4.5 HAZARDS AND HAZARDOUS MATERIALS

This section of the EIR addresses the potential for impacts related to the presence and use of hazardous materials within the Santa Ana Transit Zoning Code (SD 84A and SD 84B) area. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, or any material that a business or local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons, or harmful to the environment if released. Data used to prepare this section were taken from various sources, including the Environmental Data Resources (EDR) Report prepared for this project.

One comment letter including comments related to hazardous materials was received during the IS/NOP scoping period. The letter, dated August 17, 2006, was from the California Department of Toxic Substances. This comment letter is included in Appendix A, and their respective concerns and issues are addressed within this section.

4.5.1 Environmental Setting

Definitions

This EIR uses the definition given in Sections 25501 (o) of the *California Health and Safety Code*, which defines a hazardous material as:

> Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous Materials" include, but are not limited to, hazardous substances, hazardous wastes, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

A "hazardous waste," for the purpose of this analysis, is any hazardous material that is abandoned, discarded, or recycled, as defined by Section 25117 of the *California Health and Safety Code*. In addition, hazardous wastes occasionally may be generated by actions that change the composition of previously nonhazardous materials. The criteria that characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

Hazard versus Risk

Workers and general public health are potentially at risk whenever hazardous materials have been used or where there could be an exposure to such materials as the result of the presence of unidentified fill materials or historic uses of a site. Ecological communities, such as avian and terrestrial habitats and the aquatic environment may also be at risk, depending on the type of populations and locations relative to potential exposure sources. Inherent in the setting and analyses presented in this section are the concepts of the "hazard" of these materials and the "risk" they pose to human health and the ecological environment.

Exposure to some chemical substances may harm internal organs or systems in the human body, ranging from temporary effects to permanent disability, or death. Aquatic, terrestrial, or avian species may also be similarly adversely affected. Hazardous materials that result in adverse effects are generally considered "toxic." Other chemical materials, however, may be corrosive, or react with other substances to form other hazardous materials, but they are not considered toxic because organs or systems are not affected. Because toxic materials can result in adverse health effects, they are considered hazardous materials, but not all hazardous materials are necessarily "toxic." For purposes of the information and analyses presented in this section, the terms hazardous substances or hazardous materials are used interchangeably and include materials that are considered toxic.

A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to human health and the ecological environment is determined by the probability of exposure to hazardous materials and severity of harm such exposure would pose. That is to say, the likelihood and means of exposure, in addition to the inherent toxicity of a material, are used to determine the degree of risk to human health or the ecosystem. For example, a high probability of exposure to a low toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to a very high toxicity chemical might. Various regulatory agencies, such as the Environmental Protection Agency (EPA), State Water Resources Control Board (SWRCB), the California Department of Toxic Substances Control (DTSC), and State and federal Occupational Safety and Health Administrations (OSHA) are responsible for developing and/or enforcing risk-based standards to protect the public and the environment.

Existing On-Site Conditions

The EDR Report prepared for the proposed project (included in Appendix E) provides a list of all existing hazardous materials sites located within the Transit Zoning Code (SD 84A and SD 84B) area. A summary of these facilities with their violation and/or cleanup status has also been provided in Appendix E. According to the EDR Report, there are 209 existing locations within the Transit Zoning Code (SD 84A and SD 84B) area that are associated with hazardous materials, and therefore, listed on government databases. Because specific details about each of these identified sites are unknown, it is possible that remediation or cleanup efforts have already taken place for at least some of these sites. However, the potential for contamination exists in multiple locations throughout the Transit Zoning Code (SD 84A and SD 84B) area. Only one of the sites listed in DTSC's comment letter is listed in the EDR Report. This site, known as Freeway Auto Wreckers located at 1041 E. 6th Street, does not have any reported violations.

Other Potential Hazards

Since the project site is already fully developed, it is possible that existing structures could contain hazardous materials such as the following:

Asbestos

Asbestos, a naturally occurring fibrous material, was used in many building materials for fireproofing and insulating properties before many of its most common construction-related uses were banned by the EPA between the early 1970s and 1991 under the authority of the *Clean Air Act* (CAA) and the *Toxic Substances Control Act* (TSCA). Loose insulation, ceiling panels, and brittle plaster are potential sources of friable (easily crumbled) asbestos. Since inhalation of airborne asbestos fibers is the primary mode of asbestos entry into the body, friable asbestos presents the greatest health threat. Nonfriable asbestos is generally bound to other materials such that it does not become airborne under normal conditions. Any activity that involves cutting, grinding, or drilling during demolition (especially demolition of older [pre-1980] structures), or relocation of underground utilities, could result in the release of friable asbestos fibers unless proper precautions are taken. Asbestos-related health problems include lung cancer and asbestosis. Many of the structures located within the project site were constructed prior to 1980 and may have been built with materials containing friable asbestos. Therefore, demolition of some of the existing structures within the project site could result in the release of friable asbestos.

Lead

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with lead-based paint. Lead may also be found in upper layers of soil as a result of vehicle emissions prior to the use of unleaded fuel. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems because it is easily absorbed into developing systems and organs. Inspection, testing, and removal (abatement) of lead-containing building materials must be performed by state-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities. Since many of the structures within the project site were constructed prior to this time, it is likely that lead-based paint was used and abatement may be required if such structures are targeted for future redevelopment under the proposed project.

