Environmental Assessment

Anaheim Regional Transportation Intermodal Center

September, 2011

ENVIRONMENTAL ASSESSMENT

Anaheim Regional Transportation Intermodal Center
Anaheim, California

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Attachment 1 ARTIC Final Environmental Impact Report (Final EIR)

1.0 INTRODUCTION

1.1 PURPOSE AND NEED

The Orange County Transportation Agency (OCTA) and the City of Anaheim in cooperation with the Federal Transit Administration (FTA) propose to construct the Anaheim Regional Transportation Intermodal Center (ARTIC) in the City of Anaheim, California. Figures 1.1-1 through 1.1-5 depict the project site and surrounding area. The purpose of this Environmental Assessment (EA) is to present and analyze the environmental effects of the Proposed Action and reasonable alternatives in accordance with the National Environmental Policy Act (NEPA).

1.1.1 Defined Roles and Responsibilities

Roles and responsibilities for ARTIC were established via two cooperative agreements between the City of Anaheim and OCTA (C-9-0448 dated May 26, 2009, and C-9-0821 dated December 8, 2009, herein referred to as "Agreements"). The following summarizes the roles and responsibilities as stipulated in both Agreements:

- ARTIC is located on an approximately 19-acre site, comprised of 16 acres for the facilities, two acres of OCTA and City of Anaheim roads and right-of-way (ROW), and less than one acre of California Department of Transportation (Caltrans) ROW. Approximately 18 of the 19 total acres are owned by OCTA and the City of Anaheim. The 405 parking spaces at the existing Anaheim Metrolink/Amtrak Station are not a part of the project construction site as no improvements are anticipated but would continue to be utilized as parking for the project.

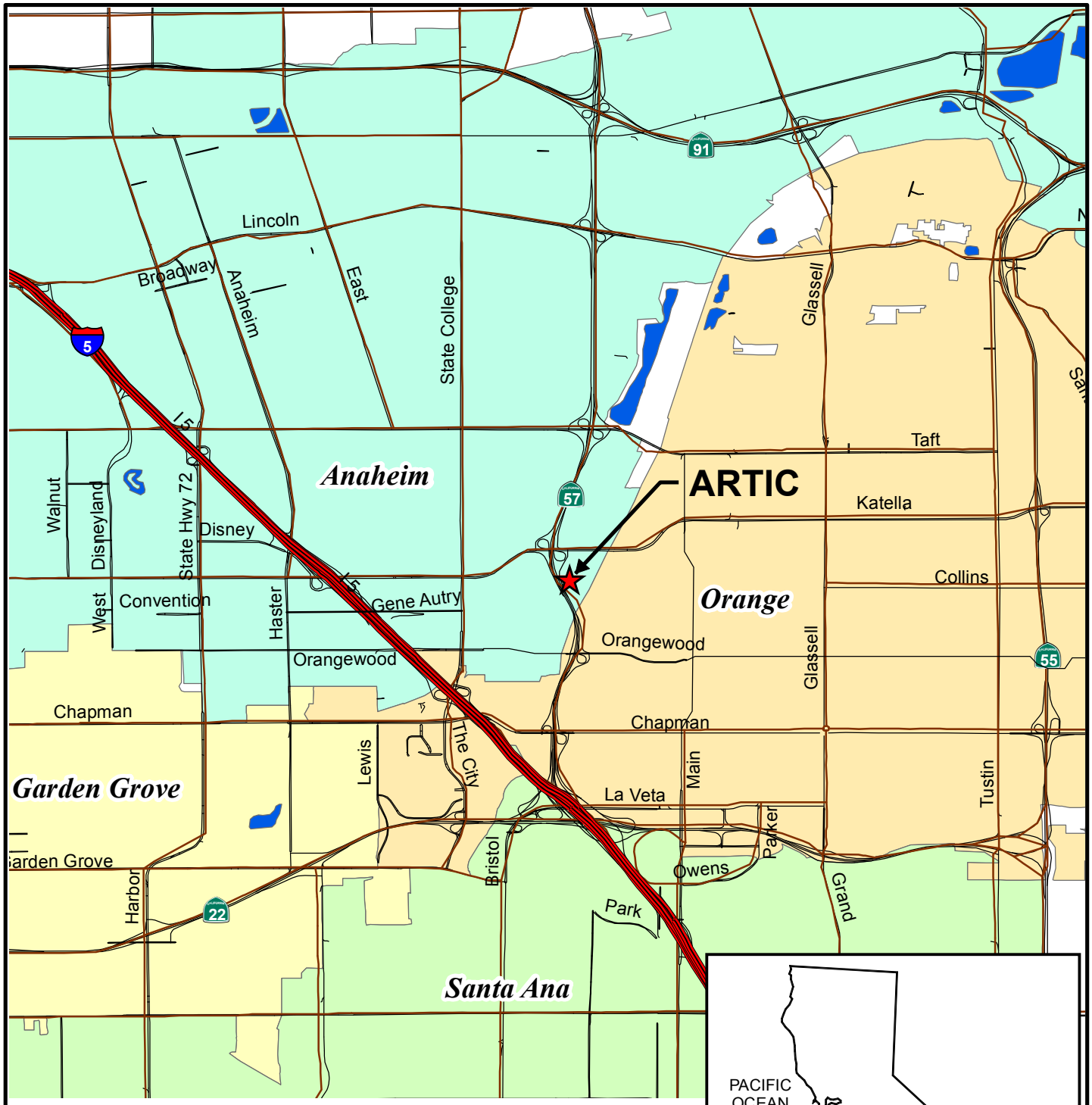
- The FTA is the Lead Agency for NEPA;

- The OCTA is the Project Sponsor and would be responsible for funding the required environmental clearance, preliminary conceptual design, and design engineering. As the Project Sponsor, OCTA would also be responsible for providing guidance to the City of Anaheim and oversight of the M1, M2 and federal funds in compliance with Measure M eligibility guidelines and FTA funding requirements; and

- The City of Anaheim would be responsible for leading the completion of the environmental studies, preliminary conceptual design, A/E final design, and design engineering, and program management oversight.

1.1.2 Project Funding

The OCTA administers the transportation funds collected under the local sales tax measure (Renewed Measure M) first approved by the County of Orange voters in 1990 and renewed by vote in 2006. Funding for ARTIC has been identified from the following sources: Renewed Measure M and Current Measure M; State Transportation Improvement Program; Federal Earmark; and FTA Formula Funds. The funding sources include $146.7 million (Renewed and Current Measure M), $29.2 million State Transportation Improvement Program (2008), $3.9 million in Federal Earmarks, $2.6 million in FTA Formula Funds, and $5 million FTA Bus Livability Initiative Program grant.



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VICINITY MAP

ENVIRONMENTAL ASSESSMENT
CITY OF ANAHEIM
ARTIC
ANAHEIM, CALIFORNIA

FIGURE
1.1-1

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ANAHEIM

OCTA

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PROJECT LIMITS

ENVIRONMENTAL ASSESSMENT
CITY OF ANAHEIM
ARTIC
ANAHEIM, CALIFORNIA

FIGURE
1.1-2

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ANAHEIM

OCTA

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VIEW OF ARTIC FACING SOUTH FROM KATELLA AVENUE

ENVIRONMENTAL ASSESSMENT
CITY OF ANAHEIM
ARTIC
ANAHEIM, CALIFORNIA

FIGURE

1.1-3

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ANAHEIM

OCTA

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VIEW FROM DOUGLASS ROAD TOWARDS THE HONDA CENTER

ENVIRONMENTAL ASSESSMENT
CITY OF ANAHEIM
ARTIC
ANAHEIM, CALIFORNIA

FIGURE
1.1-4

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ANAHEIM

OCTA

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VIEW ALONG THE RAILROAD ROW FROM THE SANTA ANA RIVER TOWARDS THE EXISTING STATION

ENVIRONMENTAL ASSESSMENT
CITY OF ANAHEIM
ARTIC
ANAHEIM, CALIFORNIA

FIGURE

1.1-5

1.1.3 Public Benefits

The City of Anaheim has identified benefits to the general public that would result from implementation of the Proposed Action, including the following:

- Stimulate the local economy;
- Support planned transit-oriented and mixed land uses for a more sustainable community; and
- Reduce vehicle miles traveled on freeways and arterial street systems, which addresses existing and proposed laws to minimize the generation of greenhouse gases (GHGs).

Economic Stimulus

ARTIC would stimulate the local economy through funding commitments of up to $187.5 million. ARTIC would be constructed using Measure, State, and Federal funds (as described in Section 1.1.2). It is expected that the local economy would be partly revitalized through direct and indirect expenditures. Project expenditures would directly support businesses in the infrastructure and construction industry (e.g., consultants, contractors, construction workers). The money spent by new and existing employees would in turn benefit the economy.

1.1.4 Avoidance and Minimization Measures

Avoidance and minimization measures are identified in this EA and have been incorporated into the Proposed Action. At this time, no adverse effects are anticipated as a result of the Proposed Action.

1.1.5 Purpose

ARTIC's purpose is to provide improved and safe pedestrian access to major sports and entertainment centers within the County of Orange and the City of Anaheim. ARTIC would enhance the County of Orange's overall transportation system by accommodating additional bus transit options, additional alternatives to road-based travel, and improved services for the transit-dependent**.** ARTIC is also intended to provide opportunities for transit-oriented development as identified within the City of Anaheim's Platinum Triangle Master Land Use Plan (MLUP).

ARTIC would facilitate connections from one transportation mode to another (rail, bus, public transit, air, taxi, private vehicle, and pedestrian) and improve links to major sports venues, entertainment centers, and businesses within the region to meet transit passenger needs. The facility would:

- Provide adequate track and platform capacity for current and future passenger demand;
- Provide convenient and safe intermodal passenger boarding areas, with well-defined and adequately sized arrival and departure areas that serve rail, pedestrian, transit buses, and other rubber-tired vehicles;
- Provide transit-oriented retail and office space that complements transit ridership (such as newsstands, beverages vending stations, drugstores, etc.);
- Improve pedestrian connections among major sports, entertainment centers, and businesses;
- Provide adequate public parking to serve transit users and employees;

- Improve queuing and circulation for vehicles providing drop-off and pickup; and
- Enhance pedestrian facilities to serve ARTIC users, keep pedestrians safely separated from road vehicles and trains, and connect to the existing pedestrian/trail network.

1.1.6 Need

ARTIC would satisfy the need to provide safe pedestrian access, improve vehicle circulation, intermodal transfers, and adequate parking for patrons. The existing Anaheim Metrolink/Amtrak Station located north of Angel Stadium and south of Stadium Towers was built in 1982 to provide Amtrak inter-city rail service. Since then, Metrolink service has been successfully launched and the station has twice been upgraded and enlarged to meet the resulting rail ridership demand. According to the Long-Range Transportation Plan for the County of Orange, population in the County of Orange will grow by 24 percent over the next 30 years (OCTA, 2006). The existing Anaheim Metrolink/Amtrak Station is undersized to handle this anticipated future passenger growth (see Table 1.1-1).

Table 1.1-1
Estimated Daily Boardings at ARTIC

Provider	Daily Boarding		
	2009-2013	2014-2020	2021-2030
Metrolink	1,600	2,300	2,900
Amtrak	575	650	800
California High-Speed Rail	0	0	32,900
OCTA/Local Bus Service	545	800	970
Anaheim Resort Transit	685	840	1.130
OCTA Go Local/ARTIC – Anaheim Canyon Station BRT	1,070	1,240	1,620
Employer Shuttles/West Anaheim Commuter Shuttles	355	400	540
Community Circulations/ARTIC – Downtown Anaheim-Fullerton Transportation Center Connector (BRT)	1,600	1,860	2,430
ARTIC Resort Connection– Circulator (a)	850	0	0
ARTIC to Resort Connection– Fixed Guideway/Anaheim Fixed Guideway (b)	0	3,500	4,300
Intercity/International Bus	600	1,205	1,500
LAWA Fly-away	550	1,000	1,000
Taxis	29	35	1,830
Total Daily Boarding	8,614	13,830	51,915

(a) Ridership on the "ARTIC Resort Connection" will transfer to "ARTIC to Resort Connection-Fixed Guideway/Anaheim Fixed Guideway" starting in 2014.
(b) The "ARTIC Resort Connection" is now known as the "Anaheim Resort Transit". The "Fixed Guideway/Anaheim Fixed Guideway" is now known as the "Anaheim Rapid Connection".
Source: Needs Assessment Update and Validation, Cordoba Corporation, August 2009

The existing Anaheim Metrolink/Amtrak Station has insufficient parking to meet future needs and poor traffic circulation infrastructure to facilitate intermodal services. The forecast of rail passenger growth will continue to exacerbate conditions. Pedestrian and vehicle access between the existing Anaheim Metrolink/Amtrak Station and major sports centers, entertainment centers, and businesses is constrained by the contractually mandated joint use of parking with Angel Stadium. Current parking is limited to 405 spaces, which will not meet future demand (OCTA, 2006). Due to the constraints of ingress and egress, major bus routes do not connect to the existing Anaheim Metrolink/Amtrak Station. Train patrons must connect by use of the Station Link buses or a walkway through a private development. The pedestrian and vehicle traffic circulation infrastructure needed to support intermodal transfers is not available at the existing Anaheim Metrolink/Amtrak Station. An efficient multi-modal transportation network is necessary to meet the future mobility needs of residents and businesses in the County of Orange.

The key factors that demonstrate the need for ARTIC are as follows:

- County of Orange is the fifth most densely populated county in the nation (see ARTIC Fact Sheet on www.articinfo.com);
- Anaheim is the 10th largest city in California (City of Anaheim, 2010);
- Anaheim attracts over 18 million tourists and visitors annually; the County of Orange attracts over 45 million tourists and visitors annually (City of Anaheim, 2010); and
- Population and employment in the area will continue to grow, increasing the demand for alternative means for transportation. Projections show that population will grow by 22 percent between 2000 and 2030. Employment will increase by 22 percent between 2007 and 2030 (Center for Demographic Research, 2009). This growth will drive demand for an increase in transit services (OCTA, 2006).

1.2 PROJECT DEVELOPMENT

In 2005, responding to the continued growth in Metrolink ridership demand, OCTA decided to increase rail service in the Los Angeles to San Diego (LOSSAN) rail corridor through the Metrolink Service Expansion Program (MSEP). In addition, as part of the Renewed Measure M Program, OCTA also initiated the Regional Gateway Program to upgrade Metrolink stations to provide gateways to regional rail.

On November 21, 2006, OCTA purchased a 13.58-acre site, which was adjacent to the Los Angeles to San Diego (LOSSAN) ROW and east of the existing Anaheim Metrolink/Amtrak Station, from Orange County Flood Control District (OCFCD). OCTA was exploring the possibility of developing ARTIC to replace the existing Anaheim Metrolink/Amtrak Station with the facilities needed to accommodate planned rail service expansions, as well as other new or expanded transportation services.

The ARTIC Project was included in the Southern California Association of Governments (SCAG) 2008 Regional Transportation Plan adopted by the SCAG's Regional Council on May 8, 2008 (RTP ID ORA120318). This RTP received a June 8, 2008 Conformity Determination by the Federal Highway Administration and Federal Transit Administration.

The ARTIC Project was listed in the SCAG 2008 Regional Transportation Improvement Program (RTIP) adopted by the SCAG Regional Council on July 17, 2008 (Project ID ORA120318).

