and radiation-detection devices to screen incoming cargo at U.S. ports.

## Airports

The SCAG region supports the nation's largest regional airport system in terms of number of airports and aircraft operations, operating in a very complex airspace environment. The system has six established air carrier airports including Los Angeles International (LAX), Bob Hope (formerly Burbank), John Wayne, Long Beach, Ontario and Palm Springs. There are also four new and emerging air carrier airports in the Inland Empire and North Los Angeles County. These include San Bernardino International Airport (formerly Norton AFB), March Inland Port (joint use with March Air Reserve Base), Southern California Logistics Airport (formerly George AFB) and Palmdale Airport (joint use with Air Force Plant 42). The regional system also includes 45 general aviation airports and two commuter airports, for a total of 57 public use airports.

Airport security planning is the joint responsibility of the federal Transportation Security Administration (TSA), the airlines, and the individual airports. Airports in the SCAG region have upgraded their security systems since 9/11 using a variety of strategies in conjunction with local, state and federal law enforcement. However, a number of aviation vulnerabilities continue to persist. These included effective screening of passengers and baggage for threat objects and explosives, adequate controls for limiting access to secure areas at airports, and adequate security for air traffic control computer systems and facilities.

## Rail and Mass Transit

The dispersed nature and the daily volume of passengers using public transportation services, which include intercity passenger rail, commuter rail, subway systems, and bus transportation,

make it an attractive target for terrorists and criminals. Today, regional transit in the SCAG region is comprised of:

- Approximately 640 bus routes
- Approximately 50 local bus (demand response and paratransit) operators
- 4 commuter express bus services<sup>4</sup>
- 2 subway lines and 3 light rail lines situated within LA County
- Metrolink Commuter Rail network that spans 5 of the 6 counties in the SCAG region and North San Diego County

The numbers of customers using public transportation each and every day creates ongoing challenges for enhancing security within transit environments. A number of plans have been implemented to provide for basic protection. In the early 1990s, the California Public Utilities Commission required that transit agencies operating rail systems prepare a comprehensive System Safety Program Plan (SSPP) that also included a security component. Since 2004, all transit agencies are required to include a security and emergency management plan, which details how the agency would coordinate with first responder (law enforcement and fire) agencies, their respective County Office of Emergency Services and the statewide Standardized Emergency Management System (SEMS).

## Regulatory Setting

Numerous laws and regulations at all levels of government are associated with security and emergency preparedness. The most relevant federal, state, and laws and regulations pertaining to security and emergency preparedness are summarized in this section.

### Federal Agencies and Regulations

#### ***Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users***

The bill known as Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005, emphasized the need for transportation safety and security. SAFETEA-LU authorizes the federal surface transportation programs for highways, highway safety, and transit for the 5-year period, 2005-2009. It specifies that MPOs will conduct a metropolitan planning process that provides for consideration of projects and strategies that will “increase the security of the transportation system for motorized and non-motorized users.” The Federal Highways Administration released a Final Rule related to its interpretation of SAFETEA-LU, noting that the metropolitan transportation planning process should be consistent with the Strategic Highway Safety Plan, and other transit safety and security planning and review processes, plans, and programs, as appropriate. Effective March 16, 2007,

<sup>4</sup> Santa Clarita, Antelope Valley, LA DOT and VISTA operate Commuter Express bus services. Santa Monica, Foothill, Montebello, Torrance, Gardena and Orange County operate local limited bus service into downtown Los Angeles.

under federal law, MPOs, like SCAG, are now tasked with addressing elements of security in their transportation plans.

### ***U.S. Department of Homeland Security***

The U.S. Department of Homeland Security (DHS) is charged with the responsibility of protecting the territory of the United States from terrorist attacks and responding to natural disasters. The department was established on November 25, 2002, by the Homeland Security Act of 2002. The primary mission of the Department is to (a) prevent terrorist attacks within the United States; (b) reduce the vulnerability of the United States to terrorism; and (c) minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States.

### ***Federal Emergency Management Agency***

On March 2003, the Federal Emergency Management Agency (FEMA) became a department of the DHS. The primary mission of FEMA is to reduce the loss of life and property and protect the nation from all hazards, including natural disasters, acts of terrorism, and other human-made disasters, by leading and supporting the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.

### ***National Response Plan***

The National Response Plan is the national plan to respond to national emergencies, such as terrorist attacks, natural disasters or emergency. This National Response Plan is administered by the DHS. The National Response Plan, last updated May 25, 2006, establishes a comprehensive all-hazards approach to enhance the ability of the United States to manage domestic incidents. It forms the basis of how the federal government coordinates with state, local, and tribal governments and the private sector during incidents.

### ***United States Department of Defense***

The Department of Defense (DOD) has several installations within the SCAG region. In the case of a large scale emergency, the DOD is authorized to provide resources when response and recovery requirements are beyond the capabilities of civilian authorities, and these efforts do not interfere with the DOD's core mission or ability to respond to operational contingencies.