Polychlorinated Biphenyls (PCB)

Polychlorinated Biphenyls (PCBs) have been widely used in transformer fluids and dielectrics. Due to health impacts, the Environmental Protection Agency (EPA) banned some uses of PCBs in 1977 and most production use in 1979. However, old transformers and other materials (e.g., capacitors and hydraulic fluids) still in use or abandoned in place may contain PCBs. Fluorescent light ballasts manufactured after 1979 should not contain PCBs and are required by law to contain a label that states that no PCBs are present within the units. If older structures (pre-1979) are targeted for future redevelopment under the proposed project, some could contain florescent light ballasts with PCBs.

Emergency Response

The Santa Ana Fire Department is responsible for hazardous materials incidents within the City, and they maintain a constantly staffed Hazardous Materials Response Team (Haz-Mat Team) at Fire Station No. 9. The Haz-Mat Team provides emergency response to any and all incidents, whether accidental or intentional, involving hazardous materials within the City. The Haz-Mat team responds with six personnel (two captains, two engineers, and two firefighters) and two pieces of apparatus. Through a contractual agreement, they also respond as a mutual-aid resource throughout Orange County.

4.5.2 Regulatory Framework

A number of federal, state, and local laws have been enacted to regulate the management of hazardous materials. Implementation of these laws and the management of hazardous materials are regulated independently of the CEQA process through programs administered by various agencies at the federal, state, and local levels.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

Federal

Primary federal agencies with responsibility for hazardous materials management include the EPA, Department of Labor's OSHA, Department of Transportation (DOT), and Nuclear Regulatory Commission (NRC). Major federal laws and issue areas include the following statutes (and regulations promulgated there under):

- Resources Conservation and Recovery Act (RCRA)—hazardous waste management
- Hazardous and Solid Waste Amendments Act (HSWA)—hazardous waste management
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—cleanup of contamination
- Superfund Amendments and Reauthorization Act (SARA)—cleanup of contamination
- Emergency Planning and Community Right-to-Know (SARA Title III)—business inventories and emergency response planning

The EPA is the primary federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to State and local environmental regulatory agencies.

In addition, with respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the federal, state, and local levels. This includes the development of a national capability to mitigate against, prepare for, respond to, and recover from a full range of emergencies.

State

Primary state agencies with jurisdiction over hazardous chemical materials management are the DTSC and the Regional Water Quality Control Board (RWQCB). Other state agencies involved in hazardous materials management are the Department of Industrial Relations (state OSHA implementation), Office of Emergency Services (OES—California Accidental Release Prevention implementation), Department of Fish and Game (DFG), Air Resources Board (ARB), Caltrans, State Office of Environmental Health Hazard Assessment (OEHHA—Proposition 65 implementation) and California Integrated Waste Management Board (CIWMB). The enforcement agencies for hazardous materials transportation regulations are the CHP and Caltrans. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Hazardous chemical and biohazardous materials management laws in California include the following statutes (and regulations promulgated there under):

- *Hazardous Materials Management Act*—business plan reporting
- *Hazardous Waste Control Act*—hazardous waste management
- *Safe Drinking Water and Toxic Enforcement Act of 1986* (Proposition 65)—releases of and exposure to carcinogenic chemicals
- *Hazardous Substances Act*—cleanup of contamination
- Hazardous Waste Management Planning and Facility Siting (*Tanner Act*)
- Hazardous Materials Storage and Emergency Response
- *California Medical Waste Management Act*—medical and biohazardous wastes

State regulations and agencies pertaining to hazardous materials management and worker safety which are applicable to the City and proposed General Plan Update are described below.

California Environmental Protection Agency

The California EPA (Cal EPA) has broad jurisdiction over hazardous materials management in the State. Within Cal EPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Department of Toxic Substances Control

RCRA of 1976 is the principal federal law that regulates the generation, management, and transportation of hazardous materials and other wastes.

The DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA, and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that the position reflects the DTSC's goals. From these laws, DTSC's major program areas develop regulations and consistent program policies and procedures. The regulations spell out what those who handle hazardous waste must do to comply with the laws. Under RCRA, DTSC has the authority to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow State and federal requirements. As such, the management of hazardous waste in the Transit Zoning Code (SD 84A and SD 84B) area would be under regulation by the DTSC to ensure compliance with State and federal requirements pertaining to hazardous waste.

California law provides the general framework for regulation of hazardous wastes by the Hazardous Waste Control Law (HWCL) passed in 1972. DTSC is the State's lead agency in implementing the HWCL. The HWCL provides for State regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage and disposal of hazardous wastes.

Tanner Act

Although there are numerous State policies dealing with hazardous waste materials, the most comprehensive is the *Tanner Act* (AB 2948) that was adopted in 1986. The *Tanner Act* governs the preparation of hazardous waste management plans and the siting of hazardous waste facilities in the State of California. The act also mandates that each county adopt a Hazardous Waste Management Plan. To be in compliance with the *Tanner Act*, local or regional hazardous waste management plans need to include provisions that define (1) the planning process for waste management, (2) the permit process for new and expanded facilities, and (3) the appeal process to the State available for certain local decision.

Hazardous Materials Management Plans

In January 1996, Cal EPA adopted regulations implementing a "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program). The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous material release response plans and inventories, risk management and prevention program, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency—the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. The CUPA that has jurisdiction in the City of Santa Ana is the Orange County CUPA.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. California's Hazardous Materials Release Response Plans

and Inventory Law, sometimes called the "Business Plan Act," aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on site, to prepare an emergency response plan, and to train employees to use the materials safely.