On September 2, 2010 SCAG's Regional Council adopted the proposed 2011 Federal Transportation Improvement Program (FTIP), which included the ARTIC Project (Project ID ORA120318). With the December 14, 2010 approval by the Federal Highway Administration and the Federal Transit Administration of the 2010/2011 Federal Statewide Transportation Improvement Program, SCAG's 2011 Final FTIP was also approved.

1.2.1 CEQA Process

In accordance with California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations [CCR] §15000 et seq.), an environmental impact report (EIR) was prepared for ARTIC. The EIR process for ARTIC was initiated on February 10, 2010 with the posting of the Notice of Preparation (NOP) (sent February 4, 2010) with the State Clearinghouse. A public scoping meeting was conducted on February 24, 2010 at the Anaheim West Tower, 201 South Anaheim Boulevard in the City. The intent of this meeting was to receive input on the issues to be addressed in the Draft EIR. Written comments were received from members of the public and public agencies.

The Draft EIR for ARTIC was available for public review between July 21, 2010 and September 3, 2010 and 28 comments were received. Based on these comments, a Final EIR was prepared in accordance with CEQA as amended (Public Resources Code §21000 et seq.), and CEQA Guidelines (California Administrative Code §15000 et seq.). The Final EIR was certified by the Anaheim City Council on September 28, 2010.

1.2.2 NEPA Process

In accordance with the NEPA, FTA must determine if the Proposed Action would have significant effects on area resources. NEPA is a nationwide mandate for the protection of the environment and applies to all Federally funded projects and projects that require Federal permits or other approval actions. The purpose of NEPA is to provide public disclosure of the environmental effects associated with Federal actions. The NEPA process enables public officials to make decisions that are based on an objective understanding of environmental consequences; and take actions that protect, restore, and enhance the environment. It also provides the opportunity for public comment.

Informal scoping and other planning and environmental studies that were conducted within the City of Anaheim and on adjacent infrastructure determined the areas of interest for this NEPA process.

- Traffic;
- Air quality;
- Contaminated sites;
- Noise and vibration;
- Biology;
- Archaeological and historic sites;
- Aesthetics;
- Cumulative effects;
- Water quality/flood control/Santa Ana River; and
- Santa Ana River Trail.

This EA evaluates the potential effects of this Proposed Action and alternatives on the physical, biological, and human resources in the area. If significant adverse effects are identified in the EA, a more detailed Environmental Impact Statement will be required. If FTA decides that there are no adverse effects, it will prepare and sign a Finding of No Significant Impact.

1.3 PROJECT AUTHORIZATIONS

- FTA, NEPA approval
- United States Army Corps of Engineers (USACE), Plan Review - Levees
- Santa Ana Regional Water Quality Control Board, Stormwater Permit Compliance MS4 permit (Order No. R8-2009-0030)
- Southern California Regional Rail Authority, Rail design and operations
- Caltrans, Encroachment Permit and Fair Share Agreement
- South Coast Air Quality Management District (SCAQMD), Air quality review and Conformity Concurrence
- OCTA, Design and Operations Review
- Orange County Flood Control District (OCFCD), Design Review and General Permit for Discharge of Stormwater
- Orange County Sanitary District (OCSD), Plan Review
- City of Anaheim, Building permits, Conditional Use Permit (CUP) (CUP2010-05492), General Plan Amendment (GPA2010-00480), and MLUP Amendment (MIS2010-00437)

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

ARTIC would relocate the existing Anaheim Metrolink/Amtrak Station to accommodate growing passenger demand and increased ridership expected with Metrolink, Amtrak, and other transportation services. The new location is proposed to be located approximately one quarter (0.25) mile east along the existing OCTA railroad ROW. ARTIC would encompass an Intermodal Terminal, Bus Transit Center, Metrolink/Amtrak Concourse, Public Hall/Waiting Area, Program Space, Public Plaza/Drop-Off Area, Stadium Pavilion, Tracks/Platforms, Surface Parking/Access, Roadway Improvements, Katella Avenue Pedestrian Bridge, ARTIC Pedestrian Trail easement, and Utilities. Elements of the Proposed Action are described in the table below.

Proposed Action	
Intermodal Terminal	Envisioned to be no more than a three-level building of approximately 310,000 gross square feet that is comprised of approximately 140,000 square feet at-grade or above-grade and approximately 170,000 square feet below the building. Two levels at-grade or above-grade and one level below the building. The below building level is envisioned to include the Bus Transit Center, the Metrolink/Amtrak concourse, and program space. The at-grade and above-grade levels are envisioned to include the Public Hall/Waiting Area and Program Space.
Bus Transit Center	Envisioned to include bus islands, waiting areas, bus bays, driving lanes, and driving ramps for surface street access.
Metrolink/Amtrak Concourse	Envisioned to provide pedestrian access between the Public Hall/Waiting Area and the Bus Transit Center to the tracks/platforms and the surface parking that is located south of the railroad ROW.
Public Hall/Waiting Area	Designed to enhance the traveling public's experience and access to exterior terraces, Metrolink/Amtrak Concourse, and the Public Plaza/Drop-Off Area.
Program Space	Envisioned to be located on all three levels of the Intermodal Terminal and would include spaces for OCTA, building services, terminal operations, passenger-oriented retail/restaurants, and passenger waiting areas.
Public Plaza/Drop-Off Area	Envisioned to include an exterior public plaza/drop-off area of approximately 36,000 square feet for taxi and private automobile drop-off, with a designated walkway from the Intermodal Terminal to the surface parking.
Stadium Pavilion	Envisioned to provide a pedestrian bridge facility as large as 12,000 square feet, located over the tracks and platforms, that allows access to the stadium, surface parking, and the tracks/platforms.

Proposed Action	
Tracks/Platform	Envisioned to consist of two through-tracks and one single-ended siding track (stub-end track) with a platform as large as 86,000 square feet. The stub-end track would allow continued two-track service during construction and serve as a station track during operations. A replacement railroad bridge is envisioned to be constructed over Douglass Road to accommodate the three-track/two-platform alignment.
Surface Parking/ Access	Envisioned to have approximately 960 (includes the existing 405 spaces) surface parking spaces. The main vehicle access to the Bus Transit Center and the Public Plaza/Drop-Off Area would be via Douglass Road from Katella Avenue, which also serves as an entry and exit during events occurring at Angel Stadium. A secondary right-in/right-out access would be provided to ARTIC from Katella Avenue.
Douglass Road Between Stadium Parking Lot and the Railroad Bridge	Improvements would consist of four lanes beginning approximately 300 feet from the stadium parking booths and extending to the Railroad Bridge, which would allow a pedestrian sidewalk on one side of Douglass Road under the State Route (SR) -57 overpass.
Douglass Road from the Railroad Bridge to Katella Avenue	Envisioned to be widened to an eight-lane configuration as it approaches Katella Avenue and four lanes under the Railroad Bridge. A left-turn pocket from Douglass Road into the Bus Transit Center, and a southbound left turn pocket for the main entrance into ARTIC would be provided. Northbound lane configuration is proposed to have two left-turn lanes, one through-lane, one right-turn/through-lane and one right-turn lane for northbound traffic. Three lanes are proposed for southbound traffic.
Douglass Road – Vertical Profile	In the vicinity of the Railroad Bridge, Douglass Road is envisioned to be lowered approximately 8 feet from the existing road surface at its lowest point. Approximately 1,100 total linear feet of Douglass Road would be re-graded.
Katella Avenue Pedestrian Bridge	Envisioned to be a clear span bridge approximately 175 feet long, 20 feet wide, and 17 feet high constructed over Katella Avenue, connecting the project site and the Honda Center. This would also allow for the future expansion of Katella Avenue.
ARTIC Pedestrian Trail Easement	A trail ROW, parallel to the existing Santa Ana River Trail, is envisioned to be along the east side of ARTIC between the railroad ROW and Katella Avenue.
Utilities - Electrical	Existing overhead electrical transmission lines located along Douglass Road would be undergrounded. Electrical service by the City of Anaheim would be provided via new underground ducts leading from the current service in Katella Avenue south under Douglass Road and into the facility. Solar photovoltaic panels are envisioned to be included on the project site to reduce the use of off-site generated electricity.

Proposed Action	
Utilities - Water	The existing fire hydrants located on both sides of Douglass Road would be relocated. An existing 8-inch water line would be abandoned in lieu of a new 16-inch water line.
Utilities - Sewer	The existing 8-inch sanitary sewer line along the west side of Douglass Road that serves the existing uses west of Douglass Road would remain. A new 15-inch sanitary sewer line would be installed from ARTIC to connect into the main sanitary sewer, which would connect to the existing OCSD sewer line**.**
Utilities - Gas	The 2-inch gas line would remain but may be relocated to accommodate construction. A gas line to the ARTIC facility would be supplied from the existing 2-inch line located along Douglass Road.
Utilities - Drainage	The storm drain would be reconfigured to reflect the change in Douglass Road elevation. Stormwater from Douglass Road would drain into a pump station, which would be replaced, and the new installation would conform to the new lower street level. The City of Anaheim would prepare a Water Quality Management Plan (WQMP), which meets the requirements of the Drainage Area Management Plan (DAMP), prior to the issuance of the first grading permit. This WQMP would include Best Management Practices (BMPs) to minimize effects to water quality.
Construction	
Construction Time Frame	Construction of the Proposed Action and associated infrastructure improvements is anticipated to take approximately 26 to 36 months.
Construction Material Export	The approximate volume of cut-and-fill results in an approximate export of 80,000 cubic yards. Some of the excavated material would be used to raise the new stub-end track to match the existing main line track elevation, and to fill selected areas of the site to the desired grade.
Operations and Maintenance	
Operations and Maintenance During Construction	The proposed tracks/platforms construction work would be within OCTA ROW, Caltrans ROW, and City of Anaheim ROW. There would be no improvements to the existing Santa Ana River railroad bridge or the existing Katella Avenue railroad bridge. The current rail operations, the station operations, and related facilities operations would be maintained during construction. The existing Anaheim Metrolink/Amtrak Station would be demolished to make way for the new stub-end track. Materials from this demolition would be recycled within the project, hauled to a recycling facility or disposed at a landfill. Temporary passenger services would be provided to replace the services of the Anaheim Metrolink/Amtrak Station. This temporary station would be in the Metrolink/Amtrak parking lot.

Operations and Maintenance	
Operations and Maintenance for Opening Year 2013	Maintenance for ARTIC would be conducted by the City of Anaheim, and maintenance of the rail ROW would remain the responsibility of Metrolink in keeping with an agreement with OCTA. Operations for the 2013 opening year at ARTIC would require planning and route modifications for the following existing and potential providers: Metrolink, Amtrak, taxis, OCTA Local Bus and OCTA Bravo! BRT, para-transit shuttles, the Anaheim Resort Transit shuttles and circulators, Anaheim Go Local rubber-tired mixed-flow shuttles, the Los Angeles World Airport "Fly-Away" airport shuttles, intercity buses, international buses, and private tourism buses**.**

2.2 ALTERNATIVES CONSIDERED FOR DETAILED STUDY

The following sections provide details about the alternatives being evaluated.

2.2.1 Alternative 1: No Action Alternative

The No Action alternative assumes that the Proposed Action would not be constructed and that transportation services would be accommodated at the existing Anaheim Metrolink/Amtrak Station. The Anaheim Metrolink/Amtrak Station is located west of SR-57, north of Angel Stadium, and south of Katella Avenue with The Grove of Anaheim to the west. Direct access to the Anaheim Metrolink/Amtrak Station is provided by an entrance on Katella Avenue through Sportstown (see Figure 1.1-2). The facility includes approximately 405 parking spaces.

The existing Anaheim Metrolink/Amtrak Station consists of a 6,814-square foot ticketing and operations office that includes two ticket windows manned during hours of operation, a single Amtrak self-service ticket kiosk, baggage claim office, restrooms for men and women, and a waiting area with approximately 40 seats. Additional facilities that are outside the ticket and operations office include a covered waiting area with two Metrolink/Amtrak unmanned ticket kiosks, four 10-foot benches, and four 5-foot benches for waiting patrons. Common areas to the east and west of the office include drought resistant landscaping, benches for public use, and a single bicycle rack built to accommodate approximately five bicycles. Facilities also include an electric car recharging station and bicycle lockers.

The Anaheim Metrolink/Amtrak Station also provides an adjacent drop-off area for the OCTA Station Link, Anaheim Resort Transit shuttles, private shuttles, and taxis. The configuration of the trackway includes a centerline rail with northbound and southbound side platforms. An underpass allows passengers to move under the tracks safely. The existing 800-foot long by 16-foot wide platforms and the tracks are situated on a 100-foot OCTA ROW.

The No Action alternative, in contrast with the Proposed Action, would not include improved site access, a pedestrian bridge, passenger amenities, and additional parking. The proposed site would continue to be used for the retail lumber business (City of Anaheim property) and the MSEP construction yard (OCTA property). When MSEP is complete, the OCTA site would be vacant.

The No Action alternative is not a feasible alternative to the Proposed Action or Alternative 2 (Reduced Building Size alternative) because it does not accommodate future growth in transit ridership and satisfy the need for more parking and intermodal connections.

2.2.2 Alternative 2: Reduced Building Size Alternative

The Reduced Building Size alternative assumes that an intermodal center would be developed at the Proposed Action site and would provide expanded capacity compared to the existing Anaheim Metrolink/Amtrak Station. The Reduced Building Size alternative would include a transit center that is approximately 66,000 gross square feet and a below-grade Bus Transit Center. The Reduced Building Size alternative would have the same amount of parking as the Proposed Action. It would also include the envisioned pedestrian bridge to be constructed over Katella Avenue and the trail easement adjacent to the Santa Ana River Trail. The Reduced Building Size alternative would provide the same intermodal transit services as the Proposed Action. Passenger waiting areas, public space and other program space would be smaller for the Reduced Building Size alternative than the Proposed Action.

The Reduced Building Size alternative would include a 13,000 square-foot Intermodal Terminal building to allow for a Metrolink/Amtrak ticket and waiting area, a 30,000 square-foot civic space for passenger and community use, and 23,000 square feet of retail space.

The Bus Transit Center would be located below or around the Intermodal Terminal. This transit center would include bus islands and/or bus bays, waiting areas, driving lanes, and driving ramps for surface street access.

The existing LOSSAN ROW mainline tracks would be realigned, the platforms relocated, and a new railroad bridge constructed. Realigning the tracks would require modifications to the existing crash wall to the support columns under SR-57. The new platforms would be 1,000 feet long with a total nominal width of 28 to 32 feet. Platform amenities would be consistent with the existing Anaheim Metrolink/Amtrak Station, such as ticketing, communication systems, benches, canopies, and information kiosks. Douglass Road would be lowered to accommodate the new bridge. Vehicular access to this alternative would be from Douglass Road with a potential access point on Katella Avenue. Approximately 960 parking spaces would be provided.

Under the Reduced Building Size alternative, the tracks/platform components would be consistent with the Proposed Action but the terminal and supporting facilities would be smaller.

This alternative would have fewer construction effects due to a shorter construction schedule and reduced grading and excavation activities. Operational effects as a result of the Reduced Building Size alternative would be comparable to the Proposed Action.

As a variation of the Reduced Building Size alternative, a Reduced Site Size was also considered. This would assume that an intermodal center would be developed at the Proposed Action site and would provide expanded capacity compared to the existing Anaheim Metrolink/Amtrak Station. However, it would require a project site that is approximately 16.15 acres, not counting the area for the 405 parking spaces at the Anaheim Metrolink/Amtrak Station (approximately 18.71 acres total). The reduction of the project site size comes from the elimination of the widening of the Douglass Road at the Katella Avenue intersection, which would remain at its current four lane configuration and would not require the General Plan Amendment to change the roadway classification or the acquisition of additional ROW.

