City of Rialto

Renaissance Specific Plan Amendment Recirculated Draft Subsequent Environmental Impact Report

September 2016

SCH# 2006071021

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RENAISSANCE SPECIFIC PLAN AMENDMENT

Recirculated Draft Subsequent Environmental Impact Report

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1 EXECUTIVE SUMMARY

1.1 PURPOSE

The City of Rialto circulated the June 2016 Draft Subsequent Environmental Impact Report (Draft SEIR) for the proposed Renaissance Specific Plan Amendment Project for public review and comment on July 5, 2016. Subsequent to the close of the public comment period for the Draft SEIR (which extended from July 5, 2016 through August 19, 2016), both the City and Project Applicant completed additional technical analysis for the Project. In an effort to address potential impacts of the proposed Project and provide additional opportunity for public input, the City has elected to recirculate the Draft SEIR in its entirety for an additional 45 days of public review. Accordingly, the City will not respond to comments submitted on the June 2016 Draft SEIR, but will respond to all comments submitted on this Recirculated Draft SEIR. Refer to Chapter 2, Introduction, for additional information.

This Recirculated Draft Subsequent Environmental Impact Report (Recirculated Draft SEIR) has been prepared by the City of Rialto ("City") in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Renaissance Specific Plan Amendment ("the proposed Project" or "Project"). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) and City rules and regulations to implement CEQA. This Recirculated Draft SEIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed Project.

The purpose of an Environmental Impact Report (EIR) is to disclose information to the public and to the decision-makers about the potential environmental effects of a proposed project. An EIR does not recommend either approval or denial of a proposed project. Rather, it is intended to provide a source of independent and impartial analysis of the foreseeable environmental impacts of a proposed course of action. This Recirculated Draft SEIR describes the proposed Project, analyzes its environmental effects, identifies measures to mitigate significant environmental effects, and discusses reasonable alternatives that would avoid, reduce, or minimize environmental impacts.

The environmental impact report (EIR) process, as defined by the California Environmental Quality Act (CEQA), requires the preparation of an objective, full-disclosure document in order to (1) inform agency decision makers and the general public of the direct and indirect potentially significant environmental effects of a proposed action; (2) identify feasible or potentially feasible mitigation measures to reduce or eliminate potential significant adverse impacts; and (3) identify and evaluate reasonable alternatives to the proposed project. In accordance with Section 15168 and Section 15161 of the State CEQA Guidelines (Title 14 of the *California Code of Regulations [CCR]*), this is both a Program-level and Project-level EIR that addresses the potential environmental impacts associated with the proposed Project.

1.2 PROJECT SUMMARY

1.2.1 PROJECT LOCATION

The Renaissance Specific Plan (RSP) planning area is located in the City of Rialto, California. The City of Rialto (City) is located in western San Bernardino, approximately 60 miles east of Los Angeles and 100 miles north of San Diego.

The proposed Project area is located within a subset of the approved RSP planning area, south of Interstate 210 (I-210), west of Ayala Drive, east of Alder Avenue, and north of Baseline Road.

1.2.2 PROJECT DESCRIPTION SUMMARY

The Renaissance Specific Plan Amendment (RSPA) is an amendment to the approved 2010 RSP. The 2010 RSP consists of approximately 1,445.3 gross acres located within the western/central portion of the City. The Specific Plan is planned as an integrated community of varied housing types located near and linked to places of employment, retail outlets, services and schools. The RSP at the time of approval was planned to accommodate 16.2 million square feet of business and commercial uses (835,200 square feet of which were existing and would remain), 1,667 residential units, one school, a community park, and multiple neighborhood parks all located in proximity to one another and organized in a grid pattern.

The approved RSP identified retail development in the Town Center zoning designation. The RSP amendment retains the Town Center zoning designation however the configuration and the square footage of the area is modified in the RSP amendment as a result of the alignment of Renaissance Parkway. The RSP amendment also includes a project specific site plan for the Town Center area and brands the area as the "Renaissance Marketplace". The RSP Amendment would include the relocation of business and industrial uses to the west of Linden Avenue; relocation of all residential land uses and the public park to the east side of Linden Avenue; and implementation of the Renaissance Marketplace retail development and the Planning Area 108 industrial/warehouse development. In addition to the Specific Plan Amendment, the project includes the Renaissance Marketplace consisting of an approximately 505,500 square foot retail center as well as the Planning Area 108 development comprised of approximately 4 million square feet of industrial/warehouse uses. Although these developments were not specifically identified in the 2010 RSP, the 2010 RSP contemplated a portion of Planning Area 108 as an industrial use (formerly Planning Area 60B), consequently, the RSP Amendment is adding to a previously identified industrial-zoned area and re-naming it as Planning Area 108.

1.3 CEQA PROCESS

1.3.1 NOTICE OF PREPARATION

A Notice of Preparation (NOP) for the proposed Project was issued on January 8, 2015 for a 30-day period of review until February 6, 2015. The NOP describes the development concept for the Project and range of issues to be addressed in the Recirculated Draft SEIR. The NOP was distributed to the State Clearinghouse, responsible agencies, and other interested parties.

Pursuant to CEQA Guidelines Section 15123(b), a summary section must identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and also identify issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. The NOP identified potential for significant impacts and the needs for the Recirculated Draft SEIR to evaluate on the following environmental issues or topical areas:

- Aesthetics
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Hydrology/Water Quality
- Noise
- Transportation/Traffic
- Utilities/Service Systems

1.3.2 AREAS OF CONTROVERSY

Based on comments received during the NOP period, input from local agencies, and discussions with local residents, the following issues are considered areas of controversy, which the Recirculated Draft SEIR will discuss:

- **Biological Resources:** The California Department of Fish and Wildlife has expressed concern with regard to potential biological resources and impacts from the proposed Project and suggested appropriate analysis methods and mitigation measures to be incorporated in the discussion of biological resource analysis.

- **Traffic:** The San Bernardino County Department of Public Works, Traffic Division has expressed concern with regard to potential traffic impacts from the proposed Project and suggested appropriate analysis methods for the traffic impact analysis and conditions of development to be incorporated in the discussion of traffic impact analysis.

- **Hydrology/Water Quality:** The San Bernardino Department of Public Works, Environmental Management Division expressed concern with regard for potential impacts to the currently operating groundwater treatment system from the proposed Project's stormwater infiltration activities.

- **Biological Surveys:** The San Bernardino Department of Public Works, Environmental Management Division expressed concern with the survey data relevancy used for the biological resources analysis.

1.3.3 SIGNIFICANT IMPACTS

The Recirculated Draft SEIR has identified the following issues where, after implementation of feasible mitigation measures, the proposed Project would result in impacts that cannot be reduced to less than significant levels. However, these significant impacts were previously identified in the certified 2010 RSP Final EIR. Consistent with the findings of the 2010 RSP Final EIR, the following impacts will occur:

Air Quality

- Construction air emissions: Construction of the Project would exceed the South Coast Air Quality Management District's (SCAQMD's) regional significance emission thresholds for Volatile Organic Compound (VOC), Carbon Monoxide (CO), Nitrogen Oxides (NO_x), PM_{10}, and $PM_{2.5}$ emissions during one or more of the Project's construction periods from 2009 to 2019 after application of mitigation measures.

- Operational air emissions: During all operational phases, the operation of the proposed Project would exceed the SCAQMD's regional significance emission thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ after application of mitigation measures.

- Cumulative air quality emissions: Because construction and operational emissions would exceed SCAQMD thresholds, the proposed Project would have significant cumulative air quality impacts. No feasible mitigation is available to reduce this impact to a less than significant level.

Greenhouse Gas Emissions

- Greenhouse gas emissions from construction and operation of the Project has the potential to be inconsistent with AB 32's Greenhouse Gas (GHG) reduction goal by failing to reduce GHG emissions by at least 28 percent below a California Air Resources Board (ARB) 2020 No Action Taken Scenario. Despite the fact that the proposed Project could potentially meet AB 32's GHG emissions reduction goal, it cannot do so without the actions of multiple third parties, including but not limited to CARB, EPA, and local air districts, who must adopt and fully implement GHG reduction requirements applicable to numerous other economic sectors. The City of Rialto lacks the authority to compel these third party agencies to engage in these activities. Pursuant to CEQA Guidelines Section 15091(a)(2), lead agencies may not rely upon mitigation that is within the responsibility or jurisdiction of another public agency.

1.3.4 ALTERNATIVES TO THE PROPOSED PROJECT

Below is a summary of the alternatives to the proposed Project considered in Section 7, Alternatives.

- **No Project – No Development Alternative:** Since the approval of the RSP in 2010, several development projects have been approved and constructed within the boundaries of the Specific Plan area. The No Project – No Development Alternative assumes that no additional development would occur; the Project area would remain in its existing condition.

- **Reduced Site Plan Alternative:** This alternative would develop approximately 8 million square feet of low intensity business and commercial uses (compared to 16.2 million square feet as assumed in the 2010 RSP) as well as 800 single-family residential units (compared to 1,667 residential units as assumed in the 2010 RSP) on the site compared to the proposed Project.

- **Mixed Use I Alternative:** This alternative examined impacts from a total of 14.5 million square feet of new development (compared to 16.2 million square feet as assumed in the 2010 RSP), including 2 million square feet of commercial uses, approximately 6.8 million square feet of business park uses, 5.7 million square feet of light industrial uses, up to 1,747 residential units (compared to 1,667 residential units as assumed in the 2010 RSP) near the existing residential neighborhoods south of Baseline Road, and various public uses.

- **Mixed Use II Alternative:** This alternative examined impacts from a total of 6.86 million square feet of new development (compared to 16.2 million square feet as assumed in the 2010 RSP), including 0.4 million square feet of commercial uses, approximately 6.4 million square feet of business park and light industrial uses, up to 3,853 residential units (compared to 1,667 residential units as assumed in the 2010 RSP), and various public uses.

- **Technology/Education Park Alternative:** This alternative would utilize the site for a mixture of educational and business park uses that focused on high or green technologies, plus a number of educational uses such as private and/or public schools, parks, a community center, etc. This alternative would include a total of 20.5 million square feet of new non-residential development compared to 16.6 million square feet for the proposed Project. Although it proposed more square footage, this alternative would emphasize uses that focus on new or "green" technology in a partnership with various educational uses, supported by some commercial uses along the freeway. This alternative would contain approximately 10 million square feet of technology-oriented business and office uses, and 10 million square feet of educational oriented uses

(industrial trade schools, private and/or public post K-12 schools, etc.). It would have no residential units and only 500,000 square feet of commercial uses compared to the Proposed RSP Amendment Project. This alternative was included in the 2010 RSP EIR and would have the same results for the proposed Project.

- **Alternative Sites:** Due to the various environmental constraints and opportunities of the proposed Project area (i.e., proximity to the SR-210 Freeway, closure of the Rialto Airport, etc.), no alternative sites to the proposed Project area are available to be examined.

- **No Project – Existing Conditions Alternative:** Under the No Project – Existing Conditions Alternative the proposed Project would not be built and the existing land uses approved with the 2010 RSP would remain in effect. Future development would be consistent with the land uses in their approved locations. Environmental impacts would be the same as those evaluated in the 2010 RSP EIR.

1.4 EXECUTIVE SUMMARY MATRIX

Table 1-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed Project. The table is intended to provide an overview; narrative discussion for the issue areas are included in the corresponding section of this Recirculated Draft SEIR. Table 1-1 is included in the Recirculated Draft SEIR as required by CEQA Guidelines Section 15123(b)(1).

The Mitigation Program set forth in this Recirculated Draft SEIR includes the measures adopted as a part of 2010 RSP Final EIR that are still applicable to the proposed Specific Plan as amended; additional mitigation is identified as needed. Minor modifications to the mitigation measures are proposed to reflect the current status of the Specific Plan; some of the mitigation measures in the Final EIR have been implemented and are no longer applicable. Measures that are no longer applicable are not identified in Table 1-1. Strikeout text is used to show deleted wording and *italic text* is used to show wording that has been added. Justification for all proposed modifications to the Final EIR mitigation measures is provided in Sections 4.1 through 4.8.

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Table 1-1 Executive Summary Matrix

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
Section 4.1 - Aesthetics		
Substantially degrade the existing visual character or quality of the site and its surroundings.	**AES-1: Pursuant to Section 15.32 of the City's Municipal Code** Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Public Works Director, evidence that all electrical distribution lines of 16,000 volts or less, telephone lines, cable antenna television and similar service wires or cable, which provide direct service to the property being developed, shall be installed underground.	Less than significant
Trigger or contribute to store closures at retail establishments within the primary or secondary trade area by creating an oversupply of retail square footage.	No mitigation measures are required.	Less than significant
Section 4.2 – Air Quality		
Conflict with or obstruct implementation of the applicable air quality plan.	No mitigation measures are required.	Less than significant
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	**AQ-1: Standard Air Quality Conditions** *Construction Activity* Prior to the issuance of grading permits , the project applicant shall submit to the satisfaction of the Public Works Director and Planning Division, evidence that development within the Renaissance Marketplace and Planning Area 108 will comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors (see SCAQMD Rule 403).[1] This applicable Rule measures as follows: • Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more). • Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.) • Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 ft) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114. • Pave construction access roads at least 100 ft (30 m) onto the site from the main road. • Reduce traffic speeds on all unpaved roads to 15 mph or less.	

[1] South Coast Air Quality Management District (SCAQMD). Rule 403. Website: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf, accessed October 2015.

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	The applicable California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program Measures are: • Recycle/reuse at least 50 percent of the construction material including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard. [2] • Use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project. *Operations* Prior to the issuance of building permits, the project applicant shall submit to the satisfaction of the Public Works Director, evidence that development within the Renaissance Marketplace and Planning Area 108 comply with Title 24 of the California Code of Regulations (CCR) established by the CEC regarding energy conservation and green buildings standards. The project applicant shall incorporate the following in building plans: • Low-emission water heaters shall be used. Solar water heaters are encouraged. • Exterior windows shall utilize window treatments for efficient energy conservation.	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	These measures will result in reduced emissions during the construction and operation phases of the proposed Renaissance Marketplace and Planning Area 108 projects. **AQ-2: Sensitive Receptors – 500-Foot Buffer** Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that the following uses will not be located within the distance specified from an existing or future sensitive receptor (residence, school, hospital, nursing home, day care centers, parks and playgrounds): within 500 feet of the 210 Freeway; within 500 feet of the equipment within a dry cleaning facility utilizing Perchloroethylene; and within 300 feet of a fueling station facility (i.e. fuel pumps). These facilities may be located closer than the proscribed distances if a project-specific health risk assessment is performed that demonstrates that the project-specific health risk impacts do not exceed the South Coast Air Quality Management District's health risk significance thresholds. **AQ-3: Sensitive Receptors – 1,000-Foot Buffer** Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that the following uses will not be located within 1000 feet of a nearby sensitive receptor (occupied portions of existing or future residences, schools, hospitals, nursing homes, day care centers, parks, and playgrounds): a warehouse, distribution center, or logistics center unless a project-specific health risk assessment is performed that demonstrates that the project-specific health risk impacts do not exceed the South Coast Air Quality Management District's health risk significance thresholds.	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	AQ-4: Off-Road Diesel Equipment Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that offroad diesel-powered construction equipment greater than 50 horsepower will meet the Tier 4 emission standards, where feasible. In addition, where feasible all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the Air Resources Board (ARB). Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by ARB regulations. **AQ-5: Construction Equipment Tier Specification** Prior to the mobilization of each applicable offroad diesel-powered construction equipment greater than 50 horsepower, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, a copy of the certified tier specification, Best Available Control Technology (BACT) documentation, and Air Resources Board or South Coast Air Quality Management District's operating permit for each shall be provided at the time of mobilization of each applicable unit of equipment. **AQ-6: Truck Access** Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that the following truck access routes have been incorporated into the project design, to the maximum extent practicable, to reduce air quality and potential future health risk impacts from the operation phases of the proposed project:	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	• Design warehouse/distribution centers such that entrances and exits discourage that trucks from traversing past neighbors or other sensitive receptors. Design warehouse/distribution centers such that any check-in point for trucks is well inside the facility property to ensure that there are no trucks queuing outside of the facility.	
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No mitigation measures are required.	Less than significant
Expose sensitive receptors to substantial pollutant concentrations.	No mitigation measures are required.	Less than significant
Section 4.3 – Biological Resources		
Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.	**BIO-1: California Gnatcatcher** Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that focused surveys have been undertaken to determine the presence/absence of this species as indicated below. Surveys shall follow protocols established by the U.S. Fish and Wildlife Service (USFWS). Portions of the Project area have been determined to contain suitable habitat for California Gnatcatcher (CAGN) (Planning Areas 58, 104, 108, 110, 113, 114, 115, and 119, as appropriate). Prior to	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	development of those planning areas, focused surveys must be undertaken to determine the presence/absence of this species. Surveys shall follow protocols established by the USFWS. In the event that CAGN is detected or observed within the disturbance footprint, avoidance, minimization, and mitigation measures shall be developed and implemented through consultation with the USFWS under Section 10 of the Federal Endangered Species Act (FESA) (or Section 7 as appropriate). At a minimum, mitigation measures will include the timing of construction activities outside of the breeding season (February 15 to August 31) and/or the purchase/conservation of offsite suitable habitat that is known to support CAGN at a minimum 1:1 ratio depending on the quality of habitat removed compared to the quality of habitat provided. Specific ratios will be determined in consultation with USFWS. Prior to the issuance of occupancy permits, the developer shall provide evidence of applicable species mitigation agreements/permits to the Development Services Director/Planning Division. **BIO-2: San Bernardino Kangaroo Rat** Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that focused surveys have been completed by a qualified biologist to determine the presence/absence of San Bernardino Kangaroo Rat (SBKR) in areas of suitable habitat within the RSP Amendment Area. Surveys shall follow protocols established by the USFWS. In the event that SBKR is detected or observed within the disturbance footprint, avoidance, minimization, and mitigation measures shall be developed and implemented through consultation with the USFWS under Section 10 of the FESA (or Section 7 if appropriate). At a	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	minimum, mitigation measures will include the purchase/conservation of offsite suitable habitat that is known to support SBKR at a minimum 1:1 ratio depending on the quality of habitat removed compared to the quality of habitat provided. Specific ratios will be determined in consultation with USFWS. Prior to the issuance of occupancy permits, the developer shall provide copies of applicable species mitigation agreements or permits to the Development Services Director/Planning Division. **BIO-3: Burrowing Owl** Prior to the issuance of grading permits and/or an action that would result in project site disturbance (whichever occurs first) (including but not limited to discing and demolition activities), the applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that focused clearance surveys have been completed to determine the presence/absence of burrowing owls (BUOW). Pre-construction surveys for BUOW shall be required in accordance with protocols established by California Department of Fish and Wildlife (CDFW) before the start of grading activities to confirm the absence of BUOW from the site. If the survey determine the BUOW to be present, protective measures shall be required to ensure compliance with the Migratory Bird Treaty Act and other applicable CDFW Code requirements and include, but are not limited to the following: • Occupied BUOW shall not be disturbed during nesting season unless a qualified biologist verifies through non-invasive methods that either 1) the birds have not begun egg-laying or incubation or 2) that juveniles from the occupied burrows are foraging independently and are capable of an independent survival flight.	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	• All relocation shall be approved by the CDFW. The permitted biologist shall monitor relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the CDFW within 30 days following completion of the relocation and monitoring of the BUOW. • A BUOW Long-term Management Plan (LTMP) shall be prepared by a qualified biologist and submitted to the CDFW for review and approval prior to relocation of owls. The BUOW LTMP shall describe proposed relocation, biological monitoring, and long-term management. The plan shall include the number and location(s) of occupied BOUW sites and details on suitable habitat at the receiver site selected and approved for relocation. The LTMP shall also describe specific procedures to compensate for impacts to BUOW/occupied burrows at the Project area. Such procedures may include, but are not limited to, the purchase/conservation of offsite suitable habitat that is known to support BUOW at a minimum 1:1 ratio depending on the quality of habitat removed compared to the quality of habitat provided. Specific ratios will be determined in consultation with CDFW. Prior to the issuance of occupancy permits, the developer shall provide copies of applicable species mitigation agreements/permits to the Development Services Director/Planning Division. BI**O-4: Focused Plant Surveys** Prior to the issuance of grading permits or and/or an action that would result in project site disturbance (whichever occurs first) (including but not limited to discing and demolition activities), the	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence from a qualified biologist that the project site does not contain suitable habitat for Plummer's mariposa-lily or Parry's spineflower. Should the project site be located within an area that does have potential for Plummer's mariposa-lily or Parry's spineflower, the applicant shall provide evidence that a focused plant survey for Plummer's mariposa-lily and Parry's spineflower has been conducted during the appropriate blooming season (generally May to July for Plummer's mariposa-lily and April to June for Parry's spineflower). If the survey results are negative for the presence of Plummer's mariposa-lily or Parry's spineflower, then no further action is required. If the surveys are positive for the presence of Plummer's mariposa-lily or Parry's spineflower, then their distribution and associated natural plant community shall be documented and a formal report submitted to the California Department of Fish and Wildlife. These data will then be used to determine the level of impact to each identified species from project development. Impacts on sensitive plants shall be mitigated offsite at a minimum 2:1 ratio. Conservation credits for each of these species can be purchased at an approved conservation bank such as the Cajon Creek Conservation Bank. **BIO-5: Riversidian Alluvial Fan Sage Scrub** Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that preservation of RAFSS habitat with equal or better habitat value has been preserved at a suitable location where the long-term viability of the habitat can be assured. Satisfactory evidence includes, but is not limited to evidence that the appropriate amount (to be determined by the City of Rialto,	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	the California Department of Fish and Wildlife [CDFW], and the project applicant) has been purchased at an approved mitigation bank, or that a long-term conservation plan that has been developed and implemented as part of longer-term mitigation strategy for multiple projects. Any long-term conservation plan must be presented to the City of Rialto and CDFW for review and comment as part of any needed incidental take permits.	
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	**BIO-6: Migratory Birds** Prior to the issuance of grading permits and/or an action that would result in project site disturbance (whichever occurs first) (including but not limited to discing and demolition activities), the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that a pre-construction nesting bird survey has been conducted prior to any ground disturbing activities and removal of vegetation or other potential nesting habitat during the nesting period (generally February 1st to August 31st). If birds are found to be nesting inside or within 250 feet (500 feet for raptors) of the impact area, construction will need to be postponed, at the discretion of a qualified biologist, until it is determined that the nests are no longer active.	Less than significant
Section 4.4 – Greenhouse Gas Emissions		
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	No mitigation measures are required.	No new significant impact
Conflict with an applicable plan, policy or regulation adopted for the	**GHG-1: Project Design Features** Prior to issuance of a building permit, the project applicant must submit to the satisfaction of the Development Services	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
purpose of reducing the emissions of greenhouse gases.	Director/Planning Division, evidence that the proposed Renaissance Marketplace and Planning Area 108 projects comply with and would not conflict with or impede the implementation of reduction goals identified in Assembly Bill (AB) 32, the Governor's Executive Order (EO) S-3-05, and other strategies to help reduce greenhouse gases (GHGs) to the level proposed by the Governor. The Renaissance Marketplace and Planning Area 108 projects will be designed and constructed to incorporate and/or implement to the extent feasible and to the satisfaction of the City, the following measures: *Construction and Building Materials* • Use locally produced and/or manufactured building materials for at least 10 percent of the construction materials used for the Projects. • Recycle/reuse at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) if feasible. • Use "Green Building Materials," such as those materials that are resource-efficient and are recycled and manufactured in an environmentally friendly way, for at least 10 percent of the Projects. *Energy Efficiency Measures* • Design all project buildings to meet or exceed the California Building Code's (CBC) Title 24 energy standard, including, but not limited to, any combination of the following: o Increase insulation such that heat transfer and thermal bridging is minimized;	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	o Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption; and o Incorporate ENERGY STAR or better rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment. • Install efficient lighting and lighting control systems. Use daylight as an integral part of the lighting systems in buildings. • Install "cool" roofs and cool pavements. • Install energy-efficient heating and cooling systems, appliances and equipment, and control systems. • Install solar lights or light-emitting diodes (LEDs) for outdoor lighting or outdoor lighting that meets the City of Rialto City Code. • Install solar photovoltaic or other technology to generate electricity on-site to reduce consumption from the electrical grid. • Install electrical vehicle charging stations to promote the use of electrical vehicles. • Promote and incentivize solar installations on new warehouse space through partnerships with SCE and other private sector funding sources including Sungevity, SolarCity, and other solar lease or PPA companies. Establish a goal that a percentage of new warehousing projects install solar to provide a minimum of 25 percent of the project's new on-	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	site energy needs and that all existing warehousing install solar to provide a minimum of 25 percent of power needs with solar. This goal could be supported through nonfinancial incentives or streamlined permitting. Cities may also act as a resource for connecting project proponents with funding opportunities. *Water Conservation and Efficiency Measures* • Devise a comprehensive water conservation strategy appropriate for the Project and its location. The strategy may include the following, plus other innovative measures that may be appropriate: o Create water-efficient landscapes within the development. o Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. o Use reclaimed water, if available, for landscape irrigation within the Project. Install the infrastructure to deliver and use reclaimed water, if available. o Design buildings to be water-efficient. Install water-efficient fixtures and appliances, including low-flow faucets and waterless urinals. o Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	Solid Waste Measures • To facilitate and encourage recycling to reduce landfill-associated emissions, among others, the Projects will provide trash enclosures that include additional enclosed area(s) for collection of recyclable materials. The recycling collection area(s) will be located within, near, or adjacent to each trash and rubbish disposal area. The recycling collection area will be a minimum of 50 percent of the area provided for the trash/rubbish enclosure(s) or as approved by the waste management vendor for the City of Rialto. • Provide employee education on waste reduction and available recycling services. *Transportation Measures* • To facilitate and encourage nonmotorized transportation, bicycle racks shall be provided in convenient locations to facilitate bicycle access to the Project area. The bicycle racks shall be shown on building plans submitted for Planning Department approval and shall be installed in accordance with those plans. • Provide pedestrian walkway and connectivity requirements. • All new non-residential and multifamily developments of ten or more units shall be designed to incorporate the transportation control measures (TCM) described in Chapter 18.59 of the City of Rialto Municipal Code.	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
Section 4.5 – Hydrology and Water Quality		
Violate any water quality standards or waste discharge requirements.	No mitigation measures are required.	Less than significant impact
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the groundwater table level.	No mitigation measures are required.	Less than significant impact
Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems of provide substantial additional sources of polluted water.	The following mitigation measures apply to all development within the Specific Plan Amendment Area. **HYD-1:** Prior to issuance of grading permits, the developers or their designees shall coordinate the design and obtain approval of all flood control and storm drain structures as identified in the Renaissance Specific Plan Storm Drainage Plan. The developers or their designees shall provide evidence of this approval to the City Public Works Department. These improvements shall be consistent with any master planning efforts of the County to the satisfaction of the City Engineer. **HYD-2:** The developers or their designees shall obtain a General Permit for Stormwater Discharge Associated with Construction Activity (Construction Activity General Permit). The developers or their designees shall provide a copy of this permit to the City Public Works Department prior to the issuance of grading permits. **HYD-3:** Prior to the issuance of grading permits, the developers or their designees shall prepare a WQMP and an Erosion and Sediment Control Plan (ESCP) to implement the most appropriate BMPs and to prevent any significant removal and/or downstream deposition of soil	Less than significant impact

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	from the Project area during construction. The WQMP and ESCP shall contain provisions requiring that all erosion control measures and structures be maintained and repaired as needed for the life of the Project. Prior to the issuance of a grading permit, the Public Works Department shall approve the WQMP and ESCP based on review and input by the RWQCB. At the request of the developer, the City Public Works Department may accept a Stormwater Pollution Prevention Plan (SWPPP) as a substitute for the ESCP as long as it fulfills the intent of this measure to an equivalent degree. The SWPPP or ESCP shall be prepared to the satisfaction of the City Public Works Department. The WQMP and ESCP or SWPPP shall include, but is not limited to, the following: a) Specify the timing of grading and construction to minimize soil exposure to winter rain periods experienced in southern California; b) Natural vegetation shall be retained on all areas that will not be disturbed for grading, except areas that must be cleared and revegetated as part of a fuel modification program; c) All slopes greater than five feet in height shall be evaluated to define the optimum length and steepness to minimize flow velocity and erosion potential. Lateral drainage collection systems shall be incorporated at the base of slopes, when determined appropriate, to transport flows in a controlled, non-erodible channel; d) Indicate where flows on the site can be diverted from denuded areas and carried in the natural channels on the site;	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	e) Construct man-made channels to minimize runoff velocities; f) Disturbed areas shall be vegetated and mulched immediately after final grades have been established; g) Sediment traps, basins, or barriers (silt fences, hay bales, etc.) shall be established on the property to prevent the release of "first flush" urban pollutants, including sediment, from developed areas, including the emergency access roads. The design and location of these improvements shall be identified in the plan subject to review and approval by the City; h) Drainage facilities designed to transport flows shall be described and the adequacy of the channel shall be verified by City approval of a detailed drainage analysis; i) An inspection and maintenance program shall be included to ensure that any erosion, which does not occur either on or offsite as a result of the Project, will be corrected through a remediation or restoration program within a time frame specified by the City; j) Confirmed observations by the City of uncontrolled runoff being carried onsite will be grounds for suspension of revocation of any grading or building permit in process, or any discretionary permit subsequently applied for until the problem is resolved to the satisfaction of the City Public Works Department. **HYD-4:** Prior to the issuance of grading building permits, graded but undeveloped land shall be maintained in a relatively weed-free condition and/or planted with interim landscaping unless building	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	permits are obtained within 180 days of completion of grading. This measure shall be implemented to the satisfaction of the Development Services Director. **HYD-5:** Prior to the issuance of grading permits, the applicant shall demonstrate that the development's Erosion Control Plans comply with the Statewide General Construction Permit to the satisfaction of the City Engineer and/or Public Works Director as applicable. **HYD-6:** Prior to issuance of the first occupancy permit, the developers or their designees shall provide proof to the Public Works Department that the onsite drainage facilities will be maintained by the County, City, HOA, or equivalent. The developer must demonstrate that these facilities will be adequately maintained by an appropriate mechanism or organization, to the satisfaction of the City Public Works Department.	
Section 4.6 – Noise		
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Construction Impacts.** Construction of the proposed Project would not result in noise levels exceeding the maximum noise level allowed at the closest residences. However, the following measures would further reduce short-term, construction-related noise impacts associated with the proposed Project: **NOI-1:** Prior to the issuance of any grading plan, the applicant shall demonstrate to the satisfaction of the Public Works Director that the following notes are shown on the grading plans: 1. During all Project area excavation and grading on site, the Project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	2. The Project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors. 3. During all Project area construction, the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors. 4. During all Project area construction, the construction contractor shall limit all construction-related activities that would result in high noise levels to the hours shown in Section 9.50.070(b) of the City of Rialto Municipal Code. **On-Site Operational Impacts.** The following mitigation measures are required for on-site operations. **NOI-2:** Prior to the issuance of any grading permits within Planning Area 104 (Renaissance Marketplace) or Planning Area 108, the applicant shall demonstrate that the following noise barriers are shown on the building plans or have been constructed in locations where nighttime loading activity is proposed: 1. A stand-alone noise barrier with a minimum height of 8 feet is required along the southern boundary of the Renaissance Marketplace if nighttime loading/unloading activity is expected at the loading areas of these proposed Renaissance Marketplace commercial/retail uses. 2. A stand-alone noise barrier with a minimum height of 8 feet is required along the eastern boundary of Planning Area 108 between the driveways if nighttime loading/unloading activity is	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	expected at the loading areas of these proposed industrial/warehouse uses. **NOI-3:** Prior to the issuance of any grading permit, the applicant shall demonstrate that the following mitigation measures have been incorporated into the project design or that the mitigation does not apply to the current development: **N-1:** Construction activities shall be limited to the City's allowable hours of construction activities shown in Table 4.11-2 (repeated in Table E in this noise study) in accordance with the City's Noise Ordinance. **N-2:** All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. **N-3:** Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from any nearby noise sensitive uses, unless safety or technical factors take precedence, subject to City approval. **N-4:** Stationary combustion equipment such as pumps or generators operating within 300 feet of any nearby noise sensitive uses shall be shielded with a noise protection barrier. **N-5:** The City shall require that a noise impact analysis be prepared for all proposed residential subdivisions within the Specific Plan and for any commercial or business developments located adjacent to existing or proposed noise sensitive land uses. Each noise impact analysis shall identify potential construction noise impacts and provide mitigation, if necessary to reduce the construction noise impacts to within the City noise level standards of the Noise Element of the Rialto General Plan.	

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	N-6: The City shall require that a noise impact analysis be prepared for all proposed residential subdivisions within the Specific Plan, and proposed commercial retail or business uses located adjacent to Alder Avenue, Baseline Road, SR-210, or adjacent to other sensitive on-site or off-site uses. Each noise impact analysis shall identify potential direct, project-related, transportation noise impacts and provide mitigation, if necessary, to reduce the traffic noise impacts as well as other onsite stationary noise impacts to within the City noise level standards of the Land Use Element of the Rialto General Plan (shown in Table 4.11-1 in the DEIR and repeated in Table 4.6-2 in this Recirculated Draft SEIR). **N-7:** The City shall require that a vibration impact analysis be prepared for all proposed residential subdivisions within the Specific Plan and for any commercial or business developments located adjacent to existing or proposed vibration sensitive land uses. Each vibration impact analysis shall identify potential construction-related vibration impacts and provide mitigation, if necessary, to reduce the construction to within the County vibration level standards. **N-8:** The City shall require that a vibration impact analysis be prepared for any commercial or business developments located adjacent to existing or proposed vibration sensitive land uses. Each vibration analysis shall identify potential sources of vibration impacts and provide mitigation, if necessary, to reduce the vibration impacts to within the County standards.	
Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	No mitigation measures are required.	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	**Traffic Noise Impacts.** The following mitigation measures are required for traffic noise impacts: **NOI-4:** Prior to Certificate of Occupancy or City acceptance of the Public Parks (as applicable), the applicant shall demonstrate that required sound barriers have been constructed for the following Planning Areas: 1. For the school (Sub-Area 123) and public park (Sub-Area 126) along Ayala Drive with outdoor active use areas within 184 feet of the Ayala Drive centerline, sound walls with a minimum height of 6 feet are required along the Project boundary along Ayala Drive or along the perimeter of the active use areas that are directly exposed to traffic on Ayala Drive. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed. 2. For residential uses proposed in Sub-Area 115 with outdoor living areas (e.g., patios and balconies/decks) or recreational areas (e.g., barbecue area or children's playground) within 184 feet of the Ayala Drive centerline, a sound wall with a minimum height of 6 feet should be constructed along the project boundary along Ayala Drive or along the perimeter of the outdoor living/ recreational areas that are directly exposed to traffic on Ayala Drive. Higher walls may be necessary if these outdoor living/recreational areas are proposed within 86 feet (70 dBA CNEL) of the centerline of Ayala Drive. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed.	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
	3. For the public park (Sub-Area 126) along Linden Avenue with outdoor active use areas proposed within 86 feet of the Linden Avenue centerline, sound walls with a minimum height of 6 feet are recommended along the Project boundary along Linden Avenue or along the perimeter of the active use areas that are directly exposed to traffic on Linden Avenue. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed. 4. For residential uses proposed in Sub-Areas 110, 116, and 113 with outdoor living areas (e.g., backyards/patios and balconies/decks) or recreational areas (e.g., barbecue area or children's playground) within 95 feet of the Linden Avenue centerline, prior to the occupancy of the residential units, outdoor living/recreational areas should be protected with a sound wall with a minimum height of 6 feet. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed.	
A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	No mitigation measures are required.	Less than significant
Section 4.7 – Transportation/Traffic		
Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation	**TRANS-1**: Prior to the issuance of grading permits, the City Traffic Engineer shall review individual site-specific development proposals to evaluate whether such proposals would cause LOS failure at Project intersections. If it is determined that traffic generated from such	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit.	proposal would cause LOS failure, the applicant shall provide, either through construction of and/or monetary contribution for, improvements listed in Table 4.7-20, Table 4.7-21, and Table 4.7-22 of the Recirculated Draft SEIR. Such improvements and/or monetary contribution shall be provided in proportion to an individual project's impacts on traffic and to the satisfaction of the City Traffic Engineer. **TRANS-2**: Prior to issuance of building permits, the Renaissance Marketplace project applicant shall enter into a Development Agreement (DA) with the City of Rialto. This DA shall describe the timing and implementation of project-specific improvements, as well as existing funding mechanisms and proportional fair-share contributions, for the improvements listed in Table 4.7-23, Table 4.7-24, Table 4.7-25, and Table 4.7-26 of the Recirculated Draft SEIR. Where no existing funding mechanism exists for recommended improvements, the DA shall stipulate that the applicant shall pay not less than the fair share contribution to mitigate project impacts. **TRANS-3**: Prior to issuance of building permits, the Planning Area 108 (PA 108) applicant shall enter into a Development Agreement (DA) with the City of Rialto. This DA shall describe the timing and implementation of project-specific improvements, as well as existing funding mechanisms and proportional fair-share contributions, for the improvements listed in Table 4.7.27, Table 4.7-28, Table 4.7-29, and Table 4.7-30 of the Recirculated Draft SEIR. Where no existing funding mechanism exists for recommended improvements, the DA shall stipulate that the applicant shall pay not less than the fair share contribution to mitigate project impacts.	
Substantially increase hazards due to a design feature or incompatible uses.	No mitigation measures are required.	Less than significant

Table 1-1 Executive Summary Matrix (continued)

EIR Section-Thresholds	Summary of Mitigation Measures	Level of Significance After Mitigation
Section 4.8 – Utilities and Service Systems		
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Implementation of Mitigation Measure **HYD-1**.	Less than significant
Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	No mitigation measures are required.	Less than significant

2 INTRODUCTION

2.1 OVERVIEW, PURPOSE, AND AUTHORITY OF THE EIR

The City of Rialto circulated the June 2016 Draft Subsequent Environmental Impact Report (Draft SEIR) for the proposed Renaissance Specific Plan Amendment Project for public review and comment on July 5, 2016. Subsequent to the close of the public comment period for the Draft SEIR (which extended from July 5, 2016 through August 19, 2016), both the City and Project Applicant completed additional technical analysis for the Project. In an effort to address potential impacts of the proposed Project and provide additional opportunity for public input, the City has elected to recirculate the Draft SEIR in its entirety for an additional 45 days of public review.

The City of Rialto has elected to recirculate the Draft SEIR for public review and comment pursuant to Section 15088.5 of the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3). As identified in Section 15088.5 (a), "a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft SEIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement."

As identified in Section 15088.5 (f) (1), "when an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and, in such cases, need not respond to those comments received during the earlier circulation period. The lead agency shall advise reviewers, either in the text of the revised EIR or by an attachment to the revised EIR, that although part of the administrative record, the previous comments do not require a written response in the final EIR, and that new comments must be submitted for the revised EIR. The lead agency need only respond to those comments submitted in response to the recirculated revised EIR." Accordingly, the City will not respond to comments submitted on the June 2016 Draft SEIR, but will respond to all comments submitted on this Recirculated Draft SEIR.

This Recirculated Draft SEIR is prepared by the City in accordance with CEQA to evaluate the potential environmental impacts associated with the implementation of the RSP Amendment ("the proposed Project" or "Project"). This is document is prepared in conformance with CEQA (California Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) and City rules and regulations to implement CEQA. This Recirculated Draft SEIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed Project.

The purpose of an EIR is to disclose information to the public and to the decision-makers about the potential environmental effects of a proposed project. An EIR does not recommend either approval or denial of a proposed project. Rather, it is intended to provide a source of independent and impartial analysis of the foreseeable environmental impacts of a proposed course of action. This Recirculated Draft SEIR describes the proposed Project, analyzes its environmental effects, and discusses reasonable alternatives that would avoid, reduce, or minimize environmental impacts.

2.1.1 OVERVIEW

The approved 2010 RSP consists of approximately 1,445.3 gross acres located within the western/central portion of the City of Rialto, California. The 2010 RSP is planned as an integrated community of varied housing types located near and linked to places of employment, retail outlets, services and schools. The 2010 RSP accommodates 16.2 million square feet of business and commercial uses (835,200 square feet of which is existing and expected to remain in the RSP area), 1,667 residential units, one school, a community park, and multiple neighborhood parks all located in close proximity and organized in a grid pattern.

This Recirculated Draft SEIR assesses the potential environmental impacts of the proposed amendment to the RSP at a programmatic level as appropriate, depending on the level of information available at the time of the preparation of the Recirculated Draft SEIR. The goal of the RSP Amendment is the relocation of business and industrial uses to the west of Linden Avenue, relocating all residential land uses and the public park to the east of Linden Avenue, implementation of the Renaissance Marketplace retail development in the northeastern segment of the RSP Amendment area, and implementation of the Planning Area 108 industrial/warehouse development in the central segment of the RSP Amendment area. The proposed Project is an amendment to the RSP and the proposed Project area is located within the previously approved 2010 RSP planning area. However, the specific RSP Amendment components referred to in this Recirculated Draft SEIR as the Renaissance Marketplace component and the Planning Area 108 component are considered individually by this Recirculated Draft SEIR at a project level. As such, this document serves both as a program level for the overall proposed amendment to the RSP, and at a project level for the specific Renaissance Marketplace and Planning Area 108 components of the RSP. The applicability of a program-level and project-level Recirculated Draft SEIR is discussed in detail in Section 2.1.2.

2.1.2 PURPOSE AND AUTHORITY

This Recirculated Draft SEIR provides both a project-level analysis of the environmental effects of the Renaissance Marketplace component and the Planning Area 108 component of the RSP Amendment and a program-level analysis of the environmental effects of the proposed amendment to the RSP. The environmental impacts of the proposed Project are analyzed in the Recirculated Draft SEIR to the degree of specificity appropriate, in accordance with Section 15146 and Section 15180 of the CEQA Guidelines. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, and operation of the proposed Project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

Section 15161 of the CEQA Guidelines states that a project EIR is appropriate to "examine the environmental impacts of a specific development project." Section 15161 states that the "This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation."

Section 15168(a) of the CEQA Guidelines states that a Program EIR is appropriate for projects, which are "… a series of actions that can be characterized as one large project and are related either:

1) Geographically;

2) A logical part in the chain of contemplated actions;

3) In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or

4) As individual activities carried out under the same authorizing statutory or regulating authority and having generally similar environmental effects which can be mitigated in similar ways."

Section 15168(b) of the CEQA Guidelines further states: "Use of a Program EIR can provide the following advantages. The Program EIR can:

1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;

2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis;

3) Avoid duplicate consideration of basic policy considerations;

4) Allow the Lead Agency to consider broad policy alternative and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and,

5) Allow reduction in paperwork."

Section 15162 of the CEQA Guidelines states a Subsequent EIR may be prepared:

"(a) When an EIR has been certified or a Negative Declaration adopted, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions of the EIR or Negative Declaration due to involvement of new significant environmental effects or a substantial increase in severity of previously identified significant effects; or

(3) New information of substantial importance which was not known could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified or the Negative Declaration was adopted, shows the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration.

(B) Significant effects previously examined will be substantially more severe than previously shown in the previous EIR.

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subsection (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

(c) If a project was approved prior to the occurrence of the conditions described in the subsection (a), the subsequent EIR or Negative Declaration shall be prepared by the Public Agency which grants the next discretionary approval for the project. In this situation no other Responsible Agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent Negative Declaration adopted.

(d) A subsequent EIR or subsequent Negative Declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or Negative Declaration shall state where the previous document is available and can be reviewed."

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Recirculated Draft EIR and include the following:

- Table of Contents
- Executive Summary
- Introduction
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the proposed Project
- Growth-Inducing Impacts
- Effects Found Not To Be Significant

2.1.3 LEAD AGENCY DETERMINATION

The City of Rialto (City) is designated as the Lead Agency for the proposed Project. CEQA Guidelines Section 15367 defines the lead agency as "…the public agency, which has the principal responsibility for carrying out or approving a project". Other public agencies may use this Recirculated Draft SEIR in the decision-making or permitting process and consider the information in this Recirculated Draft SEIR along with other information that may be presented during the CEQA process.

Kimley-Horn and Associates (KHA) was contracted to prepare this Recirculated Draft SEIR under the project applicant under the City's direction. The City contracted MIG/Hogle-Ireland to provide a professional peer review of the document. Prior to public review, the Recirculated Draft SEIR was extensively reviewed and evaluated by the City and the peer review team. This Recirculated Draft SEIR reflects the independent judgment and analysis of the City as required by CEQA. A list of organizations and persons consulted and the report preparation personnel are provided in Section 8, *Report Preparation Resources*.

2.1.4 PROJECT OF STATEWIDE, REGIONAL, OR AREAWIDE ENVIRONMENTAL SIGNIFICANCE

Section 15206 of the CEQA Guidelines sets forth the following criteria for determining if a project is of Statewide, regional, or area wide environmental significance:

a) The project proposes to amend a General Plan

b) The project has effects on the environment that extend beyond the jurisdiction it is located in

c) The project contains more than 500 dwelling units

d) The project would employ more than 1,000 persons

e) The project would encompass more than 250,000 square feet of commercial floor space or 650,000 square feet of industrial floor space

f) The project contains more than 500 hotel rooms

g) The project would occupy more than 40 acres of land

h) The project would result in the cancellation of a Williamson Act contract encompassing more than 100 acres

i) The project would adversely affect sensitive wildlife habitats

j) The project would interfere with the attainment of regional water quality standards

k) The project would locate more than 500 persons or jobs within 10 miles of a nuclear power plant.

The proposed Project meets several of the above criteria and therefore is considered regionally significant. A copy of the Recirculated Draft SEIR will be submitted to the Southern California Association of Governments (SCAG) for its review to comply with the notification requirements of CEQA Section 15206.

2.1.5 ACTIONS, APPROVALS, AND FUTURE REVIEW PROCESS

The City of Rialto has primary governmental authority for the approval of the proposed Project. As such, the City is the Lead Agency and is responsible for completing the EIR and for assessing and disclosing the environmental consequences associated with project implementation. Additional discretionary actions could also be required of other governmental entities. The EIR is intended to serve as the CEQA compliance document for any necessary approvals by the City and other agencies. **Table 2-1** lists the actions and approvals that may be required. Other approvals may be identified later in the process as the Project moves forward.

Table 2–1 Actions and Approvals

Lead & Responsible Agencies	Action
City of Rialto (Lead Agency)	• Adoption of the RSP Amendment • Certification of the Final RSP Amendment SEIR • Precise Plan of Design for Renaissance Marketplace • Conditional Development Permit (CDP) and Parcel Map for a 401,280 s.f. industrial building • CDP and Parcel Map for a 1,246,837 s.f. industrial building • CDP and Parcel Map for a 1,246,837 s.f. industrial building • CDP for Cinemark Theaters • CDP for 24 Hour Fitness • General Plan Amendment to Bicycle and Truck Routes • Development Agreement

2.2 SCOPE OF THE EIR

The Recirculated Draft SEIR assesses the foreseeable impacts to the environment from construction and occupancy of the approved RSP per the RSP Amendment and the specific implementation of the Renaissance Marketplace component and the Planning Area 108 component of the RSP. Where a potentially significant environmental impact has been identified, mitigation has been proposed that would reduce potential impacts to less than significant levels. If the analysis shows that an impact cannot be fully mitigated and that the impact will remain significant even with the implementation of feasible mitigation, the City will use the Recirculated Draft SEIR to determine if the Project's benefits outweigh its associated impacts. Ultimately, the Recirculated Draft SEIR will be considered by the Lead Agency and other responsible agencies prior to approving the Project.

2.2.1 NOP COMMENTS

The City issued a Notice of Preparation (NOP) for the Project on January 8, 2015 for a period of review until February 6, 2015. Copies of the NOP were provided to the Office of Planning and Research (State Clearinghouse) for issuance to state agencies. A summary of all NOP comments is provided below in **Table 2-2**. Copies of the NOP and comment letters can also be found in Appendix A of this Recirculated Draft SEIR.

Table 2-2 Notice of Preparation Comments

Agency	Author	Date
San Bernardino County Department of Public Works	Nidham Aram Alrayes, Public Works Engineer III, Environmental Management	February 5, 2015
The Department of Fish and Wildlife	Leslie MacNair, Acting Regional Manager	January 21, 2015

2.3 ORGANIZATION OF THE EIR

This Recirculated Draft SEIR is organized into the following sections:

- **Section 1: Executive Summary**. This section includes a summary of the proposed Project and the alternatives to be addressed in the Recirculated Draft SEIR.