California Accidental Release Prevention Program (CalARP)

The CalARP program (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The CalARP program regulations became effective on January 1, 1997, and include the provisions of the Federal Accidental Release Prevention program (Title 40, CFR Part 68) with certain additions specific to the State pursuant to Article 2, Chapter 6.95, of the Health and Safety Code.

The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of a RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist in federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers.

Hazardous Materials Transportation

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping

regulations. The Office of Emergency Services (OES) also provides emergency response services involving hazardous materials incidents.

Investigation and Cleanup of Contaminated Sites

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary State agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine if a release of hazardous wastes/substances exists at a site and delineates the general extent of contamination; estimates the potential threat to public health and/or the environment from the release and provides an indicator of relative risk; determines if an expedited response action is require to reduce an existing or potential threat; and completes preliminary project scoping activities to determine data gaps and identifies possible remedial action strategies to form the basis for development of a site strategy.

State Aeronautics Act

The *State Aeronautics Act* is contained in the California Public Resources Code Section 21001, et seq. and is established for several purposes, including encouraging development of private flying and general use of air transportation, fostering and promoting safety in aeronautics, protecting residents in the vicinity of an airport from unreasonable intrusions from airport noise, and establishing regulations for allowing the conduct of aviation activities in a manner not inconsistent with the rights of others.

A key feature of this Act is the establishment of Airport Land Use Commissions (ALUCs) to promote land use compatibility around airports. The Aeronautics Act gives ALUCs two principal responsibilities: (1) ALUCs must prepare and adopt an airport land use compatibility plan based upon a long-range airport master plan that reflects projected growth for twenty years, and (2) they must review the plans, regulations, and other actions of local agencies and airport operators for consistency with that plan. As discussed below under Local Regulations, the Orange County ALUC is responsible for the John Wayne Airport (JWA.)

Local

Airport Environs Land Use Plan for John Wayne Airport

The airport land use compatibility plan adopted in December 2002 by the Orange County Airport Land Use Commission (ALUC) is called the "Airport Environs Land Use Plan for John Wayne Airport" (AELUP). The AELUP serves as a comprehensive land use plan for the orderly growth of each public airport in Orange County and the area surrounding the airport.

The proposed Transit Zoning Code (SD 84A and SD 84B) is not located within the Noise Impact Zone, Clear Zone, or Height Restriction Zone for JWA. However, as identified by the ALUC, a height restriction zone of 200 feet (above the ground level at a project site) overlays the entirety of Orange County. Thus, even for projects that lie outside of the Clear or Accident Potential Zones and 60 dB CNEL Contours, or other areas of special concern as delineated by the FAA and adopted by the ALUC, local agencies are required to submit only those matters which contemplate structures that would penetrate the imaginary surfaces as defined in Federal Aviation Regulations (FAR) Part 77.13 (Construction or alteration requiring notice), 77.25 (Civil airport imaginary surfaces), or 77.28 (Military airport imaginary surfaces), which have been designated for each individual airport for height restriction.[4] As such, any construction or alteration of more than 200 feet in height above the ground level at its site requires filing with the FAA.[5]

General Plan—Public Safety Element

The Public Safety Element of the City's General Plan serves as a long-range guide for the control and reduction of potential risks associated with hazards and hazardous materials in the City. The following goals and policies are directly applicable to hazards and hazardous materials risks associated with the Transit Zoning Code (SD 84A and SD 84B):

Goals

1. Preserve a safe and secure environment for all Santa Ana residents and workers.
2. Minimize loss of life and property due to natural and man-made catastrophes.

Objectives

1.2 Effectively manage risks associated with earthquakes, floods, fires, and hazardous materials.

2.1 Maintain an effective emergency preparedness plan and program.

Implementation Policies

- Assure acceptable levels of risk to people and property from construction and future uses of the project area.
- Consider maintenance of emergency preparedness programs as a high municipal investment priority.

General Plan–Airport Environs Element

Section 21675 of the California Public Utilities Code requires all counties and their Airport Land Use Commissions to formulate a comprehensive land use plan for the surrounding areas. The City's Airport Environs Element (adopted December 18, 2008) outlines necessary steps and procedures specific to development within the City of Santa Ana that need to be followed when proposing a structure that would extend upwards in excess of a 100:1 slope of an imaginary surface extending outward 20,000 feet

[4] AELUP, page 14.
[5] FAR Section 77.13 (a)(1).

from the nearest runway from John Wayne Airport. This element was developed as part of a resolution with ALUC to promote consistency of the City's General Plan with the AELUP. With its adoption the City of Santa became a compliant local agency exempting it from further review by ALUC for general plan amendments or zone changes that are outside of the AELUP planning area.

Santa Ana Municipal Code

Article 1 of Chapter 18 (Health and Sanitation) identifies the regulatory responsibility associated with hazardous waste incidents in the City to the Santa Ana Fire Department.

Consistency Analysis

Future development projects in the Transit Zoning Code (SD 84A and SD 84B) area would not result in land uses that would create a significant hazard to the public or the environment. Compliance with applicable federal, state, and local laws and regulations would ensure that risks associated with hazards and hazardous materials would be minimized to acceptable levels for future development. In addition, as discussed below under Impacts and Mitigation Measures, mitigation measure MM4.5-6 would require the City to update their Emergency Preparedness Plan to address changes in the emergency response for accidental release of hazardous materials that may be used, stored, and/or transported at any new facility. As such, future projects would not conflict with the applicable goals and policies of the Public Safety Element of the City's General Plan. Due to the fact that the City of Santa Ana is a compliant local agency and that the project area is outside of the AELUP planning area, no further review by ALUC is required for the proposed general plan amendment and zone change. Any individual projects constructed pursuant to the Transit Zoning Code (SD 84A and SD 84B) that exceed 200 feet in height would be required to have additional ALUC review.