The Traffic Impact Analysis (Appendix F) prepared for the Proposed Action determined that the minimum number of lanes needed for the Douglass Road/Katella Avenue intersection at the 2013 opening day condition was six lanes in order to accommodate the re-distribution of traffic from the Anaheim Metrolink/Amtrak Station to the Proposed Action location (notably, the ROW required for six lanes would be the same as would be required in the Proposed Action (approximately 20,000 square feet) since constructing six lanes would partially encroach into the retail buildings anyway, hence a partial

encroachment would still require the acquisition of that building). Thus, development of the Reduced Site Size alternative would result in an adverse effect at the PM Peak Hour to the Douglass Road/Katella intersection LOS. Moreover, since this condition is only projected to the 2013 scenario, it would only continue to degrade as cumulative projects begin to contribute to traffic, i.e. Platinum Triangle buildout. In addition, developing the Proposed Action on a Reduced Site Size would result in potentially adverse effects to air quality in the form of an increase in traffic delays at this Douglass Road/Katella Avenue intersection. An increase in traffic delays would result in an increase in automotive idling, which could contribute to a CO Hot Spot at this intersection.

Developing the Proposed Action on a Reduced Site Size alternative would develop a transit facility identical to the Proposed Action but would result in adverse and unavoidable effects to traffic and potentially adverse effects to air quality as a result of the decreased project site acreage. Therefore, developing the Proposed Action on a Reduced Site Size was not considered further.

2.3 ALTERNATIVES CONSIDERED BUT REJECTED

Three alternative sites were evaluated as potential locations for a transportation intermodal center. The alternative sites were found to have effects identical to or more severe than the Proposed Action, or that would not meet most of the project objectives. These alternative locations were considered, evaluated, and then dismissed from further consideration. These sites, the Fullerton Transportation Center, the Orange Metrolink Station, and the Irvine Station, were considered based on the fact that they are existing transit centers that offer bus and rail transit options.

2.3.1 Fullerton Transportation Center

The Fullerton Transportation Center, located at 120 E. Santa Fe Avenue, is an active train station that currently services Amtrak, Metrolink, the OCTA bus system, taxis, bicycles, and pedestrians (OCTA, 2009). Plans to expand the station within the existing footprint are in preparation (City of Fullerton, 2010). This site is approximately 5.5 acres with limited room to expand.

The surrounding area is developed, and residential zones are located 500 feet to the south, 700 feet to the northeast, and 1,000 feet to the north (City of Fullerton, 2005). The nearest freeways are one or more miles away from the Fullerton Transportation Center site. SR-91 is approximately one mile south, SR-57 is approximately 2.5 miles east, and I-5 is approximately 2.5 miles southwest. The closest freeway access would be SR-91 via Lemon Street, Harbor Boulevard or Euclid Street, which travels through a primarily residential area.

The development of a transit center meeting the project objectives would require approximately 18.71 acres in order to provide enough room for development of the transit center and an adequate parking supply to support the transit services that are planned to be located at ARTIC as identified in the Needs Assessment (Cordoba Corporation, 2009) prepared for the Proposed Project. The construction of a parking structure, which was evaluated early in the project planning stage and would reduce the acreage requirement, would be cost prohibitive as well as increase the construction schedule. The approximate 18-acre site size required by the project needs is not available at the 5.5-acre Fullerton Transportation Center site. Displacement of people and businesses would be required to obtain the necessary land in order to provide adequate parking, building size, and internal circulation. In order to provide adequate parking for this site, a large parking structure would be required. The City of Fullerton is currently evaluating the feasibility of a parking structure to provide approximately 1,200 parking spaces across Harbor Boulevard from the station but does not have the available property (City of Fullerton, 2010). The disconnected parking structure would require travelers to cross Harbor Boulevard in order to enter the transit center. The transit center building (Intermodal Terminal) would obstruct views from residences and businesses.

Due to this proximity, the Proposed Action could potentially adversely affect traffic, air quality, noise, aesthetics, and population and housing at the Fullerton Transportation Center.

The California High Speed Rail Authority has identified Fullerton Transportation Center as an optional station on the first southern California segment of its planned high speed train service. The California High Speed Rail Authority will evaluate the Fullerton Transportation Center for "skip-stop" service on the Los Angeles-to-Anaheim segment of the high speed rail project. A skip-stop reduces travel times and increases capacity by scheduling some trains to stop at the station while others continue through the station (City of Fullerton, 2010). Since the Fullerton Transportation Center will be evaluated as a "skip-stop" for California High Speed Rail, it would not be able to function as a main terminus stop.

The Fullerton Transportation Center cannot meet the Proposed Action objectives because it would not be able to accommodate the projected increases in mass transit ridership, provide a transit-oriented building that can accommodate future transportation modes, provide improved access and availability of mass transit resources, or provide improved access to activity centers and destinations within the region. The Fullerton Transportation Center alternative was rejected from further evaluation because it would not avoid or substantially lessen potentially adverse effects of the Proposed Action.

2.3.2 Orange Metrolink Station

The Orange Metrolink Station, also known as the Orange Santa Fe Depot, is an approximately 2.3-acre site is located at 194 North Atchison Street (OCTA, 2009). Surrounding land uses include a Medium Density Residential area one block west and a Low Density Residential area 600 feet to the south (City of Orange, 2010).

The Orange Metrolink Station site does not contain the approximately 18 acres needed for the Proposed Action and would not be able to accommodate the parking, building, and other facilities necessary to the operation of ARTIC. This alternate site has limited room to expand because the surrounding area is already highly developed, and expansion would require the displacement of people and businesses. The Orange Station currently has 250 parking spaces. The station is approximately 0.75 miles from SR-22, 1.3 miles from SR-57, and 1.5 miles from SR-55. The most direct freeway access would be SR-57 via West Chapman Avenue, which travels through a primarily residential and commercial area. Displacement of people and businesses would be required to obtain the necessary land in order to provide adequate parking, building size, and internal circulation. The transit center building would obstruct views and would be inconsistent with the character of the surrounding development.

The Orange Metrolink Station cannot meet the Proposed Action objectives because it would not be able to accommodate the projected increases in mass transit ridership, provide a transit-oriented building that can accommodate future transportation modes, provide improved access and availability of mass transit resources, or provide improved access to activity centers and destinations within the region. The Orange Metrolink Station alternative was rejected from further evaluation because it would not avoid or substantially lessen potentially adverse effects of the Proposed Action.

2.3.3 Irvine Station

The Irvine Station located at 15215 Barranca Parkway encompasses approximately 12 acres and currently offers Amtrak, Metrolink, OCTA bus system, taxis, and shuttle services (OCTA, 2009).

Land to the north and west of the Irvine Station is developed. Land to the south and southeast is zoned for transit-oriented development and is currently vacant (City of Irvine, 2006). The potential exists for the

station to expand to the approximately 18 acres required for the Proposed Action. Environmental effects such as traffic, air quality, and noise would be similar to the Proposed Action effects.

Freeway access and proximity to entertainment destinations would be less convenient than the Proposed Action. The Irvine Station is approximately 0.5 miles from I-5 and 0.8 miles away from the I-5 and I-405 interchange and the nearest residential areas are 0.6 miles away (City of Irvine, 2006). The Irvine Station is at least 10 miles away from many major entertainment destinations. The closest destinations are Wild Rivers Water Park and Verizon Wireless Amphitheater, which are approximately 1.25 miles to the southwest. The Irvine Station is adjacent to the planned Orange County Great Park, which will be located at the former Marine Corps Air Station El Toro base. The Orange County Great Park is currently planned but development has been suspended.

The Irvine Station cannot meet the Proposed Action objectives because it would not be able to provide improved access to activity centers and destinations within the region nor be able accommodate future transportation modes. The Irvine Station alternative was rejected from further evaluation because it would not avoid or substantially lessen potentially adverse effects of the Proposed Action.

3.0 AFFECTED ENVIRONMENT

Summarized evaluations of project-related impacts are provided for select resource areas. Technical reports and detailed analyses are provided in Appendices A through P. Typical items of interest to the FTA include conformance with the Americans with Disabilities Act (ADA), socioeconomics and environmental justice, noise and vibration, Section 106 Compliance, and safety and security. At this time, the Proposed Action is anticipated to result in no adverse effects.

3.1 PHYSICAL ENVIRONMENT

3.1.1 Air Quality

The National Ambient Air Quality Standards (NAAQS) established by the United States Environmental Protection Agency (USEPA) focus on six pollutants: carbon monoxide (CO), particulate matter (PM), lead (Pb), sulfur dioxide (SO_2), ozone (O_3), and nitrogen dioxide (NO_2, or NO_x). The NAAQS represent maximum concentrations above which adverse effects on human health may occur. Areas of the country where air pollution levels persistently exceed the NAAQS may be designated as non-attainment areas. An Air Quality Impact Assessment was prepared by Kleinfelder, 2010 (Appendix A).

ARTIC is located within the southern portion of the City of Anaheim, which is part of the South Coast Air Basin (SCAB), a 6,600 square-mile area encompassing all of the County of Orange and the non-desert parts of Los Angeles, Riverside and San Bernardino Counties. The SCAB fails to meet national air quality standards for O_3, $PM_{2.5}$, and PM_{10} and is considered a federal nonattainment area for these pollutants.

Table 3.1-1 lists the criteria pollutants and their relative attainment status. Serious, severe, or extreme nonattainment areas are required to prepare air quality management plans to include specified emission reduction strategies in an effort to meet clean air goals. ARTIC is located within an area defined as being in attainment for NO_2, SO_2, Pb and CO. Levels of PM and O_3 are not within attainment in the SCAB.

Table 3.1-1
Attainment Status of Criteria Pollutants in SCAB

Pollutant	Federal Standards
O_3 – 1-hour [1]	Extreme Nonattainment[1]
O_3 – 8 hour	Severe-17 Nonattainment[2]
PM_{10}	Serious Nonattainment[3]
$PM_{2.5}$	Nonattainment
CO	Attainment
SO_2	Attainment
NO_x	Attainment/Maintenance
Pb	Attainment
All Others	Attainment/Unclassified

Source: USEPA, 2009; changes to National Area Designations current as of February 2009 (http://www.arb.ca.gov/desig/adm/adm.htm).
[1] National 1-hour O_3 standard was revoked in June 2005.
[2] Annual Standard Revoked September 2006.
[3] The USEPA granted the request to redesignate the SCAB from nonattainment to attainment for the CO NAAQS on May 11, 2007 (Federal Register Volume 71, No.91), which became effective as of June 11, 2007.

An analysis was conducted to assess the potential ambient air quality impacts of CO from traffic associated with ARTIC. The intersection of Katella Avenue and Douglass Road was identified as representing the worst-case intersection affected by ARTIC due to proximity and site access. ARTIC effects were evaluated using traffic data (Appendix F) provided by the City of Anaheim. Consistent with the traffic study data, the assessment included a scenario for conditions of ARTIC in year 2013 and a scenario for estimated future build-out of adjacent land uses in year 2030. The CO Hotspots analysis was conducted using the CAL3QHC modeling program in accordance with SCAQMD CEQA Air Quality Handbook, the Transportation Project-Level Carbon Monoxide Protocol (CO Protocol) and USEPA CAL3QHC user guide.

GHGs are atmospheric gases and clouds within the atmosphere that influence the Earth's temperature by absorbing most of the infrared radiation that rises from the sun-warmed surface and that would otherwise escape into space. This process is commonly known as the "Greenhouse Effect." GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). General discussions on climate change often include water vapor, O_3, and aerosols in the GHG category. Water vapor and atmospheric O_3 are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases and are therefore not GHGs. While water vapor, atmospheric O_3 and aerosols have a role in climate change, they are not considered by either regulatory bodies or climate change groups as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, atmospheric O_3, or aerosols is provided (Appendix A). The USEPA issued a ruling on April 17, 2009 that finds GHGs pose a threat to public health and welfare in response to the 2007 Supreme Court ruling [*Massachusetts v. EPA*, 549 US 497 (2007)]. The two findings regarding GHGs under Section 202(a) of the Clean Air Act are as follows (http://epa.gov/climatetechange/ endangerment.html):

The Administrator is proposing to find that the current and projected concentrations of the mix of six key GHGs- CO_2, CH4, N_2O, HFCs, PFCs, and SF_6 in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the endangerment finding.

The Administrator is further proposing to find that the combined emissions of CO_2, CH_4, N_2O, and HFCs from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key GHGs and hence to the threat of climate change. This is referred to as the cause or contribute finding.

The Proposed Endangerment and Cause or Contribute Findings for GHGs under the Clean Air Act was signed on April 17, 2009, and will be published in the Federal Register and available in the Docket under Docket ID No. [EPA-HQ-OAR-2009-0171].

3.1.2 Geology and Soils

Due to previous quarrying activities and bank sloughing, most of ARTIC is underlain by an undetermined thickness of undocumented artificial fill that was encountered during subsurface investigations (See Appendix B, Geotechnical Feasibility Study, for a detailed discussion). The fill depth varies throughout ARTIC, ranging between approximately 7 and 21 feet. Locally derived sand material appears to have been used as fill and site compaction appears to be highly variable. The fill soils were classified mostly as poorly graded sand, poorly graded sand with silt, and silty sand (Appendix B). This fill is considered not suitable for structural support. Young alluvial deposits were encountered below the fill. Gravel layers were identified in select locations, and sand layers containing significant amounts of gravel were also identified.

ARTIC is located within a State of California Hazard Zone for Liquefaction (California Division of Mines and Geology, 1998; City of Anaheim, 2009). The portion of ARTIC bound by the Santa Ana River has potential to be affected by slope instability and lateral spreading due to liquefaction. Preliminary analyses indicate that, due to liquefaction, the channel slope would not be stable during the design earthquake (Appendix B) and may affect improvements at ARTIC. ARTIC will be designed to avoid adverse effects from liquefaction.

3.1.3 Hydrology, Flood Zones, and Water Quality

ARTIC is located in an area considered protected by levees from the 100-year flood event for the Santa Ana River. After flood control measures were implemented with the collaboration of USACE, these levees were certified by Federal Emergency Management Agency (FEMA). Despite the protection provided from flooding by levees and the channeling of the Santa Ana River, over-toppling and/or failure of these structures is possible (FEMA, 2009). The City of Anaheim has an Emergency Action Plan in the case of flooding and the OCFCD has an Emergency Action Plan in case of a breach or overflow of the levee system.

The area surrounding ARTIC is almost entirely covered with impermeable surfaces and does not have defined drainage patterns. Runoff in the project area occurs primarily through sheet flow across the parking areas in a southwest direction to the surrounding street system. The street system has been designed to convey a 10-year storm event while maintaining one dry lane in each direction. Catch basins located within the street system collect gutter runoff and transport it via the drainage system to the Southeast Anaheim Channel, which then flows to the Santa Ana River.

The ARTIC site and surrounding area would require drainage infrastructure adequate to convey the 25-year storm event runoff. Surface flow limitations also apply to this area of the City of Anaheim and are outlined in the City of Anaheim's drainage source criteria. Additional storm drain construction may be necessary in this area to meet the surface flow limitations, depending on grading and development configuration (City of Anaheim, 2008). ARTIC will not directly affect the levee and it will be designed to include BMPs that would reduce potential affects to drainage and surface flow. See Appendix C and D for a detailed discussion.