- **Section 2: Introduction**. This section provides an introduction and overview describing the purpose of this Recirculated Draft SEIR, its scope and components, and its review and certification process.

- **Section 3: Project Description**. This section includes a detailed description of the proposed Project, including its location, size, and Project characteristics. A discussion of the Project objectives, intended uses of the Recirculated Draft SEIR, responsible agencies, and approvals that are needed for the proposed Project area also provided.

- **Section 4: Environmental Impact Analysis**. This section analyzes the environmental impacts of the proposed Project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significant criteria, impacts, mitigation measures, and significance after mitigation. The Specific environmental topics that are addressed within Section 4 are as follows:

    - **Section 4.1: Aesthetics.** Addresses the visual impacts of development intensification and the overall increase in illumination to be produced by the proposed Project.

    - **Section 4.2: Air Quality**. Addresses the local and regional air quality impacts anticipated with response to Project implementation, as well as consistency with the Air Quality Management Plan (AQMP) prepared by the South Coast Air Quality Management District (SCAQMD).

    - **Section 4.3: Biological Resources**. Addresses the proposed Project's potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and, the potential impacts on listed, proposed, and candidate threatened and endangered species.

    - **Section 4.4: Greenhouse Gas Emissions**. Addresses the proposed Project's anticipated greenhouse gas emissions and potential impacts to local, regional, and state greenhouse gas emission goals.

    - **Section 4.5: Hydrology & Water Quality**. Addressed the potential impacts of the proposed Project on local hydrological conditions, including drainage areas, and changes in localized flow rates.

    - **Section 4.6: Noise**. Addresses the potential noise impacts during construction and at Project buildout from mobile and stationary sources. This section also addresses the impact of noise generation on neighboring areas.

    - **Section 4.7: Transportation**. Addresses the potential impacts on the local and regional roadway systems, public transportation, as well as impacts related to emergency access, parking, and alternative transportation.

    - **Section 4.8: Utilities**. Addresses the potential impacts upon service providers including water, sewer, and solid waste.

- **Section 5: Cumulative Impacts**. This section discusses the potential cumulative impacts associate with the proposed Project, including impacts of past, present, and probable future projects.

- **Section 6: Growing Inducing, Unavoidable Adverse and Irreversible Impacts**. This section provides a summary of potentially significant environmental impacts, including unavoidable and growth-inducing impacts, and the proposed Project's irreversible and irretrievable commitment of resources assuming implementation.

- **Section 7: Alternatives to the Proposed Project**. This section compares the proposed Project's potential impacts with the following alternatives: No Project Alternative…. An environmentally super alternative is identified.

- **Section 8: Report Preparation Resources**. This section contains a full list of persons and organizations that were consulted during the preparation of this Recirculated Draft SEIR. Also listed are the authors that assisted in the preparation of the Recirculated Draft SEIR, by name and company/agency affiliation. This section also contains a full list of references that were used in the preparation of this Recirculated Draft SEIR.

- **Appendices:** The material in the appendices includes all notices and other procedural documents pertinent to the Recirculated Draft SEIR, as well as all technical material prepared to support the analysis.

2.4 DOCUMENTS INCORPORATED BY REFERENCE

As permitted by Section 15150 of the CEQA Guidelines, this Recirculated Draft EIR has referenced several technical studies and analyses. Information from the documents incorporated by reference is briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Recirculated Draft SEIR has also been described. The documents, other sources, and all other components of the administrative record that have been used in the preparation of this Recirculated Draft SEIR include, but are not limited to:

- Renaissance Specific Plan Draft and Final EIR, 2010
- Renaissance Specific Plan, April 2010
- City of Rialto General Plan. March 31, 1992
- City of Rialto General Plan Final EIR, 1992
- Rialto General Plan Update and EIR, 2010
- Rialto Airport Specific Plan, 1997
- Rialto Airport Specific Plan Program EIR, 1997
- City of Rialto Zoning Ordinance
- City of Rialto Municipal Code
- The County of San Bernardino General Plan. March, 2007

2.5 DOCUMENTS PREPARED FOR THE PROJECT

The stand-alone technical studies and other resources prepared for the proposed Project are listed in Section 8, *Report Preparation Resources*. In accordance with Section 15150(b) of the CEQA Guidelines, these referenced documents and other sources used in the preparation of the Recirculated Draft EIR are available for review at the City office at the address shown in Section 2.7 below.

2.6 LEAD AGENCY, SPONSOR, AND CONSULTANT

The City of Rialto is the lead agency in the preparation of the Recirculated Draft EIR. Lewis-Hillwood Rialto, LLC is the sponsor of the proposed Project. KHA is the environmental consultant for the project applicant and preparer of the SEIR. MIG/Hogle-Ireland is the peer review consultant for the City for this Project.

2.7 REVIEW OF THE DRAFT EIR

Upon completion of the Recirculated Draft SEIR, the City will file a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code §21161). Concurrent with the NOC, this Recirculated Draft SEIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, the County of San Bernardino, and interested parties, as well as all parties requesting a copy of the Recirculated Draft SEIR in accordance with Public Resources Code 21092(b)(3). During the 45-day public review period, the Recirculated Draft SEIR, including the technical appendices, is available for review at the City Planning Division office, located at 150 South Palm Avenue. Agencies, organizations, and interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on the Recirculated Draft SEIR during the public review period on the Recirculated Draft SEIR.

Written comments on this Recirculated Draft EIR should be addressed to:

City of Rialto, Development Services Department
Planning Division
150 South Palm Avenue
Rialto, CA 92376
ggibson@rialtoca.gov
Attn: Gina Gibson, Planning Manager

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review at least 10 days prior to the public hearing before the City Council on the Project, at which time the certification of the Final SEIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the Project.

2.8 LIST OF ACRONYMS USED IN THE EIR

AAQS Ambient air quality standards

AASHTO American Association of Safe Highway and Transportation Officials

ADT Average daily traffic

AQMD Air Quality Management District

AQMP Air Quality Management Plan

BACT Best available control technology

BMP Best Management Practices

CAA Clean Air Act

CAAA Clean Air Act Amendments

CAAQS California Ambient Air Quality Standards

CalEPA California Environmental Protection Agency

Caltrans California Department of Transportation

CARB California Air Resources Board

CCR California Code of Regulations

CDFW California Department of Fish and Wildlife

CESA California Endangered Species Act

CEQA California Environmental Quality Act

CFR Code of Federal Regulations

CHP California Highway Patrol

CNDDB California Natural Diversity Database

CNEL Community Noise Equivalent Level

CNPS California Native Plant Society

CO Carbon monoxide

CO_2 Carbon dioxide

dB Decibel

dBA A-weighted decibel scale

DPM Diesel particulate matter

EIR Environmental Impact Report

ESA Endangered Species Act

F Fahrenheit

FESA Federal Endangered Species Act

FHWA Federal Highway Administration

GLO Government Land Office

GPM Gallons per minute

HCM Highway Capacity Manual

H_2S Hydrogen sulfide

HVLP High volume-low pressure

HVAC Heating ventilation and air conditioning

ITE Institute of Transportation Engineers

L_{dn} Day-Night noise level

L_{eq} Equivalent noise levels

L_{max} Maximum sound level

L_{min} Minimum sound level

LOS Level of service

LST Localized significance thresholds

MBTA Migrating Bird Treaty Act

MCE Maximum Credible Earthquake

MG Million gallons

MGD Million gallons per day

MMRP Mitigation Monitoring and Reporting Program

mph Miles per hour

MSL Mean sea level

M_w Moment Magnitude

NAAQS National ambient air quality standards

NEPA National Environmental Policy Act

NO_2 Nitrogen dioxide

NOA Notice of Availability

NOC Notice of Completion

NOI Notice of Intent

NOP Notice of Preparation

NO_x Nitrogen oxides

NPDES National Pollutant Discharge Elimination System

NPPA Native Plant Protection Act

NRHP National Register of Historic Places **O_3** Ozone

PA Planning Area

Pb Lead

PCE Passenger car equivalent, generally 1 truck being equal to approximately 1.5-2 cars

ppv Peak particle velocity

$PM_{2.5}$ Fine particulate matter (2.5 microns or less)

PM_{10} 10-micron or less particulate matter

ppm Parts per million

PVC Polyvinyl chloride

ppm_v Parts per million by volume

ROG Reactive organic gases

RTIP Regional Transportation Improvement Program

RWQCB Regional Water Quality Control Board

SCAB South Coast Air Basin

SCAG Southern California Association of Governments

SCAQMD South Coast Air Quality Management District

SIP State Implementation Plan

SOI Sphere of Influence

SO_2 Sulfur dioxide

SWPPP Stormwater Pollution Prevention Program

TAC Toxic air contaminants

TIA Traffic Impact Analysis

U.S. EPA United State Environmental Protection Act

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

VDB Vibration decibels

VOC Volatile organic compound

VPHG Vehicles per hour of green

VRP Visibility reducing particles

WDR Waste discharge requirements

WQMP Water Quality Management Plan

2.9 GLOSSARY OF TERMS USED IN THE EIR

Acre-foot: Volume of liquid or solid required to cover an area of one acre to a depth of 1 foot. Equivalent to approximately 325,850 gallons of water.

Aquifer: A geological formation that is sufficiently permeable to conduct groundwater and to yield significant quantities of water to wells and springs.

California Endangered Species Act: California state legislation, enacted in 1984, with the intent to protect floral and faunal species by listing them as "rare," "threatened" "endangered," or "candidate" and by providing a consultation process for the determination and resolution of potential adverse impact to the species.

California Environmental Quality Act (CEQA): Policies that were enacted in 1970, and subsequently amended in September 2004, the intent of which is to maintain a quality environment for the people of California now and in the future.

CALINE4: Computer Model, air quality model developed by the California Department of Transportation (Caltrans).

CNEL: Community Noise Equivalent Level-A noise index that accounts for the greater annoyance of noise during evening and nighttime hours.

Discretionary actions: Conditions, which can be imposed on a Project action prior to approval for implementation. The approval would thus be "at the discretion" of an agency.

EMFAC2002: A computer program published by the California Air Resources Board (CARB) that calculates on road vehicle emissions.

Endangered species: A species whose prospects of survival and reproduction in the wild are in immediate jeopardy from one or more causes.

Environmental Impact Report (EIR): Document in which the impacts of any State, local, public or private project actions, which may have a significant environmental effect, are evaluated prior to its approval and subsequent construction or implementation, as required by CEQA.

Groundwater: Water found beneath the land surface in the zone of saturation below the water table.

Lead Agency: The public agency, which has the principal responsibility for carrying out or approving a project.

Level of Service (LOS): An indicator of traffic conditions at an intersection or on a stretch of roadway, and of the delay that can be expected in the general area; A is the best (no delay) and F is the worst.

Notice of Preparation (NOP): A brief notice sent by the public agency with principal responsibility for carrying out or approving a project to notify other agencies that an EIR is being prepared.

NO_x: A generic term for various oxides of nitrogen.

Ozone (O_3): A product of complex reactions between reactive organic gases (or non-methane hydrocarbons) and nitrogen oxides (No_x) in the presence of intense ultraviolet radiation.

Rare species: A species, which, although not presently threatened with extinction, is in such small numbers throughout its range that it may become endangered if its present environment worsens.

Regional Water Quality Control Board (RWQCB): Agency which administers the requirements of the California Administrative Code, Title 23, Division 3, Chapter 15 (Section 2595,g,7) to ensure the highest possible water quality consistent with all demands.

Responsible agency: A public agency, which proposes to carry out or approve a project for which a lead agency has prepared an EIR. A responsible agency is any agency with discretionary approval over a project.

Right-of-way (ROW): The right to pass over property owned by another. The strip of land over which facilities such as roadways, railroads, or power lines are built.

Sensitive species: Generic term for any plant or animal species, which is recognized by the government or by any conservation group as being depleted, rare, threatened, or endangered.

Significant environmental impact: As defined by CEQA, Chapter 3, Article 1, Section 15002(g), “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project”.

Threatened Species: Species, which, although not presently threatened with extinction, is likely to become endangered in the near future in the absence of special protection and management efforts.

Trustee Agency: A state agency having jurisdiction over natural resources that may be affected by the Project, which are held in trust by the State. These include the California Department of Fish and Wildlife (CDFW), State Lands Commission, and State Department of Parks and Recreation.

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3 PROJECT DESCRIPTION

3.1 PROJECT LOCATION AND SETTING

3.1.1 LOCATION

The Renaissance Specific Plan ("RSP") planning area is located in the City of Rialto, California (**Figure 3-1: Regional Location**). The City of Rialto is located in western San Bernardino County, approximately 60 miles east of Los Angeles and 100 miles north of San Diego. The proposed Project is an amendment to the approved 2010 RSP and the proposed Project area is located within the previously approved RSP planning area (**Figure 3-2: Project Vicinity**).

3.1.2 EXISTING CONDITIONS

The majority of the RSP planning area is currently vacant or undeveloped. Parcels within and facilities of the Rialto Municipal Airport, which ceased operations in 2014, occupy the majority of the site. The airport area surrounding the former runway was largely undeveloped, with the exception of paved areas, buildings, hangars, and warehouses located south of the runway. The former runway and associated taxiways run diagonally through the site. Therefore, with the exception of the runway and former associated airport facilities on the southern portion of RSP planning area, the area is largely vacant, with the exception of new warehouse developments that have been constructed in the southern portion of the planning area. A City fire station is located on the site, west of Ayala Drive and north of Leiske Drive. Existing commercial and industrial structures and associated uses exist in the southeastern portion of the Project area. No existing residential uses are located on the Project area.

The Project area is generally flat, draining to the south. Existing vegetation consists of an assortment of native and non-native shrubs and grasses. Numerous paved and unpaved roads traverse the RSP Planning Area.

3.1.3 CURRENT LAND USE DESIGNATIONS

The total Project area is included in the RSP, which was adopted in 2010. **Table 3-1** below presents existing land use within the Project area designated in the RSP.

3.2 PROJECT OBJECTIVES

The objectives of the proposed Project have been updated from the original 2010 RSP to reflect the current land use plan for the RSP Amendment. The following provides a summary of the Project objectives associated with submittal of the proposed RSP Amendment:

- To implement the approved Renaissance Specific Plan as amended;
- To facilitate the redevelopment of the former Rialto Municipal Airport;
- To implement and facilitate the development of the Renaissance Marketplace retail project;
- To implement and facilitate the development of the Planning Area 108 industrial/warehouse project;
- To facilitate development through efficient land use planning and phased infrastructure design;

Table 3–1 Adopted Specific Plan Land Use Distribution

Land Use	Total Acres	Future Uses						Existing Uses Expected to Remain		
		Acres	Target Density/FAR[1]	Total Sq. Ft.	Total Units	Jobs	Pop.	Acres	Sq. Ft.	Jobs
Residential Uses										
Low Density Residential (LDR)	61.9	61.9	8 du.ac	-	446	-	1,382	-	-	-
Medium Density Residential (MDR)	25.8	25.8	12.5 du/ac	-	290	-	900	-	-	-
Medium High Density Residential (MHDR)	56.8	56.8	16 du/ac	-	818	-	2,536	-	-	-
High Density Residential (HDR)	5.0	5.0	25 du/ac	-	113	-	349	-	-	-
Business Uses										
Town Center	56.5	56.5	0.25 FAR	612,285	-	1,231	-	-	-	-
Corporate Center	25.5	25.5	0.75 FAR	833,085	-	1,667	-	-	-	-
Freeway Commercial	47.4	47.4	0.25 FAR	516,186	-	1,032	-	-	-	-
Employment	431.4	346.3	0.40 FAR	6,033,931	-	5,853	-	85.1	820,320	820
Freeway Incubator	92.6	92.6	0.25-0.35 FAR	1,374,754	-	1,334	-	-	-	-
General Commercial	5.8	2.2	0.25 FAR	23,958	-	48	-	3.6	14,880	30
Other Uses										
School	15.0	15.0	-	-	-	50	-	-	-	-
Public Parks	19.3	16.0	-	-	-	-	-	3.3	NA	NA
Private Recreation Center	2.6	2.6	-	-	-	-	-	-	-	-
Private Parks	1.5	1.5	-	-	-	-	-	-	-	-
Private Paseos	1.4	1.4	-	-	-	-	-	-	-	-
Buffer	2.1	2.1	-	-	-	-	-	-	-	-
Easement	1.1	1.1	-	-	-	-	-	-	-	-
Utilities	11.5		-	-	-	-	-	-	-	-
ROW[2]	299.4	299.4	-	-	-	-	-	-	-	-
Totals	**1,438.5**	**1,335**	**-**	**15,406,301**	**1,667**	**13,618**	**5,167**	**103.5**	**835,200**	**850**

[1] FAR: Floor Area Ratio
[2] ROW: Right-of-Way

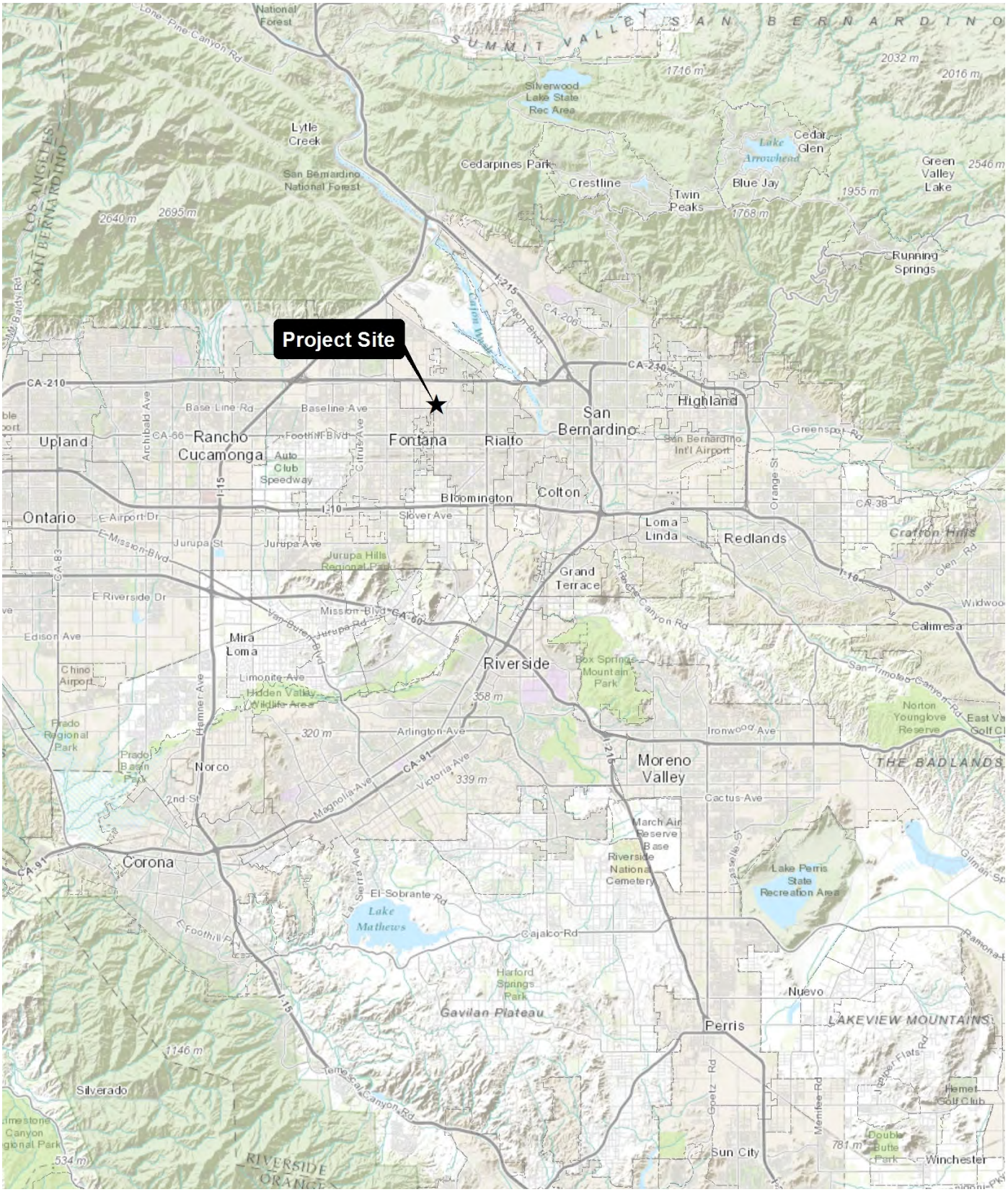

Figure 3-1: Regional Location

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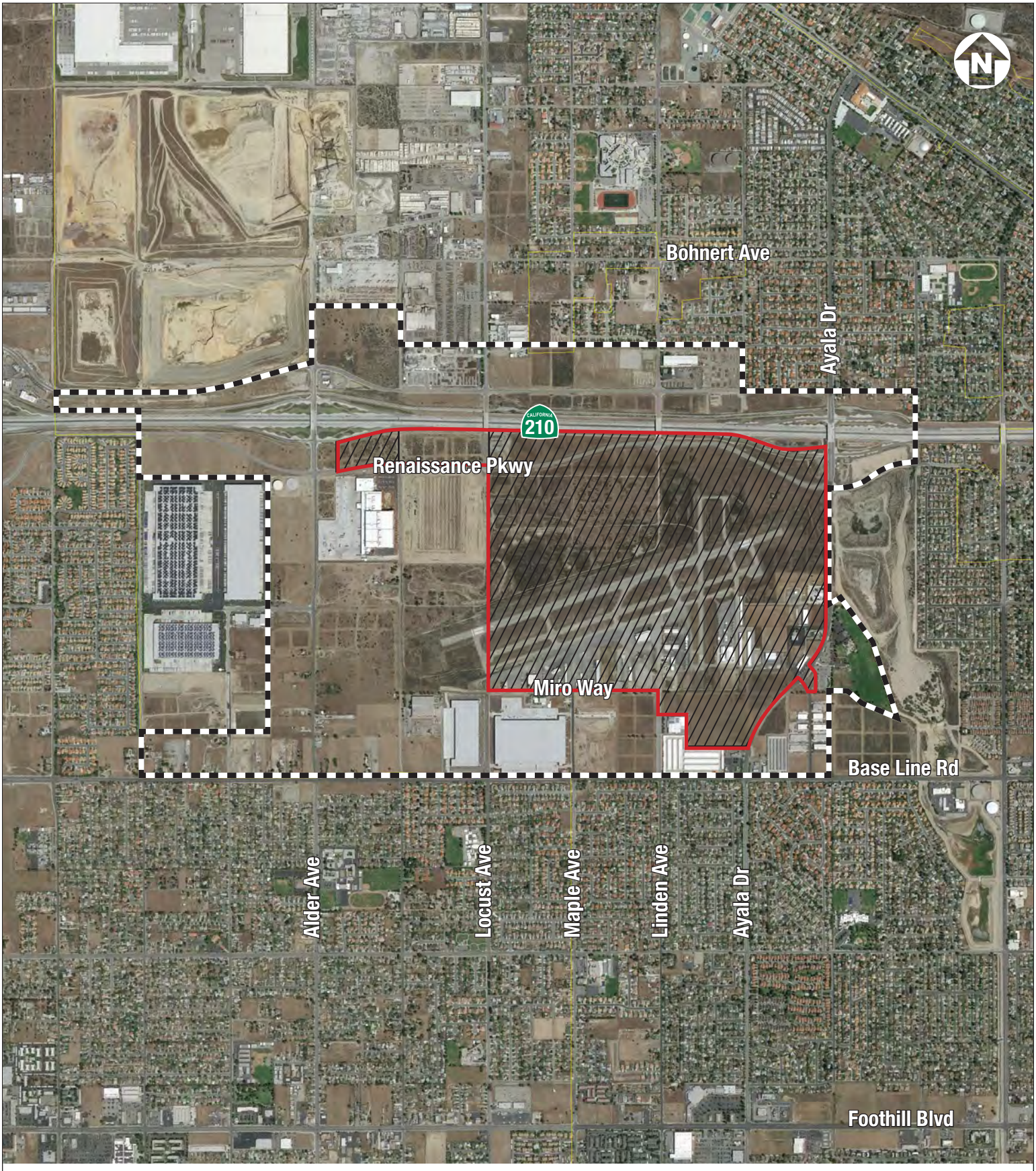

Figure 3-2: Project Vicinity

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- To provide a range of housing options including single-family (detached and attached) housing and multi-family housing that are financially self-supporting and contribute to the City's economic base;
- To create public recreational and open spaces;
- To create an expanded Business Center capable of accommodating a wide range of land uses contributing to jobs-housing balance, including commercial, employment, business center, educational, and corporate center uses;
- To create a range of job and economic development opportunities for local individuals and businesses; and
- To develop a master planned community that has a unique character and quality with a commitment to sustainability, flexible planning, high quality architecture and site design, and the provision of attractive on-site open space, public spaces, recreational facilities, and landscape design.

3.3 PROJECT CHARACTERISTICS

On November 9, 2010, the City of Rialto approved the 2010 RSP consisting of approximately 1,445.3 gross acres located within the western/central portion of the City. The Specific Plan is planned as an integrated community of varied housing types located near and linked to places of employment, retail outlets, services and schools. The RSP at the time of approval was planned to accommodate 16.2 million square feet of business and commercial uses (835,200 square feet of which were existing and would remain), 1,667 residential units, one school, a community park, and multiple neighborhood parks all located in proximity to one another and organized in a grid pattern.

To address the potentially significant impacts associated with implementation of the 2010 RSP, the City prepared the 2010 RSP Draft and Final EIR in accordance with the CEQA. The RSP EIR was released for public review on May 3, 2010; the 2010 RSP Final EIR was certified on November 9, 2010. Since certification of the 2010 RSP Final EIR, six addendums to the Final EIR have been prepared and undergone respective CEQA review and approval. They are: Golden Bear Regional Food Distribution Center Project Addendum (2012), SR-210 Logistics Center II Project Addendum (2013), Rialto 42 Distribution Center Project Addendum (2013), Medline Project Addendum (2015), Niagara Project Addendum (2015), and SR-210 Logistics Center III Project Addendum (2015).

The proposed Project is an amendment to the 2010 RSP. The proposed RSP Amendment would allow for the modification of square footage and zoning within a portion of the 2010 RSP area to include the relocation of business and industrial uses to the west of Linden Avenue, the relocation of all residential land uses and the public park to the east of the Linden Avenue, and implementation of the Renaissance Marketplace retail development and the Planning Area 108 industrial/warehouse development. The purpose of relocating some land use is to create a more efficient land use plan and to cluster similar land use types.

The proposed Project considered by this Recirculated Draft SEIR includes the following actions:

- An update of the 2010 Renaissance Specific Plan and related texts and figures throughout the RSP
- Updates to residential development standards to reflect housing trends
- Relocation of all residential land uses to the east of Linden Avenue
- Relocation of Business Center land use to west of Linden Avenue
- Precise Plan of Design for the Renaissance Marketplace retail development
- Precise Plan of Design for the Planning Area 108 industrial/warehouse development
- Change in Land Use in Planning Area 19 from Freeway Commercial to Freeway Incubator
- Change FAR of Corp Center from .75 to .50
- Develop potential interim storm drain basins
- Maintain Renaissance Parkway in its current alignment
- Revised Sign Standards for freeway pylon signs
- Revised street sections
- Terminate Miro Way east at Linden Avenue
- Increased public park area from 16.0 acres to 20.0 acres
- Relocation of public school site to east side of Linden Avenue

The existing approved 2010 RSP area land use plan is displayed in **Figure 3-3: 2010 Approved RSP Plan Area**. The revised land use for plan for the RSP area per the RSP Amendment is displayed in **Figure 3-4: Proposed RSP Plan Amendment Area.** Related updates to the 2010 RSP text and figures are required based upon the revised land use plan as proposed by the RSP Amendment. However, the land uses proposed by the RSP Amendment represent a re-distribution of previously-identified land uses in the RSP. The total acreage of the RSP increased from 1,435.5 acres to 1,450.6 due to more accurate survey data of the project area since its original adoption.

As a component of the proposed Project, the Applicant is proposing the development of the Renaissance Marketplace. The approximately 566,764-square-foot retail center would include a major retail sites, as well as other uses that could include, a health club, a movie theater, restaurants, a gas station, a day care center, a drug store, and additional in-line retail. Access to the Renaissance Marketplace would be provided from Renaissance Parkway, Ayala Drive, Linden Avenue and a proposed street that would provide access to the residential planning areas south of the Renaissance Marketplace. Marketplace PPD identifies maximum square footage, streets cross sections and entrance locations. Building footprints, site layout, design features and parking may be subject to modification as development occurs. The Renaissance Marketplace would be constructed in two phases. A preliminary master site plan of the Renaissance Marketplace is provided in **Figure 3-5: Renaissance Marketplace Master Site Plan**.

The Planning Area 108 component of the proposed Project would be developed with up to approximately 4 million square feet of industrial/warehouse uses. Planning Area 108 encompasses what was once Planning Area 60B, a previously identified industrial-zoned area. The development would include four buildings, each between 400,000 and 1.3 million square feet. Planning Area 108 is located on the north side of Miro Way between Locust and Linden Avenues. Access to the proposed industrial/warehouse uses would be provided by four driveways on Locust Avenue, three driveways on Linden Avenue, and one driveway on Miro Way. A conceptual site plan of Planning Area 108 is provided in **Figure 3-6: Planning Area 108 Conceptual Site Plan**. Note: Monster Energy Distribution Center shown as Building 4-A in PA 108 in Figure 3-6, was approved by the City in July 2016 as a separate application outside of the RSP Amendment application.

The RSP Amendment would also maintain Renaissance Parkway in its current alignment (see Figure 3-3), without modifying it as proposed by the existing Land Use Plan for the RSP. Existing utilities in Renaissance Parkway will remain, except those that need to be relocated to within the street right-of-way. The Project also contemplates revisions to the RSP Sign Standards to allow additional freeway pylon signs along Renaissance Parkway and the Interstate 210 Freeway. Street sections for the Project have also been updated to provide additional width for bike travel lanes and median widths for turning movements. Alder Avenue, Miro Way, Locust Avenue, Ayala Avenue, and portions of Linden Avenue have been constructed since the approval of the RSP in 2010. The street sections have been modified from the 2010 RSP per the recommendations of the City's Transportation Commission and Class I and II bike lanes have been added where feasible and away from industrial land uses.

The proposed Project is also expected to need interim drainage basins due to downstream facilities not yet completed by outside agencies. The proposed Project would provide an alternative interim drainage facility for the Renaissance Marketplace, within Planning Area 115 (as newly-designated by the RSP Amendment), should downstream facilities be determined to not be eligible for stormwater flows. The high density unit count in Planning Area 115 may be reduced if the interim detention basin is needed beyond the planned buildout of high density residential in Planning Area 115.

The proposed Project will include a Development Agreement that identifies the impact fees to be paid by the applicant, as well as the timing and funding of improvements that are already identified as part of the Project. The Development Agreement would also identify the legal obligations of both parties in terms of performance, assignments, liability, etc.

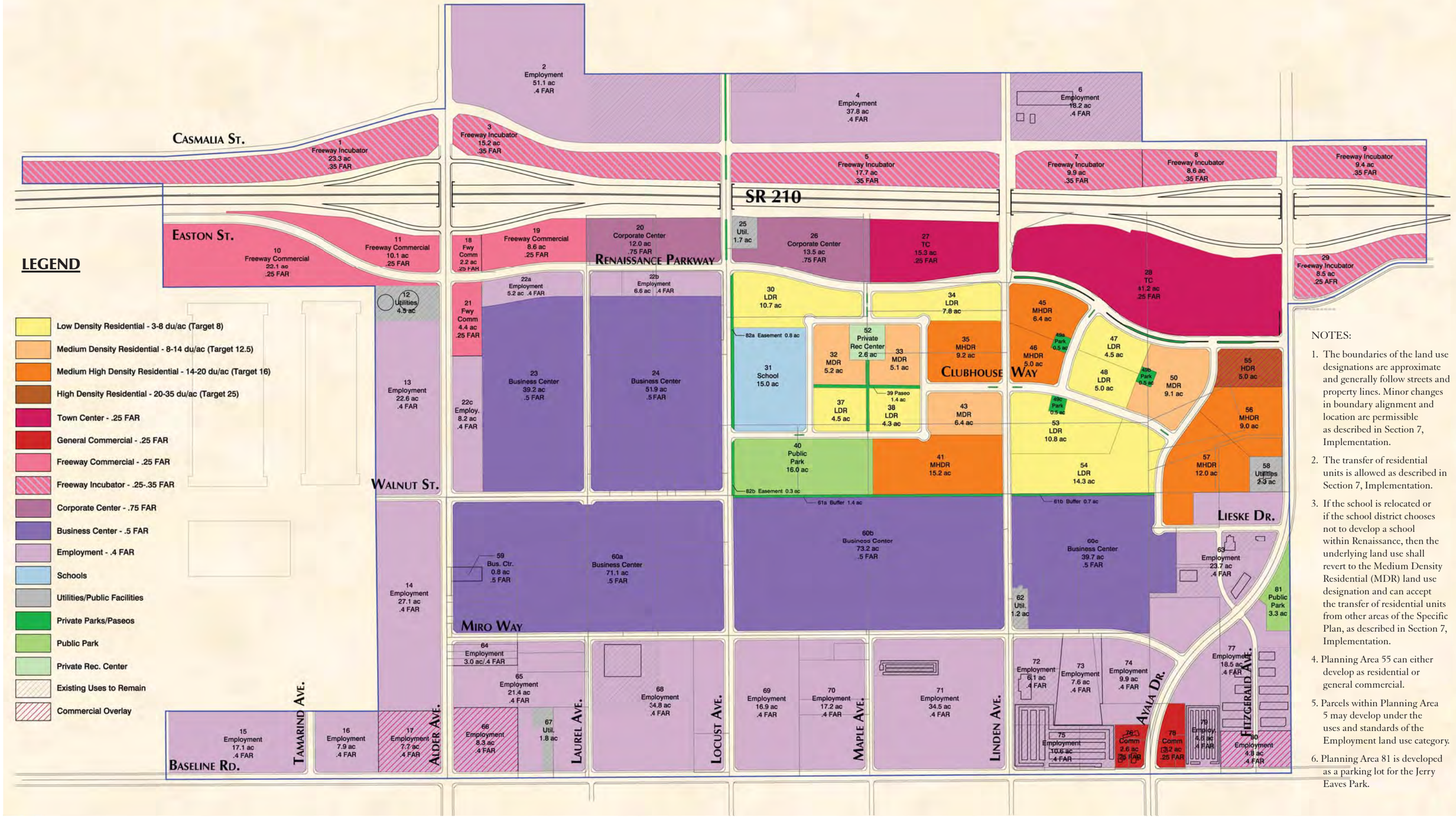
A summary of the proposed RSP Amendment land use changes is provided below in **Tables 3-2 and 3-3**. As shown in the tables, some of the total acres have changed for the land use areas for which there has been no proposed changes. This is the result of an updated land survey that produced slightly different results. Other changes to the size of some land categories are the result of changes to the land use plan to reflect changes in market conditions. For example, the proposed land use plan has decreased the amount of residential area and increased the amount of Business Center. In addition, the amount of existing development has increased significantly since 2010 due to the construction of multiple projects. Projects that have been constructed as of April 2016, are reflected as "Existing Uses to Remain" in the Statistical Data table.

Table 3–2 Change in Acreage by Land Use (2010 Approved Versus 2016 Revisions)

	2010 Plan	2016 Plan	Change
Residential	**149.5**	**107.0**	**(42.5)**
Low	61.9	50.5	(11.4)
Medium	25.8	29.0	3.2
Medium High	56.8	19.5	(37.3)
High	5.0	8.0	3.0
Non Residential	**935.1**	**991.2**	**56.1**
Retail	109.7	116.7	7.0
Commercial	46.3	43.0	(3.3)
Office	25.5	26.7	1.2
Industrial	753.6	804.9	51.3
Public Spaces	**376.5**	**352.4**	**(24.1)**
Private Rec Center	4.1	2.5	(1.6)
Public Parks	41.9	45.9	4.0
Buffer/Easements	4.6	4.8	0.2
Utilities	11.5	12.9	1.4
Schools	15.0	13.0	(2.0)
ROW	299.4	273.3	(26.1)
Totals	**1,461.1**	**1,450.6**	**(10.5)**

Table 3–3 Change in Units/BSF by Land Use (2010 Approved Versus 2016 Revisions)

	2010 Plan	2016 Plan	Change
Residential	**1,667**	**1,279**	**(388)**
Low	446	404	(42)
Medium	290	363	73
Medium High	818	312	(506)
High	113	200	87
Non Residential	**15,406,301**	**17,484,283**	**2,077,982**
Retail	1,155,429	1,244,367	88,938
Commercial	687,377	616,921	(70,456)
Office	833,085	872,292	39,207
Industrial	12,730,410	14,750,703	2,020,293
Performance Metrics			
Population	5,168	3,964	(1,204)
Employment	14,468	11,578	(2,890)
Jobs/Housing Unit	8.68	9.05	0.37
Housing Units/Acre	11.2	12.0	0.80
Non-Residential FAR	0.38	0.40	0.02
Park Ratio (New Public Parks)	3.1	5.0	1.90



NOTES:

1. The boundaries of the land use designations are approximate and generally follow streets and property lines. Minor changes in boundary alignment and location are permissible as described in Section 7, Implementation.
2. The transfer of residential units is allowed as described in Section 7, Implementation.
3. If the school is relocated or if the school district chooses not to develop a school within Renaissance, then the underlying land use shall revert to the Medium Density Residential (MDR) land use designation and can accept the transfer of residential units from other areas of the Specific Plan, as described in Section 7, Implementation.
4. Planning Area 55 can either develop as residential or general commercial.
5. Parcels within Planning Area 5 may develop under the uses and standards of the Employment land use category.
6. Planning Area 81 is developed as a parking lot for the Jerry Eaves Park.

Figure 3-3: RSP Plan Area

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LEGEND

Color	Land Use Category	AC	FAR	DU/AC	DU
	LDR	50.5	–	8	404
	MDR	29.0	–	12.5	363
	MHDR	19.5	–	16	312
	HDR	8.0	–	25	200
	Town Center	71.9	0.25		
	General Commercial	6.2	0.25	–	
	Freeway Commercial	38.6	0.23	–	
	Freeway Incubator	85.9	0.23	–	
	Corporate Center	26.7	0.30	–	
	Business Center	320.5	0.5	–	
	Employment	441.4	0.4	–	
	Schools	13.0	–	–	
	Utilities/Public Facilities	12.9	–	–	
	Slope / Buffer	4.8	–	–	
	Public Park	45.9	–	–	
	Private Rec. Center	2.5	–	–	
	Commercial Overlay				
	Employment Overlay				
	Existing Uses to Remain				
	Residential Overlay				

Project Area/RSP Amendment Area

Existing Jerry Eaves Park to Remain

Source: Placeworks, 2015

NOTES:

1. The boundaries of the land use designations are approximate and generally follow streets and property lines. Minor changes in boundary alignment and location are permissible as described in Section 6, Implementation.
2. The transfer of residential units and square footage in the Business Center land use categories is allowed as described in Section 6, Implementation.
3. If the school is relocated or if the school district chooses not to develop a school within Renaissance, then the underlying land use shall revert to the Medium High Density Residential (MHDR) land use designation and can accept the transfer of residential units from other areas of the Specific Plan, as described in Section 6, Implementation.
4. See city zoning code for non-conforming uses.
5. PA 132 will remain as an Employment Area with the option to become Low Density Residential. As Low Density Residential it will be calculated at 8 du/ac for a total of 23 dwelling units.
6. Existing uses noted based on approved square footage and FAR.

Figure 3-4: Proposed RSP Plan Amendment Area

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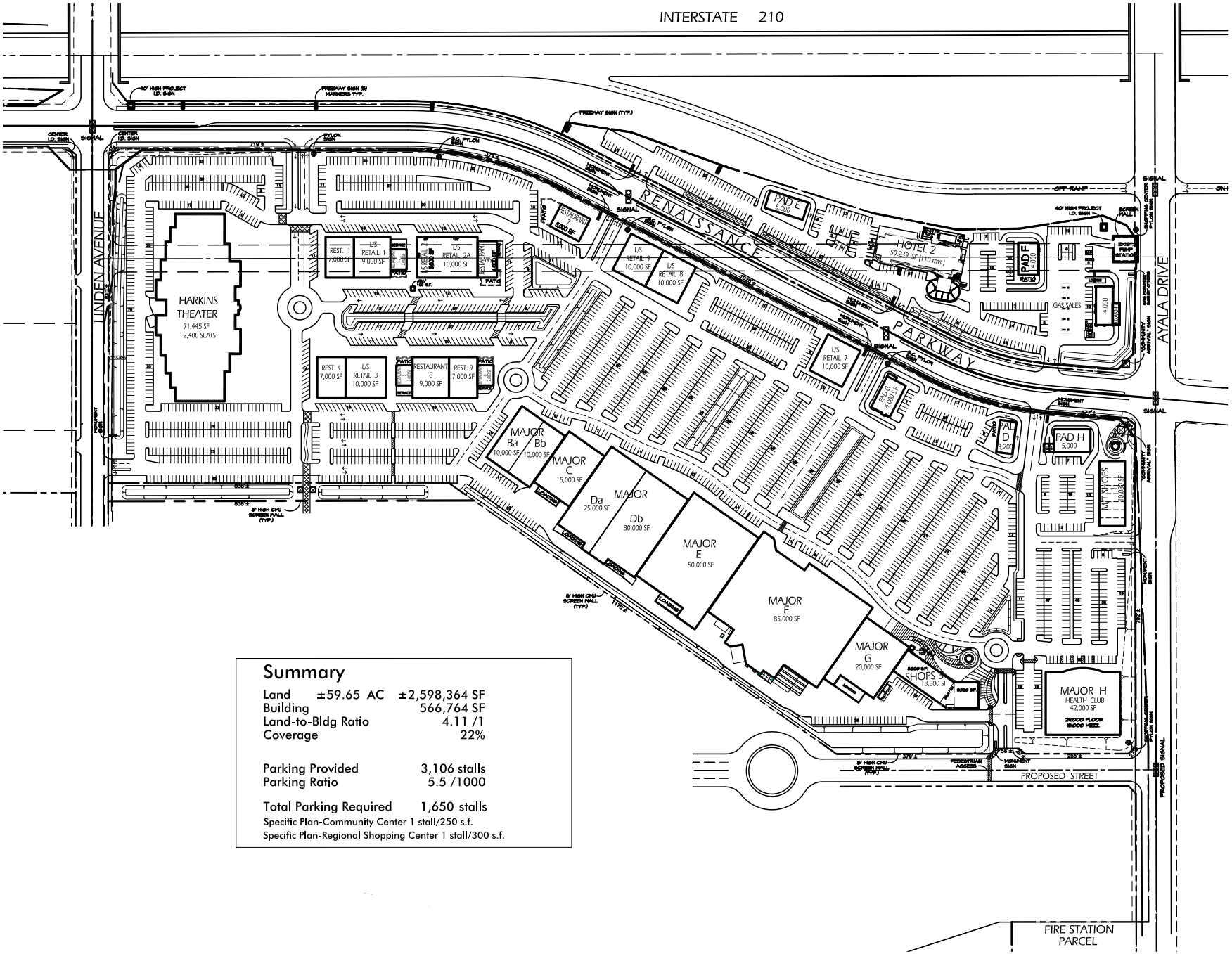

Summary

Land	±59.65 AC	±2,598,364 SF
Building		566,764 SF
Land-to-Bldg Ratio		4.11 /1
Coverage		22%
Parking Provided		3,106 stalls
Parking Ratio		5.5 /1000
Total Parking Required		1,650 stalls

Specific Plan-Community Center 1 stall/250 s.f.
Specific Plan-Regional Shopping Center 1 stall/300 s.f.

Figure 3-5: Renaissance Marketplace (PA 101 & 104) Site Plan

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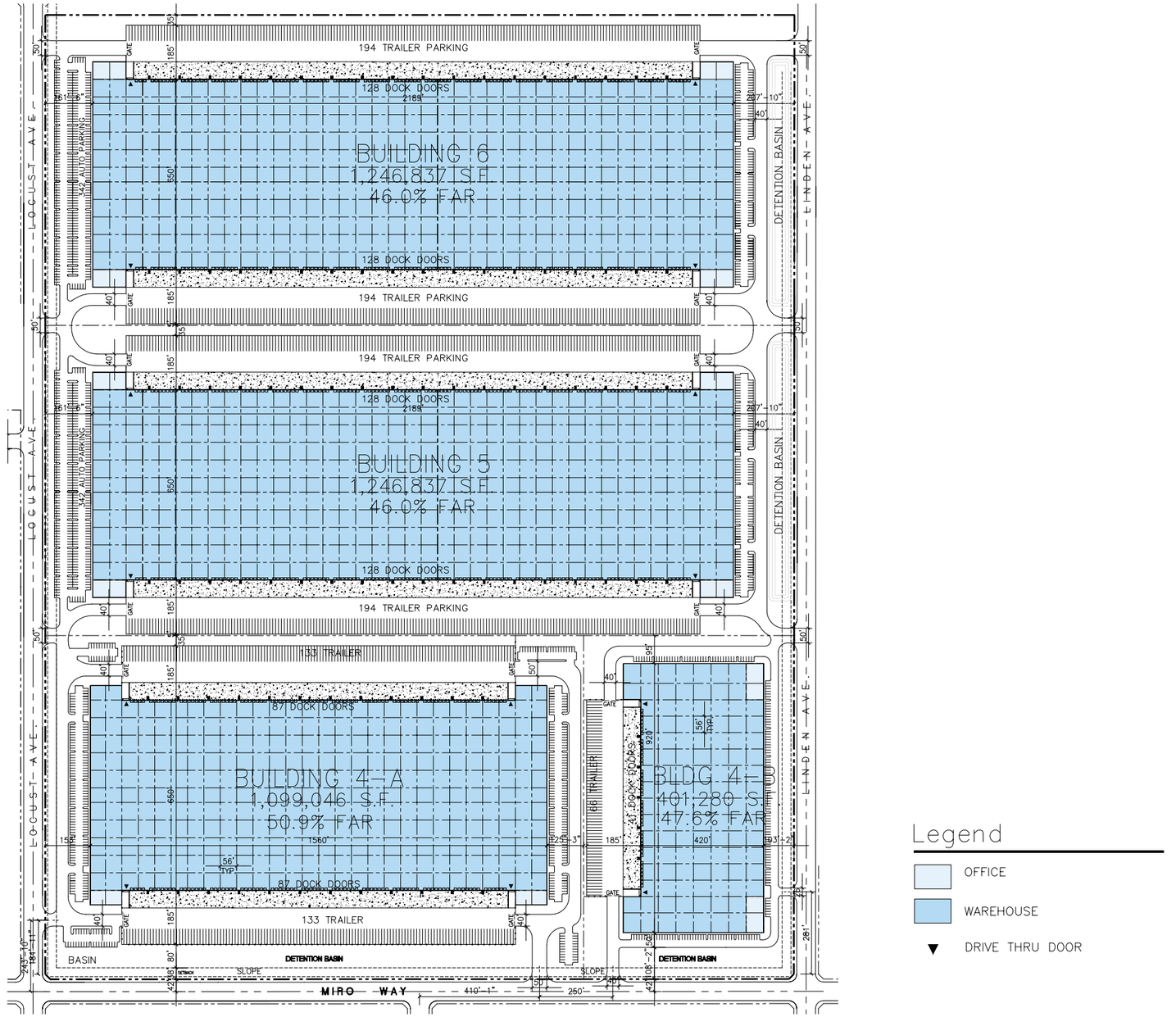

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

Figure 3-6: Planning Area 108 Conceptual Site Plan

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3.3.1 LAND USE CATEGORIES AND PERMITTED USES

The proposed Project is designed to provide flexibility in the size of the parcels, the configuration of the circulation system, and the ultimate use of the site. The Project contains 17 different land use categories including 4 residential categories and 7 business categories. **Table 3-4** provides a description of each category.