4.5.3 Project Impacts and Mitigation

Analytic Method

The analysis in this section focuses on the generation, storage, use, disposal, transport, or management of hazardous or potentially hazardous materials in the proposed Transit Zoning Code (SD 84A and SD 84B) area and addresses the environmental conditions associated with past and present operations conducted within the plan area. The environmental review of the Transit Zoning Code (SD 84A and SD 84B) area was prepared using the regulatory database listings from the EDR Report. The listed hazardous materials sites were analyzed to determine their potential to adversely affect new development within the Transit Zoning Code (SD 84A and SD 84B) area. This section also analyzes the potential risks associated with increased use, handling, transport, and/or disposal of hazardous materials that could occur under future projects carried out under the proposed Transit Zoning Code (SD 84A and SD 84B) .

Construction impacts would generally result from demolition of existing (usually older) structures, as well as from disturbance of potentially contaminated soils. Operational impacts would generally be associated with the types of uses proposed and the types of materials those uses would include. In determining the level of significance, the analysis assumes that construction and operation of the proposed project would

comply with relevant federal and State laws and regulations, as well as the City of Santa Ana Municipal Code, General Plan and airport land use compatibility plan.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2009 CEQA Guidelines. For purposes of this EIR, implementation of the Transit Zoning Code (SD 84A and SD 84B) may have a significant adverse impact on hazards and hazardous materials if it would result in any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?
- For a project located within an airport land use plan or, where such a plan has not been developed, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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?

Effects Found to Have No Impact

Threshold	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

A private airstrip/heliport is not known to be located within the Transit Zoning Code (SD 84A and SD 84B) area, nor is the Transit Zoning Code (SD 84A and SD 84B) area located in close proximity to a private airstrip/heliport. As a result, no related safety hazards for people residing or working in the Transit Zoning Code (SD 84A and SD 84B) area would occur. Refer to Impact 4.5-5 for a discussion of potential heliports within the Transit Zoning Code (SD 84A and SD 84B) area. Consequently, no further analysis is required in this EIR.

Threshold	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?

The Transit Zoning Code (SD 84A and SD 84B) area is located in a dense urban environment and is surrounded by existing development. There are no wildland areas, nor wildland interface areas located in the vicinity. Consequently, no wildland fires would affect, or be affected by, implementation of the proposed Transit Zoning Code (SD 84A and SD 84B) Therefore, no further analysis of wildland fires is required in this EIR.

Effects Found to Be Less Than Significant

Threshold	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact 4.5-1 **Long-term cumulative development occurring pursuant to the Transit Zoning Code could involve the transportation, use, storage, and/or disposal of hazardous materials, such as diesel exhaust; however, implementation of existing regulations would reduce this impact to a *less-than-significant* level.**

Presently, the Transit Zoning Code (SD 84A and SD 84B) area is characterized by a wide variety of uses such as civic, commercial, industrial and residential. Implementation of the proposed project would divide the project area into nine distinct zones. While the mix of residential and retail uses that could be developed under the proposed zoning is not expected to introduce any unusual hazardous materials to the area, some hazardous materials would be used in varying amounts during construction and operation of future development. These would consist mostly of typical household-type cleaning products as well as maintenance products (e.g., paints, solvents, cleaning products, diesel). Additionally, grounds and landscape maintenance within the development area could also use a wide variety of commercial products formulated with hazardous materials, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, and pesticides/herbicides. Specific uses allowed within the zones primarily related to auto or motor vehicle services, industrial uses and laboratory testing must ensure that the use, storage, transport and/or disposal of potentially hazardous materials follows all other regulatory guidelines. One of the primary objectives of the Transit Zoning Code (SD 84A and SD 84B), however, is the elimination or reduction of incompatible uses that expose sensitive receptors to hazardous materials.

Exposure of persons to hazardous materials could occur in the following manners: improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. The types and amounts of hazardous materials would vary according to the nature of the activity. In some cases, it is the type of material that is potentially hazardous; in others, it is the amount of hazardous material that could present a hazard.

Existing hazardous materials regulations were established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. The Santa Ana Fire Department has the authority to inspect on-site uses and enforce state and federal laws governing the storage, use, transport, and disposal of hazardous materials and wastes. Any projects built within the Transit Zoning Code (SD 84A and SD 84B) area will be required to comply with existing hazardous materials regulations, which are codified in Titles 17, 19, and 27 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.5 of the *California Health and Safety Code*. In addition, all projects will be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, and disposal of hazardous waste, including, Title 40, 42, 45, and 49 of the Code of Federal Regulations.

The potential impacts from transport, use, storage, and disposal of hazardous materials are each discussed separately, below.

Transportation of Hazardous Materials

The USDOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 40, 42, 45, and 49 of the Code of Federal Regulations, and implemented by Title 17, 19, and 27 of the CCR.