3.2 BIOTIC COMMUNITIES

3.2.1 Vegetation and Habitat

The project site is located within a developed urban area and bisected by an elevated freeway corridor and railroad corridor (see Figure 1.1-3). ARTIC would be developed on a site that currently contains paved parking areas, existing buildings, railroad tracks, and limited landscaping. Vegetation within the landscaped areas of ARTIC includes non-native landscape trees and ruderal vegetation. The Santa Ana River adjacent to ARTIC has concrete banks and a soft bed with earthen berms that are maintained and manipulated for groundwater recharge, and are regularly cleared of vegetation. There are no sensitive areas, or natural or native vegetation communities onsite or in the immediate vicinity of ARTIC (See Appendix E, Biological Resources Technical Report, for a detailed discussion).

3.2.2 Wildlife

The project area is a developed urban area that does not contain habitat to support most wildlife populations. Migratory birds may use areas within and adjacent to ARTIC for nesting (Appendix E).

3.2.3 Protected Species

Suitable habitat for federally listed species was not observed within or adjacent to ARTIC (Appendix E). There is no designated critical habitat noted within the vicinity of ARTIC. No federally listed species are expected to occur within the vicinity of ARTIC.

3.3 HUMAN ENVIRONMENT

3.3.1 Land Use and Planning

Comprehensive Planning and Zoning Districts

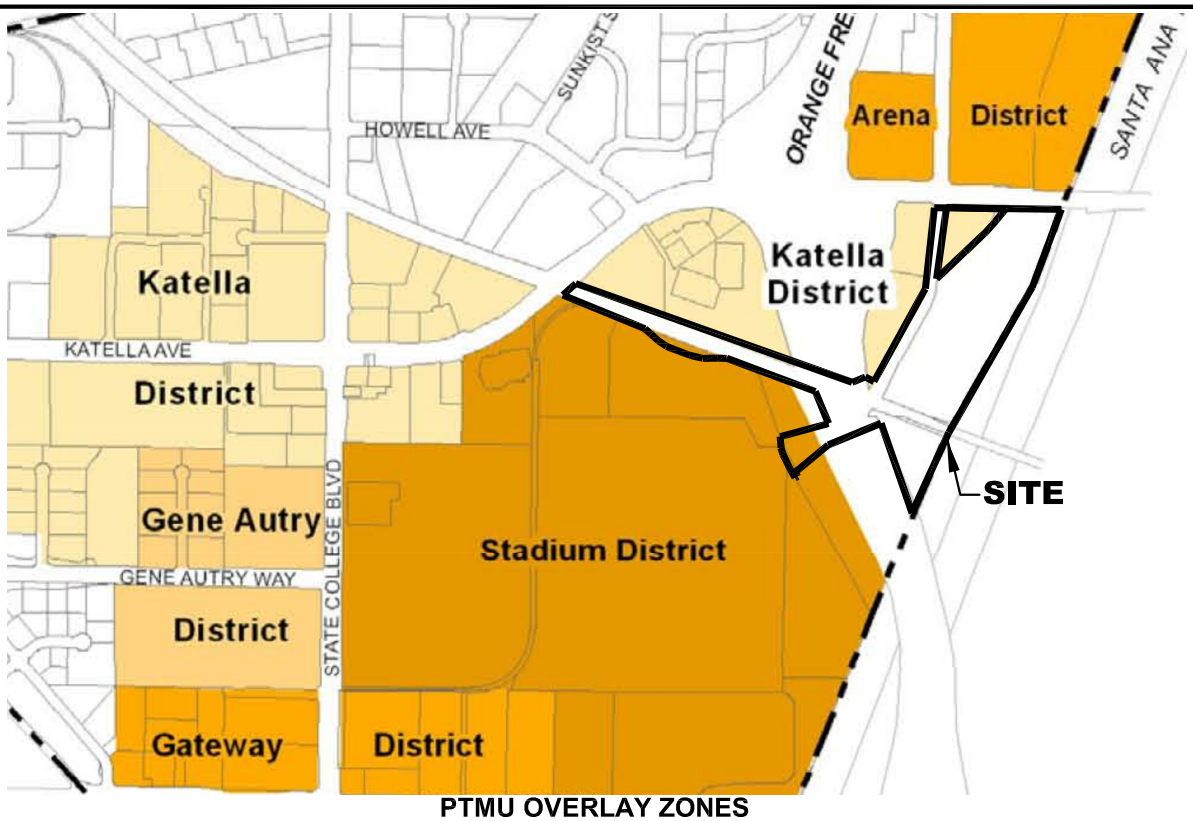
ARTIC is located within an area of the City of Anaheim referred to as the Platinum Triangle, located on the southeastern boundary of the City of Anaheim at the confluence of I-5 and SR-57 (Figure 3.3-1). The Platinum Triangle includes Angel Stadium, the Honda Center, and The Grove of Anaheim. The City of Anaheim General Plan designates most of the project site for institutional land use, which is implemented by the Semi-Public Zone. This land use designation covers a wide variety of public and quasi-public land uses. Although the City of Anaheim's Semi-Public Zone applies to most of the project site, portions of the project site within the Stadium District are within the City of Anaheim's Public Recreation Zone and the Platinum Triangle Mixed Use Overlay Zone. The pedestrian bridge would land on property north of Katella Avenue, designated by the General Plan for mixed-use and within the Public Recreation Zone and the Platinum Triangle Mixed Use Overlay Zone. See Appendix O, Land Use and Planning, for a detailed discussion.

Land Ownership

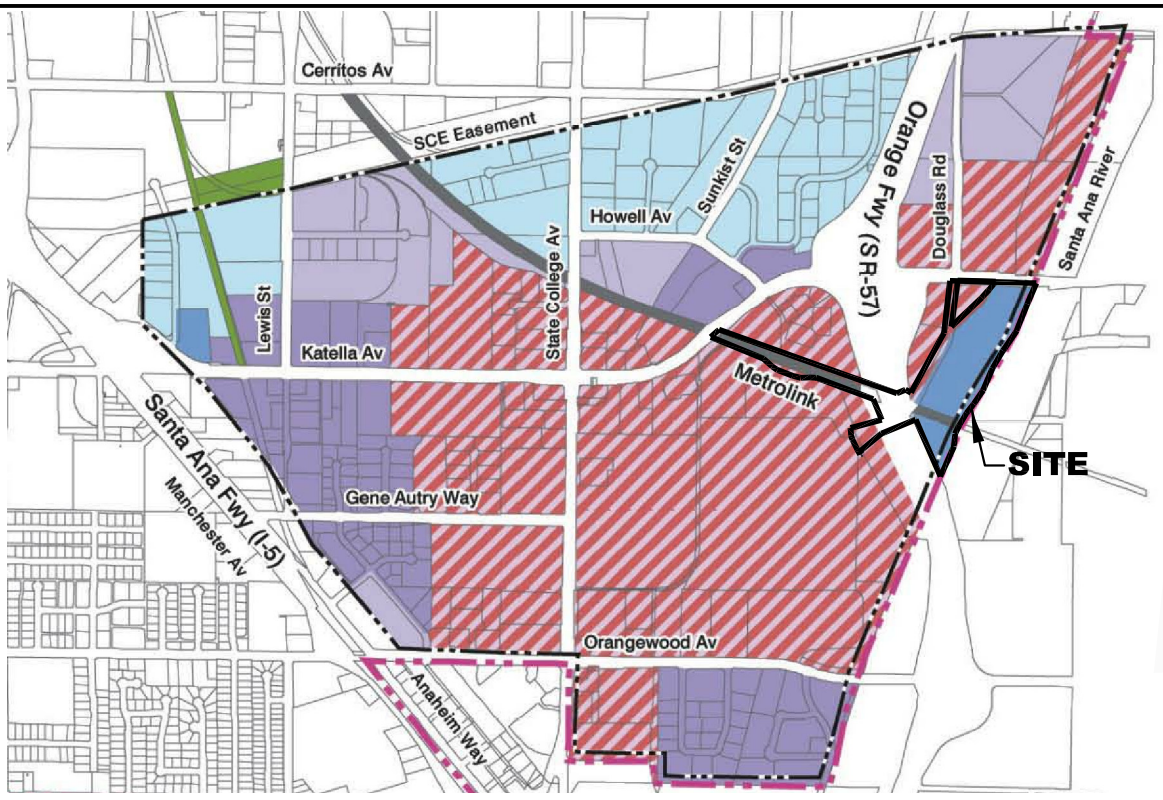
The project site is located on approximately 19 acres, formerly used as a County of Orange Maintenance Facility and currently used as a construction lay-down yard for OCTA's MSEP construction activities. A portion of the project site is currently leased on a month-to-month basis to a lumber retailer. Owned and operated by OCTA are a section of the existing LOSSAN ROW, and a 13.58-acre parcel bounded by Katella Avenue on the north, the LOSSAN ROW on the south, Douglass Road on the west, and the Santa Ana River on the east. The City of Anaheim owns a 2.2-acre parcel directly south of the OCTA LOSSAN ROW. Caltrans owns and manages the SR-57 ROW. The proposed construction may need to use less than an acre of this Caltrans SR-57 ROW.

3.3.2 Socioeconomics

Anaheim is the 10th largest city in California. Projections show that population will grow by 22 percent between 2000 and 2030, and that employment will increase by 22 percent between 2007 and 2030. The maturing Anaheim economy is diverse and not dependent on one or two industries.



PTMU OVERLAY ZONES



KLEINFELDER

NOT TO SCALE

EXISTING GENERAL PLAN DESIGNATIONS

SOURCE:
PLATINUM TRIANGLE MASTER LAND USE PLAN

- The Platinum Triangle
- Anaheim City Boundary
- Mixed-Use
- Industrial
- Office - Low
- Office - High
- Open Space
- Institutional
- Railroad

PROJECT NO.	109528
DRAWN:	7/28/10
DRAWN BY:	JP
CHECKED BY:	CC
FILE NAME:	109528use_EA3-3-1.dwg

LAND USE WITHIN THE PLATINUM TRIANGLE

ENVIRONMENTAL ASSESSMENT
CITY OF ANAHEIM
ARTIC
ANAHEIM, CALIFORNIA

FIGURE

3.3-1

Demographics

To characterize the demographics of the potentially affected area, certain US Census block data were used to estimate nearby populations. The study area, which includes census block groups adjacent to ARTIC, comprises block groups within the Census Tracts in corporate limits of the City of Anaheim, the City of Orange, and County of Orange. ARTIC is within Block Group 1 of Census Tract 761.01 and Block Group 2 of Census Tract 863.03. Census Tracts adjacent to ARTIC include: Census Tract 761.01 (Block Group 2), Census Tract 762.04 (Block Groups 1 and 2), and Census Tract 863.03 (Block Group 4) (US Census Bureau, 2000). Census data from 2000 for these block groups and for the community are presented in Table 3.3-1.

Table 3.3-1
Census Data For Block Groups Located At and Near Proposed ARTIC Site, City of Anaheim, City of Orange, and Orange County, California

	Block Groups	City of Anaheim	City of Orange	Orange County
Total Population	11,511	328,014	128,821	2,846,289
Households	3,361	96,969	40,930	935,287
Minority Persons*	7,485	203,001	55,953	1,323,053
% Minority	65.0	61.9	43.4	46.5
Median Household Income in 1999	$47,006	$47,122	$58,994	$58,820
% in poverty	12.5	14.1	10.0	10.3
Employed	5,176	142,825	61,620	1,338,838
Unemployed	358	9,430	3,192	71,059
% Unemployed	7.0	6.6	5.2	5.3

*Minority Persons: persons of Black, American Indian, Asian, Hispanic/Latino, or other (non-white) race
Source: US Census Bureau, Census 2000 Summary Tape Files 1 and 3, American FactFinder, http://factfinder.census.gov/ (2000)

The study area block groups for ARTIC had about 11,511 persons and 3,361 households in 2000, as shown on Table 3.3-1. The majority of the population (8,720 persons) was in block groups in the City of Orange corporate limits (Census Tracts 761.01 and 762.04). The study area population represents 0.4 percent of the population of the County of Orange, 3.5 percent of the population of the City of Anaheim, and 8.9 percent of the City of Orange's population.

The study area block groups for ARTIC contain 12.5 percent of the sampled population below the poverty threshold. The study area is not considered a low income community because the low income population is not significantly greater than the total population (14.1 percent in the City of Anaheim, 10.0 percent in the City of Orange, 10.3 percent in the County of Orange).

3.3.3 Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low- Income Populations, issued in 1994, directs Federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of Federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. According to *Environmental Justice: Guidance Under the National Environmental Policy Act* produced by the Council on Environmental Quality, "Minority populations should be identified where

either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis." (Council on Environmental Quality, 1997).

The ethnicity and poverty status in the census block groups and tracts around the project area were compared to data for the City of Anaheim, City of Orange, and County of Orange population to determine if minority or low-income communities exist in the area that could be disproportionately affected by the Proposed Action. Data used to assess environmental justice considerations were discussed in Section 3.3.2 above.

ARTIC is considered to be within a minority community because minority population was greater than 50 percent of the population of the study area block groups. The study area block groups had 65 percent minority population in 2000, compared with 61.9 percent in the City of Anaheim, 43.4 percent in the City of Orange, and 46.5 percent in the County of Orange, as shown on Table 3.3 1. The City of Orange and County of Orange are not considered to be minority communities. Anaheim is considered a minority community.

3.3.4 Relocations and Acquisitions

In order to reach the proposed Douglass Road width of approximately 120 feet, approximately 20,000 square feet of ROW located along the east side of Douglass Road and the south side of Katella Avenue would be acquired from the Arena Plaza Commercial Center. One retail business and two vacant commercial spaces are located on the parcel that would be acquired. A portion of the proposed site is leased on a month-to-month basis to a lumber retailer and another portion is being used as a construction lay-down yard for OCTA's MSEP construction activities that are scheduled to be completed prior to the Proposed Action.

3.3.5 Transportation Systems and Facilities

The Traffic Impact Analysis is presented in Appendix F. This traffic study evaluated 12 intersections, 8 roadway segments, and 7 project driveways. In addition, freeway ramps and weaving lanes were evaluated. OCTA, the City of Anaheim, and Caltrans agree that traffic is a local planning issue and that a Fair Share Agreement mitigates current and future traffic effects.

The traffic study analyzed the relocation of the existing Anaheim Metrolink/Amtrak Station to the ARTIC site with the facilities necessary to support existing transit services (rail and non-rail), as well as to accommodate future transit services such as the planned OCTA's MSEP currently underway, OCTA's proposed Bravo service and other fixed route services. ARTIC would also include passenger-oriented retail and civic space. A total parking supply of up to 960 parking spaces would be provided within three parking lots, ARTIC North Parking Lot, ARTIC South Parking Lot, and the existing Metrolink/Amtrak Parking Lot, with a parking supply of approximately 323 parking spaces, 232 parking spaces and 405 parking spaces, respectively. Access to the project site and parking lots would be provided via driveways located along Douglass Road, Katella Avenue, and at the existing Sportstown access on Katella Avenue west of SR-57.

The Proposed Action is forecast to generate 4,714 daily trips (one half arriving and one half departing), with 805 trips (642 inbound, 163 outbound) produced in the AM peak hour and 662 trips (144 inbound, 518 outbound) produced in the PM peak hour on a "typical" weekday. The existing Anaheim Metrolink/Amtrak Station generates 1,015 daily trips (one half arriving and one half departing), with 183

trips (119 inbound, 64 outbound) produced in the AM peak hour and 223 trips (86 inbound, 137 outbound) produced in the PM peak hour on a "typical" weekday.