Requests for Defense Support to Civilian Authorities (DSCA) are made through the local, county and State authorities as a request for assistance to the federal coordinating official in the appropriate lead federal agency and is normally accompanied by, or submitted after a request from the Governor for a disaster declaration from the President. The Defense Coordinating Officer coordinates the DOD resources to be provided. The California National Guard may be activated as part of the DSCA and can provide law enforcement support, crisis management and

consequence management services. Activation of the National Guard for local support during emergencies is done by the Governor via the California Office of Emergency Services.<sup>5</sup>

### ***Transportation Security Administration***

The Transportation Security Administration (TSA) is a component of the DHS and is responsible for security of the nation's transportation systems. With state, local and regional partners, the TSA oversees security for highways, railroads, buses, mass transit systems, and ports. A vast majority of its resources are dedicated to aviation security and is primarily tasked with screening passengers and baggage.

### ***Maritime Transportation Security Act of 2002***

The Maritime Transportation Security Act of 2002, signed on November 25, 2002, is designed to protect the nation's ports and waterways from a terrorist attack. This law is the U.S. equivalent of the International Ship and Port Facility Security Code (ISPS), and was fully implemented on July 1, 2004. It requires vessels and port facilities to conduct vulnerability assessments and develop security plans that may include passenger, vehicle and baggage screening procedures; security patrols; establishing restricted areas; personnel identification procedures; access control measures; and/or installation of surveillance equipment.

### ***The Disaster Mitigation Act of 2000 (DMA 2000)***

The Disaster Mitigation Act of 2000 (DMA 2000) provides an opportunity for states, Tribes, and local governments to take a new and revitalized approach to mitigation planning. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 by adding Section 322 – Mitigation Planning. Section 322 placed new emphasis on mitigation planning requiring governments to develop and submit mitigation plans as a condition of receiving any funding from the Hazard Mitigation Grant Program (HMGP) project grants. This Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide, and is aimed primarily at the control and streamlining of the administration of federal disaster relief and programs to promote mitigation activities.

## **State Agencies and Regulations**

### ***California Department of Transportation***

Caltrans, in conjunction with the California Highway Patrol (CHP), has created Transportation Management Centers (TMCs) to rapidly detect and respond to incidents while managing the resulting congestion. With the help of intelligent transportation system technologies, such as electronic sensors in the pavement, freeway call boxes, video cameras, ramp meter sensors, earthquake monitors, motorist cellular calls, and commercial traffic reports; as well as Caltrans highway crews, 911 calls and officers on patrol, the TMC provides coordinated transportation

---

<sup>5</sup> San Diego Association of Governments, 2007 Regional Transportation Plan White Paper: Public Safety and Homeland Security, July 21, 2006.

management for general commutes, special events and incidents affecting traffic. The TMCs are operated within each Caltrans district. For the SCAG region, Districts 7, 8, 11 and 12 all have TMCs.

### ***Governor's Office of Emergency Services***

The Office of Emergency Services (OES) was established as part of the Governor's Office in 1950 as the State Office of Civil Defense. The Governor's Office of Emergency Services coordinates overall state agency response to major disasters in support of local government. The office is responsible for assuring the state's readiness to respond to and recover from natural, human-made, and war-caused emergencies, and for assisting local governments in their emergency preparedness, response and recovery efforts.

The OES serves as the central contact point in the state for any emergency or imminent disaster. It coordinates the notification of appropriate state administering agencies that may be required to respond, as well as the emergency activities of all state agencies in the event of an emergency. In doing so, the OES does not focus on security specifically, but rather more broadly on addressing all potential incidents that could impact the state, such as earthquakes, fires, floods, and terrorist attacks. Furthermore, OES coordinates with federal agencies, such as the Department of Homeland Security and Federal Emergency Management Agency, as well as other state and local agencies such as the California Highway Patrol.

In May 2005, the OES released the 2005-2010 Statewide Emergency Management Strategic Plan, which outlines California's vision, mission, principles for emergency management, as well as goals and objectives for the period of 2005-2010. In addition to the strategic plan, OES has released a local planning guide on terrorism, which provides guidance to local cities in planning for potential terrorist acts.<sup>6</sup>

### ***Multi-Hazard Mitigation Plans***

The goal of hazard mitigation plans is to guide implementation activities to achieve the greatest reduction of vulnerability, which will result in saved lives, reduced injuries, reduced property damages, and greater protection of the environment.

FEMA now requires state and local governments to develop hazard mitigation plans. The Disaster Mitigation Act of 2000 (DMA 2000), Section 322 (ad) requires that local governments, as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities; identify and prioritizes mitigation actions; encourage the development of local mitigation; and provides technical support for those efforts. "Local Governments" are defined in the DMA 2000 to typically include counties, local municipalities, and tribal governments, but can also include other local agencies and organizations, including Councils of Governments, schools and other special districts.