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. The precise increase in the amount of hazardous materials transported to or from the project area as a result of implementation of the Transit Zoning Code (SD 84A and SD 84B) cannot be definitively predicted for future projects since detailed descriptions of potential development projects are not yet available. The Developer proposal will construct approximately 220 new residential units, new public open space, and new commercial space. The Developer project is not anticipated to be a source of hazardous materials transportation. It is possible that future potential uses, excluding the Developer project, could result in some hazardous materials being brought to and from the Transit Zoning Code (SD 84A and SD 84B) area; however, appropriate documentation for all hazardous waste that is transported in connection with project-site activities would be provided as required for compliance with the existing hazardous materials regulations described above. Adherence to these regulations, which requires compliance with all applicable federal and State laws related to the transportation of hazardous materials, would reduce the likelihood and severity of accidents during transit, thereby ensuring that a ***less-than-significant*** impact would occur.

Hazardous Materials Use and Storage

As described in Section 4.5.3 (Regulatory Framework), businesses are required to comply with health, safety, and environmental protection laws and regulations. To accomplish this, and to otherwise provide a safe and healthy environment, businesses that use hazardous materials must implement health and safety policies and procedures. In addition, future projects within the Transit Zoning Code (SD 84A and SD 84B) area will be required to conform with environmental regulations related to new construction and hazardous materials storage, use, and transport.

For those employees who would work with hazardous materials (to the extent that there are any), the amount of hazardous materials that are handled at any one time are generally small given the type of land uses allowed within the Transit Zoning Code (SD 84A and SD 84B) area (office, residential, auto repair, medical office, etc.), thus reducing the potential consequences of an accident during handling. Further, proposed future projects would be required to comply with federal and State laws to eliminate or reduce the consequence of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment and safety equipment, which is routinely available in all areas where hazardous materials are used. Therefore, the risk of upset from hazardous materials handling would be ***less than significant***.

Hazardous materials are required to be stored in specific areas designed to prevent accidental release to the environment. California Building Code (CBC) requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal and State laws related to the storage of hazardous materials, as required by existing hazardous materials regulations, would be implemented to maximize containment (through safe handling and storage practices described above) and to provide for prompt and effective cleanup if an accidental release occurs, thereby ensuring that a less-than-significant impact would occur. In general, enforced compliance with existing hazardous materials regulations would reduce the risk from the use and storage of hazardous materials to a ***less-than-significant*** level.

Disposal of Hazardous Waste

Operations at future projects within the Transit Zoning Code (SD 84A and SD 84B) area are not anticipated to require the handling of any hazardous or other materials that would result in production of large amounts of hazardous waste. Federal, state, and local regulations govern the disposal of wastes identified as hazardous, which could be produced at future development sites. Asbestos, lead, or other hazardous material encountered during demolition or construction activities would be disposed of in compliance with all applicable regulations for the handling of such waste. Therefore, there would be a ***less-than-significant*** impact from the proposed Transit Zoning Code (SD 84A and SD 84B) with regard to disposal of hazardous waste.

The enforcement of existing hazardous materials regulations would ensure that this impact is less than significant by requiring compliance with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and disposal through the implementation of established safety practices, procedures, and reporting requirements.

Existing hazardous materials regulations must be implemented by employers/businesses, as appropriate, and are monitored by State (e.g., OSHA in the workplace or DTSC for hazardous waste) and local jurisdictions (e.g., the SAFD). Adherence to existing hazardous materials regulations would ensure compliance with existing safety standards related to hazardous materials, and the safety procedures mandated by applicable federal, state, and local laws and regulations (RCRA, California Hazardous Waste Control Law, and principles prescribed by the California Department of Health Services, Centers for Disease Control and Prevention, and National Institutes of Health) would ensure that risks resulting from the routine use, storage, transport or disposal of hazardous materials, or hazardous wastes

associated with construction and implementation of future development projects within in the Transit Zoning Code (SD 84A and SD 84B) area, are ***less than significant***.

Threshold	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact 4.5-2 **Construction activities associated with implementation of the proposed Transit Zoning Code (SD 84A and SD 84B) could result in the release of hazardous materials to the environment through reasonably foreseeable upset and accident conditions. Compliance with existing regulations and implementation of mitigation measures MM4.5-1 and MM4.5-2 would ensure that this impact would be reduced to a *less-than-significant* level.**

The future development projects proposed under the Transit Zoning Code (SD 84A and SD 84B) could include the use, storage, transport and disposal of hazardous materials during construction as discussed above under Impact 4.5-1. Some chemicals can pose physical hazards (e.g., chemical burns) or health hazards (e.g., poisoning), including potential acute or chronic illnesses. The properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the quantities of these materials that would be stored and used on a specific project site.

The project-related effects of hazardous materials handling and storage would generally be limited to the immediate areas where materials would be located, because this is where exposure would be most likely. Exposure at more distant locations would require some mechanism, like wind, to transport the material to the location. Best management practices (BMPs) during construction activities and adherence to applicable regulations regarding hazardous materials management (i.e., laws required to ensure hazardous materials are properly handled, used, stored, and disposed of) would reduce impacts, associated with future development projects, to individuals located outside of the Transit Zoning Code (SD 84A and SD 84B) area to less-than-significant levels. This reduction of potential impacts would be ensured through existing hazardous materials regulations. For this reason, the individuals most at risk would be residents, employees, or others in the immediate vicinity of the hazardous materials that may be used at future project sites within the Transit Zoning Code (SD 84A and SD 84B) area. The routes through which these individuals could be exposed include inhalation, ingestion, and other contact.