Table 3–4 Land Use Categories

Residential Use	Description of Category
Low Density Residential (LDR)	Low density single-family detached residential uses of three to eight units per acre.
Medium Density Residential (MDR)	Medium density single-family detached and multiple-family attached residential uses at 8-14 dwelling units per acre.
Medium High Density Residential (MHDR)	High-density multiple-family residential uses at 14-20 dwelling units per acre.
High Density Residential (HDR)	High-density multiple-family residential uses at 20-30 dwelling units per acre.
Retail/Office Uses	**Description of Category**
Town Center (TC)	Hub retail activity (retail shopping, restaurants, entertainment, department stores and regional shopping in a pedestrian-friendly environment). Also incorporates uses such as day-care centers, performing arts centers, and civic uses.
Corporate Center (CC)	Accommodates professional office, research and development and medical uses in a campus-like setting.
Freeway Commercial (FC)	Retail uses serving the community and traveling public (retail, travel services, restaurants, lodging, drug stores, home improvement centers, entertainment centers, health clubs, regional shopping centers, and automobile dealerships).
General Commercial (GC)	Local community retail services (gas stations, convenience stores, drug stores, car washes, restaurants medical offices).
Business Uses	**Description of Category**
Employment (EMP)	Accommodates a mixture of professional office, light industrial, research and development, business park, light manufacturing, assembly, and related storage and support services.
Business Center (BC)	Accommodates larger industrial, distribution, manufacturing uses.
Freeway Incubator (FI)	Larger regional retail and business uses (furniture showrooms, automobile/boat dealerships, lodging, travel services, floor and tile showrooms, and furniture/appliance outlets).

Table 3–4 Land Use Categories (continued)

Other Uses	Description of Category
Schools (S)	Accommodates a public school. In the event that the school is relocated or not developed, the underlying zoning would revert to Medium High Density Residential (MHDR), which can accept the transfer of residential units from other areas of the Specific Plan as long as the maximum of 1,667 total units is not exceeded.
Public Parks (PP)	Public open spaces (tot lots, sports courts, sports fields, picnic areas, jogging courses, joint-use recreational facilities).
Private Recreation Center (PRC)	Private clubhouse for the proposed Project, which may include swimming pools, ball courts, meeting rooms, gyms, spa, and other recreational/social amenities.
Miscellaneous Parks/Open Space (MP/OS)	Private recreational facilities such as tot lots, sport courts, picnic areas and open space (community activities areas).
Utilities (U)	Accommodates the existing water tank, electrical substation and water filtration system.
Commercial Overlay (CO)	Allows the underlying district to develop the uses and standards of the General Commercial (GC) land use district.

Source: Renaissance Specific Plan, 2010

The proposed Project is an integrated community of various housing types, closely linked to employment, retail, recreation, services, and education. The proposed Project provides for a mix of residential and commercial uses to allow development of a diverse mix of uses. Specific uses proposed in each land use category are summarized in Table 3-4. For each land use category, uses are allowed by right (permitted) or conditional approval by a conditional use permit or conditional development permit, or prohibited.

3.3.2 PROJECT PHASING

Considering the variety of potential future ownerships in the overall Specific Plan area, including the Project sites considered by this Recirculated Draft SEIR, phasing for the entire 1,450.6 acres of the RSP area, which includes the areas of the proposed Project considered by the amendment, cannot be determined. However, the development and phasing of Specific Plan area including the Amendment areas are shown in **Figure 3-7: Phasing Plan**, and is based on expectations of future planning and market demand. However, it should be recognized that development area sequencing may change as the result of future conditions. However, the development standards will not change and future projects will be required to comply with conditions set forth for the 2010 RSP and the RSP Amendment, regardless of shifts in the composition of each development phase.

As displayed in Figure 3-7, the core area of the 2010 RSP area is planned to be developed in three phases. Phase I development began in 2011; Phase II is expected to begin in 2016; and Phase III is expected to begin in 2020. As noted, phase development as originally envisioned included portions of the Project area as considered by this Recirculated Draft SEIR, including the location of the Renaissance Marketplace component.

Peripheral areas surrounding the phasing boundaries within the RSP area will be developed over time as individual property owners propose development projects. The peripheral areas will be required to abide by the development guidelines specified in the 2010 RSP and the RSP amendment.

3.3.3 GRADING PLAN

Figure 3-8: RSP Conceptual Grading Plan provides an overview of the proposed Project's conceptual grading plan; the entire Project area including the Marketplace (PA 101 and 104) and Planning Area 108 sites will be graded at approximately two percent from the northwest corner to the southwest corner. The community street grades will be set to match existing topography. The sites will be graded to balance onsite, and the grading plan may be adjusted to reflect the final roadway layout, plotting, drainage plans and design.

3.3.4 INFRASTRUCTURE

3.3.4.1 ACCESS AND CIRCULATION

Primary access to the Project area would be from SR-210 via interchanges at Alder Avenue and Ayala Drive. Baseline Road, Miro Way, Easton Street, Renaissance Parkway, and Casmalia Street provide the main east to west access within the site. Palmetto, Locust, Linden Avenues, and Ayala Drive provide the main north to south access within the site. Within the Project area, Walnut Street was vacated between Laurel Avenue and Locust Avenue by a separate action subsequent to the approval of the RSP in 2010.

Figure 3-9: RSP Vehicular Circulation Plan provides an overview of the proposed Project's circulation plan. The RSP circulation plan consists of a hierarchy of streets including arterials, secondary arterials, collectors, local and private streets and private drives.

The major arterials in the RSP area include Renaissance Parkway, Alder Avenue, Ayala Avenue, and Baseline Road. The arterial roadways are intended to carry large volumes of relatively high-speed traffic between the region, different parts of the City, and the RSP area, including the Project area. Cross-section of the arterial roadways serving the proposed Renaissance Marketplace are shown in **Figures 3-10: Renaissance Parkway, 3-11: Modified Renaissance Parkway at Ayala Drive Intersection**, and **Figure 3-12: Ayala Drive**. The roadway cross-sections from the Renaissance Specific Plan for other arterials are included in Appendix H.

Secondary arterials serve as the primary roadways within the RSP area, carrying the majority of traffic into and throughout the site. The secondary arterials in the RSP area include Casmalia Street, Locust Avenue, Miro Way, Linden Avenue, Laurel Avenue, Maple Avenue, Tamarind Avenue and Walnut Street. Collectors are designed to be used by local traffic within the RSP area. These two lane roads and are intended to allow slow-speed traffic and on-street parking. Local and private streets will be developed within each residential and business neighborhood. Private drives will be found in some residential neighborhoods and are the function of individual projects and would be reviewed during the tract map process. Gated entries are permitted in the RSP area; proposed locations are show on the RSP Amendment's circulation plan.

3.3.4.2 WATER SYSTEM

The City is served by three separate water districts. The West Valley Water District serves the area north of SR-210. The Fontana Water Company serves the area south of SR-210 and west of Linden Avenue. The City of Rialto provides water service to the area east of Linden Avenue and south of SR-210. **Figure 3-13: RSP Water Plan**

provides an overview of the proposed Project's conceptual water supply system. The water supply system within the RSP Amendment Area has been updated as part of the RSP Amendment to match the updated land use plan and circulation plan.

3.3.4.3 WASTEWATER AND SEWER SYSTEM

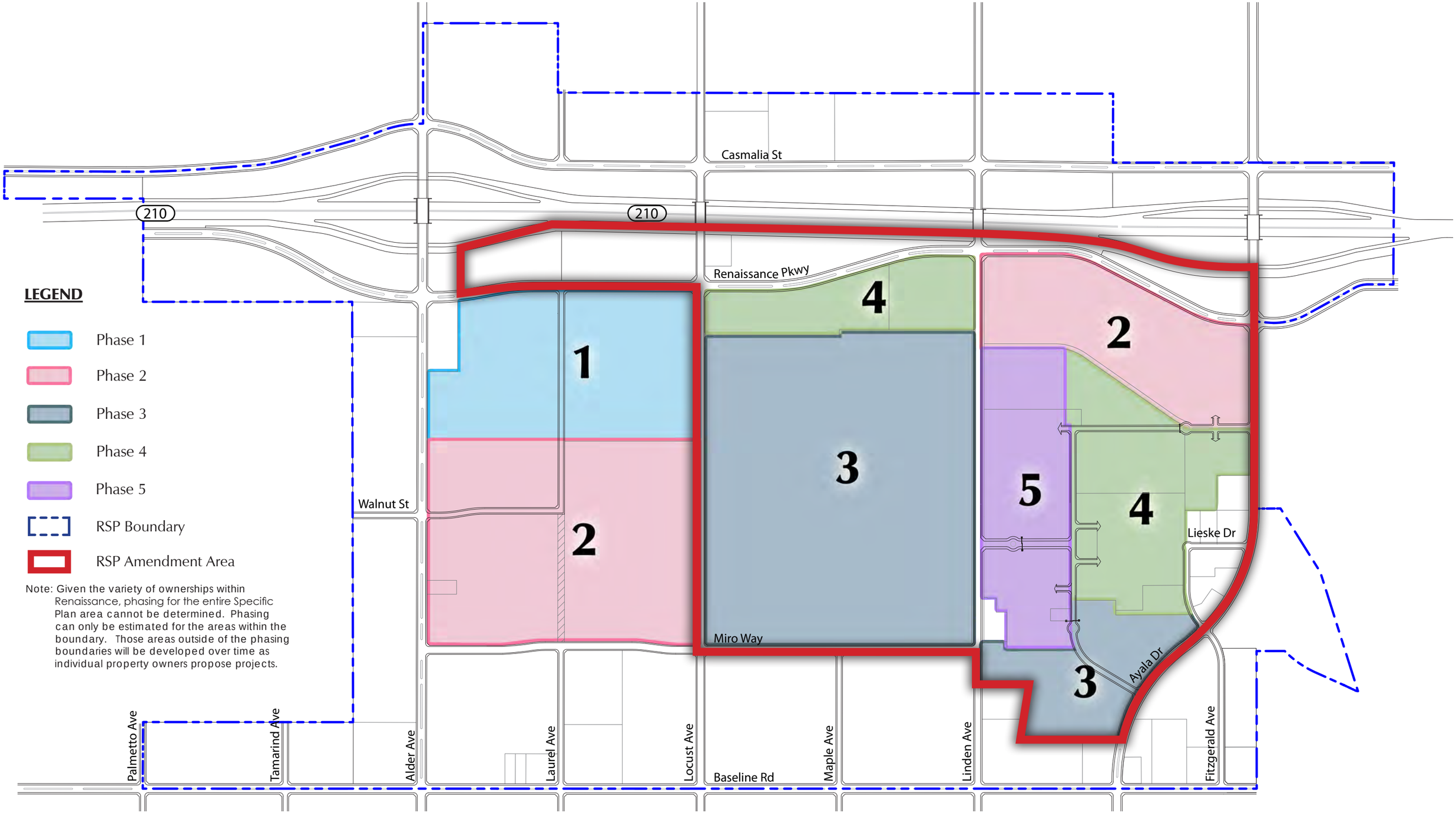
Figure 3-14: RSP Sewer Plan provides an overview of the proposed Project's conceptual sewer system. The area north of SR-210 will be connected to an existing 18" sewer line in Casmalia Street.

The area south of SR-210 will require new sewer lines to be installed. A maximum 15" sewer line will be constructed in Renaissance Parkway, which will drain easterly to Ayala Avenue. Since the existing 18" sewer line in Ayala Avenue is currently at capacity, a new parallel 15" sewer line will be constructed within Ayala Avenue to drain southerly. A series of local sewer lines will connect to a maximum 18" line, which will collect sewage runoff from the parcels north of Miro Way and east of Locust Avenue. It will then connect to a new 18" sewer line within Ayala Avenue. A new parallel 24" sewer line will be constructed in Baseline Road, from Ayala Avenue to Cactus Avenue. The parcels north of Baseline Road, east of Alder Avenue, south of Renaissance Parkway, and west of Locust Avenue will be connected to an existing 27" line that is located in Baseline Road. The area west of Alder Avenue will be connected to a maximum 12" sewer line that will be constructed in Alder Avenue. Alternatively, some portions of the area east of Alder Avenue may also be connected to the Alder Avenue sewer line. The Alder Avenue sewer line will be connected to an existing 12" line in Baseline Road.

The entire RSP area will be connected to an existing sewer line that is located within Cactus Avenue. This sewer line extends southerly from Baseline Road in Cactus Avenue, easterly in Valley Boulevard, and southerly in Riverside Drive, and easterly in Santa Ana Avenue to the City of Rialto sewage treatment plant. Final design and location will be determined through the tract map and grading permit processes.

3.3.4.4 STORMWATER DRAINAGE SYSTEM

Currently, the area north of SR-210 drains into the Cactus channel, which outlets into the existing San Bernardino County Flood Control District's Cactus Basin #5. The area south of SR-210 drains to Baseline Avenue. Baseline Avenue drains easterly toward Cactus Avenue, but currently there are no storm drains in Baseline Avenue to intercept site runoff. **Figure 3-15: RSP Storm Drainage Plan** provides an overview of the system plan for the proposed Project's conceptual storm drainage. As shown in the plan, the RSP area will require construction of four major east-west drain systems as further described below and within Section 4.8, *Utilities*.



Source: Placeworks, 2016

Figure 3-7: Phasing Plan

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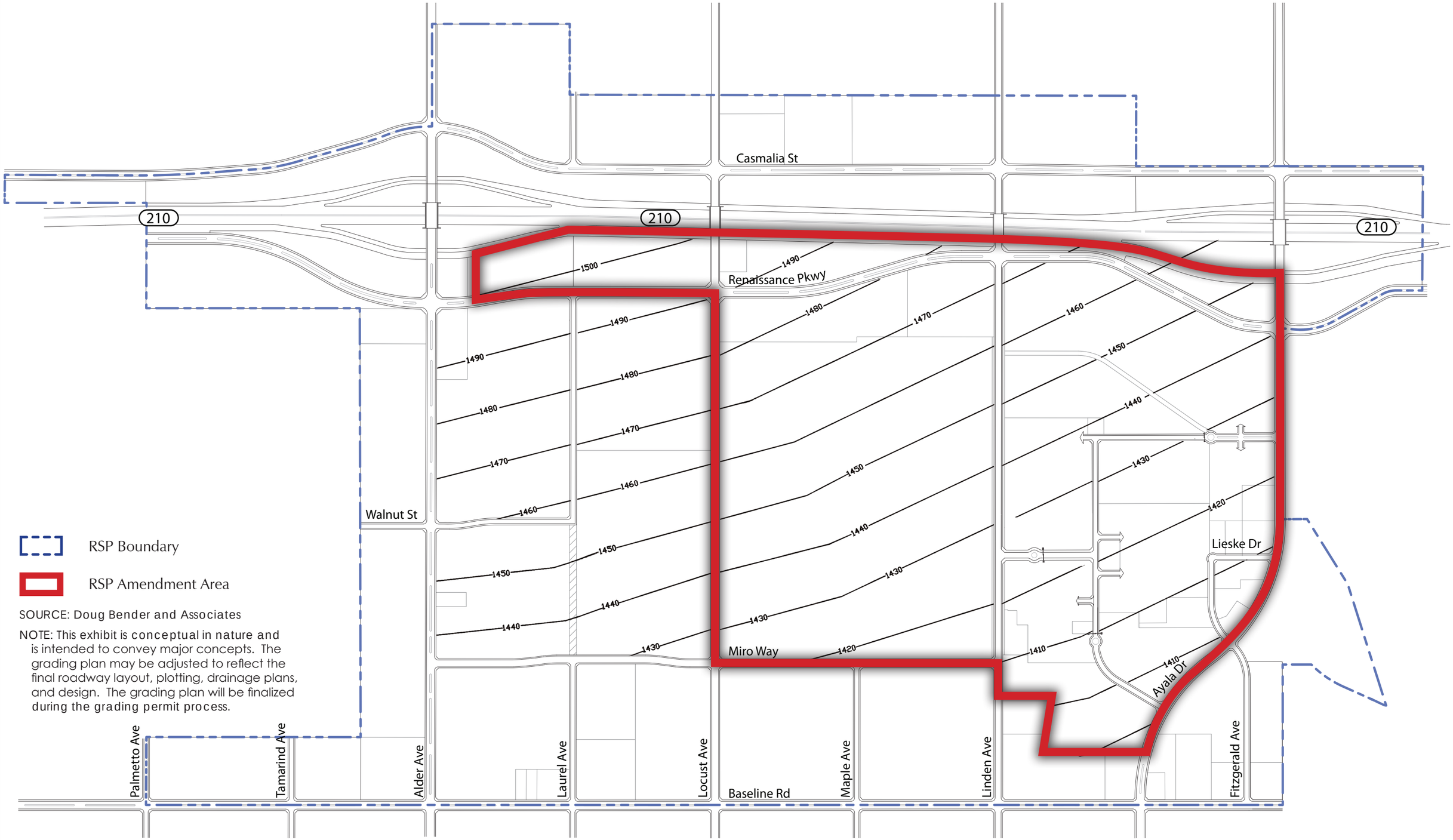

Source: Placeworks, 2016

Figure 3-8: RSP Grading Plan

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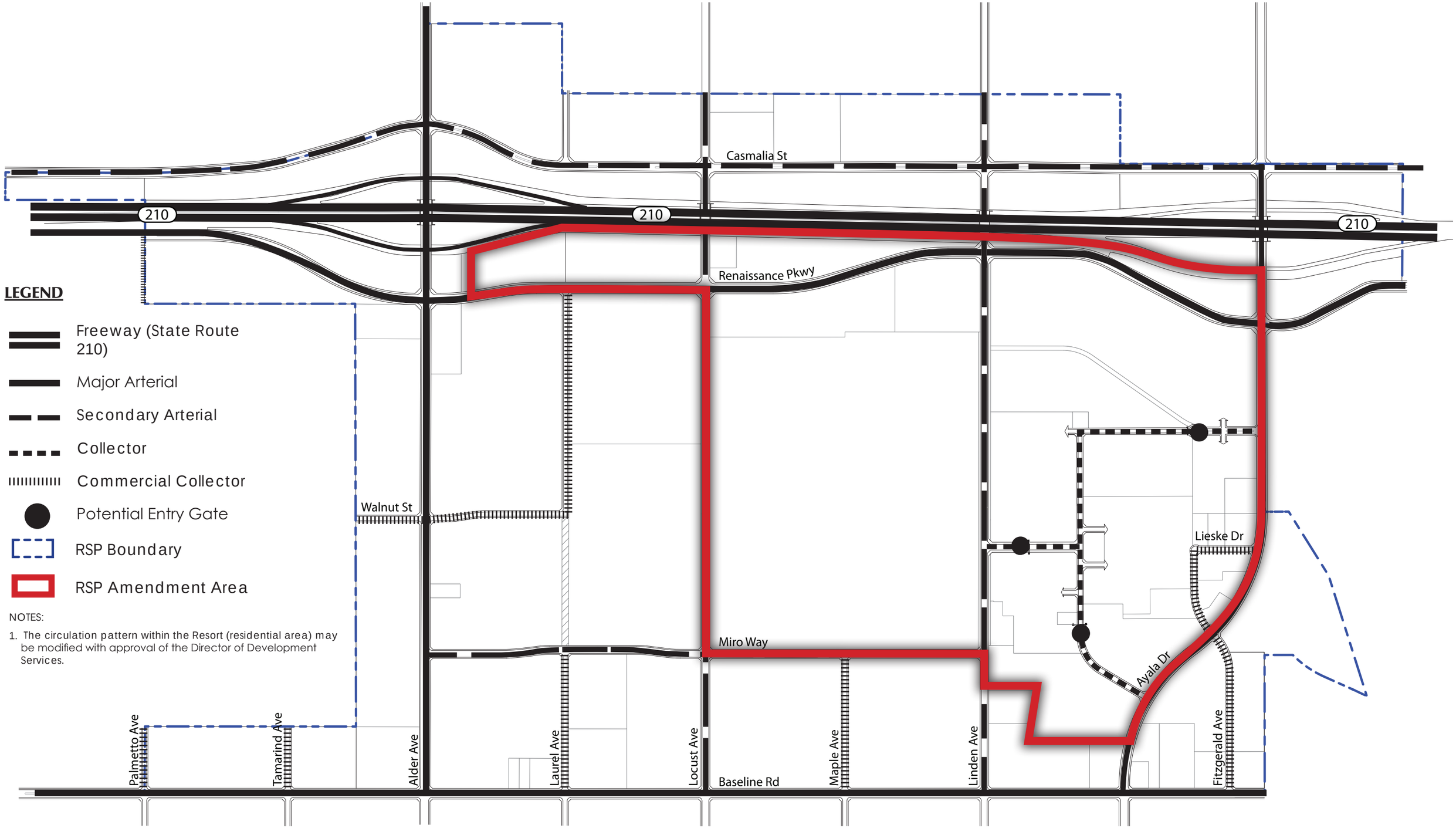

Source: Placeworks, 2016

Figure 3-9: RSP Vehicular Circulation Plan

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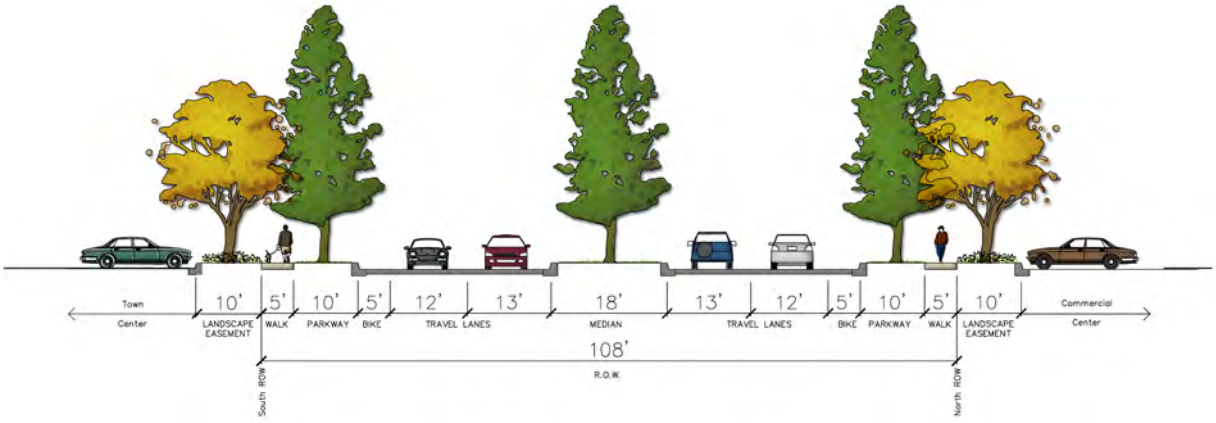

NOTES:

1. In cases where the ultimate Right-of-Way cannot be obtained due to existing structures or unique conditions, the City Engineer may approve a reduced Right-of-Way street section.
2. Standard street sections do not apply at intersections. Modifications are necessary to maintain the City's level of service goals and accommodate features such as turn lanes and deceleration lanes.
3. Setbacks measured from the back of landscape easement.
4. Meandering sidewalks may be utilized on this street. A minimum separation of 5 feet must be maintained between the sidewalks edge and back of curb and back of landscape easement.

Figure 3-10: Renaissance Parkway

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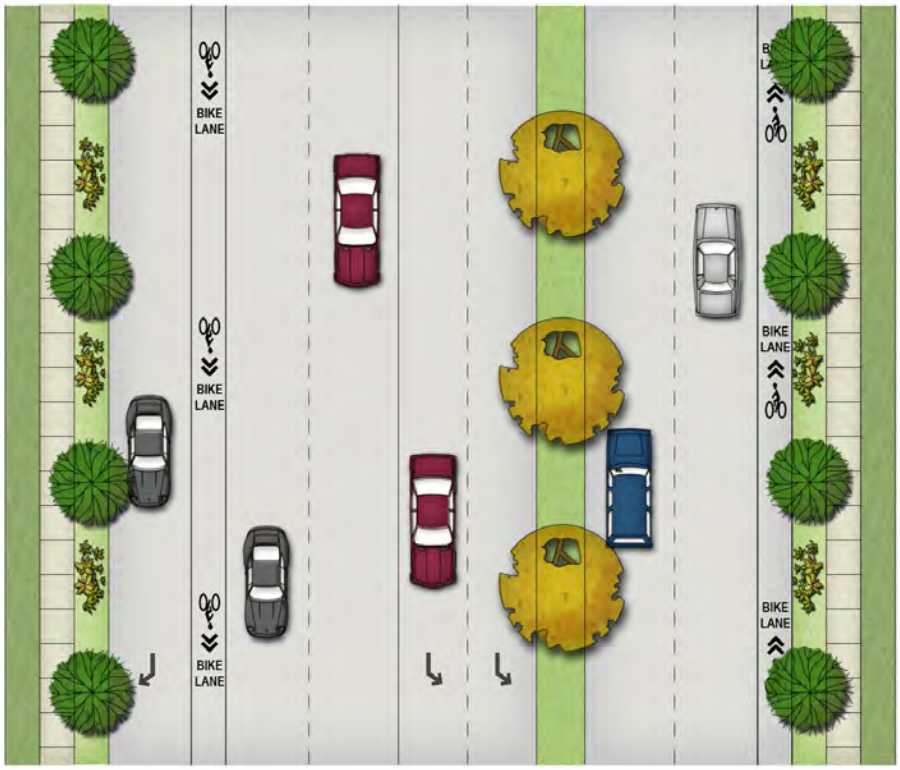

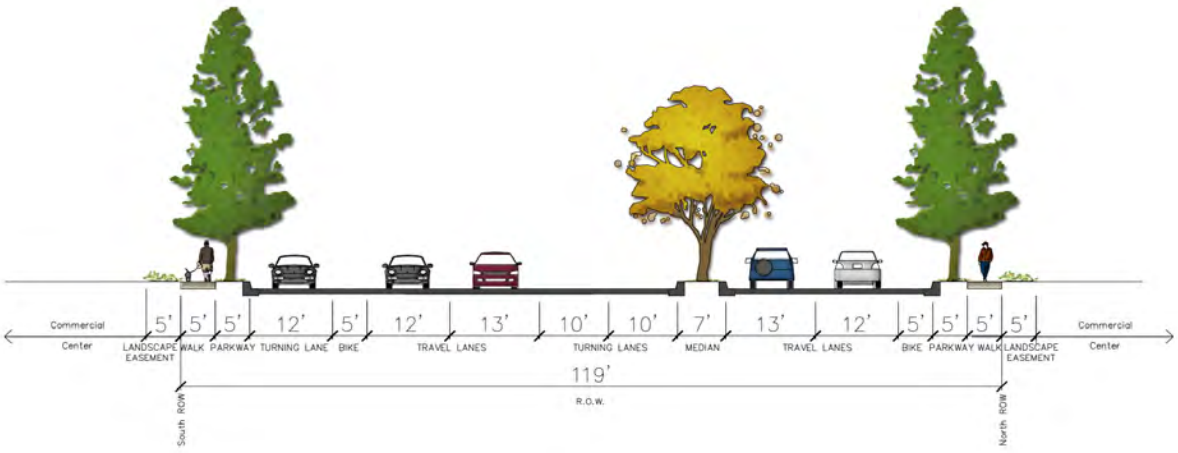

NOTES:

1. In cases where the ultimate Right-of-Way cannot be obtained due to existing structures or unique conditions, the City Engineer may approve a reduced Right-of-Way street section.

2. Setbacks measured from the back of landscape easement.

Figure 3-11: Modified Renaissance at Ayala Intersection

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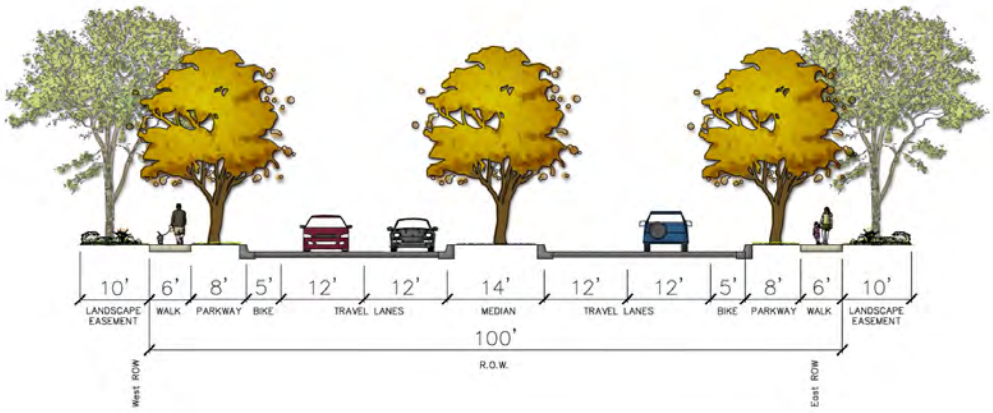

NOTES:

1. In cases where the ultimate Right-of-Way cannot be obtained due to existing structures or unique conditions, the City Engineer may approve a reduced Right-of-Way street section.
2. Standard street sections do not apply at intersections. Modifications are necessary to maintain the City's level of service goals and accommodate features such as turn lanes and deceleration lanes.
3. Setbacks measured from the back of landscape easement.
4. Meandering sidewalks may be utilized on this street. A minimum separation of 5 feet must be maintained between the sidewalks edge and back of curb and back of landscape easement.

Figure 3-12: Ayala Drive

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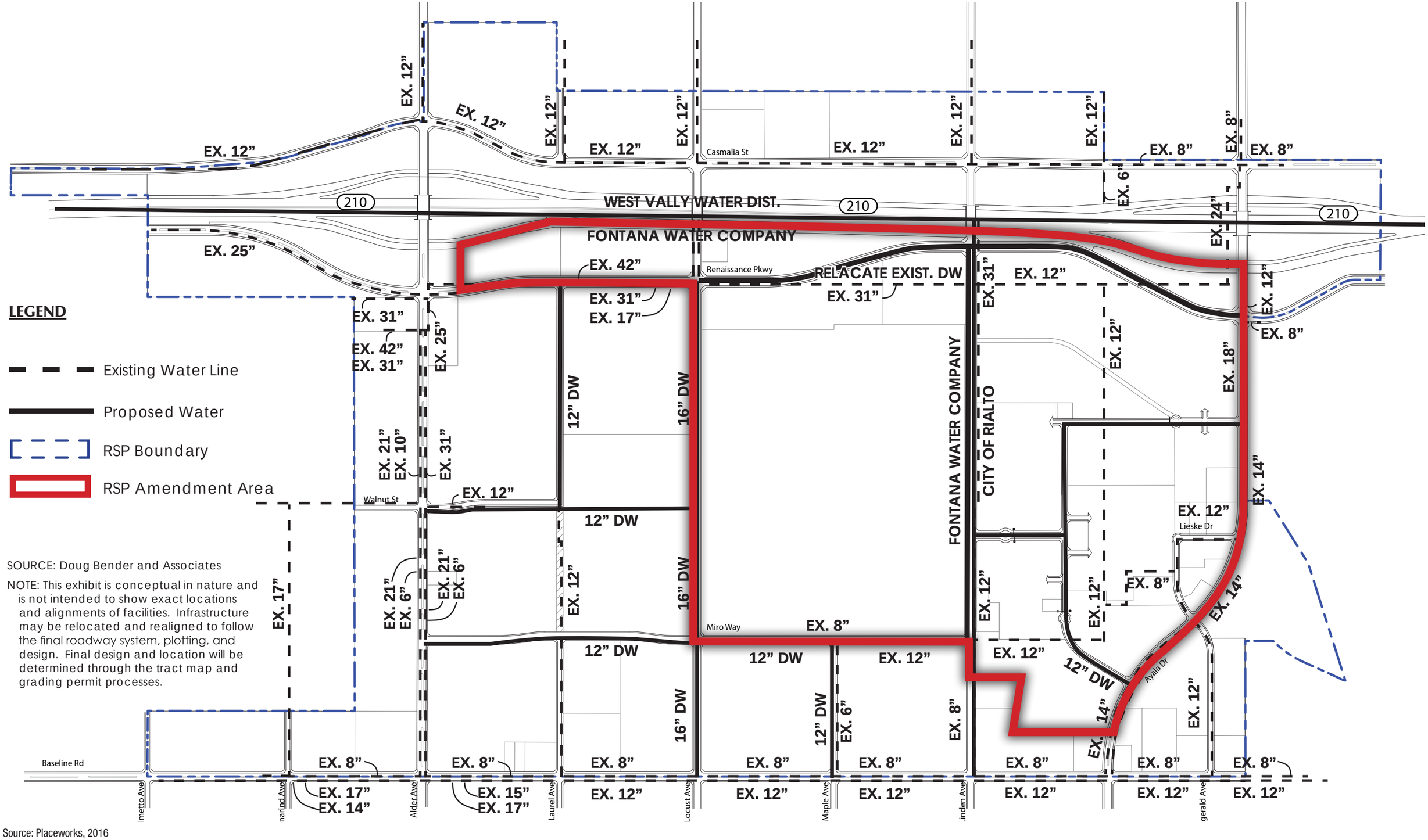

Source: Placeworks, 2016

Figure 3-13: RSP Water Plan

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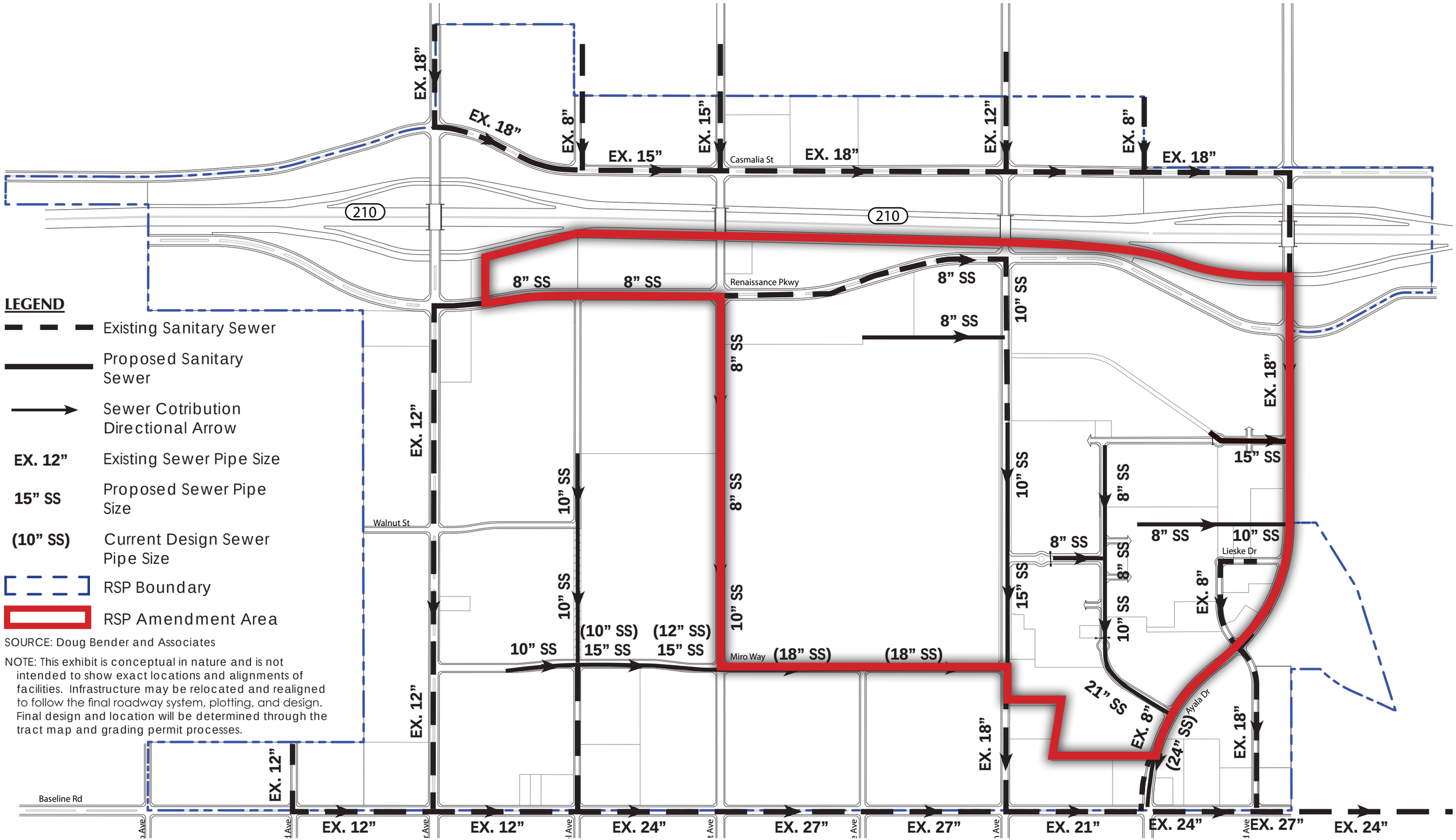

Source: Placeworks, 2016

Figure 3-14: RSP Sewer Plan

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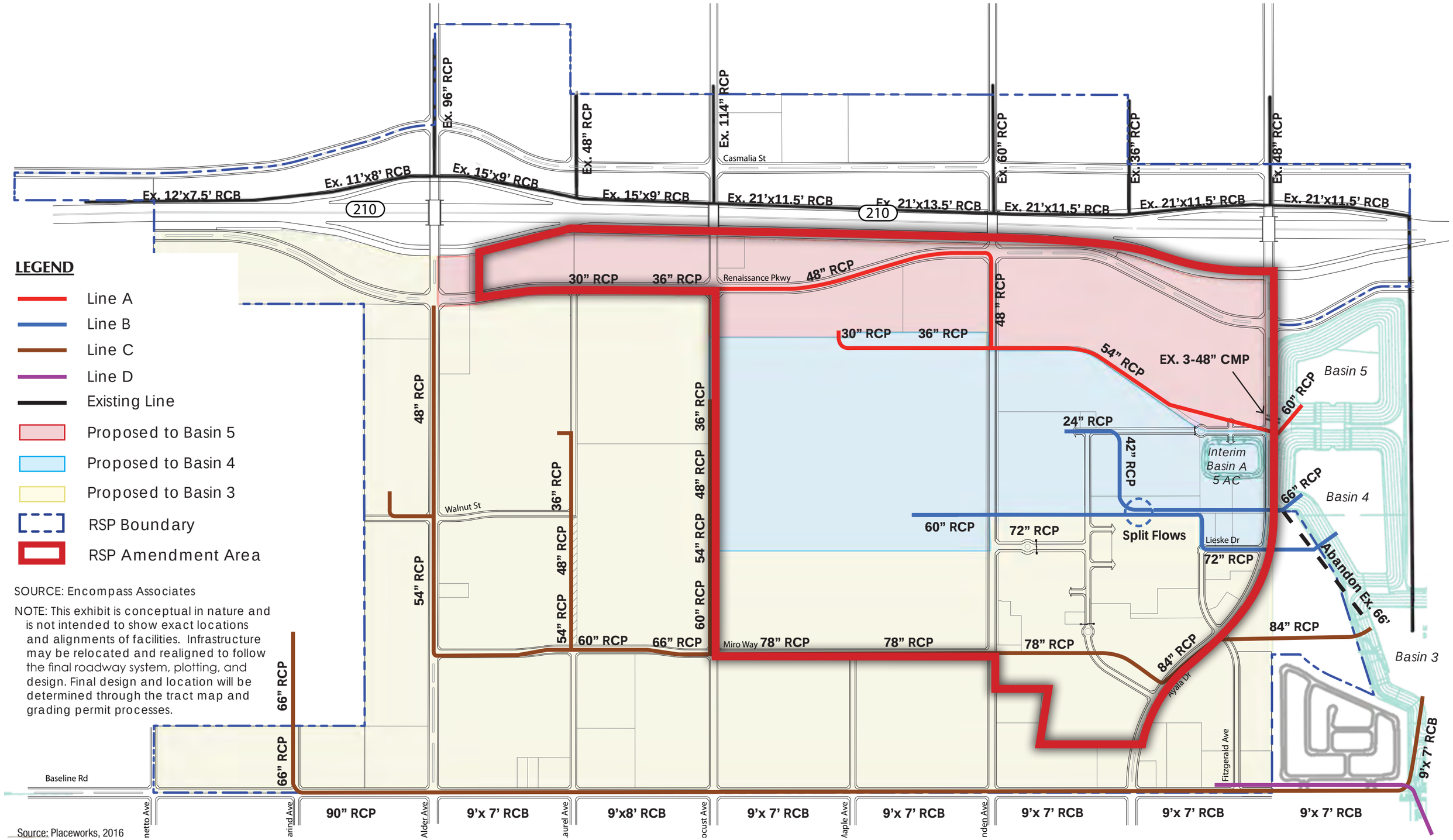

Figure 3-15: RSP Storm Drainage Plan

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Line "A" storm drain will be constructed in Renaissance Parkway beginning at Laurel Avenue, intercepting flows between the freeway and Renaissance Parkway. The storm drain then moves south on Linden Avenue and will turn east and run behind the Renaissance Marketplace parcels and capture flows from the retail development and ultimately discharges into Cactus Basin Number 5.

Line "B" storm drain will be constructed approximately half way between Renaissance Parkway and Miro Way east of Linden Avenue. It will capture discharge from PA 108 development, as well as the residential development as it runs easterly to Ayala Drive, where it ultimately discharges into Cactus Basin Number 4.

Line "C" storm drain has been constructed in Miro Way and captures discharge from development along Alder Avenue and properties along the north side of Miro Way. The storm drain runs easterly to Ayala Drive, turns north to the Fitzgerald intersection, through Jerry Eaves Park and discharges into Cactus Basin Number 3 through an 84-inch storm drain.

Line "D" is the most southerly east west storm drain system and will be constructed in Baseline Avenue. It will intercept runoff from the area south of Miro Way and north of Baseline Road. This storm drain will outlet into Cactus Basin Number 3. Development in this area will be required to have interim detention basins as downstream facilities will likely be analyzed and completed by outside agencies and the Project's drainage will be routed to these facilities in the future. The proposed Project would provide an alternative interim drainage facility for the Renaissance Marketplace, south of Planning Area 104 (as newly-designed by the RSP Amendment), should downstream facilities be determined to not be eligible for stormwater flows. Figure 3-15 identifies the interim basin location.

3.3.4.5 ELECTRICITY

Southern California Edison (SCE) provides electrical service to the general Project area. The source of the electricity is from an existing substation located within the RSP area at the southeast corner of SR-210 and Locust Avenue. SCE has existing 66kV transmission lines in portions of Locust Avenue and Laurel Avenue in an easement between the two streets. Another 66kV line is located parallel to the south side of SR-210 from Alder Avenue to the existing substation. There are existing overhead and underground distribution circuits in most of the streets within the RSP boundaries. Some of these circuits may need to be relocated or converted to underground as buildout of the RSP occurs. Relocation and/or conversion of these facilities will require approval from the Public Utilities Commission (PUC) if the length to be relocated and/or converted exceeds 2,000 feet in length. Standard SCE extension rules will apply to new extensions and the new extension facilities will be underground. In addition, a separate environmental review and design review would be required for relocation and/or conversion of these facilities. **Figure 3-16: RSP Electricity Plan** provides an overview of the proposed Project's conceptual electric system.

SCE has indicated the other developments are planned in the general vicinity of the RSP area and that additional capacity may be required in the future to serve these cumulative projects. SCE has also indicated that the existing substation within the RSP area maybe not be able to be enlarged sufficiently to accommodate all of the planned future users. Therefore, it may be necessary for SCE to construct an additional substation in another location and to extend their existing transmission and distribution lines accordingly. Depending on the specific construction required, this action would require environmental review and approval from the PUC.

3.3.4.6 NATURAL GAS

Southern California Gas Company provides natural gas service to the vicinity of the RSP area and currently has high-pressure transmission lines and medium pressure distribution mains located in Baseline Road. Service to the RSP area is provided via connection to an existing station north of Baseline Road and east of Linden Avenue. It is planned that Miro Way, Renaissance Parkway, and Ayala and Locust Avenue would carry a medium pressure distribution main. Distribution at medium pressure would extend from these streets to the rest of the RSP area. There would be no high-pressure mains installed in the RSP area. The overview of the proposed Project's natural gas system is depicted in **Figure 3-17: RSP Gas Plan.**

3.3.4.7 TELECOMMUNICATIONS

AT&T and Time Warner Cable provide telephone and advanced telecommunication services to the vicinity of the RSP area. Currently, AT&T has facilities in the intersection of Casmalia Street and Locust Avenue on the north side of SR-210. This fiber-optic cable will be extended to the RSP area through an existing conduit running through Locust Avenue. Telecommunication services to the RSP area will be via underground connections from existing lines. Commensurate with street improvements, existing overhead telephone lines will be converted to underground lines. It is expected that AT&T will install a number fiber-optic "Pair Gain" (line concentrator) cabinets and/or controlled environment vaults and other facilities within the RSP area. The specific locations and design arrangements will be determined at the tract map stage of development in the RSP area in coordination with AT&T.