---

<sup>6</sup> <http://www.oes.ca.gov/Operational/OESHome.nsf/Content/A566AC012F62E72E88256B7B0026D74B?OpenDocument>

California is currently in the process of updating its *State of California Multi-Hazard Mitigation Plan*. The State is required to adopt a federally-approved State Multi-Hazard Mitigation Plan to be eligible for certain disaster assistance and mitigation funding. The Plan is an evaluation the hazards California faces and the strategies, goals, and activities the state will pursue to address these hazards. The Plan:<sup>7</sup>

- Documents statewide hazard mitigation planning in California
- Describes strategies and priorities for future mitigation activities
- Facilitates the integration of local and tribal hazard mitigation planning activities into statewide efforts
- Meets state and federal statutory and regulatory requirements
- Is an annex to the State Emergency Plan.

All six SCAG counties and a number of cities within the SCAG region have completed Hazard Mitigation Plans. OES dictates that these plans must be updated every three years.

### ***County Offices of Emergency Services***

Counties and cities are generally the first responders to any security or emergency situation. These responders include fire departments, police and sheriff department, hospitals, ambulance services and transportation agencies. Coordination among public and private agencies within various cities and counties make the most use of all available resources in the event of any emergency.

While each city and county has their own security procedures, the policies are generally similar. Mutual Aid agreements between cities, counties and private organizations help to maximize resources and reduce the human suffering associated with disaster situations. Each SCAG county has a department in charge of security and emergency response (see **Table 3.13-1**).

### ***National Incident Management System / Standardized Emergency Management System***

The National Incident Management System (NIMS) is a tool for states, counties and local jurisdictions to respond to catastrophic events through better communication and coordination.

*NIMS provides a consistent nationwide template to enable Federal, State, local, and tribal governments and private sector and non-governmental organizations to work together effectively and efficiently to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity, including acts of catastrophic terrorism.<sup>8</sup>*

<sup>7</sup> State of California Multi Hazard Mitigation Plan (2004)

<sup>8</sup> [http://www.fema.gov/pdf/nims/NIMS\\_basic\\_introduction\\_and\\_overview.pdf](http://www.fema.gov/pdf/nims/NIMS_basic_introduction_and_overview.pdf)

**TABLE 3.13-1  
 COUNTY OFFICES OF EMERGENCY SERVICES**

County	Office Information	County	Office Information
Imperial	Office of Emergency Services 1078 Dogwood Road Heber, CA 92249 (760) 482-2400	Riverside	Office of Emergency Services 4080 Lemon Street, Suite 8 P.O. Box 1412 Riverside, CA 925021412 (951) 955-4700
Los Angeles	Office of Emergency Management 1275 N. Eastern Ave. Los Angeles, CA 90063 (323) 980-2261	San Bernardino	Office of Emergency Services 1743 W. Miro Way Rialto, CA 92376 (909) 356-3998
Orange	Office of Emergency Services 2644 Santiago Canyon Road Silverado, CA 92676 (714) 628-7055	Ventura	Ventura County Office of Emergency Services 800 South Victoria Ave. Ventura, CA 93009 (805) 654-2551

SOURCE: Southern California Association of Governments, 2007

California has a similar management system called the Standard Emergency Management System (SEMS) which is mandated under California Government Code Section §8607(a). State of California Executive Order S205 requires the state to integrate, to the extent appropriate, the NIMS, into the State's Standardized Emergency Management System (SEMS).<sup>9</sup>

The NIMS Integration Center strongly recommends that all elected officials who will be interacting with multiple jurisdictions and agencies during an emergency incident to take several NIMS courses, at a minimum:

- FEMA IS700: NIMS, an Introduction<sup>10</sup>
- ICS100: Introduction to Incident Command System (ICS)<sup>11</sup> or equivalent<sup>12</sup>

All federal, state, local, tribal, private sector and nongovernmental personnel with a direct role in emergency management and response must be NIMS and ICS trained. This includes all emergency service related disciplines such as Emergency Medical Technicians, hospitals, public health, fire service, law enforcement, public works/utilities, skilled support personnel, and other emergency management response, support and volunteer personnel.

The NIMS employs two levels of incident management, depending upon the type of incident.

- The **Incident Command System (ICS)** is a standard, on scene, all-hazard incident management system. ICS allows users to adopt an integrated organizational structure to match the needs of single or multiple incidents.

<sup>9</sup> <http://gov.ca.gov/index.php/executiveorder/2000/>

<sup>10</sup> <http://www.training.fema.gov/emiweb/is/is700.asp>

<sup>11</sup> <http://www.training.fema.gov/EMIWEB/is/is100.asp>

<sup>12</sup> FEMA IS700 "NIMS, and Introduction" and ICS100 are used extensively in the development of this section

- **Multi-Agency Coordination Systems** are a combination of facilities, equipment, personnel, procedures and communications integrated into a common framework for coordinating and supporting incident management.