After taking credit for the existing Anaheim Metrolink/Amtrak Station land use, ARTIC is forecast to generate 3,699 net daily trips (one half arriving and one half departing), with 622 net trips (523 inbound, 99 outbound) produced in the AM peak hour and 439 net trips (58 inbound, 381 outbound) produced in the PM peak hour on a "typical" weekday.

3.3.6 Noise and Vibration

The noise and vibration assessment analyzed construction and operational effects as a result of the Proposed Action (Appendix G). On an operational basis, the proposed setting would change the location where trains would start and stop based on moving the station 0.25 miles east.

Noise

The major source of noise in the project area is vehicular traffic from SR-57 and surrounding arterial streets. Noise is also generated from several passenger and freight trains that run through the project area. In accordance with FTA's Transit Noise and Vibration Impact Assessment Guidance Manual (FTA, 2006), an assessment was conducted to determine if noise-sensitive land uses occurred within specified screening distances of the project. The project area consists of mainly commercial land uses, including office buildings, restaurants, retail businesses, and one hotel. FTA guidance recommends a screening distance of 1,200 feet from the centerline of the noise-generating activity. Sensitive receivers identified within this screening distance are the Ayres Hotel of Anaheim and the Avalon Anaheim Stadium Apartments, identified within Category 2 of the FTA Land Use Categories.

Vibration

Ground-borne vibration is the oscillatory motion of the ground about some equilibrium position, and it is described in terms of displacement (the distance an object moves), velocity (the speed the object moves), or acceleration (the rate of change in velocity). The response of humans, buildings, and equipment to vibration is best described using velocity because sensitivity to vibration has typically been found to correspond to a constant level of vibration velocity amplitude within the low frequency range of most concern for environmental vibration (roughly 5-100 Hz). Common and long-standing sources of this vibration in the project area include roadways and train activity (Appendix G).

3.3.7 Utilities

Utility providers throughout the study area include municipal agencies, special utility districts, and private companies providing water, wastewater collection, wastewater treatment, stormwater collection, natural gas, and telecommunications services (See Appendix H, Utilities and Service Systems, for a detailed discussion).

Sewage generated throughout the City of Anaheim is collected by the City of Anaheim's sewer collection system facilities and conveyed to trunk sewers owned and maintained by the Orange County Sanitation District (OCSD), which then treats the sewage at regional facilities. ARTIC is surrounded on three sides by OCSD Trunk Sewer lines: along State College Boulevard, along the eastern edge of the Santa Ana River, and to the north of ARTIC, running parallel to the train tracks. A small portion of the sewer trunk line that runs along State College Boulevard, between Katella Avenue and Gene Autry Way, is considered to have reduced functionality.

Through the City of Anaheim Public Utilities Department, the City of Anaheim operates its own water utility and water treatment plant. The local storm drains that serve ARTIC are maintained under the jurisdiction of the City of Anaheim and Caltrans. There are also major storm drains under the jurisdiction of the Orange County Flood Control District (OCFCD). Municipal solid waste generated in the study area would be disposed of at the three County of Orange landfills.

Southern California Gas Company has gas lines along Orangewood Avenue, State College Boulevard, Katella Avenue, Gene Autry Way, and Lewis Street. Telephone and cable television service are provided by AT&T and Time-Warner.

3.3.8 Archaeological, Historical, and Paleontological Resources

The National Historic Preservation Act of 1966 and its implementing regulation found at 36 CFR 800 require that federally assisted projects take into account the possible effects on properties that are listed on or are eligible for listing on the National Register of Historic Places. These protected resources can be affected by actions that alter the attributes that might qualify the resources for inclusion on the National Register of Historic Places. Paleontological resources are protected under the National Natural Landmarks Program, which was established in 1962 under the authority of the Historic Sites Act of 1935, and is administered by the National Park Service. Adverse effects can result when a resource's significant characteristics are diminished. This section is a summary of a technical report that examines the effects on archaeological, historical, and paleontological resources (Appendix I, Archaeological Resources Survey Report). A survey of the project area was conducted to identify and describe potential historic properties in the Area of Potential Effect (APE). For this project, the APE includes the site and a 500-foot radius beyond the site boundaries (See Appendix I, Archaeological Resources Survey Report, for a detailed discussion). This accounts for potential visual, atmospheric, or auditory effects to nearby historic properties.

The Douglass Road Rail Bridge and the Big "A" scoreboard were identified within the APE of ARTIC and do not appear eligible for listing on the National Register of Historic Places.

The records search indicated that an alluvial outwash plain of the Santa Ana River forms near the eastern boundary of the project site and, prior to channelization of the Santa Ana River, the project area was crossed by many tributaries and smaller creeks at this locale. The flow of water and accumulation of sediments over time may have buried evidence of past occupations in the project area. Previous cultural studies conducted less than 1/8 mile from ARTIC have determined the vicinity to be sensitive for historical properties.

Letters describing the project area and indicating the project location were sent to 12 Native American tribal representatives in the County of Orange on July 15, 2010. No responses were received. FTA also sent a letter to the State Historic Preservation Office (SHPO) requesting Section 106 Concurrence on June 3, 2011. SHPO responded with a letter, dated June 26, 2011, agreeing to the Section 106 Concurrence in compliance with 36CFR 800.4(1)(a).

3.3.9 Recreation and Section 4(f) Properties

Section 4(f) of the Department of Transportation Act of 1966 as amended by 49 USC 303 was adopted to protect the natural beauty of the countryside and public parks and recreation lands, wildlife and waterfowl refuges, and historic sites. Federally funded transportation programs and projects requiring the use of any of these lands are allowable only if there is no other prudent and feasible alternative. The project must include all possible planning to minimize harm to these areas. Federally funded projects that may use

areas protected under Section 4(f) require an evaluation to document the effects, alternatives and means of minimizing effects. Use occurs when land from a Section 4(f) property is acquired, when temporary occupancy has adverse effects, or when proximity effects of the project on the Section 4(f) property are so great that the purposes for which the Section 4(f) site exists are substantially impaired.

There are no Section 4(f) resources or recreational facilities identified within the project area. The Santa Ana River Trail, identified as a National Recreation Trail, is located adjacent to the eastern boundary of ARTIC. The Honda Center and Angel Stadium are adjacent to the project site.

3.3.10 Contaminated Sites

A Phase I and Phase II Environmental Site Assessment of the study area was conducted to identify known or potential contamination of the project area (See Appendix J and Appendix K for detailed discussions). The site assessment included records review, environmental database review, site visits, and personal interviews. The databases reviewed include the Underground Storage Tank Database, the Leaking Underground Storage Tank Database, and the USEPA Databases. Several properties listed within the government databases were evaluated for potential environmental concerns for ARTIC. Of the properties listed, five sites were identified adjacent to the project site and three sites were identified within the project site boundaries.

The five properties adjacent to the project site are: 2695 E. Katella Avenue; 1654 S. Douglass Road; 1650 S. Douglass Road; 2400 E. Katella Avenue; and N.W. corner of Katella Avenue and Douglass Road. The three properties identified within project boundaries are: 1750 S. Douglass Road; 2150 E. Katella Avenue; and 1790 S. Douglass Road.

3.3.11 Visual

Multi-story industrial and commercial buildings, the elevated SR-57, billboards, and overhead utility lines are within the viewshed of ARTIC (see Figures 1.1-3 through 1.1-5). Angel Stadium is located southwest of ARTIC and west of SR-57 and the Honda Center is located to the north of the site across Katella Avenue. Angel Stadium, the Honda Center, and associated parking lots create prominent sources of light and glare in the area. The sky is lit up during nighttime events; and the existing SR-57, streetlights, parking lots, billboards, and other structures in the area emit sources of light.

The Santa Ana River is the only identified aesthetic resource within the vicinity of ARTIC (See Appendix L, Aesthetics, for a detailed discussion). The portion of the river adjacent to ARTIC is used for water infiltration, is void of vegetation, and occasionally has construction equipment mobilized to move river sediment. The San Bernardino Mountains range, which is over 20 miles to the north, can be seen in the distance from ARTIC. The Santiago Hills, located over 8 miles east of the site, are not visible from ARTIC but can be seen from the Avalon Anaheim Stadium Apartments located west of ARTIC. The City of Anaheim and City of Orange designate the Santa Ana River Trail as an open space area.

3.3.12 Energy

Current energy uses in the project area include energy for lighting and heating purposes, diesel fuel for the locomotives, and automobile fuel. The City of Anaheim Public Utilities Department would provide electricity to ARTIC. The City of Anaheim's electric supply comes from resources located in or near the City of Anaheim and across the western US. Southern California Gas Company provides gas service in the City of Anaheim and has facilities throughout the City of Anaheim (Appendix H).

3.3.13 Safety and Security

ARTIC is located in an urban area with little vegetation that is not affected by wildfires. Potential urban fires would be addressed through applicable building codes, and a fire suppression and alarm system that would notify local fire department of fires.

Amtrak is policed by Amtrak, Metrolink is policed by the Los Angeles Sheriff's Department, and the OCTA ROW is policed by the Orange County Sheriff's Department (See Appendix M, Safety and Security, for a detailed discussion). There are currently 26 Orange County Sheriff's personnel assigned to Transit Police Services who patrol the various transit centers throughout the County of Orange. The Orange County Sheriff's Department, under contract to OCTA, would patrol the train platforms and ROW at ARTIC. The Anaheim Police Department would be responsible for the Intermodal Terminal and parking areas. ARTIC would replace the existing Anaheim Amtrak/Metrolink Station, which currently has police service by Anaheim Police Department, Amtrak, and Metrolink. Emergency responders would be trained in accordance with emergency response plans jointly developed by the train operators and local jurisdictions.

The Proposed Action would be in compliance with Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks. This Executive Order states that each federal agency must make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Under Executive Order 13045, federal agencies must also ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

3.3.14 ADA Compliance

The existing Anaheim Metrolink/Amtrak Station complies with ADA standards. ARTIC would be designed and maintained in compliance with the ADA and related Department of Transportation regulations. Access to the station and platforms would be designed with safe, barrier-free pedestrian access as defined by Federal and State mandates/guidelines. Proposed facilities, including station platforms, parking, building entry, bathrooms, and retail services, would be accessible and usable by persons with disabilities. Although ARTIC does not involve the purchase or modification of rolling stock, the Proposed Action would not preclude the implementation of level boarding when train equipment is upgraded by the commuter rail operators.

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter of discusses the probable beneficial and adverse environmental, social, and economic effects, including direct and indirect effects, of each of the alternatives described in Chapter 3.0. The alternatives evaluated include Alternative 1 (the No Action alternative); Alternative 2 (the Reduced Building Size alternative); and the Proposed Action alternative. This section takes into account applicable environmental regulations (See Appendix N, Applicable Regulations, for a list of applicable regulations).

4.1 IMPACTS TO THE PHYSICAL ENVIRONMENT

4.1.1 Air Quality

See Appendix A for additional information.

Alternative 1 (No Action alternative): Only indirect access through the Angel Stadium parking lot to the existing Anaheim Metrolink/Amtrak Station is currently available. Without adequate space to accommodate the projected increase in vehicles, Alternative 1 would contribute toward traffic congestion. Alternative 1 may cause air quality to exceed NAAQS and GHGs due to increased congestion.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Project improvements under both alternatives would increase the availability of mass transit alternatives, which is consistent with the AQMP and other regional plan strategies. Operational activities would not yield criteria pollutant emissions in excess of NAAQS and would not cause or contribute to a local or regional exceedance of the ambient air quality standards. Construction activities for both alternatives would exceed the ambient air quality standards for NO_X. Mitigation measures would be required to reduce construction NO_X to below the threshold level.

The majority of traffic impacts are due to regional growth without the Proposed Action. The CO assessment addressed the combined impacts from regional growth and the addition of Proposed Action. The results indicate no cumulative impacts from CO hotspot emissions for the intersections and roadway segments analyzed in the Traffic Impact Analysis. Alternative 2 and the Proposed Action would not expose sensitive receptors to substantial pollutant concentrations.

GHG emissions for Alternative 2 and the Proposed Action result from the use of electricity, natural gas combustion, and increased vehicles exhaust. CO_2e was calculated based on the total operational emissions plus construction emissions amortized over 30 years. The emissions calculations demonstrate Alternative 2 and the Proposed Action would not exceed established air quality standards.

Except for construction NO_x emission that would be mitigated through construction sequencing and equipment, no effects would be anticipated and no mitigation measures would be required.

4.1.2 Geology and Soils

See Appendix B for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: There would be no effects associated with either alternative associated with the potential rupture of a known fault, or

strong seismic ground shaking. Assuming engineering recommendations before and during construction are implemented, effects related to landslides would be avoided. The Stormwater Pollution Prevention Plan (SWPPP) would identify BMPs to minimize erosion and sediment loss. Industry standards for engineering and guidance recommendations before and during construction would be used. With the implementation of BMPs, Alternative 2 and the Proposed Action alternative would have no effects associated with on-site or off-site landslide, lateral spreading, subsidence, liquefaction, collapse, soil erosion and loss of topsoil. No mitigation measures would be required.

4.1.3 Hydrology and Flood Zones

See Appendices C and D for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Alternative 2 and the Proposed Action alternative would be located in an area considered protected by levees from the 100-year flood event projected for the Santa Ana River. After flood control measures were implemented with the collaboration of USACE, these levees were certified by FEMA. Despite the protection provided from flooding by levees and the channeling of the Santa Ana River, over-toppling and/or failure of these structures is possible (FEMA, 2009). The City of Anaheim has an Emergency Action Plan in the case of flooding and the OCFCD has an Emergency Action Plan in case of a breach or overflow of the levee system.

Alternative 2 and the Proposed Action alternative would be constructed on previously disturbed and paved land that does not contain defined drainage patterns. Since the project site for both alternatives is currently covered with impervious surfaces, the rate or volume of surface runoff within the site after construction would not be significantly greater than the existing conditions. Both alternatives would be designed to direct local drainage into the storm drainage system to avoid potential hydrology or flooding effects.

No construction or operational effects would be anticipated and no mitigation measures would be required.

4.1.4 Water Quality

See Appendices C and D for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Construction activities for Alternative 2 and the Proposed Action alternative would include clearing, grading, and excavating activities for the Intermodal Terminal, the stub-end track/platforms, and the road improvements. These construction activities would expose surface soils and may require de-watering of groundwater, which could result in sediment eroding into the downstream receiving water, along with attached soil nutrients and organic matter, and other nutrients, soil additives, pesticides, construction chemicals, and miscellaneous waste. Minor oil and fluid leaks from vehicles would potentially be transported by runoff water as it flows into the storm drain system during operation of either alternative.

Potential pollutants would be controlled by BMPs identified in the construction SWPPP. BMPs would be in compliance with the current municipal stormwater permit (B. Jones, electronic mail, January 15, 2010) and would be implemented to control sediment erosion and other pollutants. Permanent BMPs addressing potential and anticipated pollutants during project operation would be identified in the Water Quality Management Plan, which meets the requirements of the DAMP. Mitigation measures would be required to verify that the Proposed Action WQMP is complete and that proposed BMPs are properly installed, maintained and functioning.

The Santa Ana River, adjacent to the project site, is the only USACE jurisdictional feature located within the project area. Neither alternative would affect the Santa Ana River. No permits from the USACE and Santa Ana Regional Water Quality Control Board would be required.