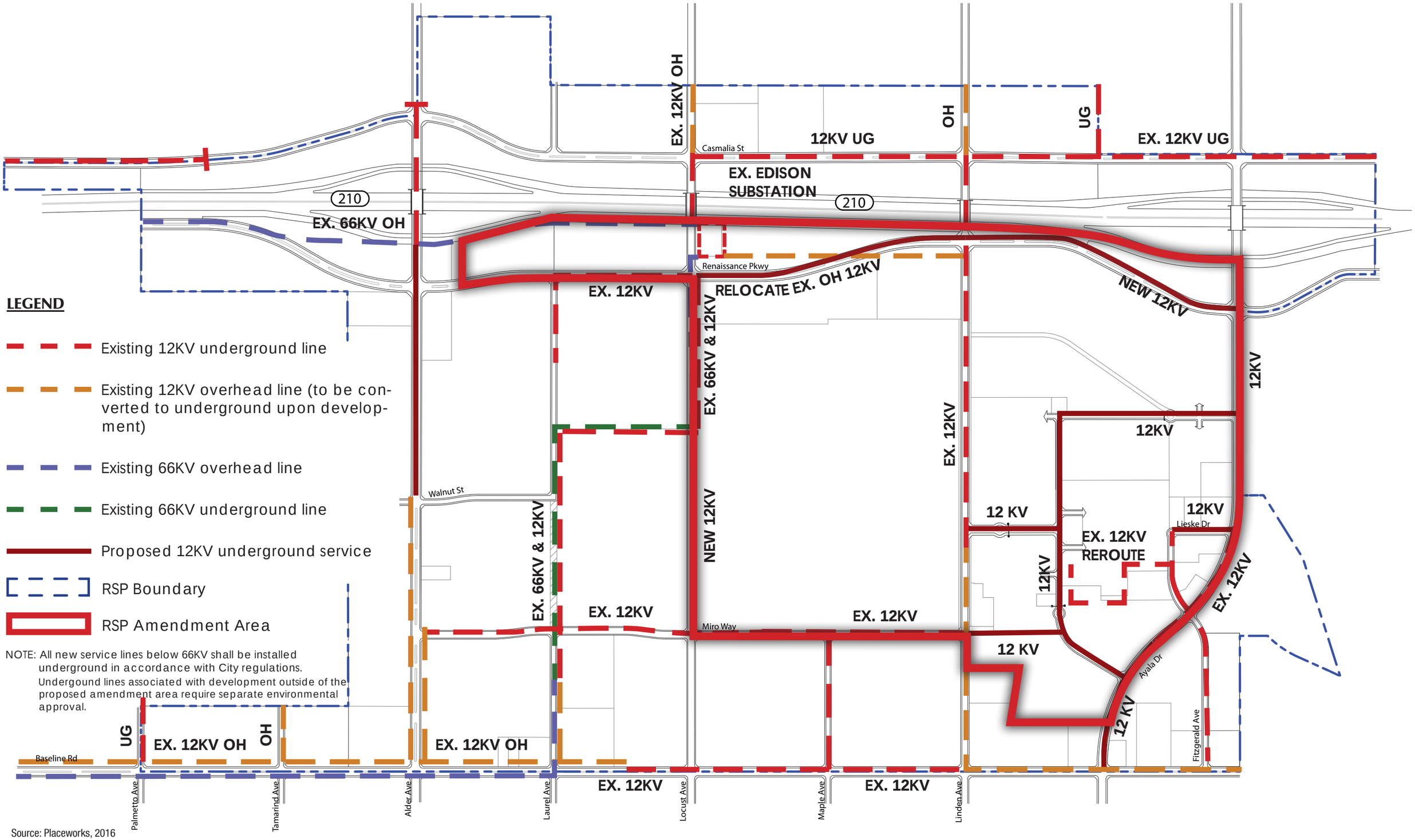

Figure 3-16: RSP Electricity Plan

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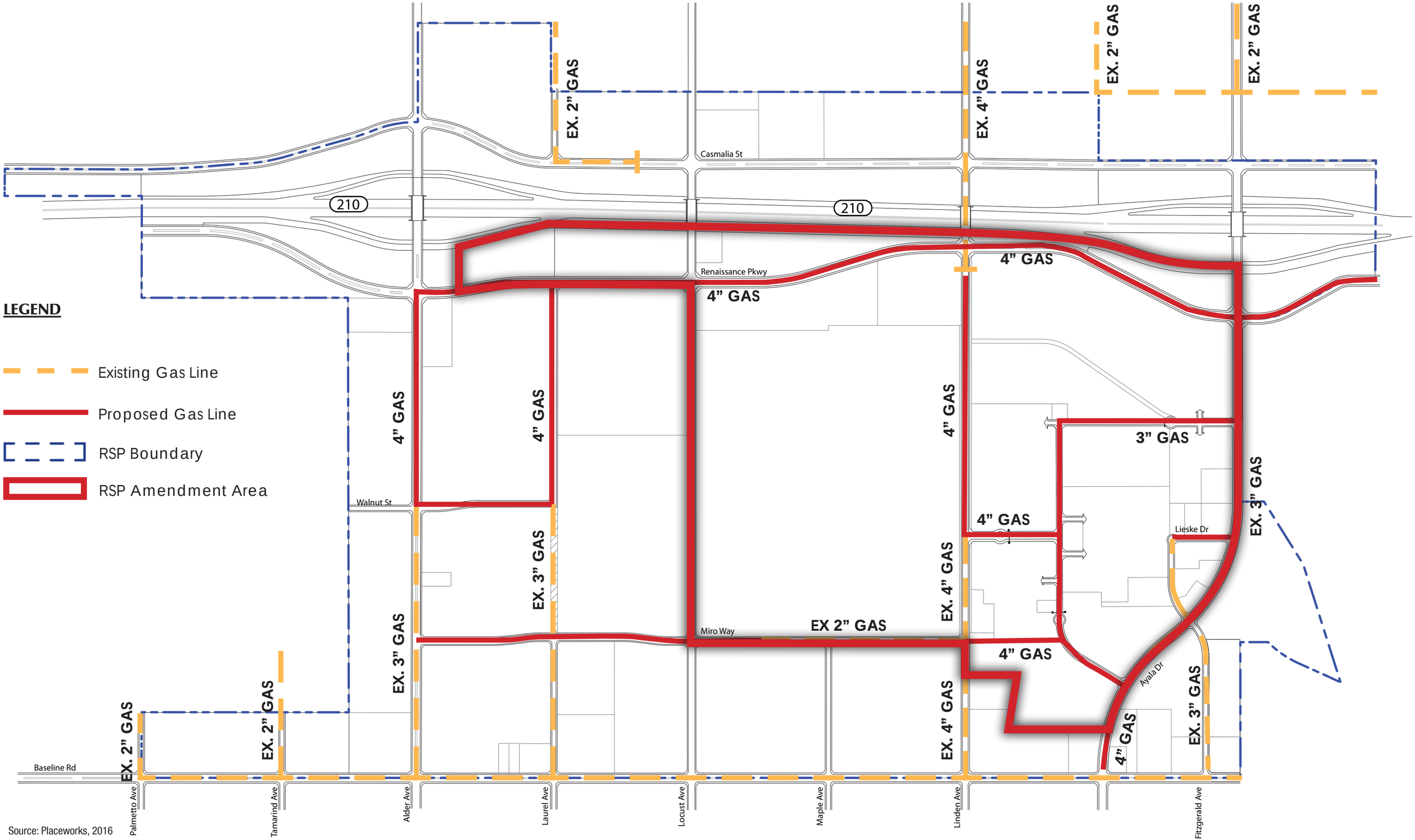

Source: Placeworks, 2016

Figure 3-17: RSP Gas Plan

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4 ENVIRONMENTAL ANALYSIS

INTRODUCTION

This chapter discusses the potential environmental impacts and presents the findings of the environmental analysis conducted for the proposed Project. The following environmental issues are evaluated in Sections 4.1 through 4.8: Aesthetics, Air Quality, Biological Resources, Greenhouse Gas Emissions, Geology and Soils, Hydrology and Water Quality, Noise, Transportation/Traffic, and Utilities.

Organization of Chapter

The analysis of each environmental issue category is organized into the following sub-sections:

Introduction, Regulatory Framework, Environmental Setting, Thresholds of Significance, Project Impacts, Mitigation Measures, and Level of Significance after Mitigation. Each of these is briefly explained below.

- **Introduction** identifies the primary documents used in the preparation of the section and any other pertinent information.
- **Regulatory Framework** identifies and describes applicable Plans, Policies, or Regulations from agencies with jurisdiction over the Project, including federal, State and local agencies.
- **Environmental Setting** identifies and describes the physical environmental setting and conditions that exist at the time of publication of the Notice of Preparation (NOP), and which constitute the baseline physical conditions that assist in determining whether an impact is significant.
- **Thresholds of Significance** identifies applicable thresholds from Appendix G of the State California Environmental Quality Act (CEQA) Guidelines or other published documentation that assists in a determination of whether an impact is significant. Unless specifically identified within each section of this document, the thresholds of significance used are those contained in Appendix G of the State CEQA Guidelines.
- **Project Impacts** describes environmental changes to the existing physical conditions that may occur if the proposed Project is implemented, and evaluates these changes with respect to the thresholds of significance. In addition, this section includes any Project Design Features proposed by the applicant to reduce potentially significant environmental impacts.
- **Mitigation Measures** are those specific measures that may be required of the Project by the Lead Agency in order to: 1) avoid an impact; 2) minimize an impact; 3) rectify an impact by restoration; 4) reduce or eliminate an impact over time by preservation and maintenance operations; or 5) compensate for the impact by replacing or providing substitute resources.
- **Level of Significance after Mitigation** describes the level of impact significance remaining after mitigation measures have been implemented.

LEVEL OF SIGNIFICANCE

Determining the severity of a project's impact is fundamental to achieving the objectives of the CEQA. CEQA Guidelines § 15091 requires that decision-makers mitigate, as completely as is feasible, the significant impacts identified in the Recirculated Draft EIR. If the Recirculated Draft EIR identifies any significant unavoidable adverse environmental effects, CEQA Guidelines § 15093 requires decision-makers in approving a project to adopt a statement of overriding considerations that explains why the benefits of the Project outweigh the adverse environmental consequences identified in the Recirculated Draft EIR.

The level of significance for each impact examined in this Recirculated Draft EIR was determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

MITIGATION MEASURES

Feasible mitigation measures are required when significant impacts are identified. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. Each mitigation measure is numbered sequentially so that it directly correlates to the impact it addresses.

4.1 AESTHETICS

4.1.1 INTRODUCTION

This section discusses impacts associated with the potential for the proposed Project to degrade the existing visual character or quality of the site and its surroundings through changes in the existing landscape. Potential effects are evaluated relative to important visual features (e.g. scenic highways, scenic features), and the existing visual landscape and its users. All other significance thresholds and potential impacts of the proposed Project were addressed in the proposed Project's NOP (January 2015), which determined there would be no new or additional impacts, or that impacts would be less than significant and therefore need not be further considered in this Recirculated Draft SEIR. Please refer to the proposed Project's NOP attached as Appendix A.

Degradation of the visual character of a site is usually addressed through a qualitative evaluation of the changes to the aesthetic characteristics of the existing environment. This analysis evaluates if the proposed Project-related modification that would alter the visual setting.

Issues of visual blight are addressed by considering the potential for urban decay that may be precipitated or exacerbated in the City of Rialto and its environs and by considering the indirect changes in visual quality that could occur as a result of the proposed Project. Visual blight related to urban decay is defined as a general deterioration of the urban landscape that is characterized by long-term building vacancies, poor building maintenance, and increased vandalism. This definition of urban decay is based on the *Bakersfield Citizens of Local Control v. City of Bakersfield* (2004) (124 Cal. App. 4th 1184) decision.

The term "visual blight," as referred to in this Recirculated Draft SEIR, is a condition where real property, as a result of its appearance, is detrimental to the appearance of surrounding properties, or reduces the aesthetic appearance of the neighborhood. An Urban Decay Analysis (UDA) and UDA Addendum were prepared by Dave Taussig & Associates, Inc. (October 2014 and May 2016) to address potential impacts from urban decay on surrounding properties, as a result of implementing the proposed Renaissance Marketplace within the Town Center portion of the RSP Amendment area. The UDA is provided as Appendix B.

4.1.2 REGULATORY FRAMEWORK

4.1.2.1 STATE

The State Scenic Highway System is a list of highways, primarily State highways that have been designated by the California Department of Transportation (Caltrans) as scenic highways. The California State Legislature, primarily through Section 263 of the Streets and Highways Code, makes highways eligible for designation as a scenic highway. Currently, the RSP area is not located in the vicinity of a State Scenic Highway.

4.1.2.2 CITY

The City of Rialto General Plan does not identify or designate any potential or existing scenic routes in the vicinity of the Project area.

Section 15.32 of the City's Municipal Code requires all electrical distribution lines of sixteen thousand volts or less, telephone, cable antenna television, and similar service wires or cables, which provide direct service to the property being developed, to be installed underground.

4.1.3 EXISTING CONDITIONS

4.1.3.1 VISUAL CHARACTER

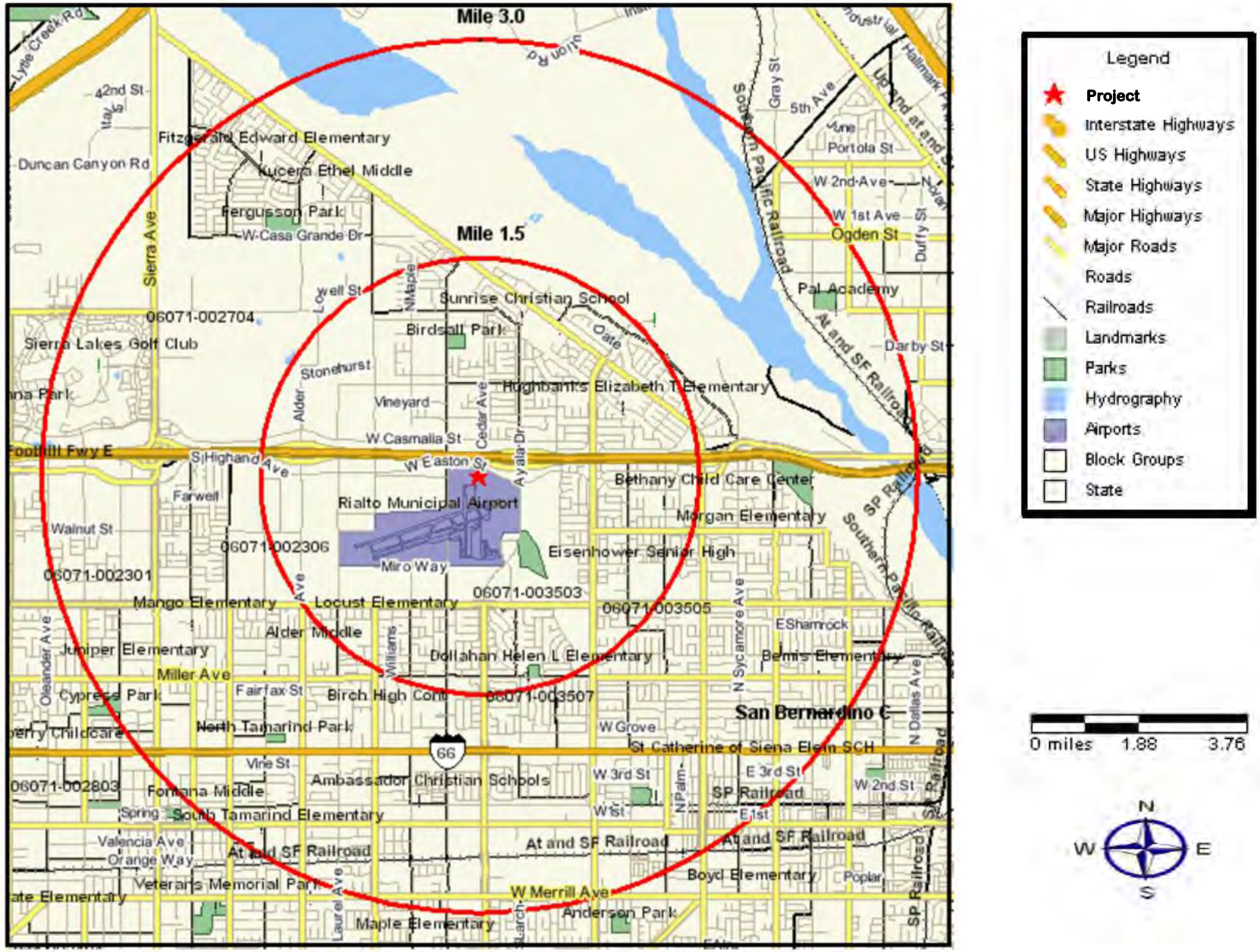
Development of the proposed Project area would convert predominantly vacant land to mixed-use urban development, substantially changing the aesthetic nature of the RSP Amendment area. The majority of the Project area is currently vacant. Areas and facilities of the former Rialto Municipal Airport, which ceased operations in 2014, occupy the majority of the site. The airport area surrounding the former runway was largely undeveloped, with the exception of paved areas, buildings, hangars, and warehouses located south of the runway. The former runway and associated taxiways ran diagonally through the site and have since been demolished. Therefore, with the exception of the runway and former associated airport facilities on the southern portion of the site, the site is largely undeveloped. A City fire station is located on the site, west of Ayala Drive and north of Leiske Drive. Existing and newly constructed commercial and industrial structures and associated uses exist in the southern portion of the RSP area outside of the proposed RSP Amendment area. No existing structures are located within the proposed Renaissance Marketplace site within the RSP Amendment Area. The runway and former airport facilities are located within the southern portion of the Planning Area 108 site, while the remaining portion of the site is undeveloped. No existing residential uses are located on the Project area. In addition, SCE has existing 66kV transmission lines in portions of Locust Avenue and Laurel Avenue in an easement between the two streets. Another 66kV line is located parallel to the south side of SR-210 from Alder Avenue to the existing substation. There are existing overhead and underground distribution circuits in most of the streets within the RSP area.

The Project area is generally flat, draining to the south. Existing vegetation consists of an assortment of native and non-native shrubs and grasses. Numerous paved and unpaved roads traverse the Project area.

4.1.3.2 ECONOMIC ENVIRONMENT

Urban decay is an environmental, economic, and social problem that may be caused by the abandonment of existing retail development that results from highly competitive new retail development. This abandonment can lead to higher vacancy rates and deferred maintenance of existing retail square-footage by its owners, who no longer receive the level of rental income necessary to maintain their properties due to the increase in area retail development averting potential sales. This abandonment can lead to lower property values, higher crime rates, a damaged business environment, and a continuing cycle of events that can cause a variety of economic and social problems for a municipality. A specific result of urban decay can be the physical deterioration of the existing visual character, specifically of retail areas in response to other new retail developments.

To evaluate the potential for the Renaissance Marketplace to cause urban decay due to closures of existing retail stores, the UDA evaluated the supply and demand specific retail categories (e.g. general merchandise, food stores, etc.) in each of the geographical areas that would be impacted by the Project. These geographical areas were determined by the UDA as primary and secondary areas where the Project would add to the supply of retail outlets available to residents. The two geographical areas determined by and referred to in the UDA are the Project's primary and secondary trade areas, as seen in **Figure 4.1-1: Primary and Secondary Retail Trade Areas.** The methodology for the determination of the proposed Project's primary and secondary trade areas can be found in the Project's UDA (Appendix B).



Source: DTA, 2014

Figure 4.1-1: Primary and Secondary Retail Trade Areas

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4.1.4 STANDARDS OF SIGNIFICANCE

4.1.4.1 SIGNIFICANCE CRITERIA[1]

As a Subsequent EIR to the 2010 RSP Final EIR, this analysis includes the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

4.1.4.1.1 Visual Character

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the project would:

> "Substantially degrade the existing visual character or quality of the site and its surroundings."

4.1.4.1.2 Urban Decay

Appendix G of the CEQA Guidelines contains the Environmental Checklist form, which is often used as the basis of significance criteria considered by CEQA documents. Issues presented in the checklist do not include specific Urban Decay impacts; however, CEQA Guidelines Section 15131(a) provides guidance on the consideration of social and economic effects:

> "Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect."

Based on this guidance and two recent court cases dealing with the issue of urban decay, the following threshold has been applied:

A project may create a significant impact if it would:

(1) Trigger or contribute to store closures at retail establishments within the primary or secondary trade area by creating an oversupply of retail square-footage, which may ultimately lead to urban decay conditions through loss of revenue associated with long-term vacancies.

4.1.5 IMPACTS AND MITIGATION MEASURES

4.1.5.1 VISUAL CHARACTER OF SITE

4.1.5.1.1 Impact 4.1-1: Project Impacts on Existing Visual Character of Project Area

Development of the proposed Project would convert remaining vacant land to residential, commercial, and light industrial land uses, substantially changing the aesthetic nature of the Project area. Additionally, some of the

[1] Less than significant and no impact determinations for potential Aesthetic impacts of the proposed Project are listed Table 1-1 of Section 1.0 Executive Summary.

existing overhead transmission lines would be converted to underground as development progresses; further modifying the aesthetics. However, existing conditions on the Project area, vacant areas of sparse vegetation and/or vacant, abandoned and demolished former airport facilities, and overhead transmission lines are considered as having negative visual characteristics. Thus, while RSP development on the proposed Project area, including the Renaissance Marketplace and Planning Area 108 components, would substantially alter the existing visual character of the Project area, the proposed development can be considered an improvement in the visual characteristic of the Project area. Therefore, potential visual character impacts would remain less than significant with mitigation incorporated.

The Specific Plan includes signage guidelines with which all future signage within the Specific Plan Amendment area needs to be consistent. Therefore, no new impact to aesthetics as a result of signage would occur.

As a component of the proposed Project, the Renaissance Marketplace would allow for the construction of a 566,764-square-foot retail center. Renaissance Marketplace construction activities would temporarily disrupt views across the site from surrounding areas. Graded surfaces, construction debris, construction equipment, and heavy truck traffic would be visible on the site. Soil would likely be stockpiled and equipment for grading activities will be located at various locations across the site during construction. These potential impacts would be short-term and would cease upon construction of the Renaissance Marketplace. Implementation of the Renaissance Marketplace component of the proposed Project would alter the nature and appearance of the proposed site from primarily vacant land to commercial development. On-site structures would be visible from surrounding areas. This alteration of appearance would be permanent and would continue throughout the life of this component of the proposed Project. Views of the primarily vacant land that currently comprise the area proposed for the retail center site are available to motorists along the surrounding roadways. The majority of views of the proposed Renaissance Marketplace site are currently unobstructed, so the change in visual character from open space to commercial development conditions would be a distinct visual alteration of the Renaissance Marketplace component site.

Although the visual appearance of the Renaissance Marketplace site may change, visual qualities would not be degraded due to City design requirements. Additionally, the proposed Renaissance Marketplace would be located nearby other proposed uses within the Specific Plan area which will also result in the alteration of existing vacant lands with building and structures to be constructed on the sites, as identified in the RSP. The proposed development would change the existing character of the Renaissance Marketplace site and RSP Amendment Area compared to its past uses. However, the area is in a transitional phase as the former airport uses are removed and redevelopment occurs within the RSP Amendment area. The visual character of the area will not be adversely affected by the proposed development because future development will be consistent with other developed areas surrounding the Project area, including other commercial, residential, and industrial uses. The visual character of the area would not be changed in a significant way from what currently exists in the surrounding area. Furthermore, future development within the RSP Amendment area will be required to demonstrate consistency with the design guidelines provided in the RSP. These design guidelines establish development parameters so that building designs and landscaping throughout the RSP area (including the proposed amendment area and remaining RSP areas) are designed in a consistent and cohesive fashion. For these reasons, the proposed Project including the Renaissance Marketplace will not have a significant impact on the visual character of the Project area.

Therefore, visual character changes to the proposed Renaissance Marketplace component site and its surroundings are considered less than significant.

The Planning Area 108 component of the proposed Project would be approximately 4 million square feet of industrial/warehouse uses. The Planning Area 108 construction activities would temporarily disrupt views across the site from surrounding areas. Demolition debris, graded surfaces, construction debris, construction equipment, and heavy truck traffic would be visible on the site. Soil would likely be stockpiled and equipment for grading activities will be located at various locations. These potential impacts would be short-term and would cease upon construction of the Planning Area 108 Project.

Implementation of Planning Area 108 would alter the nature and appearance of the proposed site from vacant land in the northern portion of the site, and the runway and former associated airport facilities on the southern portion of the site to a warehouse complex. On-site structures would be visible from surrounding areas. This alteration of appearance would be permanent and would continue throughout the life of this component of the proposed Project. Views of the primarily vacant land that currently comprise the Project component site on its northern portion are available to motorists along the surrounding roadways. The majority of views of the Project area are currently unobstructed, so the change in visual character from partial open space to warehouse development conditions would be a distinct visual alteration of the Planning Area 108 component site. However, the development of the Planning Area 108 component would remove the negative visual characteristics of the abandoned former airport facilities on the southern portion of the site and can be considered an improvement in the visual characteristic of the component site.

Although the visual appearance of the component site may change, visual qualities would not be degraded due to City design requirements. Additionally, the proposed Project component would be located nearby other proposed uses within the specific plan area which will also result in the alteration of existing vacant lands into development with building and structures to be constructed on the sites, as identified in the RSP. Therefore, visual character changes to the proposed Planning Area 108 component site and its surroundings are considered less than significant.

4.1.5.2 URBAN DECAY

4.1.5.2.1 Impact 4.1-2: Project Impacts on Viability of Existing Project Vicinity Shopping Centers

As a component of the proposed Project, the Renaissance Marketplace would result in the development of an approximately 566,764 -square-foot retail center which would include major retail sites, as well as other uses that could include, a health club, a movie theater, restaurants, a gas station, a day care center, a drug store, and additional in-line retail. This retail component of the proposed Project may draw business from existing commercial centers in the region. This could result in urban decay if other stores close as a result of the loss of business and the buildings remain vacant and unmaintained for extended periods of time.

The Planning Area 108 component of the proposed Project does not include retail uses. Therefore, implementation of this component would not draw businesses from existing commercial centers in the region and would not result in urban decay.

Both primary and secondary trade areas are evaluated in the Project's UDA (Appendix B); the results of which are summarized in this Recirculated Draft SEIR. The International Council of Shopping Centers defines as primary trade area as the area from which 60-80 percent of a project's sales originate. Based on the proposed locations of retail uses within the Specific Plan area and the location of other retail centers in the area, the UDA determined that the identified primary trade area, as shown in **Figure 4.1-1: Primary and Secondary Retail Trade Areas**, would be

appropriate for analyzing the majority of the demand generated by the Project for its local-serving neighborhood retail uses. Local-serving retail uses include grocery and drug stores, cleaners, and other retail uses commonly found in neighborhood shopping centers. Customers for these uses tend to shop within 1 to 3 miles of their residence or place of work, and are unlikely to drive long distances to purchase items similar to those that they could purchase closer to home.

A larger secondary trade area was also evaluated by the UDA, as it would be expected that a portion of the demand for a retail center such as that proposed as part of the proposed Project would be generated within an area larger than the primary trade area. It is important to consider a secondary trade area that encompasses retail development that might be competitively impacted by a project. The proposed Project is not expected to compete with existing retailers beyond the boundaries of the secondary trade area, as any consumers who reside beyond this radius would have multiple shopping center options to patronize that are located significantly closer to their residence that the proposed Project. Figure 4.1-1 also displays the boundaries of the secondary trade area.

To evaluate the potential for the Project to cause urban decay due to closures of existing retail stores, the UDA evaluated the supply and demand for each specific retail category (e.g. general merchandise, food stores, etc.) in each of the Project's trade areas.

The existing retail demand for each type of retail use expected in the Renaissance Marketplace for both the primary and secondary trade areas is provided below in **Table 4.1-1**. The total retail demand generated by residents of the primary area for applicable retail categories is estimated to be $348.4 million, while the combined retail demand for residents of both the primary and secondary trade areas is estimated to be $1.41 billion.

Table 4.1-1 Existing Retail Demand

Retail Service	Primary Trade Area Demand	Combined Primary & Secondary Trade Area Demand
Food	$43,129,222	$181,119,791
General Merchandise	$57,752,559	$237,583,520
Apparel	$12,071,158	$50,071,643
Eating and Drinking Establishments	$33,096,404	$137,490,241
Building & Farm Materials	$27,675,543	$107,083,830
Automotive	$73,226,360	$281,891,243
Other Retail	$61,711,351	$248,160,210
Home Furnishing & Appliances	$7,133,286	$27,759,620
Service Stations	$32,597,205	$135,132,254
Total	$348,393,088	$1,406,292,352

Source: David Taussig & Associates, 2014.

The existing supply for each type of retail use expected in the Project for both the primary and secondary trade areas is provided below in **Table 4.1-2**. The total retail supply generated by residents of the primary area for applicable retail categories is estimated to be $157.8 million, while the combined retail demand for residents of both the primary and secondary trade areas is estimated to be $920.3 million.

Table 4.1-2 Existing Retail Supply

Retail Service	Primary Trade Area Supply	Combined Primary & Secondary Trade Area Supply
Food	$15,143,689	$90,898,289
General Merchandise	$46,438,187	$321,294,854
Apparel	$1,234,112	$10,114,319
Eating and Drinking Establishments	$18,210,453	$74,549,722
Building & Farm Materials	$26,597,499	$91,857,502
Automotive	$5,587,596	$145,049,541
Other Retail	$5,952,236	$89,526,138
Home Furnishing & Appliances	$1,704,424	$8,412,685
Service Stations	$36,940,116	$88,569,066
Total	$157,808,312	$920,272,116

Source: David Taussig & Associates, 2014.

As reflected below in **Table 4.1-3**, the current annual retail demand of $384.4 million in the primary trade area exceeds the $157.8 million in sales by $190.6 million each year. This indicates that overall there is a current leakage of approximately 54.7 percent of the primary trade area resident expenditures to retail service providers outside of the area. The leakage appears to be occurring in most retail categories and is most pronounced within the category of automotive ($67.6 million), other retail ($55.8 million), and food ($28.0 million). To a lesser extent, eating and drinking establishments ($14.9 million), general merchandise ($11.3 million), apparel ($10.8 million), home furnishing ($5.4 million), and building and farm materials ($1.1 million) are also categories that fail to fully capture potential spending. This data indicates that current retail businesses within the primary trade area are failing to capture all the possible retail expenditures of the population in their trade area. Thus, households residing within this primary area must travel elsewhere in order to meet their current retail needs as the vast majority of retail categories in the primary trade area are underserved. Notably, one of the retail categories (Service Stations) within the trade area shows an existing surplus, suggesting that such sales are currently being captured from residents of other market areas. For example, people living outside the trade area driving through the Rialto area and buying gas at the service stations.

As reflected below in **Table 4.1-4**, the current annual retail demand is $1.41 billion in the primary and secondary trade areas. This compares to a current annual retail supply estimate of $920.3 million, which indicates an overall leakage of retail expenditures in the amount of $486.0 million per year within the primary and secondary trade areas. The leakage appears to be occurring in most of the retail categories and is most severe within other retail ($158.6 million), automotive ($136.8 million), food ($90.2 million), and eating and drinking establishments ($62.9 million). This data indicates that current retail businesses within the combined primary and secondary trade areas are also failing to capture all the possible retail expenditures of their population, as was the case for the primary trade area. Thus, households residing within this combined area must travel elsewhere in order to meet their current retail needs as nearly every retail category in the trade areas is underserved.

Table 4.1-3 Existing Surplus/Leakage Primary Trade Area

Retail Service	Primary Trade Area Demand	Primary Trade Area Supply	Excess/Leakage
Food	$43,129,222	$15,143,689	($27,985,533)
General Merchandise	$57,752,559	$46,438,187	($11,314,372)
Apparel	$12,071,158	$1,234,112	($10,837,046)
Eating and Drinking Establishments	$33,096,404	$18,210,453	($14,885,951)
Building & Farm Materials	$27,675,543	$26,597,499	($1,078,044)
Automotive	$73,226,360	$5,587,596	($67,638,764)
Other Retail	$61,711,351	$5,952,236	($55,759,115)
Home Furnishing & Appliances	$7,133,286	$1,704,424	($5,428,862)
Service Stations	$32,597,205	$36,940,116	$4,342,911
Total	$348,393,088	$157,808,312	($190,584,776)

Source: David Taussig & Associates, 2014.

Table 4.1-4 Existing Surplus/Leakage Primary & Secondary Trade Area

Retail Service	Combined Primary & Secondary Trade Area Demand	Combined Primary & Secondary Trade Area Supply	Excess/Leakage
Food	$181,119,791	$90,898,289	($90,221,502)
General Merchandise	$237,583,520	$321,294,854	$83,711,334
Apparel	$50,071,643	$10,114,319	($39,957,324)
Eating and Drinking Establishments	$137,490,241	$74,549,722	($62,940,519)
Building & Farm Materials	$107,083,830	$91,857,502	($15,226,328)
Automotive	$281,891,243	$145,049,541	($136,841,702)
Other Retail	$248,160,210	$89,526,138	($158,634,072)
Home Furnishing & Appliances	$27,759,620	$8,412,685	($19,346,935)
Service Stations	$135,132,254	$88,569,066	($46,563,188)
Total	$1,406,292,352	$920,272,116	($486,020,236)

Source: David Taussig & Associates, 2014.

Table 4.1-5 shows the estimated expenditures on retail goods per year, based on household growth and income growth resulting from the proposed Project. As the number of households and their related household income grows in the City and surrounding jurisdictions, encompassed by the trade areas, so do the expenditures on retail goods. The UDA forecasts that households in the primary trade area are estimated to spend approximately $348.4 million on retail goods in 2019 (operational year start for proposed Marketplace). Similarly, households in the combined primary and secondary areas are expected to spend approximately $1.41 billion retail goods.

Table 4.1-5 Retail Demand Under Future Conditions for Primary and Secondary Trade Areas

Retail Service	Existing 2014 Demand	Renaissance Marketplace	Total Demand in 2019
Primary Trade Area			
Number of Households	6,894	0	6,894
Household Income	$56,155	$56,155	$56,155
% Income Spent on Retail		29.87%	
Trade Area Capture Rate		100%	
Primary Trade Area Demand	$348,393,088	$0	$348,393,088
Combined Primary & Secondary Trade Area			
Number of Households	29,930	0	29,930
Household Income	$49,182	$49,182	$49,182
% Income Spend on Retail		29.87%	
Trade Area Capture Rate		100%	
Combined Primary & Secondary Trade Area Demand	$1,406,292,352	$0	$1,406,292,353

Source: David Taussig & Associates, 2014.

The future retail supply conditions were estimated by the UDA. In order to determine the effects of the proposed Marketplace on the primary and secondary trade areas, the Project's projected sales were included in future retail supply conditions. Only the Marketplace's expected sales to be generated by residents from within the primary trade area have been applied to the primary area's forecasted 2019 future conditions supply figures. The secondary trade area figures include the Marketplace's estimated total annual retail sales (including both primary and secondary trade area residents). **Table 4.1-6** portrays the projected Future Supply Conditions for the trade areas.

As previously indicated, the estimated demand for the primary trade area is expected to remain at $348.4 million in retail expenditures per year, while the projected supply is only expected to reach a level of approximately $287.4 million under the future conditions scenario. These figures indicate that even with the additional sales generated by the Project, there is still significant leakage of retail sales with a total of $61.0 million in unmet retail demand within the primary trade area. **Table 4.1-7** reflects the overall leakage for each of the trade areas.

Table 4.1-6 Retail Supply Under Future Conditions for Primary and Secondary Trade Areas

Retail Service	Existing 2014 Supply	Renaissance Marketplace	Total Supply in 2019
Primary Trade Area			
Projected Building sf		589,000	
Taxable Sales Per sf		$275	
Displaced Sales Within Trade Area		20.00%	
Primary Trade Area Supply	$157,8008,312	$129,580,000	$287,388,312
Combined Primary and Secondary Trade Area			
Projected Building sf		589,000	
Taxable Sales Per sf		$275	
Displaced Sales Within Trade Area		20.00%	
Combined Primary & Secondary Trade Area Supply	$920,272,116	$129,580,000	$1,406,852,116

Source: David Taussig & Associates, 2014.

Table 4.1-7 Retail Surplus/Leakage Under Future Conditions

Retail Service	Trade Area Balance 2014	Trade Area Balance 2019
Primary Trade Area		
Projected Demand	$348,393,088	$348,393,088
Projected Supply	$157,808,312	$287,388,312
Excess/Leakage	($190,584,776)	($61,004,776)
Combined Primary and Secondary Trade Areas		
Projected Demand	$1,406,292,352	$1,406,292,352
Projected Supply	$920,272,116	$1,049,852,116
Excess/Leakage	($486,020,236)	($356,440,236)

Source: David Taussig & Associates, 2014.

The overall leakage expected within the primary trade area under the future conditions scenario is reflective of the current level of insufficient retail supply. As a result, the future retail demand in the primary trade area is more than sufficient to support the Marketplace without significantly diverting sales from existing retail providers. The development of the Marketplace will only serve to benefit the market within primary trade area and expand on the limited retail shopping opportunities currently available. The significant consumer spending that is still not being met, even after the addition of the Marketplace, in the primary trade area indicates the Marketplace has the potential to operate successfully and not result in market saturation or deterioration. In the combined primary and secondary trade areas, the projected excess of consumer demand is approximately $356.4 million per year under the future condition scenario.

In addition to the proposed Project, there are other retail projects proposed for future development in the general project vicinity. The Project's UDA estimates future retail square footage for 2019 of 220,000 retail sf in the primary trade area and 385,000 sf in the combined in the primary and secondary trade areas.

Table 4.1-8 shows the estimated expenditures on retail goods per year, based on household growth and income growth throughout the two trade areas. Table 4.1-8 assumes no changes in percentage amount spent on retail goods and services.

Table 4.1-9 shows the primary, secondary, and combined trade area's projected future conditions supply figures below.

The estimated demand for the Primary Trade Area is expected to increase by $350.8 million in retail expenditures per year. Including all future proposed projects in the trade area, the projected supply is only expected to reach a level of approximately $335.8 million only under future conditions. These figures indicate that even with the additional sales generated by the proposed Project and other future projects; there will still be significant leakage of retail sales, with a total of $15 million in unmet retail demand within the primary trade area. **Table 4.1-10** below displays the overall leakage information for each of the trade areas.

The overall leakage expected within the primary trade area under the future conditions scenario is reflective of the current level of insufficient retail supply under existing conditions. As a result, the future retail demand in the primary trade area is more than sufficient to support the proposed Marketplace without significantly diverting sales from existing retail services providers. As displayed in Table 4.1-10 below, the same situation is predicted to result for the proposed Project in the combined primary and secondary trade area scenario as well.

The development of the Project would, therefore, benefit the market within the primary trade area and expand on limited retail shopping opportunities available under existing conditions. The amount of consumer spending that would continue to be unmet in the primary trade area, even after the addition of the proposed Project, indicates that the Project has the potential to operate successfully while not resulting in market saturation or deterioration.

Therefore, the conditions, both existing and future, of the primary and secondary trade areas are such that the proposed Project would not represent a significant enough proportion of the existing or projected future market demand in the market place to cause, in and of itself, significant closures of existing retail businesses in either the primary or secondary trade areas and no such closures are expected. The Project's UDA determined future net demand for retail space to be more than sufficient to accommodate the proposed Project and other known retail development projects within the vicinity without having a significant impact on existing retail providers.

Table 4.1-8 Retail Demand Under Future Conditions

Retail Service	Existing 2014 Demand	Projected Increase by 2019	Renaissance Marketplace	Total Demand in 2019
Primary Trade Area				
Number of Households	6,894	142	0	7, 036
Household Income	$56,155	$56,155	$56,155	$56,155
% Income Spent on Retail		29.87%	29.87%	
Trade Area Capture Rate		100%	100%	
Primary Trade Area Demand	$348,393,088	$2,381,691	$0	$350,774,779
Secondary Trade Area				
Number of Households	23,036	649	0	23,685
Household Income	$47,095	$47,656	$47,656	$47,656
% Income Spent on Retail		29.87%	29.87%	
Trade Area Capture Rate		100%	100%	
Secondary Trade Area Demand	$1,057,899,264	$9,237,912	$0	$1,067,137,176
Combined Primary and Secondary Trade Area				
Number of Households	29,930	791	0	30,721
Household Income	$49,182	$49,182	$56,155	$49,182
% Income Spend on Retail		29.87%	29.87%	
Trade Area Capture Rate		100%	100%	
Combined Primary & Secondary Trade Area Demand	$1,406,292,352	$11,619,603	$0	$1,417,911,955

Source: David Taussig & Associates, 2014.

Table 4.1-9 Retail Supply Under Future Conditions

Retail Service	Existing 2014 Supply	Projected Increase by 2019	Renaissance Marketplace	Total Supply in 2019
Primary Trade Area				
Projected Building sf		220,000	589,000	
Taxable Sales Per sf		$275	$275	
Displaced Sales Within Trade Area		20%	20%	
Primary Trade Area Supply	$157,8008,312	$48,400,000	$129,580,000	$335,788,312
Secondary Trade Area				
Projected Building sf		165,000		
Taxable Sales Per sf		275		
Displaced Sales Within Trade Area		20.00%		
Secondary Trade Area Supply	$762,463,804	$36,300,000	$0	$789,763,804
Combined Primary and Secondary Trade Area				
Projected Building sf		385,000	589,000	
Taxable Sales Per sf		$275	$275	
Displaced Sales Within Trade Area		20%	20%	
Secondary Trade Area Supply	$920,272,116	$84,700,000	$129,580,000	$1,134,552,116

Source: David Taussig & Associates, 2014.

Table 4.1-10 Retail Surplus/Leakage Under Future Conditions

Retail Service	Existing 2014 Condition	Projected 2019 Condition
Primary Trade Area		
Projected Demand	$348,393,088	$350,774,779
Projected Supply	$157,808,312	$335,788,312
Excess/Leakage	($190,584,776)	($14,986,467)
Combined Primary and Secondary Trade Areas		
Projected Demand	$1,406,292,352	$1,417,911,955
Projected Supply	$920,272,116	$1,134,552,116
Excess/Leakage	($486,020,236)	($283,359,839)

Source: David Taussig & Associates, 2014.

While is it not possible to determine with absolute certainty that the proposed Marketplace will have no economic effects on existing retail businesses in the primary or secondary trade areas, it is anticipated that the proposed Project would not have a significant enough impact to cause urban decay in the primary or secondary trade areas. The UDA retail leakage analysis for the primary and secondary trade areas reflected continued overall excess of retail demand from the trade area residents, as compared to retail supply. To the extent to which there is sufficient demand to support proposed retail development, including the proposed Project, there would be no negative impacts to market shares of existing businesses. The UDA concluded that proposed retail development, including the proposed Project, may improve the balance between supply and demand in the primary and secondary trade areas. Additionally, the location of Specific Plan site proximate to the SR-210 Freeway, a significant gateway to the Project area and City, provides regional visibility and immediate access from Alder Avenue and Ayala Avenue. Thus, the UDA concluded that that while the proposed Project and other proposed retail development projected would add to the available supply of retail outlets, current and projected strength of the retail demand in the proposed Project's primary and secondary trade areas would support this supply which is currently inadequate and the supply is projected to remain below retail demand under future conditions.

In this context, it is important to note that the terms "economic impact" and "economic effect" refer to loss of sales, or at most, closure of a business. Under CEQA, purely economic impacts are not in themselves considered significant. In order to meet the definition of a "significant impact" under CEQA, there must be a substantial physical effect. For example, the competitive effects of a new project could result in a substantial economic impact to an existing business, leading to its closure and result in the vacancy of that space. If that space remained vacant for an extended period without regular maintenance such that it was subject to physical deterioration, the urban decay conditions could ultimately ensue. However, as identified in the Project's UDA and summarized in this EIR section, it is not anticipated that the proposed Project would be the primary cause of the closure of any existing retail providers and is even less likely to create conditions severe and prolonged enough to cause closures that would lead to physical urban decay.

Based on these findings, development of the proposed Project would not contribute to urban decay and therefore would not result in a degradation of the existing visual character in the primary or secondary trade areas. The potential impact would, therefore, be less than significant.

4.1.5.3 MITIGATION MEASURES

The following mitigation measure applies to all development within the RSP Amendment Area where undergrounding of electrical lines is required.

Mitigation Measure AES-1: **Pursuant to Section 15.32 of the City's Municipal Code**
Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Public Works Director, evidence that all electrical distribution lines of 16,000 volts or less, telephone lines, cable antenna television and similar service wires or cable, which provide direct service to the property being developed, shall be installed underground.

4.2 AIR QUALITY

4.2.1 INTRODUCTION

This section describes the existing air quality conditions and potential effects from continued development within the RSP area on the site and its surrounding area. The description and analyses in this section are based on information contained in the 2010 RSP EIR, and in the Air Quality and Greenhouse Gas Analysis prepared in September 2016 by LSA Associates, Inc. (LSA 2016), and are included in Appendix C of this Recirculated Draft SEIR. Potential effects are evaluated relative to conflict with or obstruction of implementation of the applicable air quality plan, violation of any air quality standard or substantial contribution to an existing or projected air quality violation, resulting in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment, and exposes sensitive receptors to substantial pollutant concentrations. All other significant thresholds and potential impacts to the proposed Project were addressed in the NOP (January 2015; see Appendix A), which determined there would be no new or additional impacts, or that impacts would be less than significant, and therefore need not be further considered in this Recirculated Draft SEIR.

4.2.2 REGULATORY FRAMEWORK

4.2.2.1 FEDERAL

Air quality is protected by the Federal Clean Air Act of 1970 and its amendments. The United States Environmental Protection Agency (EPA) regulates air pollutants at the national level. The EPA handles global, international, national, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIP), provides research and guidance in air pollution programs, and sets National Ambient Air Quality Standards (NAAQS), also known as federal standards. There are NAAQS for six common air pollutants, called criteria air pollutants, which are identified resulting from provisions of the Clean Air Act. The six criteria pollutants are ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide (NO_2), carbon monoxide (CO), lead, and sulfur dioxide (SO_2). The NAAQS were set to protect the health of sensitive individuals; the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. The Clean Air Act identifies two types of NAAQS: primary standards provide public health protection, including protecting the health of "sensitive" populations, and secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Data collected at permanent monitoring stations are used by the EPA to classify regions as "attainment" or "nonattainment," depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin.

Both the State and federal governments have established health-based ambient air quality standards (AAQS) for the six criteria air quality pollutants as detailed in Table 4.2-1. In addition, the State has set standards for sulfates, hydrogen sulfide (H2S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 4.2-1 Ambient Air Quality Standards (AAQS)

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[8]	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		--		
Fine Particulate Matter ($PM_{2.5}$)[8]	24-Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm(40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
Nitrogen Dioxide (NO_2)[9]	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	—	
Sulfur Dioxide (SO_2)[10]	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (for certain areas)[9]	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[9]	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		75 ppb (196 µg/m^3)	—	
Lead[11,12]	30-Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	
	Rolling 3-Month Average[11]	—		0.15 µg/m^3		
Visibility-Reducing Particles[13]	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: Ambient Air Quality Standards (CARB 2015c). Website: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed October 2015.
Footnotes are provided on the following page.

Table 4.2-1 Ambient Air Quality Standards (AAQS) (continued)

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]

[1]California standards for O_3; CO (except Lake Tahoe); SO_2 (1- and 24-hour); NO_2; suspended particulate matter - PM_{10}, $PM_{2.5}$ and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2]National standards (other than O_3, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth-highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current Federal policies.

[3]Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4]Any equivalent procedure which can be shown to the satisfaction of ARB to give equivalent results at or near the level of the air quality standard may be used.

[5]National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6]National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7]Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

[8]On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9]On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10]To attain the 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11]On June 2, 2010, the new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12]The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13]The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.

[14]In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basins, respectively.

°C = degrees Celsius
ARB = California Air Resources Board
EPA = United States Environmental Protection Agency
$\mu g/m^3$ = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
ppm = parts per million
ppb = parts per billion

4.2.2.2 STATE

In 1988, the California Clean Air Act was adopted and led to the establishment of the California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (CARB) regulates air pollutants at the State level. CARB has overall responsibility for statewide air quality maintenance and air pollution prevention. The State Implementation Plan (SIP) for the State of California is administered by the CARB. A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain NAAQS. The CARB also administers CAAQS, or State standards, for the ten air pollutants designated in the California Clean Air Act. The ten air pollutants are visibility reducing particulates, hydrogen sulfide, sulfates (H_2S), vinyl chloride, and the six criteria pollutants.

CARB coordinates and oversees both State and federal air pollution control programs in the State. CARB oversees activities of local air quality management agencies and maintains air quality monitoring stations through the State in conjunction with the EPA and local air districts. CARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these station are used by CARB and EPA to classify air basins as attainment, non-attainment, non-attainment-transitional, or unclassified, based on air quality data for the most recent three calendar years compared with the AAQS.

Hazardous Air Pollutants

The public's exposure to toxic air contaminants (TACs) is a significant environmental health issue in the State. In 1983, the State Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the Federal Act (42 United States Code [USC] Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.

The State regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for ARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

Air toxics from stationary sources are also regulated in the State under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM).

4.2.2.3 LOCAL

South Coast Air Quality Management District (SCAQMD)

The SCAQMD regulates air pollutants at the air basin level. SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the South Coast Air Basin (Basin). SCAQMD, in coordination with Southern California Association of Governments (SCAG), is also responsible for developing, updating and implementing the Air Quality Management Plan (AQMP) for the South Coast Air Basin. An AQMP is a plan prepared by an air pollution control district for a county or region designated as a non-attainment area to bring the area into compliance with the requirements of the national and/or California ambient air quality standards. Air basins where ambient air quality standards are exceeded are referred to as "non-attainment" areas.

The purpose of the 2012 Air Quality Management Plan (AQMP) for the Basin is to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the Basin's commitments towards meeting the federal 8-hour ozone standards. It will also serve to satisfy recent EPA requirements for a new attainment demonstration of the revoked 1-hour ozone standards, as well as a vehicle miles travelled (VMT) emissions offset demonstration.[1]

The AQMP demonstrated attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 in the Basin through adoption of all feasible measures. The AQMP also updates the EPA approved 8-hour ozone control plan with new measures designed to reduce reliance on the CAA Section 182 (e)(5) long-term measures for NO_x and Volatile Organic Compounds (VOC) reductions. The AQMP also addresses several State and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The AQMP builds upon the approaches taken in the 2007 APMP for the Basin for the attainment of federal PM and ozone standards, and highlights the significant amount of reductions needed and the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the federal Clean Air Act.[2]

The California Clean Air Act provides the SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution include any facility, building, structure, or installation, or combination thereof, that attracts or generates mobile source activity that results in emissions of any pollutant. In addition, area sources that are generated when minor sources collectively emit a substantial amount of pollution are also managed by the local air districts. Examples of this would be the motor vehicles at an intersection, a mall, and on highways. The SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by CARB.

[1] South Coast Air Management District, *Final 2012 Air Quality Management Plan*, February 2013, pg. 1-1.
[2] South Coast Air Management District, *Final 2012 Air Quality Management Plan*, February 2013, pg. ES-1, ES-2.

City of Rialto General Plan

The City of Rialto General Plan includes the following applicable policies related to air quality:

Goal 2-35: *Reduce air pollution emissions from both mobile and stationary sources in the City.*

- ***Policy 2-35.2:*** *Require that new development projects incorporate design features that encourage ridesharing, transit use, park and ride facilities, and bicycle and pedestrian circulation.*
- ***Policy 2-35.3:*** *Establish a balanced land use pattern, and facilitate development that provide jobs for City residents in order to reduce vehicle trips citywide.*
- ***Policy 2-35.4:*** *Require new development and significant redevelopment proposals to incorporate sufficient design and operational controls to prevent release of noxious odors beyond the limits of the development site.*

Goal 2-36: *Reduce the amount of fugitive dust released into the atmosphere.*

- ***Policy 2-36.1:*** *Put conditions on discretionary permits to require fugitive dust controls.*
- ***Policy 2-36.2:*** *Support programs and policies of the South Coast Air Quality Management District regarding restrictions on grading operations at construction projects.*
- ***Policy 2-36.3:*** *Enforce regulations that do not allow vehicles to transport aggregate or similar material upon a roadway unless the material is stabilized or covered.*

4.2.3 EXISTING CONDITIONS

4.2.3.1 CLIMATE/METEOROLOGY

Air quality in the Specific Plan area is not only affected by various emission sources (mobile, industry, etc.), but also by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the Basin the worst air pollution in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the Specific Plan area is the Fontana Kaiser Station.[3] The monthly average maximum temperature recorded at this station from 1951 to 1984 ranged from 66.8°F in January to 95.0°F in July, with an annual average maximum of 79.4°F. The monthly average minimum temperature recorded at this station ranged from 44.0°F in January to 62.9°F in August, with an annual average minimum of 52.3°F. These levels are still representative of the Project area. January is typically the coldest month, and August is typically the warmest month in this area of the Basin.