Existing Contaminated Sites

Another potential hazard to construction workers and the public could involve construction activities on existing sites that may potentially be contaminated. Existing sites that may potentially contain hazardous materials in the Transit Zoning Code (SD 84A and SD 84B) area include the 209 sites that are identified in Appendix E, which includes a range of sites with a variety of potential sources of contamination, including empty containers, waste oil tanks, other forms of chemical waste, and gas stations. However, any new development occurring on these documented hazardous materials sites would have to be preceded by remediation and cleanup under the supervision of the DTSC before construction activities could begin, if such actions have not already occurred. In addition, the demolition of existing structures

built prior to 1980, for the proposed development as well as future construction projects, may contain asbestos, lead, or PCBs.

In order to address the potential for encountering contamination within the Transit Zoning Code (SD 84A and SD 84B), mitigation measures MM4.5-1, MM4.5-2, MM4.5-3 would minimize the potential risk of contamination by implementing investigation and remediation efforts at future development sites. As such, the potential impacts associated with unknown contamination would be reduced to a ***less-than-significant*** level.

MM4.5-1 *When sites that are listed in the EDR Report initiate project development, the project applicant shall prepare a Phase I ESA for the proposed site. The Phase I ESA shall be prepared in accordance with ASTM E-1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (November 1, 2006). The purpose of a Phase I ESA is to identify environmental conditions at a proposed project site that may suggest environmental contamination. The Phase I ESA report shall be prepared by a CA EPA Registered Environmental Assessor or similarly qualified individual prior to initiating any construction activities at the site.*

If recommended in the Phase I ESA, the project sponsor shall undertake (or require the responsible party to undertake) a Phase II ESA soil sampling plan; or if any environmental contamination is identified by the Phase I ESA, the project sponsor shall implement (or require the responsible party to implement) the recommendations of the report to further investigate and to remove any soil contamination.

MM4.5-2 *In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction in the Transit Zoning Code (SD 84A and SD 84B) area, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., Santa Ana Fire Department). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.*

MM4.5-3 *Prior to the demolition of structures that were constructed before 1980, a thorough investigation shall be completed to determine if asbestos, lead, or PCBs exist on the site. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards.*

As described in the Section 4.5.3 (Regulatory Framework), businesses are required to comply with health and safety and environmental protection laws and regulations. The plan must include a Material Safety Data Sheet (MSDS) for each hazardous material used or stored on site. To accomplish this, and to otherwise provide a safe and healthy environment, businesses that use hazardous materials must implement health and safety policies and procedures. In addition, future projects within the Transit

Zoning Code (SD 84A and SD 84B) area will be required to conform with environmental regulations related to new construction and hazardous materials storage, use, and transport. As discussed under Impact 4.5-1, there would be a less-than-significant impact to the public or environment through the routine transport, use, storage, or disposal of hazardous materials associated with future development projects in the Transit Zoning Code (SD 84A and SD 84B) area.

Existing hazardous materials regulations would minimize the potential for exposure to adverse health or safety effects. Therefore, projects resulting from the proposed Transit Zoning Code (SD 84A and SD 84B) would not involve the use of materials in a manner that poses any substantial hazards to people, or to animal or plant populations. The proposed project would result in a ***less-than-significant*** environmental impact related to the upset and accidental release of hazardous materials into the environment.

Threshold	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact 4.5-3 **Construction activities associated with the implementation of the Transit Zoning Code could result in the handling of hazardous materials, substances, or waste within one-quarter mile of an existing school. Compliance with existing regulations would ensure this impact would be *less than significant*.**

There are two Santa Ana Unified School District facilities located within the proposed Transit Zoning Code (SD 84A and SD 84B) area. These include Garfield Elementary School and the Phoenix House. There are an additional six private schools within the Transit Zoning Code (SD 84A and SD 84B) area, as well as eight Santa Ana Unified School District facilities within one-quarter mile of the proposed Transit Zoning Code (SD 84A and SD 84B) area. As stated below, future proposed projects could handle and/or store potentially hazardous materials within the Transit Zoning Code (SD 84A and SD 84B) area; however, the types of hazardous materials anticipated are limited to regulated types and quantities. Construction activities would necessarily involve the utilization of diesel-powered trucks and equipment, which result in diesel emissions that have been determined to be health hazards. Compliance with all applicable local, State, and federal laws, and regulations, as described in Section 4.5.3 (Regulatory Framework), regulate, control, or respond to hazardous waste, transport, disposal, or clean-up in order to ensure that hazardous materials do not pose a significant risk to nearby receptors. If ground contamination is found within close proximity to one or more of the above locations before or during construction, further mitigation measures MM4.5-1 and MM4.5-2 must be followed to ensure the health and safety of all students. For these reasons, the proposed Transit Zoning Code (SD 84A and SD 84B) would result in a ***less-than-significant*** environmental impact related to the emission or handling of hazardous materials within the vicinity of schools.

Threshold	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment

Impact 4.5-4 **The Transit Zoning Code (SD 84A and SD 84B) includes sites which are included on a list of hazardous materials sites and as a result, could create a significant hazard to the public or environment. Implementation of mitigation measures MM4.5-2 and MM4.5-3 would ensure this impact would be reduced to a *less-than-significant* level.**

As shown in the EDR Report (Appendix E), the Transit Zoning Code (SD 84A and SD 84B) area contains sites that have been identified on various regulatory databases as being contaminated from the release of hazardous substances in the soil, including underground storage tanks and small-quantity generators of hazardous waste. Implementation of the proposed project could lead to development of these sites. As discussed under Impact 4.5-3, development of these sites would be required to undergo remediation and cleanup before construction activities can begin. If contamination at any specific project site were to exceed regulatory action levels, the proponent would be required to undertake remediation procedures prior to grading and development under the supervision of appropriate regulatory oversight agencies (e.g., Santa Ana Fire Department, Orange County Environmental Health Division, Department of Toxic Substances Control, or Regional Water Quality Control Board), depending on the nature of any identified contamination. Thus, implementation of mitigation measures MM4.5-1 and MM4.5-2, above, would ensure that contaminated sites undergo remediation activities prior to development activities. Consequently, if future development under the Transit Zoning Code (SD 84A and SD 84B) is located on a site that is included on a list of hazardous materials sites, remediation would ensure that this impact would be reduced to a ***less-than-significant*** level.