4.2 IMPACTS TO BIOTIC COMMUNITIES

4.2.1 Vegetation and Habitat

See Appendix E for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Vegetation within the landscaped areas of the project site includes non-native landscape trees and ruderal vegetation. The Santa Ana River adjacent to the site boundary has concrete banks and a soft bed with earthen berms that are maintained and manipulated for groundwater recharge, and are regularly cleared of vegetation. There are no natural or native vegetation communities onsite or in the immediate vicinity of the project site.

No effects would be anticipated and no mitigation measures would be required.

4.2.2 Wildlife

See Appendix E for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Migratory birds may use areas within and adjacent to the project site for nesting. ARTIC may adversely affect nesting migratory bird species during construction. A mitigation measure would be required to avoid adverse effects to nesting migratory bird species during construction.

4.2.3 Protected Species

See Appendix E for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Suitable habitat for Federally listed species was not observed within or adjacent to the project site. There is no designated

critical habitat noted within the vicinity of the project site and no Federally listed species are expected to occur within the vicinity of the site. Alternative 2 and the Proposed Action alternative would have no effect on Federally listed species or protected natural plant communities.

No effects would be anticipated and no mitigation measures would be required.

4.3 IMPACTS TO HUMAN ENVIRONMENT

4.3.1 Land Use and Planning

See Appendix O for additional information.

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: In general, the proposed uses (rail, roads, parking, and pedestrian improvements) are consistent and compatible with planned land uses, and the City of Anaheim's policies and regulations concerning land use, zoning ordinances, and codes (Appendix O for a detailed discussion). Both alternatives are consistent with future visions articulated in the Platinum Triangle MLUP, the City of Anaheim General Plan, and local and regional transportation plans.

Both alternatives would require the following discretionary approvals: a General Plan Amendment (GPA2010-00480), an amendment to the Platinum Triangle MLUP (MIS2010-00437), and a Conditional Use Permit (CUP) (CUP2010-05492). The General Plan Amendment would modify Figure C-1 (Planned Roadway Network) of the General Plan Circulation Element to classify Douglass Road south of Katella Avenue as a Secondary Arterial. This amendment is intended to provide consistency between the street classification and the existing street design. The amendment to the Platinum Triangle MLUP would allow for greater flexibility of the streetscape improvements prescribed by the Platinum Triangle MLUP to meet the specific design needs of ARTIC, including the proposed pedestrian bridge. A CUP is required by the City of Anaheim Municipal Code for a transit facility to be developed and operated within the Public Recreation and Semi-Public Zones.

Alternative 2 and the Proposed Action alternative would have no adverse effect on land use and planning with the CUP, General Plan Amendment, and MLUP Amendment.

No effects would be anticipated and no mitigation measures would be required.

4.3.2 Socioeconomics

Alternative 1 (No Action alternative): The No Action alternative would have adverse effects on socioeconomic conditions by hindering the City of Anaheim and OCTA's ability to meet existing and projected future passenger services needs in the area. This alternative would limit the transportation and economic benefits that likely would occur if ARTIC were to accommodate forecast demand. Being unable to accommodate passenger demand at the Anaheim Metrolink/Amtrak Station could dampen growth in the tourism sector of the Anaheim economy. Indirect economic benefits associated with construction-generated revenues would not occur.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Development of ARTIC is consistent with and would not adversely affect the community character of the area, which is

already rail-transit oriented. The area would be enhanced by improved pedestrian and transit facilities and connections between the region and major entertainment centers, sports centers, and businesses. These improvements would have a positive benefit on the overall character of area.

Effects related to construction activities would be temporary. BMPs would be implemented to control fugitive dust, erosion, runoff, and sedimentation related to construction, and provide for appropriate restoration after construction. The BMPs would be incorporated into construction documents. Construction activities during a period of approximately 26 to 36 months would generate a stimulus for the local economy due to construction-period expenditures for equipment, materials, supplies, and employment of workers by contractors. Indirect economic benefits associated with construction-generated revenues would occur. These effects are considered to be temporary and beneficial.

Alternative 2 and the Proposed Action alternative would have no adverse effect on socioeconomics and no mitigation measures would be required.

4.3.3 Environmental Justice

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: A higher percentage of minority population resides in the Alternative 2 and Proposed Action alternative block group areas within the City of Orange than in the City of Orange as a whole. A higher percentage of minority population resides within these alternatives block group areas than in the County of Orange. Minority populations in the City of Anaheim are similar to minority populations in the alternatives block groups.

In order to address the disproportionate minority population within the study area block groups compared to the City of Orange and the County of Orange, minority populations were included in public outreach efforts, as outlined in Section 5.1, Public Meetings. No minority communities would be divided by either alternative. No minority populations would be relocated. Minority communities near the project site would benefit from increased public transportation opportunities.

Alternative 2 and the Proposed Action would have no adverse effect on minority populations and no mitigation measures would be required.

4.3.4 Relocations and Acquisitions

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Alternative 2 and the Proposed Action alternative would require an acquisition that would result in two commercial relocations. Approximately three employees of the commercial property within the Arena Plaza Commercial Center at Douglass Road and Katella Avenue would be displaced. These alternatives would also result in the need for the lumber company to relocate as per the Month-to-Month Lease Agreement. Approximately three to five lumber company employees would be displaced.

Adequate replacement for commercial space of similar size and price range is available in the City of Anaheim, City of Orange, and the County of Orange. Acquisition and relocation assistance would be

conducted in accordance with the Urban Redevelopment Authority Act. Commercial relocations would not have impacts as there are not expected to be loss of local business or employment opportunities. Impacts associated with the acquisition and commercial relocations would be avoided by measures outlined in the Urban Redevelopment Authority Act.

Alternative 2 and the Proposed Action would have no adverse effect on business relocations and no mitigation measures would be required.

4.3.5 Transportation Systems and Facilities

See Appendix F for additional information.

Alternative 1 (No Action alternative): There would be no adverse construction effects to transportation systems and facilities as a result of this alternative. This alternative would have an adverse operational effect to traffic due to reduced parking to accommodate the growing demand for intermodal services. No construction effects would occur but operational effects as a result of this alternative would be greater than the Proposed Action.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: In Year 2013, with the Proposed Action, three of the four Caltrans ramp locations are forecast to operate at adverse levels of service under the existing traffic conditions: SR-57 Southbound between Katella Ave On-Ramp and Orangewood Ave Off-Ramp, SR-57 Northbound between Katella Ave On-Ramp and Ball Rd Off-Ramp, and SR-57 Southbound between Ball Rd On-Ramp and Katella Ave Off-Ramp. Two Caltrans freeway segments are forecast to operate at adverse levels of service with the addition of ARTIC traffic: SR-57 Northbound from Katella Avenue to Ball Road and SR-57 Southbound from Ball Road to Katella Avenue. No construction effects are anticipated.

Mitigation measures would be required to reduce potential impacts.

4.3.6 Noise and Vibration

A technical report was prepared to assess the potential noise and vibration effects of ARTIC at sensitive receiver locations near the project site (Appendix G). Noise and vibration effects for the project are based on the criteria described in the FTA guidance manual entitled "Transit Noise and Vibration Impact Assessment" (FTA, 2006). This assessment of noise and vibration effects from ARTIC for the alternatives is based on a comparison of existing and projected future noise and vibration exposure at potentially sensitive land uses in the project area (sensitive receptors). Sensitive receivers identified are the Ayres Hotel and the Avalon Anaheim Stadium Apartments, identified within Category 2 of the FTA Land Use Categories.

Noise

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative:

Rail Effects

Approximately 22 Amtrak trains and 19 Metrolink trains arrive and depart from the Anaheim Metrolink/Amtrak Station daily. These trains would continue to operate with the development of Alternative 2 and the Proposed Action alternative. Additional trains are not components of either alternative. Train noise for Year 2013 either alternative would be similar to existing conditions.

Metrolink and Amtrak trains arriving and departing from ARTIC are expected to cause intermittent increases in ambient noise levels in the vicinity of Ayers Hotel above existing levels without either alternative. The increase is expected to last no longer than one minute per occurrence. It would not add substantially to the existing Community Noise Equivalent Level (CNEL), which is based on a 24-hour, time-weighted average. It is anticipated that no increase in CNEL would occur as a result of Alternative 2 and the Proposed Action alternative for 2013 noise levels would be less than the existing noise levels that are currently experienced at the Ayres Hotel. No noticeable change would occur in the exterior noise environment near the hotel.

In addition, the cumulative CNEL and the day-night average sound level (Ldn) values found at the Anaheim Metrolink/Amtrak Station are well below the cumulative CNEL and Ldn values found at the Ayres Hotel. According to the FTA Noise Impact Criteria for Transit Projects, if the existing noise level at the Ayres Hotel is 67 decibels (dBA) and the 2013 Proposed Action noise level would be 59 dBA, then the implementation of Alternative 2 and the Proposed Action would have no future effect on the Ayres Hotel or the surrounding area.

Traffic Effects

Due to the relocation of the existing Anaheim Metrolink/Amtrak Station, vehicular traffic would be rerouted to the project area. On-site traffic noise levels along roadway segments adjacent to the project site at a reference distance of 50 feet have negligible increases (less than one dBA) from the No Action to the Proposed Action conditions.

As a result, Alternative 2 and the Proposed Action noise effects associated with vehicular traffic would not be anticipated and no mitigation measures would be required.

Interior Noise Effects

In order to satisfy local and State standards for interior sound levels, a simultaneous interior and exterior measurement was taken at the Ayres Hotel to determine the building attenuation. The interior measurement was taken in Room 135 of the hotel and an exterior measurement was taken at the hotel pool area. The interior measurement was 34 dBA and the exterior measurement was 65 dBA; therefore, the building attenuation for the hotel is 31 dBA. The CNEL for the Ayres Hotel was found to be 67 dBA. By applying the building attenuation of 31 dBA to the exterior CNEL of 67 dBA, the interior sound level is expected to be 36 dBA. Alternative 2 and the Proposed Action noise levels would remain below the State and local standards interior noise standards.

Construction Effects

Construction activities, which would include demolition, site preparation, grading, and building construction, are expected to cause a temporary increase in ambient noise levels in the project vicinity.

Construction that would occur between the hours of 7 AM and 7 PM would be in compliance with Chapter 6.70 of the City of Anaheim Municipal Code.

Constructing the stub-end track along the LOSSAN ROW would require intermittent nighttime construction of the rail bridge over Douglass Avenue in order to maintain operation of the Amtrak/Metrolink rail services. These nighttime construction activities may expose noise sensitive receivers, such as the Avalon Anaheim Stadium Apartments and the Ayres Hotel, to temporary adverse noise levels.

Mitigation measures would be required to avoid construction noise effects as a result of both alternatives.

Vibration

Alternative 1 (No Action alternative): Under this alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Metrolink and Amtrak trains currently pass through the project area. For purposes of this analysis, vibration conditions as a result of Alternative 2 and the Proposed Action alternative are anticipated to be consistent with conditions at the Anaheim Metrolink/Amtrak Station. No changes in vibration levels would occur, and the area surrounding ARTIC is not expected to experience excessive ground-borne vibration.

During construction it is anticipated that approximately 80,000 cubic yards of material would be excavated. If shoring is needed during the excavation work, the shoring would be vibrated into place, not pile-driven. The FTA Vibration Screening procedure provides reference distances for sensitive receivers identified within a proposed action area (FTA, 2006). The Ayres Hotel was identified as the nearest sensitive receiver within the project area that is categorized as a Category 2 Land Use. The screening distance for Category 2 Land Uses is 200 feet from the project ROW. The Ayres Hotel is approximately 800 feet from the building excavation and shoring. According to the FTA guidance, no vibration effects would be likely to occur at the Ayres Hotel.

No adverse effects would be anticipated as a result of Alternative 2 or the Proposed Action alternative. No mitigation measures would be required.

4.3.7 Utilities

See Appendix H for additional information.

Alternative 1 (No Action alternative): Under the No Action alternative there would be no ground disturbing activities that would disrupt or require alteration of existing utility lines or services.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Neither alternative would require or result in the construction of new utilities or the expansion of existing facilities. The existing 8-inch sewer line at Douglass Road, south of Katella Avenue, that currently serves the Industrial property and Ayers Hotel will remain and will not be disturbed by ARTIC. A new 18-inch sanitary line will be installed to serve ARTIC and will connect with the existing OCSD sanitary line at Katella Avenue. Adequate capacity is available for the City of Anaheim for the foreseeable future (City of Anaheim, 2009). Natural gas may be considered as the fuel type for ARTIC's emergency generator. The natural gas supply from the City of Anaheim mains cannot be considered a guaranteed supply (Buro Happold, 2010). Diesel may be considered as an alternate fuel. While development of ARTIC may

contribute to the cumulative demand on the telephone and/or cable television service, due to the expandable nature of these services, systems can be upgraded as necessary by the provider without effects to the utility providers (City of Anaheim, 2008). Waste as a result of construction and operation of ARTIC would account for less than one percent of the combined daily capacity of the three County of Orange landfills. This percentage would not significantly reduce capacity at these associated landfills.

No adverse effects would be anticipated as a result of Alternative 2 or the Proposed Action alternative. No mitigation measures would be required.

4.3.8 Archaeological, Historical, and Paleontological Resources

See Appendix I for additional information.

Alternative 1 (No Action alternative): Under the No Action alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: No historic properties were identified within the project site for Alternative 2 and the Proposed Action alternative. The Big "A" scoreboard is located outside of the project site and no effects would occur as a result of either alternative.

FTA also sent a letter to the SHPO requesting Section 106 Concurrence on June 3, 2011. SHPO responded with a letter, dated June 26, 2011, agreeing to the Section 106 Concurrence in compliance with 36CFR 800.4(1)(a).

Although there is a potential for buried archaeological, historical, and paleontological resource deposits to exist beneath previously disturbed and developed land surfaces, this is highly unlikely. Ground disturbing activities as a result of the project could unearth and adversely affect these resources if they exist.

Mitigation measures would be required to avoid adverse effects to these resources.

4.3.9 Recreation and Section 4(f) Properties

Alternative 1 (No Action alternative): The No Action alternative does not require use of Section 4(f) properties.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: There are no Section 4(f) properties located within the project site for either alternative. Current access to the Santa Ana River Trail would not be restricted by construction. Construction activities for both alternatives would remain within the site and would not utilize the Santa Ana River Trail. ARTIC would not create demand for trail use above current use generated by the Anaheim Metrolink/Amtrak Station.

ARTIC would provide current users of the Santa Ana River Trail with access to a variety of transportation modes. A trail easement envisioned to be located along the east side of the ARTIC site would provide access from the Santa Ana River Trail to ARTIC via Katella Avenue.

No adverse effects would be anticipated as a result of Alternative 2 or the Proposed Action alternative. No mitigation measures would be required.

4.3.10 Contaminated Sites

Section 8.2 of the Phase I Environmental Site Assessment (Appendix J in the EA) for the ARTIC project and Section 3.7.1 of the EIR identified the following three properties within ARTIC project boundaries as sites of potential environmental concern:

- 1750 S. Douglass Road
  - A gravel-filled pit beneath a corrugated metal building on the southern portion of the property. The former use of this pit is unknown, and any previous sampling in the area was not determined.
- 2150 E. Katella Avenue
  - Former "pouring" of oil along the railroad tracks at/around/near the Anaheim Metrolink/Amtrak Station for weed abatement.
- 1790 S. Douglass Road
  - Blue-green dye staining near the dipping vat and within the concrete drainage swale at the retail lumber company.