[3] Western Regional Climate Center. Website: http://www.wrcc.dri.edu, accessed October 2015.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. The Fontana Kaiser Station monitored precipitation from 1951 to 1984. Average monthly rainfall during that period varied from 3.65 inches in February to 0.34 inch or less between May and October, with an annual total average of 15.32 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near to the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the Specific Plan area blow predominantly from the south-southwest, with relatively low velocities. Wind speeds average about 5 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as the Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly from the coastal areas into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and nitrogen oxides (NO_X) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

4.2.3.2 REGIONAL AIR QUALITY

The RSP site is located in the non-desert portion of San Bernardino County which is part of the Basin and is under the jurisdiction of the SCAQMD.

In addition to setting out primary and secondary AAQS, the State has established a set of episode criteria for O_3, CO, NO_2, SO_2, and PM_{10}. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. An alert level is that concentration of pollutants at which initial stage control actions are to begin. An alert will be declared when any one of the pollutant alert levels is reached at any monitoring site and when meteorological conditions are such that the pollutant concentrations can be expected to remain at these levels for 12 or more hours or to increase; or, in the case of oxidants, the situation is likely to recur within the next 24 hours unless control actions are taken.

Pollutant alert levels:

- **O_3:** 392 micrograms per cubic meter (µg/m^3) (0.20 parts per million [ppm]), 1-hour average
- **CO:** 17 milligrams per cubic meter (mg/m^3) (15 ppm), 8-hour average
- **NO_2:** 1,130 µg/m^3 (0.6 ppm), 1-hour average; 282 µg/m^3 (0.15 ppm), 24-hour average
- **SO_2:** 800 µg/m^3 (0.3 ppm), 24-hour average
- **Particulates measured as PM_{10}:** 350 µg/m^3, 24-hour average

Air Pollution Constituents and Attainment Status

As previously noted, CARB coordinates and oversees both State and federal air pollution control programs in the State. CARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. Data collected at these stations are used by the CARB and EPA to classify air basins as attainment, non-attainment, non-attainment-transitional, or unclassified, based on air quality data for the most recent 3 calendar years compared with the AAQS.

Attainment areas may be:

- Attainment/Unclassified ("Unclassifiable" in some lists), which have never violated the air quality standard of interest or don't have enough monitoring data to establish attainment or non-attainment status; or
- Attainment-Maintenance (NAAQS only), which violated a NAAQS that is currently in use (was Non-attainment) in or after 1990, but now attains the standard and is officially redesignated to Attainment by the EPA with a Maintenance State Implementation Plan (SIP); or
- Attainment (usually only for CAAQS, but sometimes for NAAQS), which have adequate monitoring data to show attainment, have never been non-attainment, or, for NAAQS, have completed the official Maintenance period.

Non-attainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. **Table 4.2-2** lists the attainment status for the criteria pollutants in the Basin.

Table 4.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Non-attainment	N/A
O_3 8-hour	Non-attainment	Extreme Non-attainment
PM_{10}	Non-attainment	Attainment/Maintenance
$PM_{2.5}$	Non-attainment	Non-attainment
CO	Attainment	Attainment/Maintenance
NO_2	Non-attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment[1]	Attainment[1]
All others	Attainment/Unclassified	Attainment/Unclassified
CO = carbon monoxide N/A = not applicable NO_2 = nitrogen dioxide O_3 = ozone	PM_{10} = particulate matter less than 10 microns in size $PM_{2.5}$ = particulate matter less than 2.5 microns in size SO_2 = sulfur dioxide	

Source: Air Quality Standards and Area Designations (ARB 2015a). Website: http://www.arb.ca.gov/desig/desig.htm, accessed October 2015.
[1]Except in Los Angeles County.

Ozone (O_3). O_3 (smog) is formed by photochemical reactions between oxides of nitrogen and reactive organic gases (ROGs) rather than being directly emitted. O_3 is a pungent, colorless gas typical of Southern California smog. Elevated O_3 concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. O_3 levels peak during summer and early fall. The entire Basin is designated as a non-attainment area for the State 1-hour and 8-hour O_3 standards. The EPA has officially designated the status for most of the Basin regarding the 8-hour O_3 standard as "Extreme Non-attainment," which means the Basin has until 2024 to attain the federal 8-hour O_3 standard.

Carbon Monoxide (CO). CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire Basin is in attainment for the State standards for CO. The Basin is designated as an "Attainment/Maintenance" area under the federal CO standards.

Nitrogen Oxides (NO_x). NO_2, a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_X. NO_X is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO_2 decreases lung function and may reduce resistance to infection. The entire Basin is designated as non-attainment for the State NO_2 standard and as an "Attainment/Maintenance" area under the federal NO_2 standard.

Sulfur Dioxide (SO_2). SO_2 is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is in attainment with both federal and State SO_2 standards.

Lead. Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The Los Angeles County portion of the Basin was redesignated as non-attainment for the State and federal standards for lead in 2010.

Particulate Matter (PM). Particulate matter (PM) is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (PM_{10}) derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particle ($PM_{2.5}$) levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA's scientific review concluded that $PM_{2.5}$, which penetrate deeply into the lungs, are more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. The Basin is designated non-attainment for the federal and State $PM_{2.5}$ standards and State PM_{10} standard, and attainment/maintenance for the federal PM_{10} standard.

Volatile Organic Compounds (VOC). Volatile organic compounds (VOCs); also known as ROGs, and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however because VOCs accumulate in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

Sulfates. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently is converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of the State due to regional meteorological features. The entire Basin is in attainment for the State standard for sulfates.

Hydrogen Sulfide (H_2S). H_2S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. In addition, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. In 1984, a CARB committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance. The entire Basin is unclassified for the State standard for H_2S.

Visibility-Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. The entire Basin is unclassified for the State standard for visibility-reducing particles.

In addition to the six criteria pollutants described above, exposure to hazardous air pollutants (HAPs) is also evaluated. Exposure to HAP is measured through a process called a Health Risk Assessment (HRA). An HRA is a process used to estimate the increased risk of health problems in people who are exposed to HAPs. An HRA combines results of studies of the health effects on various animal and human exposures to toxic air pollutants with results of studies that estimate the level of people's exposures at different distances from the sources of the pollutants. For the purposes of an HRA, short-term emissions (one hour averages) are of concern for analyzing acute health impacts, and long-term emissions (multiple year averages) are of concern for analyzing chronic and carcinogenic health impacts. A critical early step in the HRA process is evaluating exposure pathways. An exposure pathway is the link between environmental releases and local populations that might come into contact with, or be exposed to, HAPs. Exposure pathways include inhalation, soil ingestion, dermal absorption, and mother's milk. An exposure pathway evaluation, therefore, determines if site contaminants have been, are, or will be in contact with local populations.

The SCAQMD requires that all HRAs be prepared in accordance with Office of Environmental Health and Hazards Assessment (OEHHA) Air Toxic Hot Spots Program Risk Assessment Guidelines (March 2015) and ARB guidance[4] and using the ARB computer program: HotSpots Analysis and Reporting Program (HARP2), or the latest approved

[4] http://oehha.ca.gov/air/hot_spots/hotspots2015.html

version of the program. OEHHA guidance requires at least a Tier-1 evaluation, which allows for Derived Risk Calculations. The Derived method uses high end exposure parameters for the top two exposure pathways and mean exposure parameters for the remaining pathways for cancer risk estimates.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any HAP it has evaluated. Fortunately, improvements to diesel fuel and diesel engines have already reduced emissions of some of the contaminants. These improvements have already resulted in a 75 percent reduction in particle emissions from diesel-powered trucks, trains and other equipment (as compared to 2000 levels), and by 2020, when fully implemented, they will result in an 85 percent reduction.[5] These improvements are anticipated to continue into the foreseeable future. However, to be conservative, other than what is built into the ARB EMFAC2014[6] model, none of these anticipated improvements are included in the analysis prepared for the proposed project.

4.2.3.3 LOCAL AIR QUALITY

As previously noted, the air quality monitoring station closest to the site is the Fontana – Arrow Highway Station, which monitors most air pollutant data, except 1-hour CO concentrations; the 1-hour CO data was obtained from the EPA website for countywide measurement level. The air quality trends from the Fontana – Arrow Highway Station are used to represent the ambient air quality in the Project area. The pollutants monitored are CO, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2.[7,8] The ambient air quality data in **Table 4.2-3** show that NO_2, SO_2, federal annual average PM_{10} and $PM_{2.5}$ standards, and CO levels are below the applicable State and federal standards.

The State 24-hour PM_{10} standard and federal 24-hour $PM_{2.5}$ standard exceeded their corresponding standard at least 1 time in the past 3 years. The State 1-hour O_3 standard was exceeded 31 to 60 times per year in the past 3 years. The federal 8-hour O_3 standard was exceeded 37 to 62 days a year in the past 3 years, and the State 8-hour O_3 standard was exceeded 52 to 88 times per year in the past 3 years.

[5]CalEPA OEHHA and American Lung Association of California, 2002. *Health Effects of Diesel Exhaust*. April.
[6] The ARB maintains the EMission FACtors (EMFAC) model, which is approved by the United States Environmental Protection Agency (EPA) for developing on-road motor vehicle emission inventories and conformity analyses in California. EMFAC models on-road mobile-source emissions under multiple temporal and spatial scales; it produces composite emission factors for specific California geographic areas.
[7] United States Environmental Protection Agency (EPA). 2012–2014 Air Quality Data. Website: http://www.epa.gov/airquality/airdata, accessed October 2015.
[8] California Air Resources Board (ARB). iADAM: Air Quality Data Statistics. Website: http://www.arb.ca.gov/adam, accessed October 2015.

Table 4.2-3 Ambient Air Quality Monitored in the Project Vicinity

Pollutant	Standard	2013	2014	2015
Carbon Monoxide (CO) – taken from Fontana - Arrow Highway Station and EPA Website for 1-hour CO				
Maximum 1-hr concentration (ppm)		1.9	2.6	2.8
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)		1.2	1.3	1.2
Number of days exceeded:	State: ≥ 9.0 ppm	0	0	0
	Federal: ≥ 9 ppm	0	0	0
Ozone (O_3) – taken from Fontana - Arrow Highway Station				
Maximum 1-hr concentration (ppm)		0.151	0.127	0.133
Number of days exceeded:	State: > 0.09 ppm	34	31	36
Maximum 8-hr concentration (ppm)		0.122	0.105	0.111
Number of days exceeded:	State: > 0.07 ppm	68	52	59
	Federal: > 0.075 ppm	42	37	39
Coarse Particulates (PM_{10}) – taken from Fontana - Arrow Highway Station				
Maximum 24-hr concentration (µg/m^3)		90	68	96
Number of days exceeded:	State: > 50 µg/m^3	15	10	13
	Federal: > 150 µg/m^3	0	0	0
Annual arithmetic average concentration (µg/m^3)		38.8	39.2	36.9
Exceeded for the year:	State: > 20 µg/m^3	Yes	Yes	Yes
Fine Particulates ($PM_{2.5}$) – taken from Fontana - Arrow Highway Station				
Maximum 24-hr concentration (µg/m^3)		43.6	34.6	50.5
Number of days exceeded:	Federal: > 35 µg/m^3	1	0	3
Annual arithmetic average concentration (µg/m^3)		12.3	12.8	10.9
Exceeded for the year:	State: > 12 µg/m^3	Yes	Yes	No
	Federal: > 15 µg/m^3	No	No	No
Nitrogen Dioxide (NO_2) – taken from Fontana - Arrow Highway Station				
Maximum 1-hr concentration (ppm)		0.0817	0.0704	0.0891
Number of days exceeded:	State: > 0.18 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.020	0.020	0.019
Exceeded for the year:	State: > 0.030 ppm	No	No	No
	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2) – taken from Fontana – Arrow Highway Station				
Maximum 24-hr concentration (ppm)		0.002	0.004	0.004
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.0005	0.0008	0.0008
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

µg/m^3 = micrograms per cubic meter
hr = hour
ND = no data available.
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ppm = parts per million

Source 1: United States Environmental Protection Agency (EPA). 2013–2015 Air Quality Data. Website: http://www.epa.gov/airquality/airdata, accessed August 2016.
Source 2: California Air Resources Board (ARB). Air Quality Data Statistics. Website: http://www.arb.ca.gov/adam, accessed August 2016.

4.2.4 STANDARDS OF SIGNIFICANCE

4.2.4.1 STATE THRESHOLDS OF SIGNIFICANCE

Based on Guidelines for the Implementation of California Environmental Quality Act, Appendix G, Public Resources Code (PRC) Sections 15000–15387, a project would normally be considered to have a significant effect on air quality if the project would violate any CAAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

4.2.4.2 THRESHOLDS OF SIGNIFICANCE FOR POLLUTANTS WITH REGIONAL EFFECTS

In addition to the NAAQS and CAAQS, the SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. It should be noted that the emissions thresholds were established based on the attainment status of the Basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Regional Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions have been established for the Basin:

- 75 pounds per day (lbs/day) of VOC
- 100 lbs/day of NO_X
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_X

Projects in the Basin with construction-related emissions that exceed any of these emission thresholds are considered to be significant under the SCAQMD guidelines.

Regional Thresholds for Operational Emissions

The following CEQA significance thresholds for operational emissions have been established for the Basin:

- 55 lbs/day of VOC
- 55 lbs/day of NO_X
- 550 lbs/day of CO
- 150 lbs/day of PM_{10}
- 55 lbs/day of $PM_{2.5}$
- 150 lbs/day of SO_X

Projects in the Basin with operational emissions that exceed any of these emission thresholds are considered to be significant under the SCAQMD guidelines.

Local Microscale Concentration Standards. The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

4.2.4.3 THRESHOLDS FOR LOCALIZED IMPACTS ANALYSIS

The SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003, recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. Localized Significance Thresholds (LSTs) represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or CAAQS, as previously shown in **Table 4.2-1**. LSTs are based on the ambient concentrations of that pollutant within the Project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this Project, the appropriate SRA for the LST is the Central San Bernardino Valley area (SRA 34).

In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$, both of which are non-attainment pollutants. For these two pollutants, the significance criteria are the pollutant concentration thresholds presented in SCAQMD Rules 403 and 1301. The Rule 403 threshold of 10.4 $\mu g/m^3$ applies to construction emissions (and may apply to operational emissions at aggregate handling facilities). The Rule 1301 threshold of 2.5 $\mu g/m^3$ applies to nonaggregate handling operational activities.

To avoid the need for every air quality analysis to perform air dispersion modeling, the SCAQMD performed air dispersion modeling for a range of construction sites less than or equal to 5 acres in size and created look-up tables that correlate pollutant emissions rates with project size to screen out projects that are unlikely to generate enough emissions to result in a locally significant concentration of any criteria pollutant. These look-up tables can also be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required.

For construction and operational emissions, the localized significance for a project greater than 5 acres can be determined by performing the screening-level analysis before using the dispersion modeling because the screening-level analysis is more conservative, and if no exceedance of the screening-level thresholds is identified, then the chance of operational LST exceeding concentration standards is small. Because the Specific Plan area is larger than 5 acres, the LST screening thresholds for the 5 acres tables were used in this analysis. Since the Project is not an aggregate handling facility, operational LSTs are assessed with the SCAQMD screening thresholds.

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Existing sensitive receivers nearest to the Specific Plan area are residences approximately 200 feet, or approximately 60 meters, from the RSPA Project area. However, there would be residences approximately 100 feet from the boundary of the Renaissance Marketplace (to the south) or Planning Area 108 (to the east). Therefore, LST thresholds for receivers at 100 feet (30 meters) of the Renaissance Marketplace and/or Planning Area 108 project boundary are used. Therefore, the following emissions thresholds apply during project operations:

- **Renaissance Marketplace**
    - Construction LST Thresholds at 100 feet (30 meters)
        - 276 lbs/day of NO_X
        - 1,876 lbs/day of CO
        - 20 lbs/day of PM_{10}
        - 8.4 lbs/day of $PM_{2.5}$
    - Operation LST Thresholds at 100 feet (30 meters)
        - 276 lbs/day of NO_X
        - 1,876 lbs/day of CO
        - 5.4 lbs/day of PM_{10}
        - 2 lbs/day of $PM_{2.5}$
- **Planning Area 108**
    - Construction LST Thresholds at 100 feet (30 meters)
        - 276 lbs/day of NO_X
        - 1,876 lbs/day of CO
        - 20 lbs/day of PM_{10}
        - 8.4 lbs/day of $PM_{2.5}$
    - Operation LST Thresholds at 400 feet (122 meters)[9]
        - 681 lbs/day of NO_X
        - 21,297 lbs/day of CO
        - 45 lbs/day of PM_{10}
        - 22 lbs/day of $PM_{2.5}$

[9] Because the Planning Area 108 site is large and the loading docks are oriented in an east-west direction and perpendicular to the direction of the nearest residences to the east, it is estimated that the nearest distance to these residences from the main operating area within Planning Area 108 would be 400 feet (122 meters).

4.2.4.4 THRESHOLDS FOR HEALTH RISK ASSESSMENT

Both the State and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For HAPs, "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered to be a prudent risk management level. If T-BACT has been applied, the individual cancer risk to the maximum exposed individual (MEI) must not exceed 10 in 1 million in order for an impact to be determined not to be significant.

Airborne impacts are also derived from materials considered to be a nuisance for which there may not be associated standards. Odors or the deposition of large diameter dust particles outside the particulate matter less than 10 microns in diameter (PM_{10}) size range would be included in this category.

The following limits for maximum individual cancer risk (MICR), and noncancer acute and chronic hazard index (HI) from concentrations of HAPs are considered appropriate for use in determining the health risk in for projects in the SCAB:

- **MICR:** MICR is the estimated probability of an MEIR contracting cancer as a result of exposure to HAPs over a period of 70 years for residential locations. The MICR calculations include multipathway consideration, when applicable.

  The cumulative increase in MICR that is the sum of the calculated MICR values for all HAPs would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1.0×10^{-5}) at any sensitive receptor location.
- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a HAP for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multipathway consideration, when applicable.

  The cumulative increase in total chronic HI for any target organ system due would be considered significant if it would exceed 1.0 at any receptor location.
- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a HAP for a potential MEI to its acute reference exposure level.

  The cumulative increase in total acute HI for any target organ system due would be considered significant if it would exceed 1.0 at any receptor location.

In March 2015, the Office of Environmental Health and Hazards Assessment (OEHHA) adopted new methods and guidelines for calculation of cancer risk. The new guidelines consider the health risks to infants and children more thoroughly, include revised assumptions for breathing rates of different age groups, and revised exposure periods for various age groups and receptor types.

4.2.4.5 SIGNIFICANCE CRITERIA [10]

As a Subsequent EIR to the 2010 RSP EIR, this analysis only evaluates the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

[10] Less than significant and no impact determinations for potential Air Quality impacts of the proposed Project are listed in Table 1-1 of Section 1.0 Executive Summary.

4.2.4.5.1 Air Quality Plan

The following criteria for establishing the significance of potential impacts on air quality were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

"Conflict with or obstruct implementation of the applicable air quality plan"

4.2.4.5.2 Air Quality Violations

The following criteria for establishing the significance of potential impacts on air quality were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

"Violate any air quality standard or contribute substantially to an existing or projected air quality violation"

4.2.4.5.3 Cumulative Impacts

The following criteria for establishing the significance of potential impacts on air quality were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

"Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors)"

4.2.4.5.4 Sensitive Receptors

The following criteria for establishing the significance of potential impacts on air quality were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

"Expose sensitive receptors to substantial pollutant concentrations"

4.2.5 IMPACTS AND MITIGATION MEASURES

4.2.5.1 AIR QUALITY PLAN

Impact 4.2.1: Would The Project Conflict With or Obstruct Implementation of the Applicable Air Quality Plan

Air pollutant emissions associated with the Project would occur over the short-term from construction activities (e.g., fugitive dust from site preparation and grading) and the emissions from equipment exhaust. There would be long-term regional emissions associated with project-related vehicular trips as well as energy consumption (e.g., electricity usage) by the proposed land uses.

Renaissance Specific Plan Amendment

Construction Impacts

Since both the approved Renaissance Specific Plan (RSP) and the currently proposed RSPA are in program-level planning review, construction would not occur under this plan comparison. Therefore, no comparison of construction emissions between the two plans has been conducted. It is expected that construction emissions under the RSPA would be similar to those of the approved RSP, and that both would exceed the daily emissions thresholds established by SCAQMD.

Operational Impacts

In order to evaluate the potential air quality impacts of the proposed RSPA, the Project trip generation for the RSPA is compared to that of the approved 2010 RSP. In order to conduct a meaningful comparison, criteria pollutant emissions from both scenarios were calculated with the same modeling program (i.e., CalEEMod, Version 2013.2.2). **Table 4.2-4** shows the air pollutant emissions for the approved RSP and the proposed RSPA (which includes the non-amendment areas of the approved RSP, plus the RSP amendment areas, plus Renaissance Marketplace and Planning Area 108). The CalEEMod computer output for both scenarios is included in Appendix A of Appendix C of this SEIR .As can be seen from Table 4.2-4, operational emissions for criteria pollutants would exceed the SCAQMD emissions thresholds of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ under the previously approved RSP. As shown in Table 4.2-4 the operational emissions for the proposed RSP Amendment increase for criteria pollutants. This increase primarily due to a substantial increase in vehicle usage compared to what was calculated in 2010, and also due to more concentrated business center land use. These increases result in operational emissions that would exceed the SCAQMD daily thresholds of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$; however, emissions of SO_X would remain lower than the SCAQMD emission threshold. As shown in Table 4.2-4 these result are consistent with the conclusions reported in the 2010 Renaissance Specific Plan EIR. As such, the proposed project would exceed SCAQMD regional significance thresholds for criteria pollutants, Similar to the findings in 2010 RSP EIR, these impacts are considered significant.

Table 4.2-4 Opening Year Regional Operational Emissions - 2010 Approved RSP and the Proposed RSPA

Source	Pollutant Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2010 Approved RSP Non-Warehouse Land Uses						
Area Sources	586	1.6	139	<0.01	3.0	3.0
Energy Sources	1.5	13	6	0.1	1.0	1.0
Mobile Sources	199	604	2,241	5.3	351	99
2010 Approved RSP Warehouse Land Uses						
Area Sources	158	<0.01	0.63	<0.01	<0.01	<0.01
Energy Sources	1.7	16	13	0.09	1.2	1.2
Mobile Sources (Trucks)	202	3,620	2,011	11	357	139
Mobile Sources (Passenger Cars)	51	67	876	1.9	164	44
Approved RSP Total Emissions	**1,198**	**4,322**	**5,288**	**18**	**877**	**287**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant Impacts?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Proposed RSPA Non-Warehouse Land Uses						
Area Sources	467	1.2	106	<0.01	2.3	2.2
Energy Sources	1.1	10.0	5.1	0.06	0.79	0.79

Table 4.2-4 Opening Year Regional Operational Emissions - 2010 Approved RSP and the Proposed RSPA

Source	Pollutant Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	204	585	2,192	5.0	334	94
Proposed RSPA Warehouse Land Uses						
Area Sources	385	0.01	1.5	<0.01	<0.01	<0.01
Energy Sources	3.7	34	28	0.20	2.6	2.6
Mobile Sources (Trucks)	492	8,823	4,901	26	870	339
Mobile Sources (Passenger Cars)	124	164	2,134	4.6	400	108
Proposed RSPA Total Emissions	**1,676**	**9,616**	**9,367**	**36**	**1,609**	**547**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant Impacts?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Net Change	**478**	**5,294**	**4,079**	**18**	**732**	**259**
New Significant Impacts?	**No**	**No**	**No**	**No**	**No**	**No**

CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
RSP = Renaissance Specific Plan
RSPA = Renaissance Specific Plan Amendment
SCAQMD = South Coast Air Quality Management District
SO_x = sulfur oxides
VOC = volatile organic compounds

Source: Compiled by LSA Associates, Inc. (2016).

Renaissance Marketplace

Construction Impacts

Construction activities produce combustion emissions from various sources such as grading, site preparation, utility engines, tenant improvements, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions. **Table 4.2-5** lists the tentative project construction schedule for the proposed Renaissance Marketplace based on a probable start date, a planned opening in 2018, and the assumption that the architectural coatings would be applied during the latter portion of the building construction phase. **Table 4.2-6** lists the potential construction equipment to be used during project construction for the Renaissance Marketplace.

Table 4.2-5 Tentative Project Construction Schedule – Renaissance Marketplace

Phase No.	Phase Name	Phase Start Date	Phase End Date	No. of Days/Week	No. of Days
1	Site Preparation	1/2/2017	1/29/2017	5	20
2	Grading	1/30/2017	2/26/2017	5	20
3	Building Construction	2/27/2018	4/21/2018	5	300
4	Architectural Coating	4/1/2017	4/21/2018	5	276
5	Paving	4/22/2018	6/22/2018	5	44

Source: Estimated by LSA from the site plan (assuming a 2018 opening year) and using CalEEMod defaults (2016).

Table 4.2-6 Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used/Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	255	0.4
	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	162	0.38
	Graders	1	8	174	0.41
	Rubber Tired Dozers	1	8	255	0.4
	Tractors/Loaders/Backhoes	2	8	97	0.37
	Scrapers	2	8	361	0.48
Building Construction	Cranes	1	7	226	0.29
	Forklifts	3	8	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48
Paving	Pavers	2	8	125	0.42
	Paving Equipment	2	8	130	0.36
	Rollers	2	8	80	0.38

Source: Compiled by LSA Associates, Inc. using CalEEMod defaults (2016).

The most recent version of the CalEEMod model (Version 2013.2.2) was used to calculate the construction emissions. The construction emissions are shown in **Table 4.2-7**. The emissions rates shown in Table 4.2-7 are from the CalEEMod output tables listed as "Mitigated Construction" even though the only measures that have been applied to the analysis are the required construction emissions control measures or standard conditions. These construction emissions are also the combination of the on- and off-site emissions.

Table 4.2-7 Short-Term Regional Construction Emissions – Renaissance Marketplace

	Total Regional Pollutant Emissions (lbs/day)								
Construction Phase	VOC	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	CO_2e
Site Preparation	5.2	55	42	0.042	7.2	2.9	3.9	2.7	4,300
Grading	6.6	75	51	0.065	3.6	3.6	1.5	3.3	6,700
Building Construction	12	73	130	0.027	15	2.7	3.9	2.5	25,000
Architectural Coating	120	3.6	17	0.033	2.4	0.21	0.63	0.21	2,800
Paving	3.6	20	16	0.024	0.17	1.1	0.045	1.0	2,500
Peak Daily	**130**	**77**	**150**	**0.30**	**20**		**7.2**		**28,000**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**		**55**		**No Threshold**
Significant Emissions?	**Yes**	**No**	**No**	**No**	**No**		**No**		

CO = carbon monoxide
CO_{2e} = carbon dioxide equivalent
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

Source: Compiled by LSA Associates, Inc. (2016).

Fugitive dust emissions are generally associated with land clearing and the exposure of soils to air and wind as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The proposed Renaissance Marketplace, as well as all projects within the Specific Plan area will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust.

Table 4.2-7 lists total construction emissions (i.e., fugitive-dust emissions and construction-equipment exhausts) that have incorporated a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction.

Architectural coatings contain VOCs that are part of the O_3 precursors. It is estimated that application of the architectural coatings for the proposed peak construction day will result in a combined peak of 130 lbs/day of VOC associated with the Renaissance Marketplace. Emissions of VOC are expected to exceed the SCAQMD daily emission threshold for VOC (i.e., 75 lbs/day) during the construction of Renaissance Marketplace. Since the construction emissions predicted for the construction of the RSP would exceed the daily emissions threshold of VOC, no new exceedance would occur, and no new significant impacts would occur for the construction of Renaissance Marketplace.

Table 4.2-7 also show that daily regional construction emissions would not exceed the daily thresholds of most criteria pollutant emission thresholds established by the SCAQMD, except for the emissions of VOC, which are expected to exceed the SCAQMD daily emission threshold for VOC (i.e., 75 lbs/day) during the construction of Renaissance Marketplace. Since the construction emissions predicted for the construction of the overall RSP would already exceed the daily emissions threshold of VOC, no new exceedance would occur, and therefore no new significant impacts would occur for the construction of Renaissance Marketplace.

Operational Impacts

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. The Renaissance Marketplace would result in net increases in both stationary- and mobile-source emissions. The stationary-source emissions would come from many sources, including the use of consumer products, landscape equipment, general energy, and solid waste.

Based on trip generation factors provided in the *Traffic Impact Study* prepared for the proposed Project (LSA 2015), the daily trips for Renaissance Marketplace were entered into the CalEEMod model. Long-term operational emissions associated with the existing site and the proposed Renaissance Marketplace are shown in **Table 4.2-8**.

Table 4.2-8 Opening Year Regional Operational Emissions – Renaissance Marketplace

Source	Opening Year Regional Pollutant Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Renaissance Marketplace						
Area Sources	61	0.0037	0.39	0.00003	0.0014	0.0014
Energy Sources	0.9	8.2	6.9	0.049	0.62	0.62
Mobile Sources	70	170	640	1.3	89	26
Total Project Emissions	**130**	**180**	**650**	**1.3**	**89**	**26**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceed SCAQMD Thresholds?	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

Source: Compiled by LSA Associates, Inc. (2016).

Area sources include architectural coatings, consumer products, hearth, and landscaping. Energy sources include natural gas consumption for heating and cooking. Table 4.2-8 also shows that the emissions of all criteria pollutants as a result of the proposed Marketplace would not exceed the corresponding SCAQMD daily emission thresholds for any criteria pollutants.

Three of the SCAQMD emission thresholds for criteria pollutants would be exceeded by the Renaissance Marketplace-related emissions. Since the operational emissions predicted for the overall RSP Project (Table 4.2-4) would exceed the daily emissions thresholds of these criteria pollutants, no new exceedance would occur, and no new significant impacts would occur for the Renaissance Marketplace.

Conclusion

The AQMP is based on regional growth projections developed by SCAG. The proposed Renaissance Marketplace project is a commercial development and is not defined as a regionally significant project under CEQA; therefore, it does not meet the SCAG Intergovernmental Review (IGR) criteria.

The City's General Plan is consistent with the SCAG RCP Guidelines and the SCAQMD AQMP. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the South Coast Air Basin 2012 AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below:

1. The Renaissance Marketplace project would result in short-term construction and long-term pollutant emissions that are within the approved RSP projections and the proposed RSP as amended would not result in new significant air quality impacts; therefore, the retail component of the overall Specific Plan could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.
2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed Project is not defined as significant.

The land uses envisioned for the Renaissance Marketplace would not be more intense than could be developed under the General Plan. Based on the consistency analysis presented above, the proposed Renaissance Marketplace project is consistent with the General Plan and the regional AQMP.

Planning Area 108

Construction Impacts

Construction activities produce combustion emissions from various sources such as grading, site preparation, utility engines, tenant improvements, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions. **Table 4.2-9** lists the tentative project construction schedule for Planning Area 108 based on a probable start date, a planned opening in 2018, and the assumption that the architectural coatings would be applied during the latter portion of the building construction phase. **Table 4.2-10** lists the potential construction equipment to be used during project construction for Planning Area 108.

Table 4.2-9 Tentative Project Construction Schedule – Planning Area 108

Phase No.	Phase Name	Phase Start Date	Phase End Date	No. of Days/ Week	No. of Days
1	Site Preparation	1/1/2017	1/14/2017	5	10
2	Grading	1/15/2017	2/11/2017	5	20
3	Building 1 Construction	2/12/2017	9/1/2018	5	145
4	Building 1 Architectural Coating	4/1/2017	9/1/2017	5	110
5	Paving	9/2/2017	11/2/2017	5	44
6	Building 2 Construction	1/2/2018	8/1/2018	5	152
7	Building 2 Architectural Coating	3/1/2018	8/1/2018	5	110
8	Building 3 Construction	1/2/2019	8/1/2019	5	152
9	Building 3 Architectural Coating	3/1/2019	8/1/2019	5	110

Source: Estimated by LSA from the site plan and using CalEEMod defaults (2016).

Table 4.2-10 Diesel Construction Equipment Utilized by Construction Phase – Planning Area 108

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	255	0.4
	Tractors/Loaders/ Backhoes	4	8	97	0.37
Grading	Excavators	2	8	162	0.38
	Graders	1	8	174	0.41
	Rubber Tired Dozers	1	8	255	0.4
	Tractors/Loaders/ Backhoes	2	8	97	0.37
	Scrapers	2	8	361	0.48
Building Construction	Cranes	1	7	226	0.29
	Forklifts	3	8	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/ Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48
Paving	Pavers	2	8	125	0.42
	Paving Equipment	2	8	130	0.36
	Rollers	2	8	80	0.38

Source: LSA Associates, Inc. using CalEEMod defaults (2016).

The most recent version of the CalEEMod model (Version 2013.2.2) was used to calculate the construction emissions. The construction emissions are shown in **Table 4.2-11**. The emissions rates shown in the table are from the CalEEMod output tables listed as "Mitigated Construction" even though the only measures that have been applied to the analysis are the required construction emissions control measures or standard conditions. These construction emissions are also the combination of the on- and off-site emissions.

Table 4.2-11 Short-Term Regional Construction Emissions – Planning Area 108

Construction Phase	VOC	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Site Preparation	5.2	55	42	0.042	7.2	2.9	3.9	2.7
Grading	6.6	75	51	0.065	3.6	3.6	1.5	3.3
Building 1 Construction	22	130	280	0.57	33	3.5	8.9	3.3
Building 1 Architectural Coating	260	5.1	35	0.071	5.4	0.24	1.4	0.23
Paving	3.5	22	16	0.024	0.17	1.3	0.045	1.2
Building 2 Construction	20	120	260	0.57	33	3.2	8.9	3
Building 2 Architectural Coating	300	4.6	32	0.071	5.4	0.21	1.4	0.21
Building 3 Construction	18	100	240	0.57	33	2.8	8.9	2.6
Building 3 Architectural Coating	290	4.2	29	0.071	5.4	0.19	1.4	0.19
Peak Daily	**320**	**140**	**320**	**0.64**	**42**		**14**	
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**		**55**	
Significant Emissions?	**Yes**	**Yes**	**No**	**No**	**No**		**No**	

CO = carbon monoxide
CO_2e = carbon dioxide equivalent
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

Source: Compiled by LSA Associates, Inc. (2016).

Fugitive dust emissions are generally associated with land clearing, exposure of soils to the air and wind, and cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. Development within Planning Area 108 will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust.

Table 4.2-11 lists total construction emissions (i.e., fugitive-dust emissions and construction-equipment exhausts) that have incorporated a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction.

Architectural coatings contain VOCs that are similar to ROCs and are part of the O_3 precursors. Based on the proposed Project, it is estimated that application of the architectural coatings for the proposed peak construction day will result in a combined peak of 320 lbs/day of VOC. Emissions of the VOC are expected to exceed the SCAQMD daily emission threshold for VOC (i.e., 75 lbs/day) during the construction of Planning Area 108. Since the construction emissions predicted for the construction of the RSP would exceed the daily emissions threshold of VOC, no new exceedance would occur, and no new significant impacts would occur for the construction of Planning Area 108.

Tables 4.2-11 show that daily regional construction emissions would not exceed the daily thresholds of most criteria pollutant emission thresholds established by the SCAQMD, with the exception of VOC and NO_X, which are expected to exceed the SCAQMD's daily emission thresholds during the construction of Planning Area 108. Since the construction emissions predicted for the construction of the RSP would exceed the daily emissions threshold of VOC and NO_X, no new exceedance would occur, and no new significant impacts would occur for the construction of Planning Area 108.

Operational Impacts

In order to evaluate the potential air quality impacts of the proposed RSPA, the Project trip generation for the RSPA is compared to that of the approved 2010 RSP. In order to conduct a meaningful comparison, criteria pollutant emissions from both scenarios are calculated with the same model, the CalEEMod, version 2013.2.2. Table 4.2-4 shows the air pollutant emissions for the approved RSP and the proposed RSPA (which includes the Renaissance Marketplace and Planning Area 108). As can be seen from Table 4.2-4, operational emissions for criteria pollutants would exceed the SCAQMD emissions thresholds of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ under the previously approved RSP. Under the proposed RSPA, operational emissions for criteria pollutants would exceed the SCAQMD emissions thresholds of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$, but emissions of SO_X would remain lower than the SCAQMD emission threshold. No new significant air quality impacts would occur under the proposed RSPA.

Based on trip generation factors provided in the *Traffic Impact Study* prepared for the proposed PA 108 development, (LSA 2015), daily trips are entered in the CalEEMod model; long-term operational emissions associated with the existing site and the proposed Project are shown in **Table 4.2-12**.

Table 4.2-12 Opening Year Regional Operational Emissions – Planning Area 108

Source	Pollutant Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	140	0.0072	0.76	0.00006	0.0027	0.0027
Energy Sources	6.1	56	47	0.33	4.2	4.2
Mobile Sources (Cars)	34	44	578	1.2	108	29
Mobile Sources (Trucks)	126	2,312	1,278	6.5	228	84
Warehouse Equipment	1.3	11	7.5	<0.01	0.9	0.83
Total Project Emissions	**308**	**2,412**	**1,904**	**8.1**	**341**	**118**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceed SCAQMD Thresholds?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

Source: Compiled by LSA Associates, Inc. (2016).

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. The PA 108 development would result in net increases in both stationary- and mobile-source emissions. The stationary-source emissions would come from many sources, including the use of consumer products, landscape equipment, general energy, and solid waste.

Area sources include architectural coatings, consumer products, hearth, and landscaping. Energy sources include natural gas consumption for heating and cooking. Table 4.2-12 also shows that the emissions of some criteria pollutants as a result of the proposed Planning Area 108 project would exceed the corresponding SCAQMD daily emission thresholds.

Five of the SCAQMD emission thresholds for criteria pollutants would be exceeded by Planning Area 108-related emissions. Since the operational emissions predicted for the RSP, as shown earlier in Table 4.2-4, would exceed the daily emissions thresholds of these criteria pollutants, no new exceedance would occur, and no new significant impacts would occur for Planning Area 108.

Conclusion

The AQMP is based on regional growth projections developed by SCAG. The proposed Planning Area 108 project is an industrial/warehouse development and is not defined as a regionally significant project under CEQA; therefore, it does not meet the SCAG IGR criteria.

The City's General Plan is consistent with the SCAG RCP Guidelines and the SCAQMD AQMP. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the South Coast Air Basin 2012 AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below:

1. The Planning Area 108 project would result in short-term construction and long-term pollutant emissions that are within the approved RSP projections and would not result in new significant air quality impacts; therefore, the Project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.
2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed Project is not defined as significant.

4.2.5.2 AIR QUALITY VIOLATIONS

Impact 4.2-2 Would The Project Violate Any Air Quality Standard or Contribute Substantially to an Existing or Protected Air Quality Violation.

As shown in Table 4.2-2, the Basin, the geographical area in which the proposed Project is located, is in non-attainment for ozone (O_3), PM_{10}, $PM_{2.5}$, and nitrogen dioxide (NO_2). Two criteria are used to assess the significance of this impact: 1) the localized significance analysis; and 2) the CO hot spot analysis.

Renaissance Marketplace

Localized Significance Analysis

The SCAQMD has issued guidance on applying CalEEMod modeling results to localized impacts analyses.[11] Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. **Table 4.2-13** shows that the construction emission rates would not exceed the Localized Significance Thresholds (LSTs) for the existing and proposed residences 100 feet (30 meters) from the boundary of Renaissance Marketplace. Table 4.2-13 also shows that the emissions of the pollutants will result in concentrations of pollutants at these nearest residences that are all below the SCAQMD thresholds of significance.

[11] South Coast Air Quality Management District (SCAQMD). Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf, accessed October 2015.

Table 4.2-13 Construction Localized Impacts Analysis – Renaissance Marketplace

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions[1]	75	49	10	6.6
LST Thresholds	276	1,876	20	8.4
Significant Emissions?	**No**	**No**	**No**	**No**

Note: SRA – Central San Bernardino Valley, 5 acres, receptors at 30 meters.

[1] CalEEMod clearly delineates the on-site and off-site construction emissions, thus this includes all on-site construction emissions without having to include a percentage of the mobile source emissions as is done for the operational LST.

CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Source: Compiled by LSA Associates, Inc. (2016).

Table 4.2-14 shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod model outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 4.2-14 include all on-site, Renaissance Marketplace-related stationary sources and 5 percent of the Renaissance Marketplace-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that will occur on site. Five percent is considered to be conservative because the average trip lengths assumed are 14.7 miles (mi) from home to work, 5.9 miles from home to shopping, and 8.7 miles for other types of trips. It is unlikely that the average on-site distance driven will be even 1,000 feet, which is approximately 2.2 percent of the total miles traveled. Considering the total trip length included in the CalEEMod model, the 5 percent assumption is conservative.

Table 4.2-14 shows that the operational emission rates would not exceed the LSTs for residences in the Project area within the 100 feet (30 meters) distance for LST analyses. Therefore, the proposed operational activity for the Renaissance Marketplace would not result in a locally significant air quality impact.

Table 4.2-14 Long-Term Operational Localized Impacts Analysis – Renaissance Marketplace

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Proposed Renaissance Marketplace				
On-Site Emissions	8.5	32	4.4	1.3
LST Thresholds	276	1,876	5.4	2.0
Significant Emissions?	**No**	**No**	**No**	**No**

Note: SRA – Central San Bernardino Valley, 5 acres, receptors at 30 meters, on-site traffic 5% of total.

CO = carbon monoxide
lbs/day = pounds per day
LST = Local Significance Thresholds
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Source: Compiled by LSA Associates, Inc. (2016).

CO Hot Spot Analysis

Vehicular trips associated with the proposed Renaissance Marketplace project would contribute to congestion at intersections and along roadway segments in the vicinity of the Renaissance Marketplace. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed Renaissance Marketplace project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, school children, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of Renaissance Marketplace project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate vicinity of the Renaissance Marketplace are not available. Ambient CO levels monitored at the Fontana-Arrow Highway Station, the closest station with complete monitored CO data, showed a highest recorded 1-hour concentration of 11.1 ppm (State standard is 20 ppm) and a highest 8-hour concentration of 1.76 ppm (State standard is 9 ppm) during the past 3 years (see Table 4.2-5). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in the Traffic Impact Study prepared for the Renaissance Marketplace (LSA 2015), all study area intersections currently operate at satisfactory LOS. With addition of the Renaissance Marketplace, all study area intersections would continue to operate at satisfactory LOS.

Therefore, the Renaissance Marketplace can be implemented with no significant peak-hour intersection impacts. Given the low level of CO concentrations in the Specific Plan area and no traffic impacts at any intersections, Renaissance Marketplace project-related vehicles are not expected to contribute significantly to or result in the CO concentrations exceeding the State or federal CO standards. Because no CO hot spot would occur, there would be no Renaissance Marketplace project-related impacts on CO concentrations.

Planning Area 108

Localized Impact Analysis

Table 4.2-15 shows that the construction emission rates would not exceed the LSTs for the residences 100 feet (30 meters) from the boundary of Planning Area 108. Table 4.2-15 also shows that the emissions of the pollutants will result in concentrations of pollutants at these nearest residences that are all below the SCAQMD thresholds of significance. For a worst-case scenario assessment, the emissions shown in Table 4.2-15 include all on-site project-related stationary sources and 2 percent of the project-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that will occur on site. A total of 2 percent is considered conservative as the average trip lengths assumed are 14.7 mi for commercial-work, 5.9 mi for commercial-nonwork, and 8.7 mi for commercial–customer trips. It is unlikely that the average on-site distance driven would be even 1,000 feet, which is approximately 1.0 percent of the total miles traveled. Considering the total trip length included in the CalEEMod model, the 2 percent assumption is conservative.

Table 4.2-15 Construction Localized Impacts Analysis – Planning Area 108

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions[1]	75	49	10	6.6
LST Thresholds	276	1,876	20	8.4
Significant Emissions?	**No**	**No**	**No**	**No**

Note: SRA – Central San Bernardino Valley, 5 acres, receptors at 30 meters.
[1] CalEEMod clearly delineates the on-site and off-site construction emissions, thus this includes all on-site construction emissions without having to include a percentage of the mobile source emissions as is done for the operational LST.
CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Source: Compiled by LSA Associates, Inc. (2016).

Table 4.2-16 shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs.

Table 4.2-16 Long-Term Operational Localized Impacts Analysis – Planning Area 108

Emissions Sources	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	58	45	7.6	3.1
LST Thresholds	681	21,297	45	22
Significant Emissions?	**No**	**No**	**No**	**No**

Note: SRA – Central San Bernardino Valley, 5 acres, receptors at 400 feet or 122 meters, on-site traffic 5% of total.
CO = carbon monoxide
LST = Local Significance Threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Source: Compiled by LSA Associates, Inc. (2016).

Because the Planning Area 108 is approximately 175 acres and the loading docks are oriented in an east-west direction and perpendicular to the direction of the nearest residences, it is estimated that the nearest distance to these residences from the main operating area would be 400 feet (122 meters). Table 4.2-16 shows that the operational emission rates would not exceed the LSTs for residences in the vicinity of Planning Area 108 that are within the 400 feet (122 meters) distance for LST analyses. Therefore, the proposed operational activity for the Planning Area 108 would not result in a locally significant air quality impact.

CO Hot Spot Analysis

Vehicular trips associated with the proposed Planning Area 108 project would contribute to congestion at intersections and along roadway segments in the vicinity of Planning Area 108.

An assessment of Planning Area 108-related impacts on localized ambient air quality requires that future ambient air quality levels be projected.

As described in the Traffic Impact Study for the proposed Planning Area 108 project (LSA 2015), all study area intersections currently operate at satisfactory LOS. With addition of the Planning Area 108 Project, all study area intersections would continue to operate at satisfactory LOS.

Therefore, the Planning Area 108 Project can be implemented in an existing setting with no significant peak-hour intersection impacts. Given the low level of CO concentrations in the Specific Plan area and no traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to CO concentrations exceeding the State or federal CO standards. Because no CO hot spot would occur, there would be no Planning Area 108-related impacts on CO concentrations.

4.2.5.3 SENSITIVE RECEPTORS

Impact 4.2.3 Would The Project Expose Sensitive Receptors to Substantial Pollutant Concentrations

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Existing sensitive receivers nearest to the Project area are residences approximately 200 feet, or approximately 60 meters, from the RSPA Project area. However, there would be residences approximately 100 feet from the boundary of the Renaissance Marketplace (to the south) or Planning Area 108 (to the east).

As discussed in Response 4.2.5.2, the localized impact analysis concluded that the Project's emissions would not exceed the SCAQMD's LSTs for any pollutant during construction and/or operational activities. As shown in the CO hot spot analysis in Response 4.2.5.2, CO from the Project, existing and future sources in the area would not cause a CO hot spot, and therefore, would not cause or contribute to a violation of the CO ambient air quality standards. The ambient air quality standards are set to protect the health of sensitive individuals. Therefore, during operation, concentrations of CO from motor vehicles at impacted intersections would not expose sensitive receptors to substantial CO concentrations.

In addition, a Health Risk Assessment (HRA) was prepared for the proposed Specific Plan Amendment to assess the potential for sensitive receptors in the surrounding area to be exposed to Hazardous Air Pollutants (HAPs). This HRA includes all vehicle emissions for the entire RSPA using information from the project traffic study, (LSA Associates, Inc. 2015). In order to provide a "worst case" HRA, many of the model inputs are very conservative.

In order to assess the impact of HAP emissions on individuals who live in the existing nearby residences and will live in the residences to be built within the RSPA, air dispersion modeling utilizing the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was performed. The model is approved by the EPA when estimating the air quality impacts associated with point and fugitive sources in simple and complex terrain. The model was used to calculate the annual average and short-duration (e.g., 1-hour) pollutant concentrations resulting from the emissions described above. Details of these inputs are shown in Appendix B and the model output in Appendix C of Appendix C of this Recirculated Draft SEIR.