ICS has been in use for over 30 years and is used for planned events, fires, earthquakes, hurricanes and acts of terrorism; ICS helps all responders communicate and coordinate logistics.

NIMS requires all emergency plans and standard operating procedures to incorporate NIMS components, principles and policies, including emergency planning, training, response, exercises, equipment, evaluation, and corrective actions. Chief elected and appointed officials in a community need to be directly involved in these NIMS preparedness elements, especially the elements that deal with exercising community emergency management policies, plans, procedures and resources.

### ***Mutual Aid Agreements (MAA)***

Immediately following the 1994 Northridge earthquake, city and county emergency managers in the OES coastal, southern, and inland regions developed a coordinated emergency management concept called the Emergency Managers Mutual Aid (EMMA) system. EMMA provided a valuable service in the emergency response and recovery efforts at the Southern Regional Emergency Operations Center (REOC), local Emergency Operations Centers (EOCs), the Disaster Field Office (DFO), and community service centers.

The purpose of EMMA is to support disaster operations in affected jurisdictions by providing professional emergency management personnel. In accordance with the Master Mutual Aid Agreement, local and state emergency managers have responded in support of each other under a variety of plans and procedures.

The objectives of the EMMA Plan include:

- Providing emergency management personnel from unaffected areas to support local jurisdictions, Operational Areas, and regional emergency operations during proclaimed emergencies.
- Providing a system, including an organization, information, and forms necessary to coordinate the formal request, reception, assignment, and training of assigned personnel.
- Establishing a structure to maintain this document (the Emergency Managers Mutual Aid Plan) and its procedures.
- Providing for the coordination of training for emergency managers, including Standardized Emergency Management System (SEMS/NIMS) training, emergency management course work, exercises, and disaster response procedures.
- Promoting professionalism in emergency management.<sup>13</sup>

---

<sup>13</sup> [http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/Emergency Managers Mutual Aid Plan/\\$file/Emma.pdf](http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/Emergency%20Managers%20Mutual%20Aid%20Plan/$file/Emma.pdf)

### ***METRANS Transportation Center***

The Metrans Transportation Center, which is a joint partnership between the University of Southern California and California State University, Long Beach, is a U.S. Department of Transportation University Transportation Center that was established in 1998 under the Transportation Equity Act for the 21st Century. The mission of Metrans is to 'solve transportation problems of large metropolitan regions through interdisciplinary research, education and outreach'. In doing so, Metrans conducts research in several areas relating to transportation, including safety, security, and vulnerability. Specifically, this study attempts to analyze safety and security issues, such as pedestrian and transit safety, vulnerability of major infrastructure, and safety and risk mitigation.

### ***Intelligent Transportation System***

One way to incorporate safety and security into transportation planning is through greater collaboration between transportation planning and operations. Collaboration is particularly critical in metropolitan regions and congested corridors where numerous jurisdictions, agencies, and service providers are responsible for the safety, security, and efficient operation of various aspects of the transportation system. Not only are the roadway and transit system operators themselves dependent on the transportation system, but so are police, fire, and medical services, emergency response and domestic security systems, and port authorities.<sup>14</sup>

Collaboration enables regional strategic development of projects and policies that have regional effects on users, including activities, such as incident management, advanced traveler information services, public safety/EMS/security, special events, electronic payment services, and performance measures.

Intelligent Transportation Systems (ITS) are one method of establishing a collaborative relationship. ITS projects were originally designed to increase transportation efficiency. It was recognized early on that ITS investments may also serve to enhance the safety, security and emergency response capabilities of the region. Such systems may be of assistance in the detection, response and recovery to human-made and natural disasters.

Because the successful operation of ITS projects usually depend on coordination and communication between different agencies and the systems they operate, it is essential that there be a region-wide framework for cooperation to help achieve that coordination and communication in the most cost-effective manner. This framework is referred to as the Southern California Regional ITS Architecture.

### ***Southern California Regional ITS Architecture***

The Southern California Intelligent Transportation System (ITS) Regional Architecture includes all six counties in the SCAG region. The goal of the project is to document the ITS Architecture covering the region. An ITS Architecture is a framework for ensuring institutional agreement and

---

<sup>14</sup> <http://www.tfhrcc.gov/pubrds/04nov/02.htm>

technical integration of technologies for the implementation of projects or groups of projects under an ITS strategy. Local components to the ITS architecture exist for Los Angeles County, Orange County, Inland Empire, Ventura County, and Imperial County.

### ***California Critical Needs Assessments***

There have also been several assessments of the critical state transportation infrastructure, which include identification of the key transportation facilities. Assessments have been conducted by the following bodies:

- The Governor's Office of Emergency Services
- The California Attorney General's Office
- CHP conducted a vulnerability assessment of the State's highway system and has issued a confidential report to the State Legislature

The results of these assessments have been shared with the transportation system operators and incorporated into their security planning. However, security considerations have precluded the inclusion or discussion of these critical system elements in public documents.