Based on these findings, a limited preliminary Phase II Environmental Site Assessment (Appendix K in the EA) was conducted at the ARTIC site. This site assessment found that no or minimal amounts of dichlorodiphenyltrichloroethane (DDT), metal concentrations, organochlorine pesticides (OCP), or polychlorinated biphenyls (PCBs) were present at the project site. Therefore, no further assessment was recommended for these contaminants. The following two contaminants were identified as potentially requiring further assessment:

- Minimal amounts of petroleum hydrocarbons were detected in a soil sample collected approximately 20 feet bgs at the 1750 S. Douglass Road property. It should be noted that remediation occurred at this property and a case closure letter (OCHCA Case No. 08IC027) was issued on November 21, 2008 confirming completion of remedial action.
- Low concentrations of toluene and methyl ethyl ketone (MEK) (below their respective US EPA Industrial RSLs) were detected at the 1750 S. Douglass Road and 1790 S. Douglass Road properties.

Alternative 1 (No Action alternative): Under the No Action alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: The Phase I and Phase II Environmental Site Assessments identify locations of potential environmental concern within and adjacent to the project site for both alternatives.

Mitigation measures will be required for both alternatives to reduce potential construction effects.

4.3.11 Visual

See Appendix L for additional information.

Alternative 1 (No Action alternative): Under the No Action alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: The project site for both alternatives is configured as a maintenance yard and consists of a paved lot with scattered machinery, railroad ties, and other maintenance materials. It is currently being used for lumber storage and as a construction yard for OCTA's MSEP construction activities. Multi-story industrial and commercial buildings surround the site. Angel Stadium is located southwest of the project site and west of SR-57, and the Honda Center is located to the north and across Katella Avenue from the site. The surrounding area is designated as mixed use and light industrial. No residential areas are in the immediate vicinity of the proposed Intermodal Terminal (City of Anaheim, 2009; City of Orange, 2010).

ARTIC is planned to be consistent with the planned architecture and landscape environment envisioned for the Platinum Triangle (see Appendix O for additional information). Though ARTIC would change the visual character of the area, it would be a well-landscaped facility that would be an aesthetic improvement from the existing visual character and quality of the site and its surroundings (see Figure 1.1-3). The pedestrian bridge connecting the site to the Honda Center over Katella Avenue would also be consistent with the planned architecture envisioned for the Platinum Triangle and would contribute to the enhancement of aesthetic quality and overall visual character of the site vicinity.

No adverse effects would be anticipated as a result of Alternative 2 or the Proposed Action alternative. No mitigation measures would be required.

4.3.12 Energy

See Appendix H for additional information.

Alternative 1 (No Action alternative): The No Action alternative would not accommodate the demand for rail passenger service, and as such, would result in overall greater numbers of automobile trips and higher energy usage for fuel as compared to the build alternatives.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: The City of Anaheim Public Utilities Department provides its current customer base with more than 595,000 kilowatts and 3.3 billion kilowatt-hours annually (City of Anaheim, 2009). A minimum service of 4.8 megavolt ampere would be requested to serve electrical needs of both alternatives, which would include a future 15-percent increase allowance. A 1,000 kW emergency generator would be included to provide supply in the event of utility power loss (Buro Happold, 2010).

No adverse effects would be anticipated as a result of Alternative 2 or the Proposed Action alternative. No mitigation measures would be required.

4.3.13 Safety and Security

See Appendix M for additional information.

Alternative 1 (No Action alternative): Under the No Action alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative:

Construction

Federal regulations and general industry safety practice require that train operations and workers on or near the tracks be protected from each other. This separation is performed by flagmen who assure that workers near the track are safe from oncoming trains, direct the workers to retreat to a place of safety when trains pass, and assure that the tracks are safe for train operation before permitting trains to pass. Safety training and debriefing would be mandatory to personnel within the construction zone prior to construction activities. Access to the construction area would be controlled using fences and barriers.

Operations

Hazardous materials may be used on site, but would be generally stored off-site. The release of hazardous materials into the environment may pose a public safety concern depending on the nature of release. Proposed construction activities and operations would involve the use of small quantities of hazardous materials. Hazardous materials would be stored, used, and disposed of in accordance with existing hazardous materials regulations.

Access to the rail ROW is controlled, and limit to properly trained individuals who have the appropriate permissions. Station areas are designed to direct pedestrian foot traffic across the railroad tracks toward designated crossings. Signs would be posted warning of the danger of crossing active railroad tracks. As necessary, pedestrian crossings would also include safety devices such as bells, flashing lights, and/or gates. The platform waiting areas would incorporate regulatory signs, striping, pavement markings, public address system, and closed-circuit television.

Executive Order 13045 states that each federal agency must identify and assess environmental health and safety risks that may disproportionally affect children and ensure that its actions do not create these risks to children. Alternative 2 and the Proposed Action would not be located near a school, daycare, or other institution where large numbers of children would be present, and potentially unsupervised, multiple times per day. Alternative 2 and the Proposed Action would also not be located near residential areas where children would be present and potentially unsupervised. Children that would utilize transportation services at ARTIC would, for the most part, be accompanied by their parents. Alternative 2 and the Proposed Action would not adversely affect safety and security and would also not disproportionally affect the health and safety of children.

No effects would be anticipated for either alternative and no mitigation measures would be required.

4.3.14 ADA Compliance

Alternative 1 (No Action alternative): Under the No Action alternative, no changes to the existing environment would occur, and no effects would be anticipated.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Alternative 2 and the Proposed Action alternative would be fully compliant with the accessibility requirements of the ADA.

No effects would be anticipated for either alternative and no mitigation measures would be required.

4.4 CUMULATIVE EFFECTS

NEPA requires analysis of the cumulative effects from a proposed action when added to past, present, future, and reasonably foreseeable future effects (40 CFR 1508.7). Cumulative effects to be considered are based on the following criteria: 1) effects occur but are not localized to the same general area; 2) effects to a resource are similar in nature; and 3) effects are long-term rather than short-term in nature. Cumulative effects can result from several individually minor effects, which may be collectively significant over time.

Several other developments in the project area have been proposed that could potentially contribute to cumulative effects on resources. Appendix P describes the present and reasonably foreseeable future projects and their current status. This section considers the cumulative effects of the Proposed Action as compared to the No Action alternative when combined with projects identified in Appendix P.

As previously discussed, no direct or indirect effects are anticipated for the following issue areas: Land Use and Planning, Visual, Section 4(f) Properties, Socioeconomics, Environmental Justice, Utilities, Safety and Security, and ADA Compliance. Therefore, cumulative effects as a result of the Proposed Action are not expected to impact these issue areas.

4.4.1 Cumulative Effects to the Physical Environment

Air Quality

Secondary and cumulative effects to air quality have been analyzed in the technical report prepared for the Proposed Action (Appendix A). Construction emissions generated by ARTIC are anticipated to be highly variable and of a short term nature, and would comply with applicable regulations. The emissions would be related to both equipment operation and soil excavation activities. The City of Anaheim has not received applications for construction of other projects in the area during the planned construction of ARTIC. There are no reasonably foreseeable projects planned within the project area during ARTIC's excavation activities, with the exception of the SR-57 Northbound Widening Project.

Construction of the SR-57 Northbound Widening Project would increase emissions of O_3, $PM_{2.5}$, and PM_{10} as a result of the use of diesel and gasoline construction equipment and soil disturbance (LSA Associates, Inc., 2009). Since these emissions would be temporary and would be minimized through implementation of SCAQMD and Caltrans-required control measures, the project would not contribute to nonattainment within SCAB for O_3, $PM_{2.5}$, and PM_{10}. The combined construction emissions for these two projects would not exceed the NAAQS thresholds and would be consistent with the AQMP. ARTIC was included in the cumulative effect analysis for the SR-57 Northbound Widening Project, which stated that no significant cumulative effects would occur.

ARTIC would provide a necessary component for the transportation network with the City of Anaheim and would serve as the gateway to the southern California region. ARTIC would enhance the County of Orange's overall transportation system by accommodating additional bus transit, additional alternatives to road-based travel, and improved services for the transit-dependent. Operation of ARTIC would not result in a cumulatively considerable net increase in non-attainment air pollutants.

No cumulative effects would be anticipated for this issue area.

4.4.2 Cumulative Effects to the Biological Environment

Vegetation and Habitat, Wildlife, and Protected Species

Potential effects to biological resources as a result of ARTIC would be localized and would remain within the project area boundaries. Implementation of ARTIC would not adversely affect Federal or State listed species, or waterbodies including upland or riparian habitats; nor would it have an adverse effect on protected wetlands, as defined in Section 404 of the Clean Water Act. Potential effects to nesting migratory birds would be avoided by vegetation removal outside of the nesting season.

No cumulative effects would be anticipated for this issue area.

4.4.3 Cumulative Effects to the Human Environment

Transportation Systems and Facilities

Two Caltrans study intersections would operate at adverse levels of service under the Year 2030 Proposed Action traffic conditions: Manchester Avenue/I-5 Southbound ramps at Katella Avenue and Anaheim Way/I-5 Northbound ramps at Katella Avenue. Three of the four Caltrans ramp locations (Weaving Analysis) would operate at adverse levels of service with the addition of ARTIC traffic: SR-57 Southbound between Katella Avenue On-Ramp and Orangewood Avenue Off-Ramp, SR-57 Northbound between Katella Avenue On-Ramp and Ball Road Off-Ramp, and SR-57 Southbound between Ball Road On-Ramp and Katella Avenue Off-Ramp. One Caltrans freeway segment would operate at an adverse level of service with the addition of ARTIC traffic: SR-57 Southbound from Ball Road to Katella Avenue.

Mitigation measures would be required to avoid adverse effects.

Noise and Vibration

Construction

Cumulative construction noise effects would have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. The ambient noise environment for ARTIC would include traffic noise from SR-57. The two sensitive receptors in the project area are the Ayers Hotel (approximately 800 feet to the northwest) and the Avalon Anaheim Stadium Apartments (approximately 2,400 feet to the west). ARTIC construction would conform to applicable policies, regulations, and codes. Nighttime construction effects would be avoided with temporary noise attenuation measures.

There are no reasonably foreseeable projects planned within the project area during ARTIC's grading and excavation activities, with the exception of the expansion of SR-57. Nighttime construction activities are not planned for the SR-57 Northbound Widening Project (LSA Associates, Inc., 2009). Noise as a result of daytime construction activities for the two projects would conform to applicable policies, regulations, and codes.

Cumulative effects for the construction of ARTIC would be avoided with temporary noise attenuation measures.

Operation

Traffic Effects

Cumulative traffic effects can occur when multiple projects combine and operate concurrently. Future projects will be completed and operating by the year 2030. 2030 traffic effects were analyzed for ARTIC in conjunction with other future planned projects operating within the project area during this future condition.

On-site traffic noise levels along roadway segments adjacent to the project site at a reference distance of 50 feet would have negligible increases (less than one dBA) in noise levels from No Action to Proposed Action conditions. Changes in local traffic patterns and improvements to local roads would not have a perceptible increase in ambient noise levels in the project area. Project-related cumulative noise adverse effects associated with vehicular traffic would not be anticipated.

No cumulative effects would be anticipated for this issue area.

Rail Effects

Approximately 22 Amtrak trains and 19 Metrolink trains arrive and depart from this station daily. According to the Final EIR for OCTA Long-Range Transportation Plan, transit trips on Orange County are expected to increase by 26-percent by the year 2030 (OCTA, 2006). FTA guidance states that a 40-percent change in trains per day or hour can produce an approximate 2 dBA change in noise exposure at a reference distance of 50 feet from the noise source. The 26-percent increase will occur throughout the County of Orange, not just the City of Anaheim. Therefore, it is assumed that the noise level for the 2030 Proposed Action would increase by a maximum of one dBA from existing noise levels at ARTIC.

Sound level attenuates or drops off at a rate of 6 dBA for each doubling of the distance (Caltrans, 2009). The Ayres Hotel is located approximately 800 feet from the proposed Intermodal Terminal location. Therefore, the increase in noise levels from the relocation of the station and the estimated increase in transit trips would have no effect on the Ayres Hotel based on the distance from the new train platform and the Ayres Hotel.

No cumulative effects would be anticipated for this issue area.

Interior Noise Effects

Noise levels for the 2030 Proposed Action conditions would be expected to be similar to the noise level for the 2013 Proposed Action and existing conditions. The building attenuation of the Ayres Hotel was found to be 31 dBA. Because 2030 noise levels are expected to remain the same as 2013 projections and existing conditions, the interior sound levels for the hotel rooms would be 36 dBA. The future noise levels would remain below the State and local standards interior noise standards.

No cumulative effects would be anticipated for this issue area.

Archaeological and Historical Sites

Potential effects to cultural resources as a result of ARTIC would be localized and would remain within the project area boundaries. Mitigation measures would be implemented to avoid effects to cultural resources as a result of ARTIC. No adverse cumulative effects would be anticipated.

4.5 IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES

NEPA requires a review of significant irreversible and irretrievable effects that occur from development of a proposed action (40 CFR 1502.16). Irretrievable effects apply to losses of production or commitment of renewable natural resources. Irreversible effects apply primarily to the use of non-renewable resources, such as minerals or cultural resources, or to those factors that are renewable over long periods of time, such as soil productivity. Irreversible effects also include the loss of future options.

Alternative 1 (No Action alternative): The No Action alternative would have no adverse effects on the commitment of resources.

Alternative 2 (Reduced Building Size alternative) and Proposed Action alternative: Development of Alternative 2 and the Proposed Action alternative would require the commitment of land, fuel, and labor resources. The commitment of energy and labor for construction is irretrievable and irreversible, but is not an adverse effect. Resources available at the project site and regionally are more than sufficient to satisfy the needs of ARTIC without disrupting construction throughout the region.

4.6 LOCAL SHORT-TERM USES VERSES LONG-TERM PRODUCTIVITY

NEPA requires a review of the balance between short-term uses and long-term productivity of resources within the project area (40 CFR 1502.16). The definitions of short-term and long-term are specific to each project. Generally, short-term refers to the useful life of the development. Long-term refers to the time beyond the lifetime of the project. Those effects that narrow the range of beneficial uses to the environment are of primary concern. Potential effects include selecting a development option that reduces the ability to pursue other possibilities, or committing a piece of land or other resources to a particular use that eliminates possibilities of additional uses being performed on this site.

Alternative 2 and the Proposed Action alternative would construct ARTIC in an area historically and currently used for transportation and rail operations. Neither alternative would limit beneficial uses of the environment because this is a redevelopment of an existing urban facility. These alternatives would facilitate connections from one transportation mode to another, improve links to the County of Orange's entertainment and sports centers, business districts, and nearby pedestrian facilities, increase operational safety and efficiency, and make future passenger rail service more feasible.

4.7 MITIGATION

An EA is intended to focus on relevant issues and effects; therefore only topics with potential associated issues are discussed in this section. Incorporated in ARTIC are appropriate mitigation measures designed to avoid, minimize, or compensate for environmental consequences.

4.7.1 Air Quality

The following actions shall be implemented to avoid adverse effects to air quality and shall be clearly noted on the grading/excavation and building plans submitted to the City of Anaheim Public Works Department and Building Division for review and approval.

The sequencing of grading/excavation activities shall be noted on the grading plans. Excavation of the soil for the Intermodal Terminal shall precede excavation of Douglass Road under the bridge, and both activities shall occur in sequence.

An export plan showing quantities and identified haul route shall be shown on grading plans. Exporting of soil during the excavation stage of the project shall be limited to 25 on-road truck trips per day during excavation and grading.