Acute (Short-Term) Risk Level

Exposure to diesel exhaust can result in immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they were allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. Emissions from gasoline-powered vehicles also contain HAPs with short-term acute health effects, see Appendix B of Appendix C of this Recirculated Draft SEIR for details. The acute inhalation health risks from all sources to the residents both on the RSPA and near the proposed project are shown in Table 4.2-17, The maximum acute Hazard Index would be 0.33, which is below the threshold of 1.0. Therefore, the potential for short-term acute exposure would be less than significant.

Table 4.2-17 Health Risks from RSPA Operations

Risk Category	Carcinogenic Health Risk	Chronic Health Index	Acute Health Index
30-Year Residential Adult Risks (MEIR)	1.1 in 1 million	0.0012	0.33
9-Year Residential Child Risks	0.87 in 1 million		
Threshold	10 in 1 million	1.0	1.0

Source: LSA Associates, Inc., August 2016.

Carcinogenic and Chronic (Long-Term) Risk Levels

Table 4.2-17 also shows the results for long-term carcinogenic and chronic impacts to both adult and child residents. The adult residential carcinogenic health risk level is shown for the period of 30 years, which includes the assumption that a person would stay at home 24-hours a day, 7 days a week, 48 weeks out of a year for 30 years. Table 4.2- shows that the MEIR would be 1.1 in 1 million, below the threshold of 10 in 1 million and thus less than significant. Appendix B of Appendix C of this Recirculated Draft SEIR includes a figure showing the 30-year cancer isopleths. The child residential carcinogenic health risk level is 0.87 in a million, also less than significant.

Table 4.2-17 also shows that nearby residents would be exposed to a chronic health risk index of 0.0012, which is below the threshold of 1.0. As such, no significant health risk would occur to any nearby resident, and no mitigation is necessary.

Therefore, impacts would be less than significant in regard to exposure of sensitive receptors to substantial pollutant concentrations.

4.2.5.4 MITIGATION MEASURES

Mitigation Measure AQ-1: Standard Air Quality Conditions

Construction Activity

Prior to the issuance of grading permits , the project applicant shall submit to the satisfaction of the Public Works Director and Planning Division, evidence that development within the Renaissance Marketplace and Planning Area 108 will comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors (see SCAQMD Rule 403).[12]

[12] South Coast Air Quality Management District (SCAQMD). Rule 403. Website: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf, accessed October 2015.

This applicable Rule measures as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 ft) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
- Pave construction access roads at least 100 ft (30 m) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

The applicable California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program Measures are:

- Recycle/reuse at least 50 percent of the construction material including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard.
- Use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project.

Operations

Prior to the issuance of building permits, the project applicant shall submit to the satisfaction of the Public Works Director, evidence that development within the Renaissance Marketplace and Planning Area 108 comply with Title 24 of the California Code of Regulations (CCR) established by the CEC regarding energy conservation and green buildings standards. The project applicant shall incorporate the following in building plans:

- Low-emission water heaters shall be used. Solar water heaters are encouraged.
- Exterior windows shall utilize window treatments for efficient energy conservation.

These measures will result in reduced emissions during the construction and operation phases of the proposed Renaissance Marketplace and Planning Area 108 projects.

Mitigation Measure **AQ-2:** **Sensitive Receptors – 500-Foot Buffer**

Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that the following uses will not be located within the distance specified from an existing or future sensitive receptor (residence, school, hospital, nursing home, day care

centers, parks and playgrounds): within 500 feet of the 210 Freeway; within 500 feet of the equipment within a dry cleaning facility utilizing Perchloroethylene; and within 300 feet of a fueling station facility (i.e. fuel pumps). These facilities may be located closer than the proscribed distances if a project-specific health risk assessment is performed that demonstrates that the project-specific health risk impacts do not exceed the South Coast Air Quality Management District's health risk significance thresholds.

Mitigation Measure AQ-3: **Sensitive Receptors – 1,000-Foot Buffer**

Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that the following uses will not be located within 1000 feet of a nearby sensitive receptor (occupied portions of existing or future residences, schools, hospitals, nursing homes, day care centers, parks, and playgrounds): a warehouse, distribution center, or logistics center unless a project-specific health risk assessment is performed that demonstrates that the project-specific health risk impacts do not exceed the South Coast Air Quality Management District's health risk significance thresholds.

Mitigation Measure AQ-4: **Off-Road Diesel Equipment**

Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that offroad diesel-powered construction equipment greater than 50 horsepower will meet the Tier 4 emission standards, where feasible. In addition, where feasible all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the Air Resources Board (ARB). Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by ARB regulations.

Mitigation Measure AQ-5: **Construction Equipment Tier Specification**

Prior to the mobilization of each applicable offroad diesel-powered construction equipment greater than 50 horsepower, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, a copy of the certified tier specification, Best Available Control Technology (BACT) documentation, and Air Resources Board or South Coast Air Quality Management District's operating permit for each shall be provided at the time of mobilization of each applicable unit of equipment.

Mitigation Measure AQ-6: **Truck Access**

Prior to the issuance of any grading permits, the project applicant shall submit, to the satisfaction of the Public Works Director and Planning Division, evidence that the following truck access routes have been incorporated into the project design, to the maximum extent practicable, to reduce air quality and potential future health risk impacts from the operation phases of the proposed project:

- Design warehouse/distribution centers such that entrances and exits discourage that trucks from traversing past neighbors or other sensitive receptors.
- Design warehouse/distribution centers such that any check-in point for trucks is well inside the facility property to ensure that there are no trucks queuing outside of the facility.

4.3 BIOLOGICAL RESOURCES

4.3.1 INTRODUCTION

This section describes the impacts of potential impacts of Project implementation on biological resources. Potential effects are evaluated relative to potential impacts on sensitive species or habitat and potential effects relative to the interference migratory species or corridors. All other significance thresholds and potential impacts of the proposed Project were addressed in the Project's NOP (January 2015), which determined there would be no new or additional impacts, or that impacts would be less than significant and therefore need not be further considered in this Recirculated Draft SEIR. Please refer to the proposed Project's NOP attached as Appendix A.

The following reports describe the general biological conditions on the Project area including the vegetation, sensitive plant and wildlife species with potential to be present, results of focused surveys, and species observed on the Project area. These items are included as Appendix C of the 2010 RSP EIR.

- L and L Environmental. March 14, 1997. *Biological Assessment of the City of Rialto Airport Specific Plan Area, Rialto California*. (L&L 1997);
- Michael Brandman Associates (MBA). October 1, 2008. *Updated Biological Resources Assessment, Renaissance Specific Plan, City of Rialto, San Bernardino County, California*. (MBA 2008c);
- Michael Brandman Associates (MBA). November 10, 2005. *Biological Resources Assessment, Rialto Municipal Airport, City of Rialto, San Bernardino County, California*. (MBA 2005b);
- Michael Brandman Associates (MBA). September 28, 2005. *San Bernardino Kangaroo Rat: Results of Protocol Presence/Absence Trapping Surveys on Parcels East of the Rialto Municipal Airport, City of Rialto, San Bernardino County, Californi*a. (MBA 2005a);
- Michael Brandman Associates (MBA). December 20, 2006. *Biological Resources Assessment, Renaissance Specific Plan, City of Rialto, San Bernardino County, California*. (MBA 2006a);
- PCR Services Corporation. July 19, 2006. *Results of Focused California Gnatcatcher Surveys for the Rialto Municipal Airport Project Site, City of Rialto, San Bernardino County, California*. (PCR 2006a);
- PCR Services Corporation. August 28, 2006. *Results of Focused Sensitive Plant Surveys on the 692-acre Rialto Municipal Airport Project Site, City of Rialto, San Bernardino County, California*. (PCR 2006b); and
- PCR Services Corporation. October 19, 2006. *Results of a Phase II Burrow Survey and Phase III Focused Burrowing Owl Survey, Census, and Mapping for the 656-acre Rialto Municipal Airport Project Site, City of Rialto, San Bernardino County, California*. (PCR 2006c).

The following reports/surveys have been conducted either on the Project area or within the RSP area since the 2010 EIR and are included as Appendix D to this Recirculated Draft SEIR.

- Michael Baker International. September 2016. *Renaissance Specific Plan Habitat Assessment, City of Rialto, San Bernardino County, California.*

- Michael Baker International. September 2016. Renaissance Specific Plan Habitat Suitability Assessment, City of Rialto, San Bernardino County, California.

4.3.2 REGULATORY FRAMEWORK

4.3.2.1 FEDERAL

Federal Endangered Species Act (FESA)

The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (FESA) that provides a process for listing species as either threatened or endangered, and methods of protecting listed species. FESA defines "endangered" as any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is a species that is likely to become endangered in the foreseeable future. A "proposed" species is one that has been officially proposed by USFWS for addition to the federal threatened and endangered species list. Section 9 of the FESA prohibits "take" of threatened or endangered species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. The presence of any federally threatened or endangered species that are in a project area generally imposes significant constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize "take" when it is incidental to, but not for the purpose of, an otherwise lawful act.

Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union.

4.3.2.2 STATE

California Endangered Species Act (CESA)

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA). The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

Section 3503 and 3511 of California Fish and Wildlife Code

The CDFW administers the California Fish and Wildlife Code. There are particular sections of the Code that are applicable to natural resource management. For example, Section 3503 of the Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3511 of the Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are fully protected by the State include golden eagle (*Aquila chrysae*tos) and white-tailed kite (*Elanus leucurus*).

4.3.3 EXISTING CONDITIONS

4.3.3.1 VEGETATION

The majority of the Project area is relatively undisturbed with natural habitats consisting of three (3) plan communities: buckwheat scrub, disturbed mature Riversidean alluvial fan sage scrub (RAFSS), and non-native grassland. In addition, there are two areas that would be classified as disturbed and developed. These areas are not vegetation classifications, rather land cover types. Vegetation types within the RSPA area are shown on **Figure 4.3-1: Vegetation Map.**

Buckwheat Scrub (194.4 acres)

The majority of the Project area consists of a buckwheat scrub plant community dominated by California buckwheat (*Eriogonum fasciculatum*). Other plant species observed within this plant community include deerweed (*Acmispon glaber*), California sagebrush (*Artemisia californica*), California croton (*Croton californicus*), doveweed (*Croton setigerus*), and slender buckwheat (*Eriogonum gracile*). Non-native grasses (*Bromus* ssp.) compose the understory of this plant community.

Disturbed Mature Riversidian Alluvial Fan Sage Scrub (RAFSS) (63.4 acres)

A mature Riversidian Alluvial Fan Sage Scrub (RAFSS) plant community occurs on two areas of the Project area: on the northwest corner and in the middle of the western half of the Project area. This disturbed mature RAFSS plant community has been effectively cut-off from the historic fluvial flow patterns and scouring regimes of Lytle Creek and flows exiting the San Gabriel Mountains due to the construction of the I-15 freeway, SR-210, development in the surrounding area, and flood control structures. These activities have eliminated the fluvial processes to this area which are needed to maintain openness of the RAFSS plant community in order to provide suitable habitat for sensitive plant and wildlife species associated with the RAFSS plant communities (i.e., San Bernardino kangaroo rat, Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), slender-horned spineflower (*Dodecahema leptoceras*)). Flooding events that characterize this plant community have not occurred in the general vicinity of the Project since the construction of the I-15, resulting in a change in soil and alluvial vegetation to mature into a dense plant community that no longer support these species.

Within the boundaries of the Project area, the mature RAFSS plant community is dominated by non-native grasses with chamise (*Adenostoma fasciculatum*), hollyleaf cherry (*Prunus ilicifolia*), elderberry (*Sambucus nigra*), scalebroom (*Lepidospartum squamatum*), basketbush (*Rhus aromatica*), matchweed (*Gutierrezia microcephala*), cane cholla (*Cylindropuntia californica*), California buckwheat, deerweed, California croton, and California sagebrush. Non-native plant species underlying this plant community include red stem filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), short podded mustard (*Hirschfeldia incana*), and non-native grasses (*Bromus* ssp.).

Non-Native Grassland (12.5 acres)

The non-native grassland plant community covers the northern portion of the Project area, just north of Renaissance Parkway and west of Linden Avenue. Plant species observed within this plant community include deerweed, pigweed (*Amaranthus californicus*), western ragweed (*Ambrosia psilostachya*), fiddleneck (*Amsinckia intermedia*), wild oat (*Avena fatua*), ripgut (*Bromus diandrus*), doveweed, California buckwheat, Russian thistle, Mediterranean grass (*Schismus barbatus*), and puncture vine (*Tribulus terrestris*).

Disturbed (102.3 acres)

Disturbed areas on-site are areas that have been subject to frequent human disturbances, such as weed abatement activities or grading. The disturbed areas are located within the northwest corner of the Project area along the northern, southern, eastern, and western edges of the disturbed mature RAFSS plant community. These areas can also be found in the northeast portion of the Project area and adjacent to the eastern border where recent grading activities have occurred. Disturbed areas in the form of dirt roads can be found throughout the Project area. The disturbed areas on the Project area no longer support a native plant community and consist of patches of early successional and non-native weedy plant species. Plant species observed within disturbed areas include red brome, short podded mustard, puncture vine, Russian thistle, flax-leaved horseweed (*Erigeron bonariensis*), and telegraph weed (*Heterotheca grandiflora)*.

Developed (134.2 acres)

Developed areas generally consist of areas that no longer support natural substrate or plant communities. Developed areas encompass all buildings, as well as paved, impervious surfaces. The airport runways within the central portion of the Project area, the remnant buildings and airport hangar structures adjacent to the southern border, and the paved roads throughout the Project area are considered developed areas.

4.3.3.2 WILDLIFE

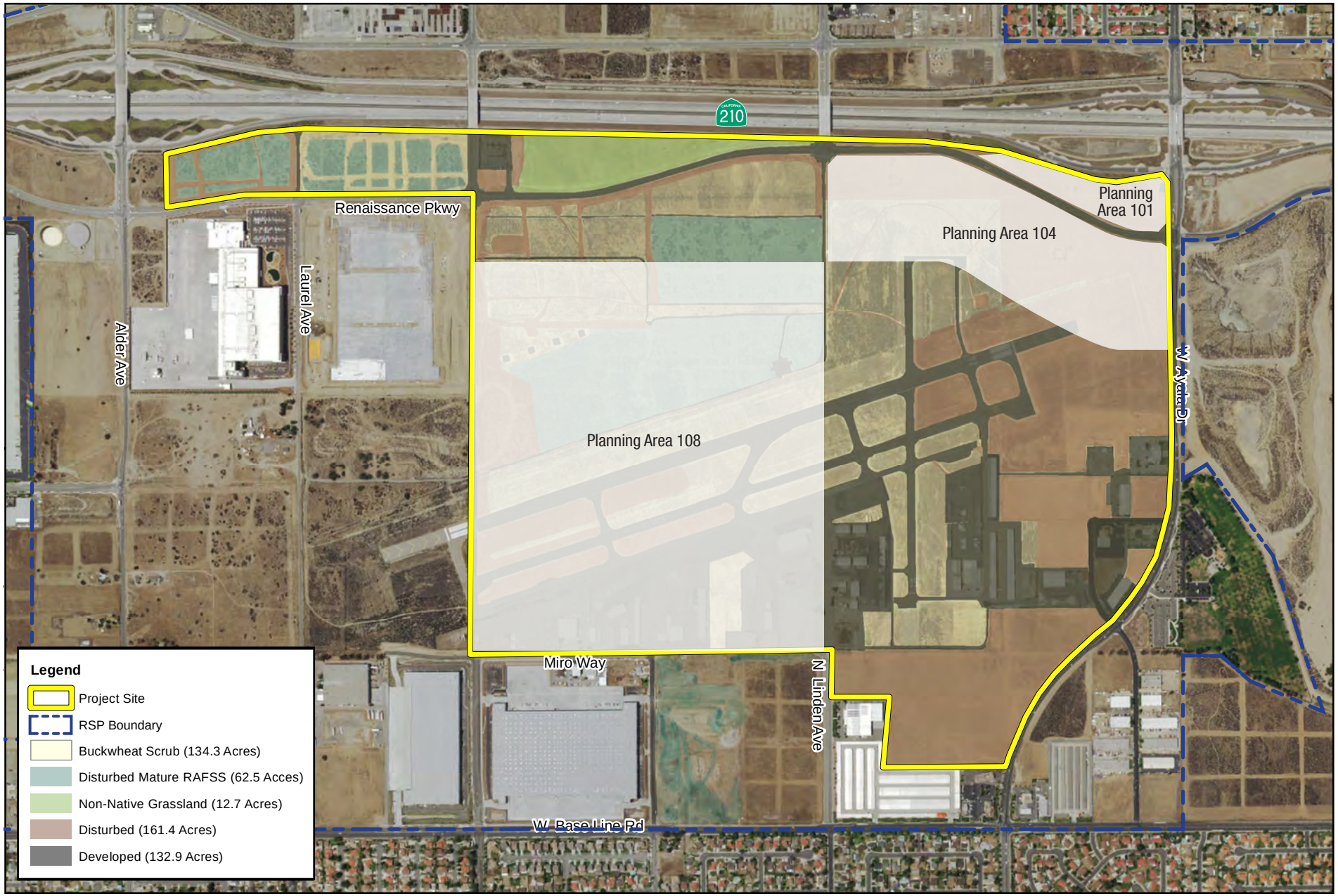
The Project area supports numerous wildlife species, some of which were observed during the biological assessments and surveys. For a complete description, see the faunal lists in the Habitat Assessment in Appendix D of this Recirculated Draft SEIR. Some of the more common species observed include side-blotched lizard (*Uta stansburiana*), the burrowing owl, house finch (*Haemorhous mexicanus*), California quail (*Callipepla californica*), lesser nighthawk (*Chordeiles acutipennis*), northern flicker (*Colaptes auratus*), Say's phoebe (*Sayornis saya*), black-tailed jackrabbit (*Lepus californicus*), and cottontail rabbit (*Sylvilagus audubonii*).

While not observed during the biological assessments and surveys, the Project area has the potential to provide suitable habitat for western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis catenifer*), southern pacific rattlesnake (*Crotalus oreganus helleri*), coachwhip (*Coluber flagellum piceus*), alligator lizard (*Elgaria coerulea*), coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*), opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and deer mice (*Peromyscus sp*.).

4.3.3.2.1 Threatened and Endangered Wildlife Species

Coastal California Gnatcatcher (CAGN)

The CAGN is a federally threatened species with restricted habitat requirements, being an obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It ranges from Ventura County south to San Diego County and northern Baja California and is less common in sage scrub with a high percentage of tall shrubs. It prefers habitat with more low-growing vegetation. California gnatcatchers breed between mid-February and the end of August, with peak activity from mid-March to mid-May. Population estimates indicate that there are approximately 1,600 to 2,290 pairs of California gnatcatcher remaining. Declines are attributed to loss of sage scrub habitat due to development, as well as cowbird nest parasitism.



Source: Michael Baker, 2015

Figure 4.3-1: Vegetation

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Although California gnatcatcher is known to occur within San Bernardino County, the species has a limited distribution. The USFWS has designated several areas in San Bernardino County as Critical Habitat for California gnatcatcher and preservation of those areas is expected to be needed to ensure the recovery of the species. However, the RSPA area is not located within designated Critical Habitat for California gnatcatcher.

The Primary Constituent Elements (PCEs) essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for California gnatcatcher are:

1. Dynamic and Successional sage scrub habitats and associated vegetation (RAFSS, Coastal Sage-Chaparral Scrub, etc.) that provides space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal, and foraging; and

2. Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats have the potential to provide linkages to help with dispersal, foraging and nesting.

Non-sage scrub habitats such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitats have the potential to provide linkages to help with dispersal, foraging and nesting.

The Project area is isolated from sage scrub habitats that occur north of Interstate 15 freeway. Ongoing development in north Rialto and Fontana has cut off connectivity and linkages of the project area to sage scrub plant communities in the San Gabriel Mountains that could provide foraging, dispersal, and nesting habitat for California gnatcatcher. The Project area is not located within federally designated Critical Habitat for California gnatcatcher. Further, the Project area does not support suitable habitat for California gnatcatcher. Therefore, the species is presumed absent from the Project area.

San Bernardino Kangaroo Rat (SBKR)

During the October 27, 2015 Habitat Assessment, field signs for kangaroo rat (KR), including possible SBKR sign, was observed within the disturbed mature RAFSS plant community and along the northern boundary of the Project area within the buckwheat scrub plant community.

The SBKR, federally listed as endangered, is one of several kangaroo rat species in its range. The Dulzura, the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in areas occupied by the SBKR, but these other species have a wider habitat range. The habitat of the SBKR is described as being confined to pioneer and intermediate RAFSS habitats, with sandy soils deposited by fluvial (water) rather than aeolian (wind) processes. Burrows are dug in loose soil, usually near or beneath shrubs.

The San Bernardino kangaroo rat is one of three subspecies of the Merriam's kangaroo rat. The Merriam's kangaroo rat is a widespread species that can be found from the inland valleys to the deserts. The subspecies known as the San Bernardino kangaroo, however, is confined to inland valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams and drainages. Most of the drainages have been historically altered as a result of flood control efforts and the resulting increased use of river resources, including mining, off-road vehicle use and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the San Bernardino kangaroo rat. The past habitat losses and potential future losses prompted the emergency listing of the San Bernardino kangaroo rat as an endangered species (USFWS, 1998a).

The PCEs essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for SBKR are:

1. River, creek, stream, and wash channels; alluvial fans, flood plains, flood benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes;

2. Alluvial sage scrub and associated vegetation such as coastal sage scrub and chamise chaparral with a moderately open canopy;

3. Soil series consisting of sand, sandy loam, or loam within its geographical range;

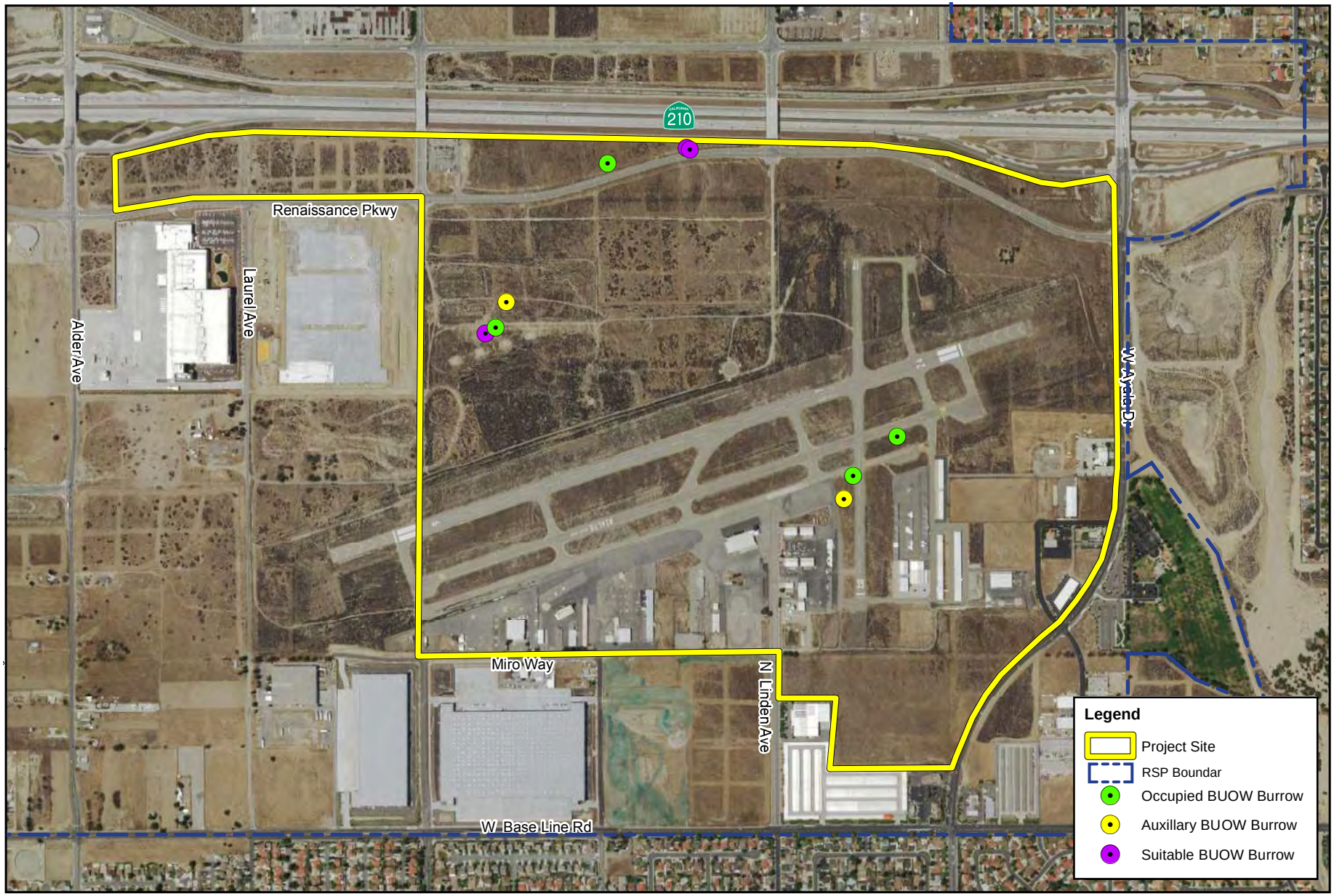
4. Upland areas proximal to flood plains containing suitable habitat (land adjacent to alluvial fan that provides Refugia); and

5. Moderate to low degree of human disturbances to habitat.

Burrowing Owl (BUOW)

Three burrowing owls were detected during the October 27, 2015 Habitat Assessment. **Figure 4.3-2: Burrowing Owl Locations** shows the locations of the BUOW burrows, as well as suitable burrow locations. Based on previous surveys, there is suitable nesting, foraging, and dispersing habitat for BUOW in the RSP area due to the presence of flat terrain, low-growing vegetation, and burrows. Therefore, the Project area supports suitable nesting, foraging, and dispersing habitat for BUOW.

The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 1999). Burrowing owls are dependent upon the presence of fossorial mammals, such as ground squirrels (Otospermophilus beecheyi), whose burrows are used for roosting and nesting (Haug and Didiuk 1993). The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.



Source: Michael Baker, 2015

Figure 4.3-2: Burrowing Owl Locations

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4.3.3.2.2 Threatened, Endangered and Sensitive Plant Species

The Habitat Assessment conducted on October 27, 2015 did not observe any sensitive plant species within the survey area. Previous biological surveys have not resulted in the observation of any threatened and/or endangered plant species. Based on habitat requirements for specific plant species and the availability and quality of habitats needed by each sensitive plant specifies, it was determined that the Project area has a low potential to support Plummer's mariposa-lily (*Calochortus plummerae*), Parry's spineflower (*Chorizanthe parryi var. parryi*), mesa horkelia (*Horkelia cuneata var. puberula*), and Robinson's pepper-grass (*Lepidium virginicum var. robinsonii*). All other sensitive plant species known to occur in the general vicinity of the Project area are presumed absent.

According to the California Natural Diversity Database (CNDDB), three sensitive plant communities have been reported in the Devore and Fontana quadrangles: RAFSS, Southern Riparian Forest, and Southern Sycamore Alder Riparian Woodland. In the October 2015 Habitat Assessment, one sensitive plant community was observed on the Project area: RAFSSS. The plant community on the Project area is heavily disturbed and has been effectively cut-off from the fluvial process. Without the restoration of the fluvial processes, the disturbed mature RAFSS habitat and rocky soils that now occupy the Project area do not provide suitable habitat for sensitive biological resources.

4.3.3.2.3 Wildlife Corridors and Migratory Birds

Wildlife Corridors

According to the 2015 Habitat Assessment, development surrounding the Project area has eliminated any potential wildlife corridors that could have historically occurred on the Project area. The Project area is located in an area that is primarily developed, converting natural habitats into residential sites. Development of the I-15, SR-210, and channelization of Lytle Creek and Cajon Creek for flood control purposes has changed the hydrology of the area, further altering the natural habitats and eliminating wildlife movement and corridors south of the I-15. As a result of these changed conditions and surrounding development, the Project area no longer supports wildlife movement or corridors.

Nesting Birds

According to the 2015 Habitat Assessment, no nesting birds were detected during the October 27, 2015 survey which was conducted after the avian nesting season. The plant communities occurring on the Project area provide suitable foraging and nesting habitat for a variety of year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. The Project area has the potential to provide suitable nesting opportunities for avian species, in particular ground nesting species (e.g. killdeer (*Charadrius vociferous*), lesser nighthawk, and burrowing owl. Additionally, the shrubs and trees found throughout the Project area have the potential to provide suitable nesting opportunities for avian species.standards of significance

4.3.3.3 SIGNIFICANCE CRITERIA. [1]

As a Subsequent EIR to the 2010 RSP EIR, this analysis only evaluates the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

[1] Less than significant and no impact determinations for potential Biological Resources impacts of the proposed Project are listed in Table 1-1 of Section 1.0 Executive Summary.

4.3.3.3.1 Sensitive Species, Habitat, and Migratory Species/Corridors

The following criteria for establishing the significance of potential impacts on biological resources were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

4.3.4 IMPACTS AND MITIGATION MEASURES

4.3.4.1 SENSITIVE SPECIES/HABITAT

4.3.4.1.1 Impact 4.3.1: Potential Project Impact on the Coastal California Gnatcatcher

Biological site surveys in 2008 observed no CAGN, and focused surveys conducted in 2006 for CAGN in the interior of the RSP area were also negative (PCR 2006a). However, at that time it was determined that some moderately suitable habitat remains unsurveyed (MBA 2006a). The RSP area is not designated as critical habitat by the USFWS (2000, 2003). However, the RSP area is immediately adjacent to critical habitat for this species. The nearest record of this species is three miles to the north.

The Habitat Assessment Update report prepared in September 2016 (Michael Baker International) included an assessment of the potential for CAGN in the RSP area (Appendix D). The CNDDB query for the 2014 Habitat Assessment Update documented twelve (12) known occurrence records for California gnatcatcher in the *Cucamonga Peak, Devore*, and *San Bernardino North* quadrangles. All twelve sightings occurred in the 1990s. Of these, only one is located on the valley floor and occurred within a two mile radius of the Project area. The remaining eleven (11) sightings are off the valley floor, with seven (7) in the foothills of the San Gabriel Mountains and four (4) in Lytle Creek and Cajon Wash at the base of Cajon Pass. There are more recent sightings in eBird[2] documenting six (6) California gnatcatcher sightings between 2008 and 2013 within the *Cucamonga Peak, Fontana*, and *San Bernardino North* quadrangles. All sightings are off the valley floor, with 3 sightings in the foothills of the San Gabriel Mountains, two (2) sightings in the foothills of the Jurupa Mountains, and one (1) sighting in the foothills of the San Bernardino Mountains. All of these recent sightings are outside of a five mile radius of the Project area. The 2014 Habitat Assessment Update report also noted that focused surveys for California gnatcatcher were conducted on the Project area by PCR in 2006 and 2008 by MBA and that both surveys were negative.

According to the 2015 Habitat Assessment, the Project area is isolated from sage scrub habitats that occur north of the I-15 freeway. Ongoing development in north Rialto and Fontana has cut off connectivity and linkages of the Project area to sage scrub plant communities in the San Gabriel Mountains that could provide foraging, dispersal,

[2] http://ebird.org/content/ebird/

and nesting habitat for California gnatcatcher. The Project area is not located within federally designated Critical Habitat for California gnatcatcher. However, the project area does contain 194.4 acres of buckwheat scrub which is a habitat that is used by the California Gnatcatcher. Potential impacts to California Gnatcatchers is considered a significant impact. The 2010 Renaissance EIR includes mitigation that requires focused California gnatcatcher surveys on portions of the project area. The surveys are required prior to construction to determine if California gnatcatchers are present onsite before construction activities below. Implementation of Mitigation Measure BIO-1 would reduce potential impacts to less than significant because the presence or absence of California gnatcatchers would be confirmed prior to construction activities. It should be noted that Mitigation Measure BIO-1 is from the 2010 Specific Plan EIR, but the text has been updated to reflect the proposed updates to the proposed Specific Plan Amendment numbering.

Mitigation Measure BIO-1: California Gnatcatcher

Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that focused surveys have been undertaken to determine the presence/absence of this species as indicated below. Surveys shall follow protocols established by the U.S. Fish and Wildlife Service (USFWS).

Portions of the Project area have been determined to contain suitable habitat for California Gnatcatcher (CAGN) (Planning Areas 58, 104, 108, 110, 113, 114, 115, and 119, as appropriate). Prior to development of those planning areas, focused surveys must be undertaken to determine the presence/absence of this species. Surveys shall follow protocols established by the USFWS. In the event that CAGN is detected or observed within the disturbance footprint, avoidance, minimization, and mitigation measures shall be developed and implemented through consultation with the USFWS under Section 10 of the Federal Endangered Species Act (FESA) (or Section 7 as appropriate). At a minimum, mitigation measures will include the timing of construction activities outside of the breeding season (February 15 to August 31) and/or the purchase/conservation of offsite suitable habitat that is known to support CAGN at a minimum 1:1 ratio depending on the quality of habitat removed compared to the quality of habitat provided. Specific ratios will be determined in consultation with USFWS. Prior to the issuance of occupancy permits, the developer shall provide evidence of applicable species mitigation agreements/permits to the Development Services Director/Planning Division.

4.3.4.1.2 Impact 4.3.2: Potential Project Impacts on the San Bernardino Kangaroo Rat

The northwestern portion of the RSP area contains marginal habitat for the federally endangered and State threatened SBKR (*Dipodomys merriamii*). Therefore, the proposed Project would potentially impact SBKR.

During the October 27, 2015 habitat assessment, field sign for kangaroo rat (K-rat) was observed within the disturbed mature RAFSS plant community and along the northern boundary of the Project area and could include sign from San Bernardino Kangaroo Rat (SBKR). K-rat sign is distinctive and readily noted in the field. Scattered sign including burrows, dusting baths, and tail drags were noted. The project area no longer supports an undisturbed native RAFSS plant community. The project area is no longer exposed to hydrological processes needed to maintain open and suitable SBKR habitat. Additionally, surrounding development has cut off any linkages or

corridors from known populations of SBKR in Lytle Creek and Cajon Wash located outside of the project area. Although the project area does not provide the requisite PCEs to sustain a SBKR populationover the long-term, a residual population of SBKR could still occur on-site. Focused surveys for San Bernardino kangaroo rat were conducted in 2005 within the northern portion of the Project area and results were negative. The scattered K-rat sign observed during the 2015 site investigation occurs in the same area that was surveyed in 2005. The observed K-rat sign is presumed to be Dulzura kangaroo rat, a non-listed K-rat species, and SBKR was determined to have a low potential for occurrence. However, potential impacts to SBKR are considered significant and mitigation is required. To reduce potential impacts to SBKR, mitigation is required for the proposed Project. With implementation of Mitigation Measure BIO-2 as identified below, potential impacts would be reduced to a less-than-significant level.

Mitigation Measure BIO-2: San Bernardino Kangaroo Rat

Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that focused surveys have been completed by a qualified biologist to determine the presence/absence of San Bernardino Kangaroo Rat (SBKR) in areas of suitable habitat within the RSP Amendment Area. Surveys shall follow protocols established by the USFWS.

In the event that SBKR is detected or observed within the disturbance footprint, avoidance, minimization, and mitigation measures shall be developed and implemented through consultation with the USFWS under Section 10 of the FESA (or Section 7 if appropriate). At a minimum, mitigation measures will include the purchase/conservation of offsite suitable habitat that is known to support SBKR at a minimum 1:1 ratio depending on the quality of habitat removed compared to the quality of habitat provided. Specific ratios will be determined in consultation with USFWS. Prior to the issuance of occupancy permits, the developer shall provide copies of applicable species mitigation agreements or permits to the Development Services Director/Planning Division.

4.3.4.1.3 Impact 4.3.3: Potential Project Impacts on the Burrowing Owl

The RSPA area provides suitable nesting, foraging, and dispersing habitat for the western burrowing owl (*Athene cunicularia*) (BUOW). The development of the RSPA area as envisioned by the RSPA would effectively remove all suitable habitat permanently. Therefore, the proposed Project is expected to impact BUOW.

BUOW have been observed on the site during biological surveys in 2014 and 2015in the central portion of the RSP area. Since BUOW has been observed breeding onsite and suitable habitat is present, BUOW is considered present onsite. Impacts to BUOW are considered potentially significant.

The Project area is dominated by low-growing open vegetation that allows for line-of-sight observation favored by burrowing owl. Three burrowing owls were detected during the 2015 Habitat Assessment (Figure 4.3-1, *Burrowing Owl Locations*). Further, multiple burrows containing sign (pellets, feathers, castings, or white wash) that have the potential to provide suitable nesting opportunities for burrowing owls were observed on the Project area.

In accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation, prior to the start of development activities, Mitigation Measure BIO-3, requires a burrowing owl focused presence/absence survey. If burrowing owl

continue to occupy the Project area, a burrowing owl relocation plan will be required. Since all suitable BUOW habitat is proposed to be removed, passive relocation is not appropriate and an active relocation strategy would need to be developed. The active relocation plan would need to be prepared and submitted to CDFW for review and approval prior to commencement of any vegetation clearing/grubbing, grading, and construction activities in areas that are known to support BUOW. The burrowing owl relocation plan shall outline methods to capture and relocate any burrowing owls inhabiting the Project area, provide a long-term management plan for an approved BUOW receiver site, and provide funding assurances for implementation of the long-term management plan.

Mitigation Measure BIO-3: Burrowing Owls

Prior to the issuance of grading permits and/or an action that would result in project site disturbance (whichever occurs first) (including but not limited to discing and demolition activities), the applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that focused clearance surveys have been completed to determine the presence/absence of burrowing owls (BUOW). Pre-construction surveys for BUOW shall be required in accordance with protocols established by California Department of Fish and Wildlife (CDFW) before the start of grading activities to confirm the absence of BUOW from the site. If the survey determine the BUOW to be present, protective measures shall be required to ensure compliance with the Migratory Bird Treaty Act and other applicable CDFW Code requirements and include, but are not limited to the following:

- Occupied BUOW shall not be disturbed during nesting season unless a qualified biologist verifies through non-invasive methods that either 1) the birds have not begun egg-laying or incubation or 2) that juveniles from the occupied burrows are foraging independently and are capable of an independent survival flight.

- All relocation shall be approved by the CDFW. The permitted biologist shall monitor relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the CDFW within 30 days following completion of the relocation and monitoring of the BUOW.

- A BUOW Long-term Management Plan (LTMP) shall be prepared by a qualified biologist and submitted to the CDFW for review and approval prior to relocation of owls. The BUOW LTMP shall describe proposed relocation, biological monitoring, and long-term management. The plan shall include the number and location(s) of occupied BOUW sites and details on suitable habitat at the receiver site selected and approved for relocation. The LTMP shall also describe specific procedures to compensate for impacts to BUOW/occupied burrows at the Project area. Such procedures may include, but are not limited to, the purchase/conservation of offsite suitable habitat that is known to support BUOW at a minimum 1:1 ratio depending on the quality of habitat removed compared to the quality of habitat provided. Specific ratios will be

determined in consultation with CDFW. Prior to the issuance of occupancy permits, the developer shall provide copies of applicable species mitigation agreements/permits to the Development Services Director/Planning Division.

4.3.4.1.4 Impact 4.3.4: Potential Project Impacts on Sensitive Plant Species

Focused plant surveys were last conducted in 2006 with negative results. A focused habitat suitability assessment for sensitive plant species, including Plummer's mariposa-lily, Parry's spineflower, mesa horkelia, and Robinson's pepper-grass was conducted for the project area in September 2016, by Michael Baker International.

Plummer's mariposa lily was not observed on-site during the 2016 habitat suitability assessment. The habitat suitability assessment determined that approximately 66.5 acres of the disturbed mature RAFSS provides moderate quality habitat, 140.9 acres of buckwheat scrub provides low quality habitat, and approximately 296.4 acres of habitat are unsuitable for Plummer's mariposa lily. Based on an assessment of individual characteristics for each of these on-site plant communities, species requirements, and historic records, it was concluded that Plummer's mariposa lily is not likely to be present on-site.

Parry's spineflower was not observed on-site during the 2016 habitat suitability assessment. The habitat suitability assessment determined that approximately 66.5 acres of the disturbed mature RAFSS provides moderate quality habitat, 140.9 acres of buckwheat scrub provides low quality habitat, and 296.4 acres of habitat are unsuitable for Parry's spineflower. Based on an assessment of individual characteristics for each of these on-site plant communities, species requirements, and historic records, it was concluded that Plummer's mariposa lily is not likely to be present on-site.

Mesa horkelia was not observed on-site during the 2016 habitat suitability assessment. Based on the results of the suitability assessment it was determined that the site provides approximately 207.46 acres of low quality habitat and 296.42 acres of unsuitable habitat. The site generally does not contain suitable habitat for this species and mesa horkelia has not been observed in the immediate vicinity of the project site since 1885. As a result, this species is presumed absent from the project site.

Robsinson's peppergrass was not observed on-site during the 2016 habitat suitability assessment. Based on the results of the suitability assessment it was determined that the site provides approximately 207.4 acres of low quality habitat and 296.4 acres of unsuitable habitat. The site generally does not contain suitable habitat for this species and Robinson's peppergrass has not been observed in the immediate vicinity of the project site. As a result, this species is presumed absent from the project site.

Based on habitat requirements for specific special-status plant species and the availability and quality of on-site habitats, it was determined that the project site has an overall low to moderate potential to support Plummer's mariposa-lily and Parry's spineflower. Mesa horkelia and Robinson's peppergrass are presumed absent from the project site due to lack of any recent observations on the project site and within the general vicinity of the project site as well as the absence of suitable habitat characteristics on-site. As such, potential impacts on mesa horkelia and Robsinson's pepper grass are considered less than significant and further focused plant surveys for mesa horkelia and Robsinson's pepper grass are required.

However, some habitat potential exists for Plummer's mariposa-lily and Parry's spineflower exist within the Project area. Potential impacts to these sensitive plant species is considered significant and mitigation is required. With implementation of Mitigation Measure BIO-4 as identified below, potential impacts would be reduced to a less-than-significant level.

Mitigation Measure BIO-4: Focused Plant Surveys

Prior to the issuance of grading permits or and/or an action that would result in project site disturbance (whichever occurs first) (including but not limited to discing and demolition activities), the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence from a qualified biologist that the project site does not contain suitable habitat for Plummer's mariposa-lily or Parry's spineflower. Should the project site be located within an area that does have potential for Plummer's mariposa-lily or Parry's spineflower, the applicant shall provide evidence that a focused plant survey for Plummer's mariposa-lily and Parry's spineflower has been conducted during the appropriate blooming season (generally May to July for Plummer's mariposa-lily and April to June for Parry's spineflower). If the survey results are negative for the presence of Plummer's mariposa-lily or Parry's spineflower, then no further action is required.

If the surveys are positive for the presence of Plummer's mariposa-lily or Parry's spineflower, then their distribution and associated natural plant community shall be documented and a formal report submitted to the California Department of Fish and Wildlife. These data will then be used to determine the level of impact to each identified species from project development. Impacts on sensitive plants shall be mitigated offsite at a minimum 2:1 ratio. Conservation credits for each of these species can be purchased at an approved conservation bank such as the Cajon Creek Conservation Bank.

4.3.4.1.5 Impact 4.3.4: Potential Project Impacts to Sensitive Plant Habitat

The project site is not located within federally designated Critical Habitat. The closest designated Critical Habitat is located approximately 1.38 miles northeast of the project site for San Bernardino kangaroo rat.

One sensitive plant community was observed on the Project area during the habitat assessment: RAFSS. However, this plant community is heavily disturbed and has been effectively cut-off from fluvial processes. Without the restoration of the fluvial processes, the disturbed mature RAFSS habitat and rocky soils that now occupy the Project area do not provide suitable habitat for sensitive biological resources. Nonetheless, the habitat is still considered to have some biological value, and development within the project area would result in the removal of approximately 63.4 acres of RAFSS habitat. Potential impacts to RAFSS are considered significant and mitigation is required. To reduce potential impacts to RAFSS, mitigation is required for the proposed Project. With implementation of Mitigation Measure BIO-5 as identified below, potential impacts would be reduced to a less-than-significant level.

Mitigation Measure BIO-5: Riversidian Alluvial Fan Sage Scrub

Prior to the issuance of grading permits, the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that preservation of RAFSS habitat with equal or better habitat value has been preserved at a suitable location where the long-term viability of the habitat can be assured. Satisfactory evidence includes, but is not limited to evidence that the appropriate amount (to be determined by the City of Rialto, the California Department of Fish and Wildlife [CDFW], and the project applicant) has been

purchased at an approved mitigation bank, or that a long-term conservation plan that has been developed and implemented as part of longer-term mitigation strategy for multiple projects. Any long-term conservation plan must be presented to the City of Rialto and CDFW for review and comment as part of any needed incidental take permits.

4.3.4.2 MIGRATORY SPECIES/CORRIDORS

Impact 4.3.4: Potential Project Impacts Migratory Birds

Due to the size of the RSPA area, the complexity of the habitat, and the secretive nesting grassland bird species that may be present (including the California horned lark and western meadowlark as determined by previous surveys conducted on the RSP area), the proposed Project would potentially impact migratory birds.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act and CDFW Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, nesting bird clearance surveys will be required prior to any vegetation removal or development that may disrupt the birds during the nesting season (generally from February 1 - August 31, but can vary annually based upon seasonal weather conditions). The pre-construction nesting bird clearance survey shall be conducted within 3 days prior to any ground disturbing activities. This clearance survey will ensure that no nesting birds will be disturbed during construction or vegetation removal activities. As long as development does not cause direct take of a bird or egg(s) or disrupt nesting behaviors, immediate protections would not be required. The biologist conducting the clearance survey should document a negative survey with a report indicating that no impacts to active avian nests will occur.

Therefore, to ensure potential impacts are reduced to a less-than-significant level, Mitigation Measure BIO-6 as described below applies to the proposed Project.

Mitigation Measure BIO-6: **Migratory Birds**

Prior to the issuance of grading permits and/or an action that would result in project site disturbance (whichever occurs first) (including but not limited to discing and demolition activities), the project applicant shall submit to the satisfaction of the Development Services Director/Planning Division, evidence that a pre-construction nesting bird survey has been conducted prior to any ground disturbing activities and removal of vegetation or other potential nesting habitat during the nesting period (generally February 1st to August 31st). If birds are found to be nesting inside or within 250 feet (500 feet for raptors) of the impact area, construction will need to be postponed, at the discretion of a qualified biologist, until it is determined that the nests are no longer active.

4.4 GREENHOUSE GAS EMISSIONS

4.4.1 INTRODUCTION

This section includes a summary of the state of climate change regulations, a description of the existing state of the science of climate change; an inventory of the approximate greenhouse gas emissions that would result from the proposed Project; a discussion of the significance threshold used to evaluate the impact of these GHG emissions; and an analysis of the potential cumulative impacts to which these GHGs would contribute. The description and analyses in this section are based on information contained in the 2010 RSP EIR, and in the Air Quality and Greenhouse Gas Analysis in September 2016 by LSA Associates, Inc. (LSA 2016), and are included in the appendices of this Environmental Impact Report (EIR). Potential effects are evaluated relative to the generation of greenhouse gas emissions and conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. All other significant thresholds and potential impacts to the proposed Project were addressed in the proposed Project's NOP (January 2015), which determined there would be no new or additional impacts, or that impacts would be less than significant, and therefore need not be further considered in this Recirculated Draft SEIR. Please refer to the proposed Project's NOP attached as Appendix A.

4.4.2 REGULATORY FRAMEWORK

4.4.2.1 FEDERAL

On April 2, 2007, the United States Supreme Court ruled that the Environmental Protection Agency (EPA) has the authority to regulate CO_2 emissions under the federal Clean Air Act. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the EPA commenced several actions in 2009 that are required to implement a regulatory approach to global climate change.

On September 30, 2009, the EPA announced a proposal that focuses on large facilities emitting over 25,000 tons of GHG emissions per year. These facilities would be required to obtain permits that would demonstrate they are using the best practices and technologies to minimize GHG emissions.

On December 7, 2009, the EPA Administrator signed a final action under the Clean Air Act, finding that six GHGs, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change. This EPA action does not impose any requirements on industry or other entities. However, the findings are a prerequisite to finalizing the GHG emission standards for light-duty vehicles discussed below.