### ***Strategic Highway Network***

The Strategic Highway Network (STRAHNET) routes within the SCAG region are essential to readily accommodate the movement of military supplies and personnel in times of national emergency. STRAHNET routes were selected by the federal government, and include the National Interstate system, as well as key "non-interstate" routes and connectors to ports and military installations.

Within the SCAG region, all interstates are part of the STRAHNET. SR14, SR101 and Route 395 are part of the non-interstate STRAHNET routes. Various connectors between the ports, as well as various military installations and STRAHNET are also included. An unclassified visual representation of the STRAHNET within the SCAG region is displayed in Map 3.13-1. in the Map Chapter.

## **Methodology**

This section summarizes the methodology used to evaluate the expected impacts on security and emergency preparedness associated with implementation of the proposed 2008 RTP. Significant threats include earthquakes, wildfires, flooding, mudslides, and more recently, terrorism has been added to the list of threats that the region must prepare against.

An evaluation of whether the 2008 RTP will adversely impair security and emergency preparedness in the region is provided. Mitigation measures are provided to minimize those effects identified as significant adverse effects.

## Comparison with the No Project

The analysis of security and emergency preparedness includes a comparison between the expected future conditions with the proposed Plan and the expected future conditions if no Plan were adopted. This evaluation is not included in the determination of the significance of impacts (which is based on comparison to existing conditions); however, it provides a meaningful perspective on the expected effects of the 2008 RTP.

## Determination of Significance

The methodology for determining significance applies the significance criteria below to compare the existing conditions to the expected future conditions with the Plan.

### *Significance Criteria*

Security and Emergency Preparedness is not specifically included in the CEQA Guidelines, with the exception of wildfire threat. Therefore, the criteria for determining significance of impacts were developed using the goals and objectives outlined in SCAG's Security and Emergency Preparedness chapter of the 2008 RTP. Implementation of the proposed Plan would have a significant impact if it would:

- Impair transportation safety, security, and reliability for all people and goods in the region; and
- Prohibit the prevention, protection, response to, and recovery from major human-caused or natural events that would create a significant hazard to the public threatening and impacting lives, property, the transportation network and the regional economy.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

## Impacts and Mitigation Measures

Implementation of the 2008 RTP would affect the security and emergency preparedness in the region due to the vast expanse of transportation infrastructure. It would be physically and financially impossible to protect all transportation systems from natural disaster or human caused incidents. However, a number of plans, programs, organizations and infrastructure are in place within the SCAG region to provide safety and security of the regional transportation system for many potential situations.

All mitigation measures should be included in project-level analysis as appropriate. The project proponent or local jurisdiction shall be responsible for ensuring adherence to the mitigation measures prior to construction. For regionally significant projects SCAG shall be provided with documentation of compliance with mitigation measures through its Intergovernmental Review Process in which all regionally significant projects, plans, and programs must be consistent with regional plans and policies.

**Impact 3.13-1: Implementation of the 2008 RTP could impair transportation safety, security, and reliability for people and goods in the region.**

The SCAG region includes approximately 18 million residents and comprises half of California's population. This region remains one of the largest economic engines in the United States and the world. In the SCAG region, transportation infrastructure also encompasses a vast system, which includes 10,683 freeway lane miles; 5,565 buses providing services in the six-county region; a metro rail system that encompasses 73 miles and 65 stations. Additionally, there are numerous aviation facilities within SCAG. The region contains six established air carrier airports including Los Angeles International (LAX), Bob Hope (formerly Burbank), John Wayne, Long Beach, Ontario and Palm Springs. There are also four new and emerging air carrier airports in the Inland Empire and North Los Angeles County. These include San Bernardino International Airport (formerly Norton AFB), March Inland Port (joint use with March Air Reserve Base), Southern California Logistics Airport (formerly George AFB) and Palmdale Airport (joint use with Air Force Plant 42).

While the RTP would generally seek to improve the efficiency of the transportation system, the addition of 5.14 million people to the region along with increased development would expose an increased number of people to risks associated with the transportation system.

The region's expansive urban form makes travel critical to daily life. A failure in the transportation system as a result of natural disaster or human-caused event would bring significant disruptions to the quality of life of many individuals. As described in this chapter, there are a number of plans, programs, organizations and infrastructure in place within the SCAG region to provide safety and security of the regional transportation system for many potential situations. All transportation sectors are subject to adhere to numerous laws and regulations at all levels of government associated with security and emergency preparedness. Also, the SCAG region has various emergency preparedness and response plans because of the region's history with earthquakes, wildfires, flooding and mudslides. However, due to the vast nature of the region, there is the potential for impacts to the security of the region. Much of the funding for safety and security programs is provided in response to changing circumstances by local, state and federal agencies. It is assumed that this circumstance would continue in to the future. Nonetheless the SCAG region is subject to and will continue to be subject to a number of natural and potential man-made risks, thus exposing residents in the region to these risks. Therefore, this impact would be **significant**.