Threshold	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Impact 4.5-5 **Construction activities associated with the implementation of the Transit Zoning Code could result in a safety hazard for people residing or working in the project area. Implementation of mitigation measure MM4.5-4 would reduce this impact to a *less-than-significant* level.**

JWA is the nearest public airport located approximately 6 miles south of the Transit Zoning Code (SD 84A and SD 84B) area. As discussed previously under Regulatory Framework, the Transit Zoning Code (SD 84A and SD 84B) area is located within a height restriction of 200 feet that overlays the entirety of Orange County. Because new buildings constructed within the Government Center (GCD) District and Transit Village (TV) Zone could exceed 200 feet in height, any such buildings (over 200 feet in height) would subsequently fall within the Airport Planning Area for JWA. Therefore, any construction or alteration of more than 200 feet in height above the ground level at a project site requires filing with the FAA. Projects meeting this threshold must comply with procedures provided by Federal and State law, including filing a Notice of Proposed Construction or Alteration (FAA Form 7460-1). Specifically, filing the FAA Form 7460-1 would be required for any proposed structure that would be

greater than 200 feet in height, at which time FAA would conduct an aeronautical study to determine if the structure would have an adverse effect on the airport or on aeronautical operations.[6] Subsequent to the findings of the FAA aeronautical study, the project would be subject to ALUC consistency review.

As mentioned previously, development in the Transit Village (TV) Zone and the Government Center (GCD) District under the proposed Transit Zoning Code (SD 84A and SD 84B) could involve structures that exceed 200 feet in height. Development in the other seven zones contained in the Transit Zoning Code (SD 84A and SD 84B) would be more restricted in height limitations and would not be expected to exceed ten stories (only allowed in limited locations within the Downtown (DT) Zone) in height. With the exception of the Developer project, details of specific development projects the Transit Zoning Code are presently unknown, however future developments may be proposed that are greater than 200 feet in height. As proposed, the buildings within the Developer project would reach no more than a maximum height of 60 feet.

Additionally, it is possible that during the temporary construction period of projects in the Transit Zoning Code (SD 84A and SD 84B) area, cranes could be used for a limited time to affix the floors and other appurtenances. The FAA recognizes that construction of structures normally requires the use of temporary construction equipment that is of a greater height than the proposed structure.

Therefore, because future development could exceed 200 feet in height in the Government Center (GCD) District and the Transit Village (TV) Zone, this would be considered a potentially significant impact. Thus, implementation of mitigation measure MM4.5-4 would be required for future development that could exceed 200 feet in height, which would require FAA approval to be obtained to ensure that construction and operation of future projects do not present a hazard to air navigation.

MM4.5-4 *For development of structures that exceed 200 feet in height above ground level at a development site, applicants shall file a Notice of Proposed Construction or Alteration with the FAA (FAA Form 7460-1). Following the FAA's nautical evaluation of the project, projects must comply with conditions of approval imposed or recommended by the FAA. Subsequent to the FAA findings, the project shall be reviewed by the ALUC for consistency analysis.*

In addition, due to the fact that buildings within the Transit Village (TV) Zone may exceed 200 feet in height, the City would notify the ALUC and the FAA per Public Utilities Code (PUC) Section 21676(b) and the AELUP. Coupled with implementation of mitigation measure MM4.5-4, future development in the Transit Zoning Code (SD 84A and SD 84B) area, which is located within 2 miles of JWA, would not result in a safety hazard for people residing or working in the project area. This impact would be reduced to a ***less-than-significant*** level.

Heliports

Presently, heliports are not proposed within the Transit Zoning Code (SD 84A and SD 84B) area. Due to the potential for an increase in residential uses within the Transit Zoning Code (SD 84A and SD 84B) area, it is assumed that heliports would be discouraged for future development because of noise and

[6] AELUP, page 14.

other safety issues. However, should heliports be proposed in the future within the Transit Zoning Code (SD 84A and SD 84B) area, such developments would be required to be submitted through the City to the ALUC for review and action (pursuant to Public Utilities Code Section 2166.5). While not anticipated, any future heliport projects must comply with the state permit procedure provided by law and with conditions of approval imposed or recommended by the FAA, ALUC for Orange County, and by Caltrans' Division of Aeronautics. As such, this impact would be ***less than significant***.

Threshold	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact 4.5-6 **The Transit Zoning Code could impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan resulting in a significant impact. Implementation of mitigation measures MM4.5-5 through MM4.5-8 would ensure this potentially significant impact would be reduced to a *less-than-significant* level.**

Construction of future development within the Transit Zoning Code (SD 84A and SD 84B) area could result in short-term temporary impacts on street traffic adjacent to the proposed site during construction activities due to roadway improvements and potential extension of construction activities into the right-of-way. This could result in a reduction in the number of lanes or temporary closure of certain street segments. Any such impacts would be limited to the construction period and would affect only adjacent streets or intersection. However, mitigation measures MM4.5-5 and MM4.5-6 would be required to ensure that temporary street closures would not affect emergency access in the vicinity of future developments.