On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a final joint rule to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The EPA is finalizing the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. The EPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile in model year 2016, equivalent to 35.5 miles per gallon (mpg).

4.4.2.2 STATE

From the 2010 Climate Action Team Report - California Climate Action Milestones. In 1988, Assembly Bill (AB) 4420 directed the California Energy Commission (CEC) to report on "how global warming trends may affect the State's energy supply and demand, economy, environment, agriculture, and water supplies" and offer "recommendations for avoiding, reducing and addressing the impacts." This marked the first statutory direction to a State agency to address climate change.

The California Climate Action Registry was created to encourage voluntary reporting and early reductions of GHG emissions with the adoption of Senate Bill (SB) 1771 in 2000. The CEC was directed to assist by developing metrics and identifying and qualifying third-party organizations to provide technical assistance and advice to GHG emission reporters. The next year, SB 527 amended SB 1771 to emphasize third-party verification.

SB 1711 also contained several additional requirements for the CEC including: updating the State's GHG inventory from an existing 1998 report and continuing to update it every 5 years; acquiring, developing, and distributing information on global climate change to agencies and businesses; establishing a State interagency task force to ensure policy coordination; and establishing a climate change advisory committee to make recommendations on the most equitable and efficient ways to implement climate change requirements. In 2006, AB 1803 transferred preparation of the inventory from the CEC to the CARB by AB 1803. CARB updates the inventory annually.

AB 1493, authored by Assembly Member Fran Pavley in 2002, directed CARB to adopt regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles. The so-called "Pavley" regulations, or Clean Car regulations, were approved by CARB in 2004. CARB submitted a request to the EPA to implement the regulations in December 2005. After several years of requests to the federal government, and accompanying litigation, this waiver request was granted on June 30, 2009. CARB has since combined the control of smog-causing pollutants and GHG emissions to develop a single coordinated package of standards known as Low Emission Vehicles III. It is expected that these regulations will reduce GHG emissions from State-passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. AB 1493 also directed the State's Climate Action Registry to adopt protocols for reporting reductions in greenhouse emissions from mobile sources prior to the operative date of the regulations.

SB 812 added forest management practices to the State's Climate Action Registry members' reportable emissions actions. It also directed the Registry to adopt forestry procedures and protocols to monitor, estimate, calculate, report, and certify CO stores and CO_2 emissions that resulted from the conservation and conservation-based management of forests in the State.

The California Renewable Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20 percent of their retail sales with renewable power by 2017, was established by SB 1078 in 2002. The renewable portfolio standard was accelerated to 20 percent by 2010 by SB 107 in 2006. The program was subsequently expanded by the renewable electricity standard approved by the ARB in September 2010, requiring all utilities to meet a 33 percent target by 2020. The renewable electricity standard is projected to reduce GHG emissions from the electricity sector by at least 12 million metric tons of carbon dioxide equivalent (MMT CO_2e) in 2020.

In December 2004, Governor Arnold Schwarzenegger signed Executive Order (EO) S-20-04, which set a goal of reducing energy use in State-owned buildings by 20 percent by 2015 (from a 2003 baseline) and encouraged cities,

counties, schools, and the private sector to take all cost-effective measures to reduce building electricity use. This action built upon the State's strong history of energy efficiency efforts that have saved Californians and the State businesses energy and money for decades. They are a cornerstone of GHG reduction efforts.

EO S-3-05 (June 2005) established GHG targets for the State such as: returning to year 2000 emission levels by 2010; 1990 levels by 2020; and 80 percent below 1990 levels by 2050. It directed the Secretary of CalEPA to coordinate efforts to meet the targets with the heads of other State agencies. This group became the Climate Action Team.

California's Million Solar Roofs plan was boosted by the passage of SB 1 in 2006. The plan is estimated to result in 3,000 megawatts (MW) of new electricity generating capacity and avoidance of 2.1 million metric tons of CO_2 equivalent (MMT CO_2e) emissions. The main components of the bill included expanding the program to more customers, requiring the State's municipal utilities to create their own solar rebate programs, and making solar panels a standard option on new homes.

The California Global Warming Solutions Act of 2006, best known by its bill number AB 32, created a first-in-the country comprehensive program to achieve real, quantifiable, and cost-effective reductions in GHGs. The law set an economy-wide cap on the State's GHG emissions at 1990 levels by 2020. It directed the CARB to prepare, approve, and implement a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions. EO S-20-06, signed in October 2006, directed the Secretary for Environmental Protection to establish a Market Advisory Committee of national and international experts. The committee made recommendations to the CARB on the design of a market-based program for GHG emissions reduction. The ARB adopted the first Scoping Plan, describing a portfolio of measures to achieve the target, in December 2008. All of the major regulatory measures necessary for meeting the 2020 emissions target were adopted by December 2010.

CARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies the next steps for California's climate change strategy. The Update shows how California continues on its path to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emission reductions. The report establishes a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities for the next several years. The Update does not set new targets for the State, but describes a path that would achieve the long-term 2050 goal of EO S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050.

The governors of California, Arizona, New Mexico, Oregon, and Washington entered into a memorandum of understanding in February 2007 establishing the Western Climate Initiative. The governors agreed to set a regional goal for emissions reductions consistent with state-by-state goals; develop a design for a regional market-based multi-sector mechanism to achieve the goal; and participate in a multi-state GHG registry. The Initiative has since grown to include Montana, Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario, and Québec.

California is implementing the world's first Low Carbon Fuel Standard for transportation fuels, pursuant to both EO S-01-07, signed January 2007, and AB 32. The standard requires a reduction of at least 10 percent in the CO intensity of the State's transportation fuels by 2020. This reduction is expected to reduce GHG emissions in 2020 by 17.6 MMT CO_2e. Also in 2007, AB 118 created the Alternative and Renewable Fuel and Vehicle Technology Program. The CEC and the ARB administer the program. This act provides funding for alternative fuel and vehicle technology research, development, and deployment in order to attain the State's climate change goals, achieve

the State's petroleum reduction objectives and clean air and GHG emission reduction standards, develop public-private partnerships, and ensure a secure and reliable fuel supply.

In addition to vehicle emissions regulations and the low carbon fuel standard, the third effort reducing GHG emissions from transportation is the reduction in the demand for personal vehicle travel (i.e., vehicle miles traveled or VMT). This measure was addressed in September 2008 through the Sustainable Communities and Climate Protection Act of 2008, or SB 375. The enactment of SB 375 initiated an important new regional land use planning process to mitigate GHG emissions by integrating and aligning planning for housing, land use, and transportation for California's 18 metropolitan planning organizations (MPOs). The bill directed CARB to set regional GHG emission reduction targets for most areas of the State. It also contained important elements related to federally mandated regional transportation plans and the alignment of State transportation and housing planning process.

Also codified in 2008, SB 97 required the Governor's Office of Planning and Research (OPR) to develop GHG emissions criteria to be used in determining project impacts under the California Environmental Quality Act (CEQA). These criteria were developed in 2009 and went into effect in 2010.

EO S-13-08 launched a major initiative for improving the State's adaptation to climate impacts from sea level rise, increased temperatures, shifting precipitation, and extreme weather events. It ordered a California Sea Level Rise Assessment Report to be requested from the National Academy of Sciences. It also ordered the development of a Climate Adaptation Strategy. The strategy, published in December 2009, assesses the State's vulnerability to climate change impacts, and outlines possible solutions that can be implemented within and across State agencies to promote resiliency. The Strategy focused on seven areas: public health, biodiversity and habitat, ocean and coastal resources, water management, agriculture, forestry, and transportation and energy infrastructure.

On April 29, 2015, Governor Edmund G. Brown Jr. issued EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. EO B-30-15 aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris set for late 2015. EO B-30-15 sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050, and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO_2e. EO B-30-15 also requires the State's climate adaptation plan to be updated every 3 years and for the State to continue its climate change research program, among other provisions. As with EO S-3-05, EO B-30-15 is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to make post-2020 targets and requirements a mandate is in process in the State Legislature.

The initiatives, executive orders, and statutes outlined above comprise the major milestones in California's efforts to address climate change through coordinated action on climate research, GHG mitigation, and climate change adaptation. There are numerous other related efforts that have been undertaken by State agencies and departments to address specific questions and programmatic needs. The Climate Action Team coordinates these efforts and others, which comprise the State's climate program. The rest of the report describes these efforts.

4.4.2.3 LOCAL

City of Rialto General Plan

The City of Rialto General Plan includes the following applicable policies related to air quality:

Goal 2-38: *Mitigate against climate change.*

- ***Policy 2-38.1:*** *Consult with State agencies, SCAG, and the San Bernardino Associated Governments (SANBAG) to implement AB 32 and SB 375 by utilizing incentives to facilitate infill and transit-oriented development.*
- ***Policy 2-38.2:*** *Encourage development of transit-oriented and infill development, and encourage a mix of uses that foster walking and alternative transportation in Downtown and along Foothill Boulevard.*
- ***Policy 2-38.3:*** *Provide enhanced bicycle and walking infrastructure, and support public transit, including public bus service, the Metrolink, and the potential for Bus Rapid Transit (BRT).*

Regional Greenhouse Gas Reduction Plan

The San Bernardino County Regional Greenhouse Gas Reduction Plan (March 2014) provides San Bernardino County Associated Governments (SANBAG) and the 21 participating cities, including Rialto, with an inventory of GHG emissions, targets, and provides reduction strategies for each City, which are the first two steps in a six-step process of climate action planning. SanBAG published the SANBAG CAP Implementation Tools Final Report on CAP Implementation Strategies in October 2015 to provide tools for the Participating Cities to use in the development, adoption, implementation, and monitoring of city-specific Climate Action Plans (CAPs), which will fulfills the remaining steps in the climate action planning process.

4.4.3 EXISTING CONDITIONS

4.4.3.1 GLOBAL CLIMATE CHANGE AND ITS SOURCES

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (such as precipitation or wind) that last for an extended period of time. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures.

Climate change refers to any change in measures of weather (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from natural factors, such as changes in the sun's intensity; natural processes within the climate system (e.g., changes in ocean circulation) or human activities, such as the burning of fossil fuels, land clearing, or agriculture. The primary observed effect of global climate change has been a rise in the average global tropospheric[1] temperature of 0.36°F per decade, determined from

[1] The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming may occur, which may induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of the State could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns, or more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones. Specific effects in the State might include a decline in the Sierra Nevada snowpack, erosion of the State's coastline, and seawater intrusion in the San Joaquin Delta.

Global surface temperatures have risen by 1.33°F ±0.32°F over the last 100 years (1906 to 2005). The rate of warming over the last 50 years is almost double that over the last 100 years (IPCC 2013). The latest projections, based on state-of-the art climate models, indicate that temperatures in the State are expected to rise 3–10.5°F by the end of the century (State of California 2013). The prevailing scientific opinion on climate change is that "most of the warming observed over the last 60 years is attributable to human activities" (IPCC 2013). Increased amounts of CO_2 and other GHGs are the primary causes of the human-induced component of warming. The observed warming effect associated with the presence of GHGs in the atmosphere (from either natural or human sources) is often referred to as the greenhouse effect.[2]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:[3]

- Carbon Dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which some scientist believe can cause causing global warming. While GHGs produced by human activities include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6, are completely new to the atmosphere. Certain other gases, such as water vapor, are short-lived in the atmosphere as compared to these GHGs that remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes,

[2] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the amount of heat that escapes, GHGs like CO_2, CH_4, and N_2O in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.
[3] The GHGs listed are consistent with the definition in Assembly Bill 32 (Government Code 38505), as discussed later in this section.

such as oceanic evaporation. For the purposes of this air quality study, the term "GHGs" will refer collectively to the six gases identified in the bulleted list provided above.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime"). GWP of each gas is measured relative to CO_2, the most abundant of the GHGs. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of metric tons[4] of "CO_2 equivalents" (MT CO_2e). For example, N_2O is 265 times more potent at contributing to global warming than CO_2. **Table 4.4-1** identifies the GWP for each type of GHG analyzed in this report.

Table 4.4-1 Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-year Time Horizon)
Carbon Dioxide (CO_2)	~100	1
Methane (CH_4)	12	28
Nitrous Oxide (N_2O)	121	265

Source: *First Update to the Climate Change Scoping Plan: Building on the Framework* (ARB 2014). Website: http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf, accessed October 2015.

The following discussion summarizes the characteristics of the six primary GHGs.

Carbon Dioxide (CO_2). In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (breathing) of humans, animals, and plants; volcanic outgassing; decomposition of organic matter; and evaporation from the oceans. Human-caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. The Earth maintains a natural carbon balance, and when concentrations of CO_2 are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO_2 to the atmosphere. Natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of human-made CO_2, and consequently the gas is building up in the atmosphere. The concentration of CO_2 in the atmosphere has risen approximately 30 percent since the late 1800s (NAST 2001).

The transportation sector remains the largest source of GHG emissions in 2012 with 36 percent of the State's GHG emission inventory. The largest emissions category within the transportation sector is on-road, which consists of passenger vehicles (cars, motorcycles, and light-duty trucks) and heavy-duty trucks and buses. Emissions from on-road constitute over 92 percent of the transportation sector total. Industry and electricity generation were the State's second- and third-largest categories of GHG emissions, respectively.

[4] A metric ton is equivalent to approximately 1.1 tons.

Methane (CH_4). CH_4 is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources of CH_4 include fires, geologic processes, and bacteria that produce CH_4 in a variety of settings (most notably, wetlands) (EPA 2010). Anthropogenic sources include rice cultivation, livestock, landfills and waste treatment, biomass burning, and fossil fuel combustion (burning of coal, oil, and natural gas, etc.). As with CO_2, the major removal process of atmospheric CH_4—a chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH_4 concentrations in the atmosphere are increasing.

Nitrous Oxide (N_2O). N_2O is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. N_2O is also a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion sources emit N_2O. The quantity of N_2O emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N_2O emissions in the State.

Hydrofluorocarbons (HFC), Perfluorocarbons (PFC), and Sulfur Hexafluoride (SF_6). HFCs are primarily used as substitutes for O_3-depleting substances regulated under the Montreal Protocol.[5] PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in the State; however, the rapid growth in the semiconductor industry, which is active in the State, has led to greater use of PFCs. However, there are no known project-related emissions of these three GHGs, these substances are not discussed further in this analysis.

4.4.3.2 EMISSION SOURCES AND INVENTORIES

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, national, State, and local GHG emission inventories. However, because GHGs persist for a long time in the atmosphere (see Table 4.4-1), accumulate over time, and are generally well mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

Global Emissions. Worldwide emissions of GHGs in 2012 totaled 29 billion MT CO_2e per year (MT CO_2e/yr) (UNFCCC 2015). Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).

United States Emissions. In 2013, the United States emitted approximately 6.7 billion MT CO_2e, down from 7.3 billion MT CO_2e in 2007. Of the six major sectors nationwide—electric power industry, transportation, industry, agriculture, commercial, and residential—the electric power industry and transportation sectors combined account for approximately 70 percent of the GHG emissions; the majority of the electric power industry and all of the transportation emissions are generated from direct fossil fuel combustion. In 2013, the total United States GHG emissions were approximately 9.0 percent less than 2005 levels (EPA 2014).

[5] The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for O_3 depletion and which are also potent GHGs.

State of California Emissions. According to CARB emission inventory estimates, the State emitted approximately 459 million metric tons of CO_2e (MMT CO_2e) emissions in 2013. This is a decrease of 1.5 MMT CO_2e from 2012 and a 7 percent decrease since 2004 (ARB 2015b).

CARB estimates that transportation was the source of approximately 37 percent of the State's GHG emissions in 2013, followed by electricity generation (both in-State and out-of-State) at 20 percent and industrial sources at 20 percent. The remaining sources of GHG emissions were residential and commercial activities at 9 percent, agriculture at 8 percent, high-GWP gases at 4 percent, and recycling and waste at 2 percent (CARB 2015b).

CARB is responsible for developing the State GHG Emission Inventory. This inventory estimates the amount of GHGs emitted to and removed from the atmosphere by human activities within the State and supports the AB 32 Climate Change Program. CARB's current GHG emission inventory covers the years 1990–2013 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, agricultural lands).

CARB staff have projected statewide unregulated GHG emissions for 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, at 509 MMT CO_2e. GHG emissions from the transportation and electricity sectors as a whole are expected to increase but remain at approximately 30 percent and 32 percent of total CO_2e emissions, respectively (CARB 2014).

4.4.3.3 THRESHOLDS FOR POLLUTANTS THAT AFFECT GLOBAL CLIMATE CHANGE

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

The City has adopted Appendix G of the State CEQA Guidelines as the significance threshold for GHG emissions. A project would normally have a significant effect on the environment if the Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

On December 30, 2009, the Natural Resources Agency adopted amendments to the State CEQA Guidelines that became effective on March 18, 2010. The amendments to the State CEQA Guidelines include new requirements to evaluate GHG emissions. Pursuant to the amended State CEQA Guidelines, a lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the Project may increase (or reduce) GHG emissions compared to the existing environmental setting;
2. Whether the Project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the Project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Currently, there is no statewide GHG emissions threshold that has been used to determine potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in the State.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. In the absence of any further developments from SCAQMD since this proposal in 2010, these draft interim proposed GHG emissions thresholds are used in this analysis for commercial and industrial uses. The applicable tier for this project is Tier 4. Tier 4 establishes a decision tree approach that includes compliance options for projects that have incorporated design features into the project and/or implement GHG mitigation measures, as follows:

- **Efficiency Target (2020 Targets)**
    - 4.8 MT CO_2e per service population (SP) for project-level threshold (land use emissions only) and total residual emissions not to exceed 25,000 million tons per year (mty) of CO_2e
    - 6.6 MT CO_2e per SP for plan-level threshold (all sectors)
- **Efficiency Target (2035 Targets)**
    - 3.0 MT CO_2e per SP for project level threshold
    - 4.1 mt CO2e per SP for plan level threshold

The County has adopted the San Bernardino County Regional Greenhouse Gas Reduction Plan (March 2014) as a climate action plan (CAP). The County's CAP provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate. The CAP recommends GHG emissions targets that are consistent with the reduction targets of the State of California. The County CAP states the following (Introduction, page 1-2):

> Program EIR to Streamline CEQA Compliance: The State California Environmental Quality Act (CEQA) Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. CEQA Guidelines (Section 15183.5) also allow individual projects to tier off of a larger (and certified) GHG reduction plan. Thus, individual projects do not need to each conduct a GHG analysis as part of CEQA if they can demonstrate consistency with the larger plan. By completing a common basic plan and a subsequent program EIR, all projects in the region can tier off the EIR and be considered less than significant under CEQA if they show consistency with the regional reduction plan.

The CAP is intended to reduce the County's impact on climate change. Within the CAP, the City of Rialto selected a goal to reduce its community GHG emissions to a level that is 15% below its 2008 GHG emissions level by 2020. The City will meet this goal through a combination of state (~69%) and local (~31%) efforts. The Pavley vehicle standards, the state's low carbon fuel standard, the RPS, and other state measures will reduce GHG emissions in Rialto's on-road, solid waste and building energy sectors in 2020. An additional reduction of 71,504 $MTCO_2e$ will be achieved primarily through the following local measures in order of importance: Implement SB X7-7 (Water-4); Solar Energy for Warehouse Space (Energy-6); and the GHG Performance Standard for New Development (PS-1). Rialto's reduction plan has the greatest impacts on GHG emissions in the solid waste management, building

energy, and on-road transportation sectors. The RSP/RSPA needs to include those GHG reduction measures into project design features to be consistent with the County CAP.

The 2010 Rialto General Plan contains many transportation and land use-related actions to reduce vehicle-related GHG emissions in the City of Rialto. The General Plan supports the goals of SB 375 and the Sustainable Communities Strategy (Transportation-1) through a wide range of actions, which include the following:

- Encourage development of transit-oriented and infill development, and encourage a mix of uses that fosters walking and alternative transportation in Downtown and along Foothill Boulevard.
- Establish a balanced land use pattern and facilitate developments that provide jobs for city residents in order to reduce vehicle trips citywide.
- Support a complementary mix of land uses, including residential densities to support a multimodal transit node at the rail station.
- Design new streets to be pedestrian friendly. Require developers to investigate and provide features that will enhance the pedestrian environment.
- Implement the Bikeway Master Plan, which promotes a safe and efficient network of bikeways for recreational and commuter use within the city.
- Provide equal access to reliable and convenient public transit services to all residents and businesses.
- Promote activity centers and transit-oriented development projects around the Rialto Metrolink Station and in Downtown.
- Require that new development projects incorporate design features that encourage ridesharing, transit use, park-and-ride facilities, and bicycle and pedestrian circulation.

Based on the foregoing, the following thresholds of significance have been used:

Threshold of Significance No. 1: Would the project interfere with the State of California's implementation of greenhouse gas emissions targets as expressed in AB 32, EO S-3-05 and EO B-30-15?

- Would the project interfere with the State's implementation of GHG reduction plans described in the ARB Revised Scoping Plan, including the State providing for 12,000 megawatts [MW] of renewable distributed generation by 2020, the California Building Commission mandating net zero energy homes in the building code after 2020, or existing building retrofits under AB 758. If not, the project would not interfere with the State's implementation of Executive Order B-30-15's target of reducing statewide GHG emissions to 40% below 1990 levels by 2030 or Executive Order S-3-05's target of reducing statewide GHG emission to 80 percent below 1990 levels by 2050, and impacts would therefore be less than significant.

Threshold of Significance No. 2: Would the project interfere with implementation of California's Green Building Standards, the County's Climate Action Plan, or other applicable plans, policies or regulations adopted for purposes of reducing GHG emissions?

4.4.3.4 SIGNIFICANCE CRITERIA[6]

As a Subsequent EIR to the 2010 RSP EIR, this analysis only evaluates the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

4.4.3.4.1 Greenhouse Gas Inventory for the Proposed Project

The following criteria for establishing the significance of potential impacts on air quality were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

"Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment"

4.4.3.4.2 Applicable Plan, Policy or Regulation

The following criteria for establishing the significance of potential impacts on air quality were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

"Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases"

4.4.4 IMPACTS AND MITIGATION MEASURES

4.4.4.1 GHG INVENTORY FOR THE PROPOSED PROJECT

4.4.4.1.1 Impact 4.4.1: Would The Project Generate Greenhouse Gas Emissions That May Have a Significant Impact on the Environment

Renaissance Specific Plan Amendment

Construction Impacts

Since both the approved RSP and the currently proposed RSPA are in program-level planning review, construction would not occur under this plan comparison. Therefore, no comparison of construction emissions of GHG between the two plans was conducted.

Operational Impacts

In order to evaluate the potential GHG emissions of the RSPA, the Project trip generation for the RSPA was compared to that of the approved 2010 RSP. In order to conduct a meaningful comparison, GHG emissions from both scenarios were calculated with the same modeling program (i.e., CalEEMod, Version 2013.2.2). **Table 4.4-2** shows the GHG emissions for the approved RSP and the currently proposed RSPA (which includes the Renaissance Marketplace and Planning Area 108). As can be seen from Table 4.4-2, operational emissions for GHG would exceed the SCAQMD proposed Tier 4 thresholds of 6.6 MT CO_{2e} per Service Population (SP) where the SP would be 17,844. The proposed RSPA would increase the GHG emissions by 294,242 MT CO_2e/yr compared to that of the approved 2010 RSP. The primary reasons for the increase in greenhouse gas emissions between the 2010 RSP and the Specific Plan amendment area is a result of the increased amount of warehouse uses (and decrease in residential uses) within the specific plan area. The increased amount of warehouse area results in a greater

[6] Less than significant and no impact determinations for potential Greenhouse Gas Emissions impacts of the proposed Project are listed in Table 1-1 of Section 1.0 Executive Summary.

number of truck trips and longer trip lengths which increases the greenhouse gas emissions from transportation sources. The increased amount of warehouse use also results in increased amounts of greenhouse gas emissions from energy sources. The results for both the 2010 Renaissance Specific Plan EIR and the Specific Plan amendment are compared in Table 4.4-2. As was the case in the 2010 RSP EIR, the proposed project would exceed SCAQMD significance thresholds for greenhouse gas emissions and these impacts are considered significant.

Table 4.4-2 Long-Term Operational GHG Emissions – 2010 Approved RSP and Proposed RSPA

Source	Pollutant Emissions (MT/yr)					
	Bio-CO_2	**NBio-CO_2**	**Total CO_2**	**CH_4**	**N_2O**	**CO_2e**
2010 Approved RSP Non-Warehouse Land Uses						
Area Sources	0	428	428	0	<0.01	432
Energy Sources	0	14,920	14,920	1	0	14,984
Mobile Sources	0	66,299	66,299	3	0	66,351
Waste Sources	4,366	0	4,366	258	0	9,785
Water Usage	1,202	15,001	16,203	124	3	19,760
2010 Approved RSP Warehouse Land Uses						
Area Sources	0	0	0	<0.01	0	0
Energy Sources	0	18,203	18,203	1	0	18,281
Mobile Sources (Trucks)	0	174,332	174,332	1	0	174,357
Mobile Sources (Passenger Cars)	0	22,567	22,567	1	0	22,592
Waste Sources	1,151	0	1,151	68	0	2,580
Water Usage	443	5,199	5,642	46	1	6,950
2010 Approved RSP Total Emissions	**7,163**	**316,948**	**324,111**	**502**	**5**	**336,071**
SCAQMD Recommended Tier 4 Threshold for an 18,785 SP						**123,981**
Exceed SCAQMD Recommended GHG Emissions Threshold?						**Yes**
Proposed RSPA Non-Warehouse Land Uses						
Area Sources	0	324	324	0.03	<0.01	327
Energy Sources	0	13,487	13,487	0.56	0.15	13,544
Mobile Sources	0	66,284	66,284	2.5	0	66,338
Waste Sources	665	0	665	39	0	1,490
Water Usage	124	2,330	2,453	13	0.32	2,822
Proposed RSPA Warehouse Land Uses						
Area Sources	0	0.36	0.36	<0.01	0	0.39
Energy Sources	0	42,414	42,414	1.8	0.46	42,594
Mobile Sources (Trucks)	0	424,856	424,856	2.8	0	424,916
Mobile Sources (Passenger Cars)	0	54,996	54,996	3.0	0	55,059
Waste Sources	2,806	0	2,806	166	0	6,288
Water Usage	1,079	12,671	13,750	111	2.7	16,936
Proposed RSPA Total Emissions	**4,673**	**617,362**	**622,035**	**340**	**3.7**	**630,313**
SCAQMD Recommended Tier 4 Threshold for a 17,844 SP						**117,770**
Exceed SCAQMD Recommended GHG Emissions Threshold?						**Yes**
Net Change	**0**	**300,414**	**297,924**	**0**	**0.06**	**294,242**
New Significant Impacts?						**No**

Bio-CO_2 = biologically generated CO_2
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated CO_2
RSP = Renaissance Specific Plan
RSPA = Renaissance Specific Plan Amendment
SCAQMD = South Coast Air Quality Management District
SP = service population

Source: Compiled by LSA Associates, Inc. (2016).

Renaissance Marketplace

Construction and operation of the Renaissance Marketplace would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the operation (as opposed to during its construction) of the Renaissance Marketplace. Typically, more than 80 percent of the total energy consumption takes place during the use of buildings, and less than 20 percent of energy is consumed during construction (UNEP 2007).

Overall, the following activities associated with the proposed Renaissance Marketplace could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction of the Renaissance Marketplace, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy intensive. Preliminary estimates indicate that the total energy used to pump and treat this water exceeds 6.5 percent of the total electricity used in the State per year (State of California 2008).
- **Solid Waste Disposal:** Solid waste generated by the Renaissance Marketplace could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed Renaissance Marketplace would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

GHG emissions associated with the Renaissance Marketplace would occur over the short-term from construction activities and would consist primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with Renaissance Marketplace-related new vehicular trips and stationary-source emissions (e.g., natural gas used for heating and electricity usage for lighting). Preliminary guidance from the Office of Planning and Research (OPR) and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities. The calculation presented below includes construction emissions in terms of CO_2 and annual CO_2e GHG emissions from increased energy consumption, water usage, solid waste disposal, and estimated GHG emissions from vehicular traffic that would result from implementation of the Renaissance Marketplace.

GHG emissions generated by the proposed Renaissance Marketplace would predominantly consist of CO_2. In comparison to criteria air pollutants such as O_3 and PM_{10}, CO_2 emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs (e.g., CH_4) are important with respect to global climate change, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO_2.

Construction Impacts

Construction activities produce combustion emissions from various sources (e.g., site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the Renaissance Marketplace site, asphalt paving, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities on the Renaissance Marketplace site would vary daily as construction activity levels change. **Table 4.4-3** lists the annual CO_2 emissions for each of the planned construction phases for the Renaissance Marketplace.

Table 4.4-3 Short-Term Regional Construction GHG Emissions – Renaissance Marketplace

Construction Phase	Peak Annual Emissions (MT/yr)				Total Emissions per Phase (MT CO_2e)
	CO_2	CH_4	N_2O	CO_2e	
2017					
Site Preparation	39	0.011	0	39	39
Grading	60	0.018	0	61	61
Building Construction	2,300	0.13	0	2,400	2,400
Architectural Coating	230	0.014	0	230	230
2018					
Building Construction	830	0.047	0	830	830
Architectural Coating	90	0.0052	0	91	91
Paving	49	0.014	0	49	49
Total Construction Emissions					**3,700**
Total Construction Emissions Amortized over 30 years					**123**

CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT = metric tons
MT/yr = metric tons per year
N_2O = nitrous oxide

Source: Compiled by LSA Associates, Inc. (2016).

Operational Impacts

Long-term operation of the proposed Renaissance Marketplace would generate GHG emissions from area and mobile sources, and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include Renaissance Marketplace-generated vehicle trips associated with on-site facilities and customers/visitors to the Renaissance Marketplace Project area. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

The GHG emission estimates presented in **Table 4.4-4** show the emissions associated with the level of development envisioned by the proposed Renaissance Marketplace at opening. Area sources include architectural coatings, consumer products, hearth, and landscaping. Energy sources include natural gas consumption for heating and cooking.

Table 4.4-4 Long-Term Operational GHG Emissions – Renaissance Marketplace

Source	Pollutant Emissions (MT/yr)					
	Bio-CO_2	**NBio-CO_2**	**Total CO_2**	**CH_4**	**N_2O**	**CO_2e**
Construction emissions amortized over 30 years	0	123	123	0.0081	0	123
Operational Emissions						
Area Sources	0	0.094	0.094	0.00026	0	0.099
Energy Sources	0	5,700	5,700	0.22	0.069	5,700
Mobile Sources	0	18,000	18,000	0.71	0	18,000
Waste Sources	360	0	360	21	0	810
Water Usage	25	360	390	2.6	0.064	460
Total Project Emissions	**390**	**24,000**	**25,000**	**25**	**0.13**	**25,000**

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
Bio-CO_2 = biologically generated CO_2
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated CO_2

Source: Compiled by LSA Associates, Inc. (2015).

As shown in Table 4.4-4, the Project would result in an increase of 25,000 MT CO_2e/yr, which is 0.025 MMT CO_2e per year. (MMT CO_2e/yr). For comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 MMT CO_2e/yr, and the existing emissions for the entire State are estimated at approximately 448 MMT CO_2e/yr. The following provides a more detailed discussion of the categories of emission sources for GHGs.

- **Energy/Natural Gas Use:** Buildings represent 39 percent of the United States' primary energy usage and 70 percent of its electricity consumption (DOE 2012). The proposed Project would increase the demand for electricity and natural gas due to the increased building area and number of residents. The Project would indirectly result in increased GHG emissions from off-site electricity generation at power plants and on-site natural gas consumption (5,700 MT CO_2e/yr).
- **Area Sources:** Area sources of GHG emissions include architectural coatings, consumer products, hearth, and landscaping. The Project would result in increased GHG emissions from the area sources (0.099 MT CO_2e/yr).
- **Water Use:** Water-related energy use consumes 19 percent of California's electricity every year (CEC 2005). Energy use and related GHG emissions are based on electricity used for water supply and conveyance, water treatment, water distribution, and wastewater treatment. The Project would indirectly result in increased GHG emissions from the off-site electricity generation at power plants and on-site natural gas consumption (460 MT CO_2e/yr).
- **Solid Waste Disposal:** The proposed Project would also generate solid waste during the operation phase of the Project. Average waste generation rates from a variety of sources are available from the California Integrated Waste Management Board (CIWMB 2015). The Project would indirectly result in increased GHG emissions from solid waste treatment at treatment plants (810 MT CO_2e/yr).
- **Mobile Sources:** Mobile sources (vehicle trips and associated miles traveled) are the largest source of GHG emissions in California and represent approximately 38 percent of annual CO_2 emissions generated in the State. Like most land use development projects, VMT is the most direct indicator of CO_2 emissions from the

proposed Project, and associated CO_2 emissions function as the best indicator of total GHG emissions. Emissions from vehicle exhaust would comprise 72 percent of the Project's total CO_2e emissions. Emissions from vehicle exhaust are controlled by the State and federal governments and are outside the control of the City.

The remaining CO_2e emissions are primarily associated with building heating systems and increased regional power plant electricity generation due to the Project's electrical demands. Specific development projects proposed under the Project would comply with existing State and federal regulations regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the Project's electricity demand. The new buildings constructed in accordance with current energy efficiency standards would be more energy efficient than older buildings. All structures other than one- and two-family dwellings and townhomes will be built under the new 2013 California Building Code (CBC) to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices.

At present, there is a federal ban on chlorofluorocarbons (CFCs); therefore, it is assumed the Project would not generate emissions of CFCs. The Project may emit a small amount of HFCs from leakage and service of refrigeration and air-conditioning equipment, and from their disposal at the end of the equipment's life. However, details regarding the refrigerants to be used at the Project area are unknown at this time. PFCs and SF_6 are typically used in industrial applications, none of which would be used on the Project area. Therefore, it is not anticipated that the Project would contribute significant emissions of these additional GHGs.

The Renaissance Marketplace would result in emissions of 25,000 MT CO_2e/yr. However, GHG emissions under both the approved RSP and the proposed RSPA would be higher than this threshold, and the Renaissance Marketplace would not result in new exceedance of the GHG threshold compared to the RSP. The Renaissance Marketplace, as part of the RSPA project, is therefore not inconsistent with any City or County GHG policies or goals.

As described in above, EO B-30-15 established a statewide emissions reduction target of 40% below 1990 levels by 2030. This interim measure was identified by the Governor as one way to keep the State on a trajectory needed to meet the 2050 goal of reducing GHG emissions to 80% below 1990 levels by 2050 pursuant to EO S-3-05. ARB has already identified the target 2050 emission levels of 431 MMT CO2e. EO B-30-15 instructs ARB to similarly express the 2030 target in terms of MMT of CO2e.

ARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32." (see First Update to Scoping Plan, p. ES2.) With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states:

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions. (First Update to the Climate Change Scoping Plan dated May 2014, p. 34.)

In other words, the experts at ARB attest the State is on a trajectory to meet the 2020, 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15 and EO S-3-05.

The project does not interfere with implementation of any of the above-described GHG reduction goals for 2030 or 2050. For example, the project does not interfere with the state's goal to install 12,000 MW of renewable distributed generation systems by 2020. Existing policies and regulations also encourage rooftop solar systems, such as government sponsored programs that offer financial incentives for installation of solar systems (e.g., PACE) and The Solar Shade Control Act (Pub. Resources Code, § 2590, et seq.) that protects solar systems from the interference of trees and shrubs. Programs such as PACE allow for property owners to distribute the cost of renewable energy systems and other energy efficiency upgrades by adding the cost to the property's tax bill for up to 20 years. The installation of rooftop solar systems is becoming increasingly common in the region and with costs of solar system installation trending down, it is reasonable to assume that the number of solar systems on California homes will continue to increase. As such, the project will not interfere with the State's goal of having 12,000 MW of renewable distributed generation by 2020.

Likewise, the project does not interfere with the ability of the California Building Commission to mandate constructing net-zero energy homes after 2020. The project is not a residential project and will not interfere with the state's ability to mandate net-zero energy homes on new construction after 2020.

Moreover, the project will not interfere with the state's implementation of building retrofits to further energy efficiency for existing buildings under AB 758. AB 758, the Comprehensive Energy Efficiency in Existing Buildings Law, tasked the California Energy Commission ("CEC") with developing and implementing a comprehensive program to increase energy efficiency in existing residential and nonresidential buildings that "fall significantly below the current standards in Title 24." (Pub. Resources Code, § 25943(a)(1).) Approximately 50% of existing residential and nonresidential buildings in California were constructed before California Building Energy Efficiency Standards went into effect in 1978. (CEC, Existing Buildings Energy Efficiency Action Plan (March 10, 2015) (hereafter Draft AB 758 Plan), Ch. 1, p. 5 [also noting that existing buildings represent 20% of all GHG emissions].) Other buildings constructed after 1978 also fall below current Title 24 standards and present significant opportunities for energy efficiency improvements. (Id.) Pursuant to AB 758, the CEC is in the process of developing an Existing Building Energy Efficiency Action Plan that identifies strategies to implement energy efficient renovations for such existing commercial, residential and publicly owned buildings. The project will be constructed in compliance with current Title 24 standards and therefore will not interfere with CEC or other initiatives implemented to increase energy efficiency and reduce GHG emissions associated with existing buildings that do not adhere to Title 24 standards.

Regulations and initiatives as developed and implemented by ARB and other statewide agencies pursuant to the Scoping Plan and EO B-30-15 related to transportation, energy, water supply and solid waste will continue to reduce emissions in the future, but the full extent of such reductions cannot be fully quantified or estimated at this time. GHG-related technological advancements in these sectors will also continue to build upon those currently employed state-wide and through local initiatives, and would become increasingly more stringent and efficient over time. Regulations and standards pertaining to these sectors include but are not limited to Title 24 building standards, the state's renewable energy portfolio standard, water conservation measures, solid waste diversion rates and other statewide initiatives as identified in ARB's Scoping Plan. Governor Brown in his 2015 inaugural address also announced new goals which would further reduce GHG emissions over the next 15 years, including an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

The project applicant would not actively interfere with any future City-, County-, state-, or federally-mandated retrofit obligations enacted or promulgated to legally require commercial development City-, County-, state-, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets, including that established under EO S-3-05 or EO B-30-15. Based on the foregoing, the project does not interfere with the state's implementation of (i) EO B-30-15's target of reducing statewide GHG emissions to 40% below 1990 levels by 2030 or (ii) EO S-3-05's target of reducing statewide GHG emissions to 80% below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG reduction plans described in the ARB's Updated Scoping Plan, including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Building Commission mandating net zero energy homes in the building code after 2020, or existing building retrofits under AB 758. Therefore, the project's impacts on greenhouse gas emissions in the 2030 and 2050 horizon years are less than significant based on the threshold of significance No. 1.

Planning Area 108

Construction and operation of Planning Area 108 would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the operation (as opposed to during its construction) of Planning Area 108. Typically, more than 80 percent of the total energy consumption takes place during the use of buildings, and less than 20 percent of energy is consumed during construction (UNEP 2007). As of yet, there is no study that quantitatively assesses all of the GHG emissions associated with each phase of the construction and use of an individual development.

Overall, the following activities associated with the proposed Planning Area 108 could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During the construction of Planning Area 108, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy intensive. Preliminary estimates indicate that the total energy used to pump and treat this water exceeds 6.5 percent of the total electricity used in the State per year (State of California 2008).
- **Solid Waste Disposal:** Solid waste generated by Planning Area 108 could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed Planning Area 108 would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

GHG emissions associated with Planning Area 108 would occur over the short-term from construction activities and would consist primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with Planning Area 108-related new vehicular trips and stationary-source emissions (e.g.,

natural gas used for heating and electricity usage for lighting). Preliminary guidance from the OPR and recent letters from the Attorney General critical of CEQA documents that have taken different approaches indicate that lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, and construction activities. The calculation presented below includes construction emissions in terms of CO_2 and annual CO_2e GHG emissions from increased energy consumption, water usage, solid waste disposal, and estimated GHG emissions from vehicular traffic that would result from implementation of Planning Area 108.

GHG emissions generated by the proposed Planning Area 108 would predominantly consist of CO_2. In comparison to criteria air pollutants such as O_3 and PM_{10}, CO_2 emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs (e.g., CH_4) are important with respect to GCC, emissions levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO_2.

Construction Impacts

Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the Planning Area 108 site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities on the Planning Area 108 site would vary daily as construction activity levels change. **Table 4.4-5** lists the annual CO_2 emissions for each of the planned construction phases for Planning Area 108.

Table 4.4-5 Short-Term Regional Construction GHG Emissions – Planning Area 108

Construction Phase	Peak Annual Emissions (MT/yr)				Total Emissions per Phase (MT CO_2e)
	CO_2	CH_4	N_2O	CO_2e	
2016					
Site Preparation	19	0.0056	0	19	19
Grading	60	0.018	0	61	61
Building 1 Construction	3,200	0.15	0	3,300	3,300
Architectural Coating	280	0.016	0	280	280
Paving	49	0.014	0	50	50
2017					
Building 2 Construction	3,300	0.14	0	3,300	3,300
Architectural Coating	270	0.014	0	270	270
2018					
Building 3 Construction	3,200	0.14	0	3,200	3,200
Architectural Coating	260	0.013	0	260	260
Total Construction Emissions					**11,000**
Total Construction Emissions Amortized over 30 years					**367**

CH_4 = methane
CO_2 = carbon dioxide
MT CO_2e = metric tons of carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

Source: Compiled by LSA Associates, Inc. (2015).

Architectural coatings used in construction of Planning Area 108 may contain VOCs similar to ROGs and that are part of O_3 precursors. However, there are no significant emissions of GHGs from architectural coatings. The architectural coating phase in Table 4.4-5 shows GHG emissions from equipment exhaust and energy use.

Operational Impacts

Long-term operation of proposed Planning Area 108 would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include Planning Area 108-generated vehicle trips associated with on-site facilities and customers/visitors to the Planning Area 108 Project area. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

The GHG emission estimates presented in **Table 4.4-6** shows the emissions associated with the level of development envisioned by the proposed Planning Area 108 at opening. Area sources include architectural coatings, consumer products, hearth, and landscaping. Energy sources include natural gas consumption for heating and cooking.

Table 4.4-6 Long-Term Operational GHG Emissions – Planning Area 108

Source	Pollutant Emissions (MT/yr)					
	Bio-CO_2	**NBio-CO_2**	**Total CO_2**	**CH_4**	**N_2O**	**CO_2e**
Construction emissions amortized over 30 years	0	367	367	0.017	0	367
Operational Emissions						
Area Sources	0	0.18	0.18	0.0005	0	0.19
Energy Sources	0	58,000	58,000	2.4	0.65	59,000
Mobile Sources (Trucks)	0	106,791	106,791	0.87	0	160,810
Mobile Sources (Passenger Cars)	0	14,909	14,909	0.81	0	14,926
Waste Sources	0	110	110	0.034	0	110
Off-Road Sources	760	0	760	45	0	1,700
Water Usage	290	3,400	3,700	30	0.74	4,600
Total Project Emissions	**1,100**	**184,040**	**184,095**	**79**	**1.4**	**187,195**

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
Bio-CO_2 = biologically generated CO_2 MT/yr = metric tons per year
CH_4 = methane N_2O = nitrous oxide
CO_2 = carbon dioxide NBio-CO_2 = non-biologically generated CO_2
CO_2e = carbon dioxide equivalent

Source: Compiled by LSA Associates, Inc. (2015).

As shown in Table 4.4-6, the Project will result in an increase of 187,195 MT CO_2e/yr, which is 0.15 MMT CO_2e/yr. For comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 MMT CO_2e/yr, and the existing emissions for the entire State are estimated at approximately 448 MMT CO_2e/yr. The following discusses in more detail each of the emissions sources for GHGs:

- **Energy/Natural Gas Use:** Buildings represent 39 percent of the United States' primary energy usage and 70 percent of its electricity consumption (DOE 2003). The proposed Project would increase the demand for electricity and natural gas due to the increased building area and number of residents. The Project would indirectly result in increased GHG emissions from off-site electricity generation at power plants and on-site natural gas consumption (59,000 MT CO_2e/yr).

- **Area Sources:** Area sources of GHG emissions include architectural coatings, consumer products, hearth, and landscaping. The Project would result in increased GHG emissions from the area sources (0.19 MT CO_2e/yr).
- **Water Use:** Water-related energy use consumes 19 percent of California's electricity every year (CEC 2005). Energy use and related GHG emissions are based on electricity used for water supply and conveyance, water treatment, water distribution, and wastewater treatment. The Project would indirectly result in increased GHG emissions from the off-site electricity generation at power plants and on-site natural gas consumption (4,600 MT CO_2e/yr).
- **Solid Waste Disposal:** The proposed Project would also generate solid waste during the operation phase of the Project. Average waste generation rates from a variety of sources are available from the CIWMB (CIWMB 2015). The Project would indirectly result in increased GHG emissions from solid waste treatment at treatment plants (110 MT CO_2e/yr).
- **Off-Road Sources:** Off-road sources are on-site equipment that is a source of GHG emissions (e.g., forklifts). The Project would result in increased GHG emissions from off-road sources (1,700 MT CO_2e/yr).
- **Mobile Sources:** Mobile sources (vehicle trips and associated miles traveled) are the largest source of GHG emissions in California and represent approximately 38 percent of annual CO_2 emissions generated in the State. Like most land use development projects, VMT is the most direct indicator of CO_2 emissions from the proposed Project, and associated CO_2 emissions function as the best indicator of total GHG emissions. Emissions from vehicle exhaust would comprise 59 percent of the Project's total CO_2e emissions. Emissions from vehicle exhaust are controlled by the State and federal governments and are outside the control of the City.

The remaining CO_2e emissions are primarily associated with building heating systems and increased regional power plant electricity generation due to the Project's electrical demands. Specific development projects proposed under the Project would comply with existing State and federal regulations regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the Project's electricity demand. The new buildings constructed in accordance with current energy efficiency standards would be more energy efficient than older buildings. All structures other than one- and two-family dwellings and townhomes will be built under the new 2013 CBC to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices.

At present, there is a federal ban on CFCs; therefore, it is assumed the Project would not generate emissions of CFCs. The Project may emit a small amount of HFCs from leakage and service of refrigeration and air-conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used at the Project area are unknown at this time. PFCs and SF_6 are typically used in industrial applications, none of which would be used on the Project area. Therefore, it is not anticipated that the Project would contribute significant emissions of these additional GHGs.

Planning Area 108 would result in emissions of 187,195 MT CO_2e/yr. However, GHG emissions under both the approved RSP and the proposed RSPA would be higher than this threshold, and Planning Area 108 would not result in new exceedance of the GHG threshold compared to the RSP. As part of the RSPA project, Planning Area 108 is therefore not inconsistent with any City or County GHG policies or goals.

Similar to the Renaissance Marketplace discussion above, Planning Area 108 would not actively interfere with any future City-, County-, state-, or federally-mandated retrofit obligations enacted or promulgated to legally require commercial development City-, County-, state-, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets, including that established under EO S-3-05 or EO B-30-15. Based on the foregoing, the project does not interfere with the state's implementation of (i) EO B-30-15's target of reducing statewide GHG emissions to 40% below 1990 levels by 2030 or (ii) EO S-3-05's target of reducing statewide GHG emissions to 80% below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG reduction plans described in the ARB's Updated Scoping Plan, including the state providing for 12,000 MW of renewable distributed generation by 2020, the California Building Commission mandating net zero energy homes in the building code after 2020, or existing building retrofits under AB 758. Therefore, the project's impacts on greenhouse gas emissions in the 2030 and 2050 horizon years are less than significant based on the threshold of significance No. 1.

4.4.4.2 APPLICABLE PLAN, POLICY, OR REGULATION

Impact 4.4.2: Would the Project Potentially Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purposes of Reducing the Emissions of Greenhouse Gases.

The project would meet or exceed all State and federal building standards, including the California Green Building Standards. The project would also comply with the County's CAP and the City's General Plan. **Table 4.4-7** summarizes key general plan policies that support the City of Rialto's GHG reduction measures or would contribute to GHG reductions and sustainable practices in the city. All policies listed below are from the Rialto 2010 General Plan unless otherwise noted (City of Rialto 2010). Thus, the project would not conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases. Therefore, the GHG emissions from the project would be less than significant, and no mitigation would be necessary.