***Mitigation Measures***

**MM-SEP.1:** SCAG shall help ensure the rapid repair of transportation infrastructure in the event of an emergency.

- SCAG, in cooperation with local and state agencies, shall identify critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities.

- SCAG shall establish transportation infrastructure practices that promote and enhance security.

**MM-SEP.2:** SCAG shall continue to promote the use of intelligent transportation system technologies that enhance transportation security.

- SCAG shall work to expand the use of ITS to improve surveillance, monitoring and distress notification systems and to assist in the rapid evacuation of disaster areas
- SCAG shall facilitate the incorporation of security into the Regional ITS Architecture.
- Transit operators should incorporate ITS technologies as part of their security and emergency preparedness and share that information with other operators.
- Aside from deploying ITS technologies for advanced customer information, transit agencies should work intensely with ethnic, local and disenfranchised communities through public information / outreach sessions ensuring public participation is utilized to its fullest. In case of evacuation, these transit dependent persons may need additional assistance to evacuate to safety.

#### **Significance after Mitigation**

Due to the geographic span and complexity of the SCAG region, the impact on transportation safety, security, and reliability for all people and goods in the region would remain significant.

---

**Impact 3.13-2: The RTP has the potential to inhibit the prevention, protection, response to, and recovery from major human-caused or natural events that could create a significant hazard to the public threatening and impacting lives, property, the transportation network and the regional economy.**

The Security and Emergency Prepared goals outlined in the 2008 RTP aim to assist the region in the planning, preparation and response to emergencies, whether caused by natural or human elements. Additionally, the 2008 RTP identifies coordination strategies SCAG would undertake in the event of major disasters, either human caused or natural. However, the unexpected and complex nature of natural and human-caused incidents require extensive coordination, collaboration and flexibility among all of the agencies and organizations involved in planning, mitigation, response and recovery. Additionally, the interdependency of the jurisdictions and organizations makes regional cooperation and coordination a significant challenge to security and emergency preparedness. The increase in population in the region would result in more people being exposed to risk. This impact would therefore be **significant**.

### **Mitigation Measures**

SCAG does not have the authority under statute to undertake a first response or emergency management role. SCAG seeks to become a conduit for coordination and collaboration among these stakeholders at the regional level.

- MM-SEP.3:** SCAG shall establish transportation infrastructure practices that promote and enhance security.
- SCAG shall work with transportation operators to plan and coordinate transportation projects, as appropriate, with Department of Homeland Security grant projects, to enhance the regional transit security strategy (RTSS).
  - SCAG should establish transportation infrastructure practices that identify and prioritize the design, retrofit, hardening, and stabilization of critical transportation infrastructure to prevent failure, to minimize loss of life and property, injuries, and avoid long term economic disruption.
  - SCAG should establish a Transportation Security Working Group (TSWG) with goals of RTP consistency with RTSS, and to find ways SCAG programs can enhance RTSS.
- MM-SEP.4:** SCAG shall establish a forum where policy makers can be educated and regional policy can be developed
- SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.
- MM-SEP.5:** SCAG shall help to enhance the region's ability to deter and respond to acts of terrorism, human-caused or natural disasters through regionally cooperative and collaborative strategies.
- SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.
- MM-SEP.6:** SCAG shall help to enhance the region's ability to deter and respond to terrorist incidents, human-caused or natural disasters by strengthening relationship and coordination with transportation.
- SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.
  - SCAG shall encourage all SCAG elected officials are educated in NIMS.
  - SCAG shall work with partner agencies, federal, state and local jurisdictions to improve communications and interoperability and to find opportunities to leverage and effectively utilize transportation and public safety/security resources in support of this effort.

**MM-SEP.7:** SCAG shall work to enhance emergency preparedness awareness among public agencies and with the public at large.

- SCAG shall work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies.

**MM-SEP.8:** SCAG shall work to improve the effectiveness of regional plans by maximizing the sharing and coordination of resources that would allow for proper response by public agencies.

- SCAG shall encourage and provide a forum for local jurisdictions to develop mutual aid agreements for essential government services during any incident recovery

**MM-SEP.9:** SCAG shall help to enhance the capabilities of local and regional organizations, including first responders, through provision and sharing of information.

- SCAG shall work with local agencies to collect regional GeoData in a common format, and provide access to the GeoData for emergency planning, training and response.
- SCAG shall establish a forum for cooperation and coordination of these plans and programs among the regional partners including first responders and operations agencies
- SCAG shall develop and establish a regional information sharing strategy, linking SCAG and its member jurisdictions for ongoing sharing and provision of information pertaining to the region's transportation system and other critical infrastructure.