The sequencing of the street improvements shall be noted on the grading plans. Road widening and sidewalk improvement projects shall occur following the completion of the excavating activities.

A complete list of construction equipment to be used at the project site shall be submitted by the contractor to confirm compliance with USEPA Tier 2 standards. Construction off-road equipment with engines greater than or equal to 150 brake horsepower shall meet or exceed USEPA Tier 2 engine standards, and shall be required to have diesel oxidation catalysts installed that meet or exceed 20 percent reduction in NOx.

Diesel or gasoline power generators shall be limited to less than 2 hours of use per day. This restriction shall be clearly noted on the grading/excavation and building plans submitted to the Anaheim Public Works Department and Building Division for review and approval. This information shall also be included in the contractor's specifications.

Implementation of these actions will avoid project-related effects to air quality.

4.7.2 Water Quality

The following actions shall be implemented to avoid adverse effects to water quality.

Prior to issuance of the first grading permit, the City will verify that the project WQMP, which meets the requirements of the DAMP, is complete.

Prior to Final Building and Zoning Inspection, the City will verify that the project BMPs are properly installed as indicated in the WQMP.

During operations, the City will inspect the BMPs and verify that the BMPs are properly maintained and functioning as per the WQMP.

Implementation of these actions will avoid project-related effects to water quality.

4.7.3 Noise and Vibration

The following actions would be implemented to avoid adverse effects to noise levels. These actions shall be clearly noted on the grading/excavation and building plans. These plans shall be submitted to the City of Anaheim Public Works Department and Building Division for review and approval.

Noise generated by construction shall be limited to 60 dBA along Douglass Road, Katella Avenue, and the tracks before 7 AM and after 7 PM, as governed by Chapter 6.70, Sound Pressure Levels, of the Anaheim Municipal Code. If 60 dBA were to be exceeded during these hours, noise attenuation features (e.g., temporary noise barriers, sound curtains, etc.) shall be installed to reduce noise levels to below 60 dBA at the exterior of the affected building. These noise attenuation features may be removed if a qualified noise specialist were to determine that noise levels are not adversely affected by nighttime construction.

If/when excessive noise during construction is anticipated before 7 AM and after 7 PM the contractor shall request an exception to the requirements of Chapter 6.70 of the Anaheim Municipal Code. The request shall be submitted in accordance with the provisions contained in Chapter 6.70 and shall include a construction schedule and a list of equipment to be used during that time frame. This information shall be provided to the Director of Public Works or Chief Building Official for consideration.

Construction equipment and supplies shall be located in staging areas that shall create the greatest distance possible between construction-related noise sources and noise sensitive receivers nearest the project area. This information shall be specified on all grading, excavation and construction plans.

Implementation of these actions will avoid project-related noise and vibration effects.

4.7.4 Transportation Systems and Facilities

The City of Anaheim roadway facilities shall be affected at the 2013 and 2030 Proposed Action conditions. Adverse effects shall be mitigated through the implementation of the City of Anaheim's Community Facilities District 08-1.

The Traffic Impact Analysis has also identified effects to Caltrans facilities at the 2013 and 2030 time horizons. Consistent with the applicable programmatic City of Anaheim documents in effect or currently under review by the City of Anaheim, the following actions would be implemented to avoid adverse effects to traffic:

Prior to the issuance of grading permits, the City of Anaheim shall transmit the Proposed Action's applicable traffic impact fee into the City's Traffic Impact Fee Account and pay for the Proposed Action's fair share of City improvements related to ARTIC. The City of Anaheim shall ensure that such improvements will be constructed pursuant to the fee program at that point in time necessary to avoid identified adverse effects on traffic.

The City of Anaheim shall participate in a multi-jurisdictional effort with Caltrans to develop a study to identify fair share contribution funding sources attributable to and paid from private and public development to supplement other regional and state funding sources necessary to implement feasible traffic improvements to state facilities as identified in the Appendix F. The study shall include fair share contributions related to private and/or public development based on nexus requirements contained in the Mitigation Fee Act (Government Code section 66000, et seq.) and 14 CCR section 15126.4(a)(4) and, to this end, the study shall recognize the state wide and regional contributions to impact state facilities that are not attributable to local development such that local private and public development are not paying in excess of such developments' fair share obligations. The fee study shall be compliant with Government Code section 66001(g) and any other applicable provisions of law. The study shall set forth a timeline and other agreed-upon relevant criteria for the implementation of the recommendations contained within the study to the extent Caltrans and other agencies agree to participate in the fee study program.

The Traffic Impact Analysis concluded that a number of identified state facilities will operate at deficient levels of service with the Proposed Action at the 2013 and 2030 timelines. The Proposed Action's contributions to traffic in these facilities will contribute to cumulative congestion on these identified state facilities. Improvements to these facilities would mitigate the Proposed Action's adverse effects. Prior to the issuance of the first grading permit the City of Anaheim shall transfer the agreed to amount into the City's Traffic Impact Fee Account and hold the amount in trust and apply such amount following the implementation of any traffic fee program.

Implementation of these actions will avoid project-related effects to transportation systems and facilities.

4.7.5 Archaeological, Historical, and Paleontological Resources

The following actions shall be implemented to avoid adverse effects to archaeological, historical, and paleontological resources. These actions shall be clearly noted on the grading/excavation and building plans. These plans shall be submitted to the City of Anaheim Public Works Department and Building Division for review and approval.

A letter shall be submitted by the contractor to the Public Works Department, identifying the certified archaeologist and paleontologist hired to ensure that the following actions are implemented:

The certified archaeologist and paleontologist shall be present at the pregrading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of potentially significant resources if such are uncovered. If OCTA discovers unanticipated archaeological material, OCTA must halt construction, in the immediate area and notify FTA, SHPO and NAHC. Construction can't start again in the immediate area before OCTA and FTA consults SHPO and NAHC to resolve its disposition.

A final report detailing the findings and disposition of the specimens shall be submitted to the City of Anaheim Engineer. Upon completion of the grading, the archaeologist or paleontologist shall notify the City of Anaheim as to when the final report shall be submitted.

In the unlikely event of the discovery of human remains during project construction, procedures specify that, upon discovery, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains may occur. The county coroner must be contacted to determine if the remains are Native American. If the remains are determined to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the Most Likely Descendant (MLD). The MLD shall make recommendations for the appropriate treatment and disposition of the remains and any associated grave goods in accordance with PRC § 5097.98.

Implementation of these actions will avoid project-related effects to archaeological, historical, and paleontological resources.

4.7.6 Wildlife

The following actions shall be implemented to avoid adverse effects to wildlife. These actions shall be clearly noted on the grading/excavation and building plans. These plans shall be submitted to the City of Anaheim Public Works Department and Building Division for review and approval.

A letter shall be submitted to the Public Works Department attesting that no more than one week prior to demolition and vegetation clearing, a qualified biologist shall conduct a breeding and nesting bird survey within ARTIC construction footprint and within a 500-foot buffer around the site. The purpose of the survey shall be to ensure that no active nests are located within or adjacent to the project area. Nesting season for raptors begins February 15 and the traditional breeding season for native and migratory birds begins March 15. If clearing were to start after October and before the start of the nesting season, there shall be no need for nesting bird surveys.

If an active nest were to be detected, a suitable buffer shall be established around the nest. The nature of the buffer shall depend on the type of species detected and location of the nest as determined by a qualified biologist and in accordance with the requirements of the Migratory Bird Treaty Act. The nest avoidance area shall be flagged and shall be avoided until after the young have fledged and the nest is no longer in use. Documentation showing that this mitigation measure was completed shall be sent to the City of Anaheim by the contractor. This documentation shall include a description of the survey results and whether subsequent actions were required prior to commencement of demolition and vegetation clearing. The California Department of Fish and Game may authorize the relocation of the nest but consultation shall be required to ensure that no direct or indirect effects result from this action and compliance with the Migratory Bird Treaty Act and California Department of Fish and Game Codes.

Implementation of these actions will avoid project-related effects to wildlife.

4.7.7 Contaminated Sites

For the two locations identified above and any undocumented contaminated sites that may be encountered during construction the following mitigation measure (identified in Section 3.7.8 of the EIR and Section 4.7.7 of the EA) is required: In areas encountered during construction that may have contaminated soil, appropriate sampling shall be required to ensure appropriate procedures are followed for disposal of excavated soil. For appropriate sampling to be conducted a work plan approved by the Orange County Department of Environmental Health is required. This work plan will include; a description of the site, sampling depths, anticipated contaminants and the analysis to be conducted on the samples. The analysis must be conducted at a California certified laboratory and the results submitted to the County. Once the County approves of the sampling, the contaminated soil shall be properly disposed at an off-site facility. With this mitigation measure incorporated, there are no anticipated significant impacts or adverse effects as a result of the ARTIC project.

Implementation of these actions will avoid project-related effects to contaminated sites.

5.0 CONSULTATION AND COORDINATION

ARTIC was presented to various agencies at the Federal, State, and regional/local levels since initial inception. Presentations, policy and technical committee meetings, and information gathering sessions were conducted to identify concerns, potential solutions, and anticipated environmental effects. Information about the Proposed Action and various alternatives were presented. These scoping/outreach opportunities allowed agencies to identify issues and concerns to be incorporated in the environmental documentation process. Contact was made with the following agencies:

- Amtrak
- California Department of Transportation
- California High-Speed Rail Authority
- California State Historic Preservation Office
- City of Anaheim
- City of Orange
- Native American Heritage Commission
- Orange County Flood Control District
- Orange County Sanitation District
- Orange County Transportation Authority
- Santa Ana Regional Water Quality Control Board
- Southern California Regional Railroad Authority
- South Coast Air Quality Management District
- United States Army Corps of Engineers

5.1 PUBLIC MEETINGS

Interested parties were invited to attend an ARTIC project meeting held on February 24, 2010 at the City of Anaheim offices. The meeting was advertised in the Orange County Register on Friday, February 19 and Saturday, February 20, and in the Anaheim Bulletin and Orange City News on Thursday, February 18. Posters in English and Spanish advertising the meeting were placed around the existing Anaheim Metrolink/Amtrak Station and ARTIC. In addition, an email distribution was sent to a City of Anaheim-generated email list of interested members of the public. A Spanish translator was available at the meeting.

5.2 NOTICE OF AVAILABILITY AND DISTRIBUTION LIST

The Notice of Availability for this Environmental Assessment was published on September 22, 2011, in the newspaper. The Notice of Availability and distribution list are included in Appendix Q of this report.

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7.0 BIBLIOGRAPHY

B. Jones. 2010. Communication via electronic mail, January 15, 2010.

Buro Happold, 2010: Electrical Loads Calculations, February, 2010.

California Air Resources Board (CARB), 2009. 1999-08-12 California Air Toxics Program Background. http://www.arb.ca.gov/toxics/background.htm

California Division of Mines and Geology (CDMG), 1998. Seismic Hazard Zones Map of the Anaheim 7.5-Minute Quadrangle, California, scale 1:24,000, released April 25, 1998.

California Department of Transportation (Caltrans), 2009. Scenic Highway Guidelines. http://www.dot.ca.gov/hq/LandArch/scenic/guidelines/scenic_hwy_guidelines.pdf

Center for Demographic Research, 2009. Orange County Facts and Figures. Cal State Fullerton, June 2009.

Center for Demographic Research, 2009. Orange County Profiles, http://www.fullerton.edu/cdr/profiles.asp (August 2009).

City of Anaheim, 2008. Initial Study for Amendment to the Platinum Triangle Master Land Use Plan and Associated Actions. Prepared December 2008.

City of Anaheim, 2008. The Platinum Triangle Master Land Use Plan. October 14, 2008.

City of Anaheim, 2009. Anaheim Municipal Code.

City of Anaheim, 2009. Anaheim Public Utilities: Water Rules, Rates, And Regulations, Rule 15D - Main Extensions.

City of Anaheim, 2009. Combined Central Anaheim Area Master Plan of Sanitary Sewers (CCAAMPSS) – Analysis of Models for the Revised Platinum Triangle Expansion Project (DSEIR No. 339).

City of Anaheim, 2009. General Plan, Revised August 11, 2009.

City of Anaheim, 2009. The Platinum Triangle Water Supply Assessment Amendment 2009.

City of Anaheim, 2010. A Gateway to the Future: The Anaheim Regional Transportation Intermodal Center. Power Point Presentation, January 27, 2010.

City of Anaheim, 2010. City of Anaheim Fire Department, Certified Unified Program Agency http://www.anaheim.net/fire/fire-prev/CUPA%20FAQ.pdf

City of Anaheim, 2010. Green Connection. Website accessed May 7, 2010. http://www.anaheim.net/section.asp?id=162

City of Fullerton, 2005. General Plan, Revised October 5, 2004.

City of Fullerton, 2010. City of Fullerton Transportation Center. Website accessed on April 29, 2010. http://www.ci.fullerton.ca.us/visitors/downtown_fullerton/transportation_center.asp

City of Irvine, 2006. General Plan, Supplemented August 2006.

City of Orange, 2010. General Plan, Updated March 9, 2010.

Cordoba Corporation, 2009. Needs Assessment Update and Validation. August 11, 2009.

Council on Environmental Quality, 1997. *Environmental Justice: Guidance Under the National Environmental Policy Act*. December 10, 1997.

Federal Emergency Management Agency (FEMA), 2009. Disaster Information: Flood. http://www.fema.gov/hazard/flood/index.shtm

FEMA, 2009. Floodplain Management Requirements. http://www.fema.gov/plan/prevent/floodplain/fm_sg.shtm

FEMA, 2009. The National Flood Insurance Program. http://www.fema.gov/about/programs/nfip/index.shtm

FEMA, 2010. FEMA FIRM Map ID 06059C0142J, 2009, available at: http://msc.fema.gov/webapp/wcs/stores/servlet/MapSearchResult?storeId=10001&catalogId=10001&langId=-1&userType=G&panelIDs=06059C0142J&Type=pbp&nonprinted=&unmapped=

Federal Transit Administration (FTA), 2006. Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06. Office of Planning and Environment, May 2006.

Greenwood, R.B. and Pridmore, C.L, 2001. Liquefaction zones in the Anaheim and Newport Beach 7.5-minute quadrangles, Orange County, California, in Seismic Hazard Zone Report for the Anaheim and Newport Beach 7.5-minute quadrangles, Orange County, California: California Geological Survey Seismic Hazard Zone Report 03, pp. 5-18; Plates 1.1 and 1.2.

LSA Associates, Inc., 2009. State Route 57 Northbound Widening Project Between Katella Avenue and Lincoln Avenue; Initial Study with Negative Declaration. Prepared for Caltrans. November 2009.

Orange County Transportation Authority (OCTA), 2006. New Directions: Chartering the course for Orange County's future transportation system. 2006 Long-Range Transportation Plan, July 24, 2006. Orange County Water District, 2004, Groundwater Management Plan, dated March 2004, available at: http://www.ocwd.com.

OCTA, 2009. Fullerton Metrolink Station Fast Facts. July 16, 2009.

OCTA, 2009. Irvine Metrolink Station Fast Facts. July 13, 2009.

OCTA, 2009. Orange Metrolink Station Fast Facts. July 28, 2009.

U.S. Census Bureau, 2010. Census 2000 Summary Tape Files 1 and 3, American FactFinder, http://factfinder.census.gov/ (downloaded January 12, 2010).

Appendices A-Q
(see attached CD)

Attachment 1
ARTIC Final Environmental Impact Report
(see attached CD)