Operation of the various residential uses and businesses or facilities developed as part of the Transit Zoning Code (SD 84A and SD 84B) could increase traffic on roads or modify existing transportation routes and could interfere with the response times of emergency vehicles, which would be potentially significant in the case of a hazardous material spill. Implementation of mitigation measure MM4.5-7 would require the City to update their Emergency Preparedness Plan to address changes in the emergency response for accidental release of hazardous materials that may be used, stored, and/or transported at any new facility. Furthermore, the haulers and users of hazardous materials would be required to register with the Santa Ana Fire Department and would be regulated and monitored under the auspices of the City of Santa Ana.

MM4.5-5 *Prior to initiation of construction activities, any development within the Transit Zoning Code (SD 84A and SD 84B) Area shall have a completed traffic control plan, prepared by the project proponent that will be implemented during construction activities. This may include, but is not limited to, the maintenance of at least one unobstructed lane in both directions on surrounding roadways. At any time if only a single lane is available, the developer shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the developer shall provide appropriate signage indicating alternative routes.*

MM4.5-6 *The City Public Works Department shall consult with the Santa Ana Police Department and the Santa Ana Fire Department to disclose temporary closures and alternative travel routes in order to ensure adequate access for emergency vehicles when construction of future projects would result in temporary land or roadway closures.*

MM4.5-7 *The Santa Ana Fire Department, in consultation with other applicable City Departments (e.g., Police), shall update their Emergency Preparedness Plan prior to occupancy of the first project developed under the Renaissance Transit Zoning Code (SD 84A and SD 84B), to address the potential for the accidental release of hazardous materials that may be used, stored, and/or transported in association with operation of project implementation.*

MM4.5-8 *Project applicants shall submit evacuation plans on a project by project basis that shall be reviewed and approved by the City Police and Fire Departments.*

With implementation of mitigation measures MM4.5-5 through MM4.5-8, the proposed project would not interfere with any emergency response or emergency evacuation plans and this impact would be ***less than significant***.

4.5.4 Cumulative Impacts

A cumulative impact analysis is only provided for those thresholds that result in a less than significant, potentially significant, or significant and unavoidable impact. A cumulative impact analysis is not provided for Effects Found Not to Be Significant, which result in no project-related impacts.

The geographic context for the cumulative analysis of hazards and hazardous materials is Orange County, based on the geographic area that could be affected by hazardous materials use or accidental release into the environment. The cumulative context for the hazards analysis includes future development under the proposed project, in combination with the development projects listed in the Cumulative Projects list identified in Chapter 3 of this EIR and development of other unrelated projects in Orange County.

Cumulative development within Santa Ana and Orange County would include some industrial and commercial uses, which could involve the use of greater quantities and variety of hazardous products. Commercial, office, retail, and residential development in the area would also increase the use of household-type hazardous materials within the area. Hazardous materials use, storage, disposal, and transport could result in a foreseeable number of spills and accidents. New development in the County would be subject to hazardous materials regulations codified in Titles 8, 22, and 26 of the CCR. Furthermore, all construction and demolition activities in the County would be subject to Cal OSHA regulations concerning the release of hazardous materials. Compliance with all federal, state, and local regulations during the construction and operation of new developments in the County would ensure that there are no cumulatively considerable significant hazards to the public or the environment associated the routine transportation, use, disposal, or release of hazardous materials. Similarly, future development within the Transit Zoning Code (SD 84A and SD 84B) area would comply with applicable regulations, which would ensure that the project would not have a cumulatively considerable contribution to this effect.

Future projects in the City and County would be regulated to ensure that either new development would not occur on hazardous materials sites, and impacts would be mitigated by appropriate remediation, or that the development would result in no cumulative effects. Mitigation measures identified for the Transit Zoning Code (SD 84A and SD 84B) would ensure that appropriate site investigation and remediation would occur on sites prior to development. This would ensure that development within the Transit Zoning Code (SD 84A and SD 84B) area would not make a cumulatively considerable contribution to impacts resulting from development on hazardous materials sites, and the impact would therefore be ***less than significant***.

Construction and demolition activities associated with the Transit Zoning Code (SD 84A and SD 84B) and other projects in the county could expose schools to hazardous emissions. Various regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos and lead have been adopted for demolition activities, and would apply to all new development in the County. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal OSHA standards. Compliance with existing regulations would ensure that schools and the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction and demolition activities. Therefore, the cumulative impacts associated with the exposure of schools to hazardous emissions would be less than significant. Compliance with existing regulations would similarly ensure that future development within the Transit Zoning Code (SD 84A and SD 84B) would have a less-than-significant impact associated with the handling of hazardous materials within proximity to schools sites. Therefore, the proposed project would not make a cumulatively considerable contribution to this effect and cumulative impacts would be ***less than significant***.

The proposed project in combination with development of other projects in the County could result in an increase in traffic on roads and could interfere with the response times of emergency vehicles. A mitigation measure implemented as part of the proposed project would require the City to update their Emergency Preparedness Plan to address the potential for accidental release of hazardous materials that may be used, stored, and/or transported at any new facility. This mitigation measure would ensure that interference with emergency response plans or emergency evacuation plans would not be cumulatively considerable and therefore, ***less than significant***. Mitigation measures identified for the proposed project would ensure that the project would have a less than significant contribution to this cumulative impact.

4.5.5 References

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