**MM-SEP.10:** SCAG shall provide the means for collaboration in planning, communication, and information sharing before, during, or after a regional emergency.

- SCAG shall develop and incorporate strategies and actions pertaining to response and prevention of security incidents and events as part of the ongoing regional planning activities.
- SCAG shall offer a regional repository of GIS data for use by local agencies in emergency planning, and response, in a standardized format.
- SCAG should enter into mutual aid agreements with other MPOs to provide this data, in coordination with the California OES in the event that an event disrupts SCAG's ability to function.

### **Significance after Mitigation**

Due to the geographic span and complexity of the SCAG region, this impact would remain **significant**.

**Impact 3.13-3: The RTP could result in exposing people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.**

The proposed project area in the SCAG region contains both wildlands and urbanized areas that have the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires. Wildland fires have increased as more development has occurred in wildfire prone areas. These wildland/urban interface (WUI) areas, the area where houses meet or intermingle with undeveloped wildland vegetation, expose people and structures to loss, injury, and/or death.<sup>15</sup> The 2008 RTP includes the addition of 5.14 million people to the region by 2035. It would include land use strategies that would focus development in existing centers and discourage dispersed patterns of development that would put people and houses at risk of fire threat. However, due to the amount of buildable land and the meteorology of the region, it is anticipated that homes would continue to be built in areas where wild fire threats exist. **Table 3.13-1** shows existing and future number of homes exposed to fire hazard. The RTP would allow improved access to areas that currently have more limited access, thereby potentially increasing homes in more remote areas exposed to fire hazard. However, because the RTP would encourage a more compact landform fewer homes would be built in areas exposed to fire hazard. Because of the increase in property and people on the urban fringe this impacts would be considered **significant**.

***Mitigation Measures***

- MM-SEP.11:** SCAG shall discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.
- MM-SEP.12:** SCAG shall maintain Buffer Zones or natural areas for adequate protection of lives and properties against natural and man-made hazards.
- MM-SEP.13:** SCAG shall discourage development on potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.
- MM-SEP.14:** SCAG shall minimize public expenditure for infrastructure and facilities to support urban type land uses in areas where public health and safety could not be guaranteed.
- MM-SEP.15:** SCAG shall promote Fire-wise Land Management: by encouraging 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.

<sup>15</sup> U.S. Fire Administration: *Wildland Fires: A Historical Perspective*. (December 2001). Available at: <http://www.usfa.dhs.gov/downloads/pdf/tfrs/v1i3-508.pdf>

**MM-SEP.16:** SCAG shall promote Fire Management Planning that help reduce fire threats in the region as part of the Compass Blueprint process and other ongoing regional planning efforts.

**Significance after Mitigation**

The mitigation measures would assure that the number of people or structures exposed to fire threat would be minimized. The impact after mitigation would be **less than significant**.

---

**Cumulative Impact 3.13-4: Urbanization in the SCAG region will increase substantially by 2035. The 2008 RTP, by increasing mobility and including land-use-transportation measures, influences the pattern of this urbanization. The 2008 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 encroach on areas that are susceptible to wild fires. Today, approximately 809,000 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. With the 2008 RTP approximately 1,064,496 households would be in areas classified as high, very high or extreme fire threat. **Table 3.13-1** depicts the wild fire threat to households for the base year (2008) and the Plan. **Map 3.13-2** depicts the wild fire threat in the SCAG region.

**TABLE 3.13-2:  
HOUSEHOLDS EXPOSED TO WILD FIRE THREAT**

	Little or No Threat	Moderate	High	Very High	Extreme
Existing	437,211	4,302,508	300,673	350,968	157,737
2035 Plan	744,148	5,900,174	381,862	477,768	204,866
2035 No Project Alternative	875,030	6,859,957	817,449	911,744	494,023

**SOURCE:** Southern California Association of Governments, 2007

The 2008 RTP represents an increase of approximately 255,000 additional households exposed to high to extreme wildfire threat compared to today, but a potential decrease of 1.16 million households compared to the No project Alternative. Nonetheless, both the Plan and the No Project Alternative would have a cumulatively considerable effect. Mitigation measures for the above impact would also be applied to this impact in addition to the following measures.

**Mitigation Measures**

**MM-SEP.17:** SCAG shall encourage local jurisdictions to strengthen and fully enforce fire codes and regulations.

- MM-SEP.18:** SCAG shall encourage the use of fire-resistant materials when constructing projects in areas with high fire threat.
- MM-SEP.19:** 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-SEP.20:** SCAG shall encourage reduction of fire threats in the region as part of the Compass Blueprint process and as part of other on-going regional planning efforts
- MM-SEP.21:** Project implementation agencies shall encourage the use of fire-resistant vegetation native to Southern California and/or to the local microclimate (e.g., vegetation that has high moisture content, low growth habits, ignition-resistant foliage, or evergreen growth) and discourage the use of fire-promoting species especially non-native, invasive species (e.g., pampas grass, fennel, mustard, or the giant reed) in the immediate vicinity of development in areas with high fire threat.
- MM-SEP.22:** Project implementation agencies shall encourage natural re-vegetation or seeding with local, native species after a fire and discourage re-seeding of non-native, invasive species to promote healthy, natural ecosystem re-growth. Native vegetation is more likely to have deep root systems that prevent slope failure and erosion of burned areas than shallow-rooted non-natives.

#### **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.

---

### **Comparison with the No Project**

The 2035 regional total population, households and employment is expected to be the same for the No Project Alternative and the proposed 2008 Plan. The growth distribution would differ from the expected distribution supported by implementation of the 2008 RTP. The No Project Alternative does not include land-use-transportation measures and includes fewer transportation projects. As a result, the Plan and the No Project Alternative provide differing mobility, and different employment and housing options, resulting in different distributions of growth in 2035.

#### **Direct Impacts**

The 2008 RTP includes expenditures of \$10 billion for safety related projects and services, that would not be available under the No Project. This is in addition to safety standards considered as part of every project design. As a result, implementation of the Plan is anticipated to minimize the

threat and impact to lives, property, the transportation network and the regional economy, as compared to the No Project alternative.

*The No Project impacts would be greater than the 2008 RTP for impacts for Impact 3.13-1, 3.13-2, and 3.13-3.*

### **Cumulative Impacts**

The 2008 RTP includes land use strategies that emphasize compact development and discourage the consumption of land on the urban fringe, where wildfire threat is the greatest. In total, the No Project would result in approximately 655,000 acres consumed compared to 200,000 under the Plan. It is anticipated that the spread out land use patterns of the No Project Alternative would expose more structures to wild fire threat.

*The No Project Alternative's cumulative impacts security and emergency preparedness would be greater than the 2008 RTP.*

## **References – Security and Emergency Preparedness**

Federal Emergency Management Agency's Emergency Management Institute website. Last updated November 29, 2007. *National Incident Management System (NIMS), An Introduction*. Retrieved November 2007 from <http://www.training.fema.gov/emiweb/is/is700.asp>.

Federal Emergency Management Agency's Emergency Management Institute website. Last updated November 29, 2007. *Introduction to Incident Command System*. Retrieved November 2007 from <http://www.training.fema.gov/EMIWEB/is/is100.asp>.

Federal Emergency Management Agency's National Incident Management System website. March 29, 2006. [http://www.fema.gov/pdf/nims/NIMS\\_basic\\_introduction\\_and\\_overview.pdf](http://www.fema.gov/pdf/nims/NIMS_basic_introduction_and_overview.pdf).

Governor's Office of Emergency Services website. 2006. *Standardized Emergency Management System (SEMS) Guidelines*. Retrieved November 2007 from <http://www.oes.ca.gov/Operational/OESHome.nsf/LevelTwoWithNav?OpenForm&Key=Laws+And+Regulation>.

Governor's Office of Emergency Services website. 2007. Retrieved November 2007 from <http://www.oes.ca.gov/Operational/OESHome.nsf/LevelTwoWithNav?OpenForm&Key=Laws+And+Regulation>.

Governor's Office of Emergency Services website. November 21, 1997. *Emergency Managers Mutual Aid Plan*. Retrieved November 2007 from

[http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/Emergency%20Managers%20Mutual%20Aid%20Plan/\\$file/Emma.pdf](http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/Emergency%20Managers%20Mutual%20Aid%20Plan/$file/Emma.pdf).

Governor's Office of Emergency Services. October 2007. *State of California Multi-Hazard Mitigation Plan*. Retrieved November 2007 from [http://hazardmitigation.oes.ca.gov/docs/SHMP\\_Final\\_2007.pdf](http://hazardmitigation.oes.ca.gov/docs/SHMP_Final_2007.pdf)

San Diego Association of Governments. July 21, 2006. *2007 Regional Transportation Plan White Paper: Public Safety and Homeland Security*. Retrieved November 2007 from [http://www.sandag.org/2007\\_rtp/safety.pdf](http://www.sandag.org/2007_rtp/safety.pdf).

Transportation Research Board. 2006. *National Cooperative Highway Research Program Report 525 Volume 9: Guidelines for Transportation Emergency Training Exercises*. Retrieved November 2007 from [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_525v9.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_525v9.pdf).

Transportation Research Board. 2006. *National Cooperative Highway Research Project 525 Volume 3: Incorporating Security into the Transportation Planning Process*. Retrieved November 2007 from [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_525v3.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_525v3.pdf).

United States Department of Homeland Security. September 25, 2006. *Fiscal Year 2006 Infrastructure Protection Program*.

United States Department of Transportation, Federal Highway Administration. November/December 2004. *Regional Collaboration to Improve Safety, Reliability, and Security*. Retrieved November 2007 from <http://www.tfhr.gov/pubrds/04nov/02.htm>.