Table 4.4-7 Project Consistency with City of Rialto 2010 General Plan Goals and Policies

Goals, and Policies	Consistency Analysis
BUILDING ENERGY	
Parking Lot Design 3-23.1: Require mature trees and landscaping in off-street parking areas to make them more inviting and aesthetically appealing, and to provide sufficient shading to reduce heat.	The proposed Project area would make all reasonable efforts to maintain existing mature trees during project construction.
Private Realm Policy 2-17.1: Require the planting of street trees along public streets and inclusion of trees and landscaping for private developments to improve airshed, minimize urban heat island effect, and lessen impacts of high winds.	The proposed project includes planting trees and landscaping along public streets.
Private Realm Policy 2-17.2: Require all new development to incorporate tree plantings dense enough to shade and beautify residential and commercial areas.	The proposed project includes planting trees as described.
Parking Lot Design Policy 2-23.1: Require mature trees and landscaping in off-street parking areas to make them more inviting and aesthetically appealing, and to provide sufficient shading to reduce heat.	The proposed project would make all reasonable efforts to maintain existing mature trees during project construction.
Open Space Policy 2-26.1: Require that private open space be integrated into new development by providing green spaces and landscaped plazas between buildings.	The proposed project includes green spaces and landscaped plazas between buildings, as appropriate.
Open Space Policy 2-26.2: Enhance street corridors by incorporating small green areas, extensive landscaping, and street trees.	The proposed project includes small green areas, extensive landscaping, and street trees, as appropriate.
Open Space Policy 2-26.3: Explore opportunities to create pocket parks within urbanized areas for public and/or private use.	The proposed project includes pocket parks, as appropriate.

Goals, and Policies	Consistency Analysis
ON-ROAD	
Transportation-1. Sustainable Communities Strategy	
Air Quality and Climate Policy 2-35.2: Require that new development projects incorporate design features that encourage ridesharing, transit use, park and ride facilities, and bicycle and pedestrian circulation.	The proposed project includes design features that encourage ridesharing, transit use, park and ride facilities, and bicycle and pedestrian circulation.
Air Quality and Climate Policy 2-35.3: Establish a balanced land use pattern, and facilitate developments that provide jobs for City residents in order to reduce vehicle trips citywide.	The proposed project would provide jobs for City residents reducing vehicle trips citywide.
Air Quality and Climate Policy 2-38.2: Encourage development of transit-oriented and infill development, and encourage a mix of uses that foster walking and alternative transportation in Downtown and along Foothill Boulevard.	As described in Project Feature GCC-1, the proposed project includes a mix of uses that foster walking and alternative transportation.
Encouraging Rail and Bus Ridership Policy 4-6.3: Require major developments to include bus turnouts, bus shelters, and other transit facilities as appropriate.	The proposed project includes bus turnouts, bus shelters, and other transit facilities as appropriate.
Encouraging Rail and Bus Ridership Policy 4-6.5: Encourage clean, lighted, and convenient bus shelters and transit stops that are within walking distance of major activity areas and residential neighborhoods and along arterial roadways.	The proposed project includes clean, lighted, and convenient bus shelters within walking distance of major activity areas, as appropriate.
Accommodating Bicyclists and Pedestrians Policy 4-8.4: Require provision of secure bicycle storage, including bicycle racks and lockers, at the Metrolink station, public parks, schools, shopping centers, park-and-ride facilities, and other major activity centers.	As described in Project Feature GCC-1, the proposed project includes bicycle racks.
Accommodating Bicyclists and Pedestrians Policy 4-9.4: Accommodate pedestrians and bicyclists—in addition to automobiles—when considering new development projects.	As described in Project Feature GCC-1, the proposed project accommodates pedestrians and bicyclists.
Accommodating Bicyclists and Pedestrians Policy 4-9.6: Encourage new development to provide pedestrian paths through projects, with outlets to adjacent collectors, secondaries, and arterial roadways.	As described in Project Feature GCC-1, the proposed project includes pedestrian paths through the site.
SOLID WASTE MANAGEMENT	
Waste Diversion	
Solid Waste and Recycling Policy 3-10.2: Encourage the recycling of construction and demolition materials in an effort to divert these items from entering landfills.	As described in Project Feature GCC-1, the proposed project includes measures to encourage the recycling of construction and demolition materials
Require Tier 1 Voluntary CALGreen Standards for New Construction	
Conserve Water Resources Policy 2-29.1: Require new development to use features, equipment, technology, landscaping, and other methods to reduce water consumption.	As described in Project Feature GCC-1, the proposed project includes water-efficient equipment, technology, and landscaping.
Water-Efficient Landscaping Practices	
Private Realm Policy 2-17.3: Require the use of drought-tolerant, native landscaping and smart irrigation systems for new development to lower overall water usage.	As described in Project Feature GCC-1, the proposed project would use drought-tolerant, native landscaping and smart irrigation systems.
Parking Lot Design Policy 2-23.3: Require use of drainage improvements designed, with native vegetation where possible, to retain or detain water runoff and minimize pollutants into drainage system.	As described in Project Feature GCC-1, the proposed project would use drainage improvements designed, with native vegetation where possible.
Water Policy 3-8.10: Support water conservation through requirements for landscaping with drought-tolerant plants and efficient irrigation for all new development and City projects.	As described in Project Feature GCC-1, the proposed project would use drought-tolerant, native landscaping and smart irrigation systems.

Goals, and Policies	Consistency Analysis
Conserve Water Resources Policy 2-29.1: Require new development to use features, equipment, technology, landscaping, and other methods to reduce water consumption.	As described in Project Feature GCC-1, the proposed project would use drought-tolerant, native landscaping and smart irrigation systems.

Source: City of Rialto General Plan (December 2010) and Project Plans.

The Renaissance Marketplace

As discussed in Section 4.4.4.1, the Renaissance Marketplace would result in emissions of 25,000 MT CO_2e/yr and would be higher than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e/yr for commercial or mixed-use projects. However, GHG emissions under both the approved RSP and the proposed RSPA would be higher than this threshold, and the Renaissance Marketplace would not result in new exceedance of the GHG threshold compared to the RSP. The Renaissance Marketplace, as part of the RSPA project, is therefore not inconsistent with all City GHG policies and goals.

The Climate Action Team and CARB have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of California businesses, local government and community groups, and State incentive and regulatory programs. These include the *Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CalEPA 2010), the *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California* (ARB 2007), and the *First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, the California Global Warming Solutions Act of 2006* (ARB 2014).

The reports identify strategies to reduce California's emissions to the levels proposed in EO S-3-05 and AB 32 that are applicable to the proposed Project. The Scoping Plan that was adopted in 2008 and updated in 2014 is the most recent document, and the strategies included in the Scoping Plan that apply to the Project are contained in **Table 4.4-8**, which also summarizes the extent to which the Project would comply with the strategies to help California reach the emission reduction targets.

The strategies listed in Table 4.4-8 are either part of the Project design or requirements under local or State ordinances. With implementation of these strategies/measures, the contribution of the Renaissance Marketplace to cumulative GHG emissions would be reduced. In order to ensure that the proposed Renaissance Marketplace complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, the Governor's EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Project Feature GCC-1 shall be implemented.

Table 4.4-8 Project Compliance with GHG Emission Reduction Strategies

Strategy	Project Compliance
Energy Efficiency Measures	
Measure State-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	**Compliant.** The proposed project would comply with the requirements of Measure State-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6) including measures to incorporate energy-efficient building design features and utilize renewable energy when applicable.

Strategy	Project Compliance
Measure State-1: Renewable Portfolio Standard. Achieve a 33 percent renewable energy mix statewide by 2020.	
Water Conservation and Efficiency Measures	
Measure Water-4: Water Use Efficiency. Reduce per capita water use by 20% by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10% from a baseline level by 2015, and to reduce per-capita water use by 20% by 2020. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	**Compliant.** The project would comply with the requirements of Measure Water-4: Water Conservation and Efficiency, including measures to increase water use efficiency. Water-efficient irrigation systems and devices and drought-tolerant landscaping would be installed on the Project area.
Solid Waste Reduction Measures	
Measure Waste-1: Increased Waste Diversion. Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 90% of C&D waste from landfills by 2035. Effective July 1, 2014, CALGreen, the state's Green Building Standards Code, requires jurisdictions to divert a minimum of 50% of their nonhazardous C&D waste from landfills. Reductions for the year 2020 assume that 100% of new construction and applicable retrofit projects meet the minimum diversion rates established by the State. For 2035, this measure assumes that C&D waste diversion would increase to 90% for new construction and retrofit projects.	**Compliant.** The project would comply with Measure Waste-1: Increase Waste Diversion. At least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) would be reused/recycled.
Transportation and Motor Vehicle Measures	
Measure State-6a and State-6b: Pavley and Low Carbon Fuel Standard (LCFS). ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. **Measure State-7: AB 32 Transportation Reduction Strategies.** The AB 32 Scoping Plan includes vehicle efficiency measures in addition to Pavley and LCFS that focus on maintenance practices, including tire pressure program, low rolling resistance tires, low friction engine oils, cool paints and reflective glazing, goods movement efficiency, heavy-duty vehicle GHG emission reduction, and medium- and heavy-duty vehicle hybridization.	**Compliant.** The project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the Project area would comply with Measure State-6a and State-6b: Pavley and Low Carbon Fuel Standard. The project will also comply with Measure State-7 to increase vehicle efficiency.

Strategy	Project Compliance
Land Use Measures	
Measure Land Use-1: Tree Planting Programs. Strategically plant trees at new developments to reduce the urban heat island effect. Planting additional trees in urban environments has a number of benefits, including lowering peak-load energy demands during the hottest months, enhancing the visual aesthetic of a community, and naturally sequestering carbon dioxide. Properly selected and located shade trees can help keep indoor temperatures low, thereby reducing air conditioner demands and utility costs. Trees can also provide shade for parking lots and other paved areas, reducing the urban heat island effect communitywide.	**Compliant.** The project would comply with Measure Land Use-1: Tree Planting Programs. Landscaping and shade trees would be provided throughout the Project area.

AB = Assembly Bill
ARB = California Air Resources Board
C&D = construction and demolition
GHG = greenhouse gas
MT CO_2e = metric tons of carbon dioxide equivalents
SB = Senate Bill

Source: San Bernardino County Regional GHG Reduction Plan

Planning Area 108

As discussed in Section 4.4.4.1, Planning Area 108 would result in emissions of 150,000 MT CO_2e/yr, which would be higher than the SCAQMD threshold of 10,000 MT CO_2e/yr for industrial projects. However, GHG emissions under both the approved RSP and the proposed RSPA would be higher than this threshold, and Planning Area 108 would not result in new exceedance of the GHG threshold compared to the RSP. As part of the RSPA project, Planning Area 108 is therefore not inconsistent with all City GHG policies and goals.

The Climate Action Team and CARB have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of California businesses, local government and community groups, and State incentive and regulatory programs. These include the *Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CalEPA 2010), the *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California* (ARB 2007), and the *First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, the California Global Warming Solutions Act of 2006* (ARB 2014).

The reports identify strategies to reduce California's emissions to the levels proposed in EO S-3-05 and AB 32 that are applicable to the proposed Project. The Scoping Plan that was adopted in 2008 and updated in 2014 is the most recent document, and the strategies included in the Scoping Plan that apply to the Project are contained in **Table 4.4-9**, which also summarizes the extent to which the Project would comply with the strategies to help California reach the emission reduction targets.

The strategies listed in Table 4.4-9 are either part of the Project design or requirements under local or State ordinances. With implementation of these strategies/measures, the contribution of Planning Area 108 to cumulative GHG emissions would be reduced. In order to ensure that the proposed Planning Area 108 complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, the Governor's EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Mitigation Measure GHG-1 shall be implemented.

Table 4.4-9 Project Compliance with GHG Emissions Reduction Strategies

Strategy	Project Compliance
Energy Efficiency Measures	
Measure State-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). **Measure State-1: Renewable Portfolio Standard.** Achieve a 33 percent renewable energy mix statewide by 2020.	**Compliant.** The proposed project would comply with the requirements of Measure State-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6) including measures to incorporate energy-efficient building design features and utilize renewable energy when applicable.
Water Conservation and Efficiency Measures	
Measure Water-4: Water Use Efficiency. Reduce per capita water use by 20% by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10% from a baseline level by 2015, and to reduce per-capita water use by 20% by 2020. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	**Compliant.** The project would comply with the requirements of Measure Water-4: Water Conservation and Efficiency, including measures to increase water use efficiency. Water-efficient irrigation systems and devices and drought-tolerant landscaping would be installed on the Project area.
Solid Waste Reduction Measures	
Measure Waste-1: Increased Waste Diversion. Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 90% of C&D waste from landfills by 2035. Effective July 1, 2014, CALGreen, the state's Green Building Standards Code, requires jurisdictions to divert a minimum of 50% of their nonhazardous C&D waste from landfills. Reductions for the year 2020 assume that 100% of new construction and applicable retrofit projects meet the minimum diversion rates established by the State. For 2035, this measure assumes that C&D waste diversion would increase to 90% for new construction and retrofit projects.	**Compliant.** The project would comply with Measure Waste-1: Increase Waste Diversion. At least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) would be reused/recycled.
Transportation and Motor Vehicle Measures	
Measure State-6a and State-6b: Pavley and Low Carbon Fuel Standard (LCFS). ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.	**Compliant.** The project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the Project area would comply with Measure State-6a and State-6b: Pavley and Low Carbon

Strategy	Project Compliance
Measure State-7: AB 32 Transportation Reduction Strategies. The AB 32 Scoping Plan includes vehicle efficiency measures in addition to Pavley and LCFS that focus on maintenance practices, including tire pressure program, low rolling resistance tires, low friction engine oils, cool paints and reflective glazing, goods movement efficiency, heavy-duty vehicle GHG emission reduction, and medium- and heavy-duty vehicle hybridization.	Fuel Standard. The project will also comply with Measure State-7 to increase vehicle efficiency.
Land Use Measures	
Measure Land Use-1: Tree Planting Programs. Strategically plant trees at new developments to reduce the urban heat island effect. Planting additional trees in urban environments has a number of benefits, including lowering peak-load energy demands during the hottest months, enhancing the visual aesthetic of a community, and naturally sequestering carbon dioxide. Properly selected and located shade trees can help keep indoor temperatures low, thereby reducing air conditioner demands and utility costs. Trees can also provide shade for parking lots and other paved areas, reducing the urban heat island effect communitywide.	**Compliant.** The project would comply with Measure Land Use-1: Tree Planting Programs. Landscaping and shade trees would be provided throughout the Project area.
AB = Assembly Bill ARB = California Air Resources Board C&D = construction and demolition GHG = greenhouse gas MT CO_2e = metric tons of carbon dioxide equivalents SB = Senate Bill	

Source: San Bernardino County Regional GHG Reduction Plan

4.4.4.3 MITIGATION MEASURES

Mitigation Measure GHG-1: Prior to the issuance of a building permit, the project application must submit to the satisfaction of the Development Services Director/Planning Division, evidence that the proposed Renaissance Marketplace and Planning Area 108 projects comply with and would not conflict with or impede the implementation of reduction goals identified in Assembly Bill (AB) 32, the Governor's Executive Order (EO) S-3-05, and other strategies to help reduce greenhouse gases (GHGs) to the level proposed by the Governor. The Renaissance Marketplace and Planning Area 108 projects will be designed and constructed to incorporate and/or implement to the extent feasible and to the satisfaction of the City, the following measures:

Construction and Building Materials.

- Use locally produced and/or manufactured building materials for at least 10 percent of the construction materials used for the Projects.

- Recycle/reuse at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) if feasible.
- Use "Green Building Materials," such as those materials that are resource-efficient and are recycled and manufactured in an environmentally friendly way, for at least 10 percent of the Projects.

Energy Efficiency Measures.

- Design all project buildings to meet or exceed the California Building Code's (CBC) Title 24 energy standard, including, but not limited to, any combination of the following:
    - Increase insulation such that heat transfer and thermal bridging is minimized;
    - Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption; and
    - Incorporate ENERGY STAR or better rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of the lighting systems in buildings.
- Install "cool" roofs and cool pavements.
- Install energy-efficient heating and cooling systems, appliances and equipment, and control systems.
- Install solar lights or light-emitting diodes (LEDs) for outdoor lighting or outdoor lighting that meets the City of Rialto City Code.
- Install solar photovoltaic or other technology to generate electricity on-site to reduce consumption from the electrical grid.
- Install electrical vehicle charging stations to promote the use of electrical vehicles.
- Promote and incentivize solar installations on new warehouse space through partnerships with SCE and other private sector funding sources including Sungevity, SolarCity, and other solar lease or PPA companies. Establish a goal that a percentage of new warehousing projects install solar to provide a minimum of 25 percent of the project's new on-site energy needs and that all existing warehousing install solar to provide a minimum of 25 percent of power needs with solar. This goal could be supported through nonfinancial incentives or streamlined permitting. Cities may also act as a resource for connecting project proponents with funding opportunities.

Water Conservation and Efficiency Measures.

- Devise a comprehensive water conservation strategy appropriate for the Project and its location. The strategy may include the following, plus other innovative measures that may be appropriate:
    - Create water-efficient landscapes within the development.
    - Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
    - Use reclaimed water, if available, for landscape irrigation within the Project. Install the infrastructure to deliver and use reclaimed water, if available.
    - Design buildings to be water-efficient. Install water-efficient fixtures and appliances, including low-flow faucets and waterless urinals.
    - Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.

Solid Waste Measures.

- To facilitate and encourage recycling to reduce landfill-associated emissions, among others, the Projects will provide trash enclosures that include additional enclosed area(s) for collection of recyclable materials. The recycling collection area(s) will be located within, near, or adjacent to each trash and rubbish disposal area. The recycling collection area will be a minimum of 50 percent of the area provided for the trash/rubbish enclosure(s) or as approved by the waste management vendor for the City of Rialto.
- Provide employee education on waste reduction and available recycling services.

Transportation Measures.

- To facilitate and encourage nonmotorized transportation, bicycle racks shall be provided in convenient locations to facilitate bicycle access to the Project area. The bicycle racks shall be shown on building plans submitted for Planning Department approval and shall be installed in accordance with those plans.
- Provide pedestrian walkway and connectivity requirements.
- All new non-residential and multifamily developments of ten or more units shall be designed to incorporate the transportation control measures (TCM) described in Chapter 18.59 of the City of Rialto Municipal Code.

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4.5 HYDROLOGY AND WATER QUALITY

4.5.1 INTRODUCTION

This section describes the potential effects of the proposed Project on the site and its surroundings relative to hydrology and water quality. The descriptions and analyses in this section are based on information contained in the 2010 RSP EIR, and in the Hydrology Study for the Renaissance Shopping Center, prepared in September 2015 by DRC Engineering, Inc., the Drainage Study prepared by Encompass Associated, Inc., prepared April 2014, and included in the appendices of this Environmental Impact Report (EIR). Potential effects are evaluated relative to violating water quality standards, depleting or interfering substantially with groundwater recharge, and creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems. All other significance thresholds and potential impacts of the proposed Project were addressed in the proposed Project's NOP (January 2015), which determined there would be no new or additional impacts, or that impacts would be less than significant and therefore need not be further considered in this Recirculated Draft SEIR. Please refer to the proposed Project's NOP attached as Appendix A.

4.5.2 REGULATORY FRAMEWORK

4.5.2.1 FEDERAL CLEAN WATER ACT

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Important applicable sections of the CWA are as follows:

- Section 301 prohibits the discharge of any pollutant by any person, except as in compliance with Sections 302, 306, 307, 318, 402, and 404 of the CWA. Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal permit that proposes an activity which may result in a discharge to "waters of the United States" to obtain certification from the State that the discharge will comply with other provisions of the Act. The Regional Water Quality Control Board (RWQCB) provides certification.
- Section 402 establishes the National Pollution Discharge Elimination System (NPDES) a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. This permit program is administered by the RWQCB, and discussed in detail below.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the United States Army Corps of Engineers (USACE).

4.5.2.2 CALIFORNIA PORTER-COLOGNE WATER QUALITY CONTROL ACT

The State of California's Porter-Cologne Water Quality Control Act (California Water Code Section 13000, et seq.) provides the basis for water quality regulation within California. The Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of

surface or groundwater of the State. Waste discharge requirements (WDR) resulting from the report are issued by the RWQCB, as discussed below. In practice, these requirements are typically integrated within the NPDES permitting process. The State Water Resources Control Board (SWRCB) carries out its water quality protection authority through the adoption of specific Water Quality Control Plans (Basin Plans). These plans establish water quality standards for particular bodies of water. California water quality standards are composed of three parts: the designation of beneficial uses of water, water quality objectives to protect those uses, and implementation programs designed to achieve and maintain compliance with the water quality objectives.

4.5.2.3 NATIONAL FLOOD INSURANCE PROGRAM

Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. FEMA issues flood insurance rate maps for communities participating in the NFIP. These maps delineate flood hazard zones in the community. Executive Order 11988 (Floodplain Management) addresses floodplain issues related to public safety, conservation, and economics. It requires:

- Avoidance of incompatible floodplain development;
- Consistency with the standards and criteria of the NFIP; and
- Restoration and preservation of the natural and beneficial floodplain values.

4.5.2.4 SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

The Santa Ana Regional Water Quality Control Board (SARWQCB) regulates state water quality standards in the City of Rialto. Beneficial uses and water quality objectives for surface water and groundwater resources in the Project area are established in the water quality control plans of each RWQCB and mandated by the state Porter-Cologne Act and CWA. The RWQCB also implements the CCWA Section 303(d) total maximum daily load (TMDL) process, which consists of identifying candidate water bodies where water quality is impaired by the presence of pollutants. The TMDL process is implemented to determine the assimilative capacity of the water body for the pollutants of concern and to establish equitable allocation of the allowable pollutant loading within the watershed. CWA Section 401 requires an applicant pursuing a federal permit to conduct any activity that may result in a discharge of a pollutant to obtain a water quality certification (or waiver) from the applicable RWQCB.

The RWQCB primarily implements basin plan policies through issuing waste discharge requirements for waste discharges to land and water. The RWQCB is also responsible for administering the NPDES permit program, which is designed to manage and monitor point and non-point source pollution. NPDES stormwater permits for general construction activity are required for projects that disturb more than one acre of land. Municipal NPDES stormwater permits are required for urban areas with populations greater than 100,000. In addition, projects that involve the California Department of Transportation (Caltrans) are required to comply with the Caltrans statewide NPDES permit and associated Stormwater Management Plan (SEMP). Caltrans implements the SEMP in coordination with the RWQCB.

4.5.2.5 CITY OF RIALTO

During project review, approval and permitting, the City requires new development projects to address the quality and quantity of stormwater runoff through the incorporation of permanent (post-construction) Best Management Practices (BMP's) into the Project's design.

The City of Rialto General Plan includes the following applicable policies related to flooding:

Goal 5-2: *Minimize the risk and damage from flood hazards.*

- ***Policy 5-2.1:*** *For properties located within designated 100-year flood zones, require the submittal of information prepared by qualified specialists which certifies compliance with development standards established for 100-year flood zones.*
- ***Policy 5-2.2:*** *Require the implementation of adequate erosion control measures for development projects to minimize sedimentation damage to drainage facilities.*
- ***Policy 5-2.3:*** *Continue to consult with the San Bernardino County Flood Control District regarding the establishment and maintenance of regional flood control facilities located within the City.*
- ***Policy 5-2.4:*** *Require water retention devices in new developments to minimize flooding of the surface drainage system by peak flows.*
- ***Policy 5-2.5:*** *Require that any structure proposed within an officially designated 100-year floodplain, or other floodplain as determined through geotechnical investigation, be designed in a manner that does not negatively impede or redirect floodwaters or raise anticipated flood heights.*

4.5.3 EXISTING CONDITIONS

4.5.3.1 STORMWATER MANAGEMENT

According to the 2014 Drainage Study prepared for the RSP area, the existing drainage of the site is in a south-southeasterly direction. Gradients in the area are aligned with both Sierra Avenue to the west and Riverside Drive to the northeast. The Project area is part of a larger area tributary to the Cactus Channel and Basin System, which is maintained by the San Bernardino County Flood Control District. The system is ultimately intended to contain a network of five detention basins, three of which are currently utilized. Basins 1 and 2 are along the west side of Cactus Avenue, south of Baseline Road. Basin 3 is located along the north side of Baseline Road and is ready for construction. It is connected to Basin 2 by way of an existing improved channel. Basin 4, which has not been designed or scheduled for buildout, is included in the plans to be located upstream of Basin 3, next to Jerry Eaves Park. Basin 5 is currently excavated to near ultimate conditions by a current mining operation east of the Project area, and is situated north of the Basin 4 site at the southeast corner of Ayala Drive and Easton Drive. All of the referenced detention basins are outside of the Project area.

The County has designed the system to meet the downstream constraints of the Rialto Channel. Currently, Basins 1 and 2 are assumed to provide no peak runoff attenuation. Basin 3; therefore, has been designed to limit downstream runoff to 1,250 cubic feet per second (cfs).

4.5.3.2 SURFACE WATER QUALITY

The cumulative effect of runoff from land uses in a region can have significant impacts on surface water quality, with both point- and non-point-source discharges contributing contaminants to surface waters. Pollutants of concern in discharges from area land uses can include heavy metals, excessive sediment production from erosion, petroleum hydrocarbons from sources such as motor oil, pesticides, excessive nutrient loads, and trash. No site specific water quality data was available to characterize existing surface water quality conditions for the Project area, but runoff from the site can generally be categorized as "urban" in nature.

Numerous studies have been conducted by the U.S. Environmental Protection Agency (EPA) to characterize the nature of urban stormwater runoff, including the National Urban Runoff Program (NURP), the U.S. Geological Survey's (USGS) Urban Stormwater Database, and the Federal Highway Administration's (FHA) study of stormwater runoff loadings from highways. More recently, the University of Alabama and the Center for Watershed Protection collected and evaluated stormwater data from a representative number of NPDES municipal separate storm sewer system (MS4) stormwater permit holders. This dataset is referred to as the National Stormwater Quality Database (NSQD), and provides median event concentration values for associated land use classes and typical water quality parameters.

Table 4.5-1 Typical Urban Surface Water Pollutants Contributions

Parameter	Residential	Commercial	Freeways	Open Space	Overall
Total Suspended Solids (mg/L)	48	43	99	51	58
Biological Oxygen Demand (mg/L)	9	11.9	8	4.2	8.6
Biological Oxygen Demand (mg/L)	9	11.9	8	4.2	8.6
Chemical Oxygen Demand (mg/L)	55	63	100	21	53
Fecal Coliform MPN/100mL	7,750	4,500	1,700	3,100	5,081
Ammonia (NH3) (mg/L)	0.31	0.50	1.07	0.30	0.44
(Nitrite + Nitrate) (NO2 + NO3) (mg/L)	0.6	0.6	0.3	0.6	0.6
Nitrogen, Total Kjeldahl (mg/L)	1.4	1.6	2.0	0.6	1.4
Phosphorous, total (mg/L)	0.30	0.22	0.25	0.25	0.27
Cadmium, total (µg/L)	0.5	0.9	1.0	0.5	1.0
Copper, total (µg/L)	12.0	17.0	35.0	5.3	16.0
Lead, total (µg /L)	12	18	25	5	16
Nickel, total (µg/L)	5.4	7.0	9.0	ND	8.0
Zinc, total (µg /L)	73	150	200	39	116

ND = not detected, or insufficient data to present as a median value.
Center for Watershed Protection, 2004.

4.5.3.3 GROUNDWATER QUALITY

In April 2010, Tetra-Tech prepared a Draft Cleanup Plan for the Rialto Municipal Airport. The purpose of this plan was to describe the site assessments for the Airport and propose a Cleanup Plan to the California Regional Water Quality Control Board (RWQCB). The Airport encompasses Properties A, B, C and D. According to the Plan, Lewis Hillwood Rialto Company, LLC intends to redevelop the Airport for a variety of beneficial uses including residential, retail and commercial.

The Cleanup Plan for contaminated soils consists of excavating impacted soil from the Airport property exceeding the residential or industrial standards California Human Health Screening Levels (CHHSLs) and Regional Screening Levels (RSLs) based on plans for future uses of different areas. The excavated soils are to be managed by either relocating soils onsite or dispose of the soils offsite at an appropriate disposal facility. Soils excavated and relocated onsite would be placed in cells located under future, publicly-owned city streets, or within dedicated impoundment areas on the former Airport property that will ultimately be used as parking lots, parkways, parks and landscaping. Land use restrictions would document the relocation of contaminated soil and restrict land use in certain areas.

The Cleanup Plan identified the area and volume of soil to be excavated based on the analytical data obtained from the field investigations. The Plan determined that approximately 142,038 square feet of surface area will be excavated. It was determined that approximately 13,485 tons of soil will be excavated and either relocated onsite or transported off-site for disposal.

The Santa Ana RWQCB (Regional Water Quality Control Board) approved the Final Draft Cleanup Plan for the Rialto Municipal Airport (RMA) Property on May 6, 2010. The RWQCB concurred with the proposed soil excavation areas and volumes and the proposed confirmation soil sampling and analyses for the excavation areas and associated soil stockpiles. The RWQCB acknowledged that the groundwater contamination (perchlorate and chlorinated volatile organic compounds) beneath the RMA do not appear to be impacted by onsite activities. The RWQCB further states that the issuance of a no further action letter for the Airport will be contingent upon satisfactory completion of all tasks as described in the Final Draft RMA Cleanup Plan and subject to the Board staff's review and approval of the final report.

The groundwater contamination (perchlorate and chlorinated volatile organic compounds) beneath the RMA is currently being remediated by the responsible parties. Therefore, future occupants of the Project area would not be held responsible for mitigating the existing groundwater contamination.

4.5.3.4 FLOOD HAZARD AREA

The proposed Project area is not within a 100-year FEMA Flood Zone Area. In addition, there are no dams, reservoirs or large water bodies near the Project area.

4.5.4 STANDARDS OF SIGNIFICANCE

4.5.4.1 SIGNIFICANCE CRITERIA[1]

As a Subsequent EIR to the 2010 RSP EIR, this analysis only evaluates the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

4.5.4.1.1 Water Quality Standards

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"Violate any water quality standards or waste discharge requirements"

4.5.4.1.2 Groundwater Recharge

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)"

4.5.4.1.3 Stormwater Drainage

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff"

4.5.5 IMPACTS AND MITIGATION MEASURES

4.5.5.1 WATER QUALITY STANDARDS

4.5.5.1.1 Impact 4.5-1: Project Impacts on Water Quality Standards or Waste Discharge Requirements

Construction-Related Impacts

Construction activities for all lots, infrastructure and the storm drain system would require a NPDES permit. Prior to the issuance of an NPDES permit, an approved SWPPP would need to be prepared for the Project Area. The SWPPP would incorporate BMPs such as sedimentation basins, silt fence, and fiber rolls, which would minimize

[1] Less than significant and no impact determinations for potential Hydrology and Water Quality impacts of the proposed Project are listed Table 1-1 of Section 1.0 Executive Summary.

storm water runoff during construction. Individual lot developments, including the Renaissance Marketplace Project and the Planning Area 108 Project within the Specific Plan Area would also require NPDES permits. Thus, future development would be responsible for obtaining and complying with NPDES permit requirements. Implementation of BMPs during construction would minimize water quality impacts to less than significant.

Operational-Related Impacts

The Renaissance Marketplace Project includes several above ground water quality basins in the proposed site design. These basins would be designed to treat flows from a 2-year return event storm. Storm flow depths in the basins would be a maximum of 1.5 feet and would be regulated by incorporating either grate inlets that drain to underground storage or parkway culverts that drain to the public roads. These grate inlets or parkway culverts will be set at the maximum allowable depth of 1.5 feet. Flows from higher return event storms would enter the storm drain system through storm drain riser pipes or flow through parkway culverts to the public roads.

The Planning Area 108 development would include detention basins located on the southern portion of the site, which would be designed to adequately treat runoff water from the site.

As a standard condition of approval, the City of Rialto and the RWQCB would require the Renaissance Marketplace component, the Planning Area 108 component, and all projects within the Specific Plan area to prepare and implement a Water Quality Management Plan (WQMP) that will control and reduce polluted urban runoff from the Project area. WQMP's are required to provide specific Best Management Practices (BMPs) that are designed to reduce urban runoff pollution.

Therefore, the proposed percolation basins and other stormwater facilities, and compliance with the City's standard conditions of approval will reduce the Project's impacts in this regard to less than significant.

4.5.5.2 GROUNDWATER RECHARGE

Impacts related to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level are discussed in Chapter 4.8, Utilities.

4.5.5.3 STORMWATER DRAINAGE

4.5.5.3.1 Impact 4.5-2: Project Impacts on Runoff Water and Planned Stormwater Drainage Systems

As discussed in Section 4.5.5.1 above, the Renaissance Marketplace Project and the Planning Area 108 development include several above ground drainage basins. The drainage facilities have been sized to adequately treat runoff water from the proposed Project areas. Onsite storm drainage facilities serving future development projects shall be sized according to a required WQMP that will control and reduce polluted urban runoff from the Project area. Furthermore, the proposed project includes a detention basin located in the northern portion of Planning Area 115. The detention basin will collect surface water from proposed development until adequate storm drain facilities have been constructed as the Specific Plan area is developed. Implementation of the mitigation measures identified in the 2010 RSP EIR (and listed in Section 4.5.5.4, below) would reduce impacts related to stormwater runoff to less than significant.

4.5.5.4 MITIGATION MEASURES

The following mitigation measures apply to all development within the Specific Plan Amendment Area.

Mitigation Measure HYD-1: Prior to issuance of grading permits, the developers or their designees shall coordinate the design and obtain approval of all flood control and storm drain structures as identified in the Renaissance Specific Plan Storm Drainage Plan. The developers or their designees shall provide evidence of this approval to the City Public Works Department. These improvements shall be consistent with any master planning efforts of the County to the satisfaction of the City Engineer.

Mitigation Measure HYD-2: The developers or their designees shall obtain a General Permit for Stormwater Discharge Associated with Construction Activity (Construction Activity General Permit). The developers or their designees shall provide a copy of this permit to the City Public Works Department prior to the issuance of grading permits.

Mitigation Measure HYD-3: Prior to the issuance of grading permits, the developers or their designees shall prepare a WQMP and an Erosion and Sediment Control Plan (ESCP) to implement the most appropriate BMPs and to prevent any significant removal and/or downstream deposition of soil from the Project area during construction. The WQMP and ESCP shall contain provisions requiring that all erosion control measures and structures be maintained and repaired as needed for the life of the Project.

Prior to the issuance of a grading permit, the Public Works Department shall approve the WQMP and ESCP based on review and input by the RWQCB. At the request of the developer, the City Public Works Department may accept a Stormwater Pollution Prevention Plan (SWPPP) as a substitute for the ESCP as long as it fulfills the intent of this measure to an equivalent degree. The SWPPP or ESCP shall be prepared to the satisfaction of the City Public Works Department. The WQMP and ESCP or SWPPP shall include, but is not limited to, the following:

a) Specify the timing of grading and construction to minimize soil exposure to winter rain periods experienced in southern California;

b) Natural vegetation shall be retained on all areas that will not be disturbed for grading, except areas that must be cleared and revegetated as part of a fuel modification program;

c) All slopes greater than five feet in height shall be evaluated to define the optimum length and steepness to minimize flow velocity and erosion potential. Lateral drainage collection systems shall be incorporated at the base of slopes, when determined appropriate, to transport flows in a controlled, non-erodible channel;

d) Indicate where flows on the site can be diverted from denuded areas and carried in the natural channels on the site;

e) Construct man-made channels to minimize runoff velocities;

f) Disturbed areas shall be vegetated and mulched immediately after final grades have been established;

g) Sediment traps, basins, or barriers (silt fences, hay bales, etc.) shall be established on the property to prevent the release of "first flush" urban pollutants, including sediment, from developed areas, including the emergency access roads. The design and location of these improvements shall be identified in the plan subject to review and approval by the City;

h) Drainage facilities designed to transport flows shall be described and the adequacy of the channel shall be verified by City approval of a detailed drainage analysis;

i) An inspection and maintenance program shall be included to ensure that any erosion, which does occur either on or offsite as a result of the Project, will be corrected through a remediation or restoration program within a time frame specified by the City;

j) Confirmed observations by the City of uncontrolled runoff being carried onsite will be grounds for suspension or revocation of any grading or building permit in process, or any discretionary permit subsequently applied for until the problem is resolved to the satisfaction of the City Public Works Department.

Mitigation Measure HYD-4: Prior to the issuance of building permits, graded but undeveloped land shall be maintained in a relatively weed-free condition and/or planted with interim landscaping, unless building permits are obtained within 180 days of completion of grading. This measure shall be implemented to the satisfaction of the Development Services Director.

Mitigation Measure HYD-5: Prior to the issuance of grading permits, the applicant shall demonstrate that the development's Erosion Control Plans comply with the Statewide General Construction Permit to the satisfaction of the City Engineer and/or Public Works Director as applicable.

Mitigation Measure HYD-6: Prior to issuance of the first occupancy permit, the developers or their designees shall provide proof to the Public Works Department that the onsite drainage facilities will be maintained by the County, City, HOA, or equivalent. The developer must demonstrate that these facilities will be adequately maintained by an appropriate mechanism or organization, to the satisfaction of the City Public Works Department.

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4.6 NOISE

4.6.1 INTRODUCTION

This section describes the existing noise setting and potential noise related effects from project implementation on the site and its surroundings. The descriptions and analyses in this section are based on information contained in the 2010 RSP EIR, and in the Noise and Vibration Impact Study in October, 2015 by LSA Associates, Inc. (LSA 2015), and included in the appendices of this Environmental Impact Report (EIR). Potential effects are evaluated relative to exposure of persons to or generation of noise and/or groundborne vibrations levels in excess of standards, and a substantial permanent, and/or temporary or periodic increase in ambient noise levels in the Project vicinity. All other significant thresholds and potential impacts to the proposed Project were addressed in the proposed Project's NOP (January 2015), which determined there would be no new or additional impacts, or that impacts would be less than significant, and therefore need not be further considered in this Recirculated Draft SEIR. Please refer to the proposed Project's NOP attached as Appendix A.

4.6.2 REGULATORY FRAMEWORK

4.6.2.1 FEDERAL

Noise

Federal codes, primarily the Occupational Safety and Health Act of 1970, govern worker exposure to noise levels. These regulations apply to all phases of the proposed Project and are designed to limit worker exposure to noise levels of 85 A-weighted decibel scale (dBA) or lower over an eight-hour period. The U.S. Department of transportation also has developed regulations that govern noise standards for designing highways.

The U.S. Environmental Protection Agency (EPA) has established general guidelines for noise levels in sensitive areas to provide State and/or local government's guidance in establishing local laws, ordinances, rules, and standards. The EPA guidelines suggest that the average residential outdoor noise level should be 55 dBA, and the indoor level should be 45 dBA. The indoor level also applies to sensitive noise receptors such as hospitals, schools, and libraries. However, the EPA residential outdoor and indoor noise levels are considered guidelines, not regulatory requirements. The EPA has also set the noise levels of typical construction equipment.

Groundborne Vibration

The U.S. Department of Transportation's Federal Transit Administration (FTA) provides criteria for acceptable levels of groundborne vibration for various types of buildings that are susceptible to vibration. The human reaction to vibration is highly subjective and varies from person to person, but 65 VdB (vibration decibels) is considered the threshold of perception. Vibrations beyond that amount can by be annoying to some people. Vibrations below that amount can have secondary audible effects, such as slight rattling of doors, fixtures, and dishes. **Table 4.6-1** shows the FTA groundborne vibration and noise impact criteria.

Table 4.6-1 Ground-Borne Vibration (GBV) and Ground-Borne Noise (GBN) Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch/sec)			GBN Impact Levels (dB re 20 micro Pascals)		
	Frequent Events[1]	**Occasional Events[2]**	**Infrequent Events[3]**	**Frequent Events[1]**	**Occasional Events[2]**	**Infrequent Events[3]**
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[4]	N/A[4]	N/A[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Notes:

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" is defined as fewer than 30 vibrations events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems of stiffened floors.

Source: United States Department of Transportation, Federal Transit Administration, *Transit Nosie and Vibration Impact Assessment*, 2006.

4.6.2.2 STATE

As with federal standards, the State of California regulations address worker exposure to noise levels. These regulations also limit worker exposure to noise levels of 85 dB or lower over an eight-hour period. The State has not established noise levels for various non-work-related environments. However, the Department of Health Office of Noise Control has published a Model Noise Ordinance to assist localities in developing their own noise ordinances. The State of California has also set noise guidelines for State land use compatibility.

4.6.2.3 LOCAL

City of Rialto General Plan

The Noise and Safety Chapter in the General Plan includes the City's Interior and Exterior Noise Standards, provided in **Table 4.6-2** below.

Table 4.6-2 City of Rialto Interior and Exterior Noise Standards

Land Use Categories		CNEL Energy	
Category	**Uses**	**Interior[1]**	**Exterior[2]**
Residential	Single-family, Duplex, Multi-family	45[3]	60[3]
	Mobile home	45[5]	60[3]
Commercial Industrial Institutional	Hotel, Motel, Transient Lodge	45	60[3,4]
	Commercial Retail, Bank, Restaurants	50	65
	Office Building, Research and Development, Professional Offices, City Office Building	45	---
	Amphitheatre, Concert Hall, Auditorium, Meeting Hall	45	---
	Gymnasium (Multi-purpose)	50	---
	Sports Club	55	---
	Manufacturing, Warehouse, Wholesale, Utilities	65	---
	Movie Theatres	45	---
Institutional	Hospital, Schools, Classrooms	45	65
	Church, Library	45	---
Open Space	Parks	---	65

[1]Indoor environment excluding bathrooms, toilets, closets, corridors.
[2]Outdoor environment limited to private yard of single-family, multifamily private patio or balcony which is served by a means of exit from inside, mobile home park, hospital patio, office patio, park's picnic area, school's playground, hotel and motel recreation area.
[3]An exterior noise level of up to 65 dBA CNEL will be allowed provided exterior levels have been substantially mitigated with a noise barrier of at least 6 feet in height, and interior noise exposure does not exceed 45 dBA CNEL with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level will necessitate the use of air conditioning or mechanical ventilation.
[4]Except those areas affected by aircraft.
[5]Due to the variable nature of mobile homes, a 15 dBA outdoor-to-indoor noise reduction with windows closed should be assumed for indicating compliance with this standard.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels

Source: City of Rialto Noise Element (2010).

The City of Rialto General Plan includes the following applicable policies related to noise:

Goal 2-8: *Preserve and improve established residential neighborhoods in Rialto.*

- ***Policy 2-8.3:*** *Require all new housing build adjacent to designated major or secondary highways to face a residential street, with driveways on the side street. Require landscaped barrier walls to preserve the privacy of residential side yards and protect them from traffic noise and pollution.*

Goal 2-9: *Protect residential, schools, parks, and other sensitive land uses from the impacts associated with industrial and trucking-related land uses, as well as commercial and retail areas.*

- ***Policy 2-9.1:*** *Require mitigation and utilize other techniques to protect residential development and other sensitive land uses or within identified health risk areas from excessive noise, hazardous materials, and waste releases, toxic air pollutant concentrations, and other impacts.*

Goal 2-21: *Ensure high-quality planned developments in Rialto.*

- ***Policy 2-21.8:*** *Require that new residential subdivisions adjacent to secondary or major highways be oriented inward and provided with buffers to reduce exposure to traffic and noise.*

Goal 2-32: *Balance the provisions of the California Surface Mining and Reclamation Act with City objectives to minimize negative impacts of mining activities on the Rialto community.*

- ***Policy 2-32.5:*** *Require that access roads to resource extraction areas meet standards for noise, dust control, erosion control and grading to minimize adverse impacts to adjacent uses.*
- ***Policy 2-32.6:*** *Apply noise reduction requirements for mining activity affecting adjacent noise-sensitive areas.*

Goal 4-3: *Protect residences, sensitive land uses, and pedestrians from activities along rail corridors.*

- ***Policy 4-3.1:*** *Require that development projects within rail corridors provide protective fencing, landscaping, and/or walls between rail tracks and new residences or other new development sensitive to noise or danger from rail operations.*

Goal 4-10: *Provide a circulation system that supports Rialto's position as a logistics hub.*

- ***Policy 4-10.3:*** *Develop appropriate noise mitigation along truck routes to minimize noise impacts on nearby sensitive land uses.*

Goal 5-10: *Minimize the impact of point source and ambient noise levels throughout the community.*

- ***Policy 5-10.1:*** *Revise the City's noise ordinance to address ongoing noise issues by using quantitative noise limits where appropriate and establishing comprehensive noise control measures.*
- ***Policy 5-10.2:*** *Consider noise impacts as part of the development review process, particularly the location of parking, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.*
- ***Policy 5-10.3:*** *Ensure that acceptable noise levels are maintained near schools, hospitals, and other noise sensitive areas in accordance with the Municipal Code and noise standards contained in Exhibit 5.5 of the General Plan.*
- ***Policy 5-10.4:*** *Limit the hours of operation at all noise generation sources that are adjacent to noise-sensitive areas.*
- ***Policy 5-10.5:*** *Require all exterior noise sources (construction operations, air compressors, pumps, fans and leaf blowers) to use available noise suppression devices and techniques to reduce exterior noise to acceptable levels that are compatible with adjacent land uses.*

Goal 5-11: *Minimize the impacts of transportation-related noise.*

- ***Policy 5-11.1:*** *Work with responsible Federal and State agencies to minimize the impact of transportation-related noise, including noise associated with freeways, major arterials, and Metrolink and other rail lines.*
- ***Policy 5-11.2:*** *Require development which is, or will be, affected by railroad noise to include appropriate measures to minimize adverse noise effects on residential and business persons.*
- ***Policy 5-11.3:*** *Require development of truck-intensive uses to minimize noise impacts on adjacent uses through appropriate site design.*

- ***Policy 5-11.4:*** *Develop a program for monitoring noise levels and investigating complaints.*
- ***Policy 5-11.5:*** *Provide education to the community at large about the importance of maintaining a healthy noise environment, and identify ways residents can assist in noise abatement efforts.*

City of Rialto Municipal Code

The City of Rialto Municipal Code provided the following applicable policies and implementations related to noise and vibration.

Section 9.50.030 Prohibited Acts.

A. It is unlawful for any person to engage in the following activities:

6. Creating excessive noise adjacent to any school, church, court, or library while the same in the use, or adjacent to any hospital or care facility, which unreasonably interferes with the workings of such institution, or which disturbs or unduly annoys patients in the hospital, students in the school, users of the court or library, provided conspicuous signs are displayed in such street indicating the presence of a school, institution of learning, church, court or hospital.

7. Making or knowingly and unreasonably permitting to be made any unreasonably loud, unnecessary or unusual noise that disturbs the comfort, repose, health, peace and quiet or which causes discomfort or annoyance to any reasonable person of normal sensitivity. The characteristics and conditions that may be considered in determining whether this section has been violated, include, but not limited to, the following:

    a. The level of noise;
    b. Whether the nature of the noise is usual or unusual;
    c. Whether the origin of the noise is natural or unnatural;
    d. The level of background noise;
    e. The proximity of the noise to sleeping facilities;
    f. The nature and zoning of the areas within which the noise emanates;
    g. The density of the inhabitation of the area within which the noise emanates;
    h. The time of day or night the noise occurs;
    i. The duration of the noise;
    j. Whether the noise is recurrent, intermittent or constant; and
    k. Whether the noise is produced by a commercial or noncommercial activity. (Ord. 1417 Section 1 (part), 2008)

Section 9.50.050 Controlled hours of operation.

It is unlawful for any person to engage in the following activities other than between the hours of seven a.m. and eight p.m. in all zones:

A. Operate or permit the use of powered model vehicles and planes;
B. Load or unload any vehicles, or operate or permit the use of dollies, cares, forklifts, or other wheeled equipment that causes any impulsive sound, raucous or unnecessary noise within one thousand feet of a residence;
C. Operate or permit the use of domestic power tools, or machinery or any other equipment or tool in any garage, workshop, house or any other structure;
D. Operate or permit the use of gasoline or electric powered leaf blowers, such as commonly used by gardeners and other persons for cleaning lawns, yards, driveways, gutters and other property;
E. Operate or permit the use of privately operated street/parking lot sweepers or vacuums, except that emergency work and/or work necessitated by unusual conditions may be performed with the written consent of the city manager;
F. Operate or use of pile driver, steam or gasoline shovel, pneumatic hammer, steam or electric hoist or other similar devices;
G. Operate or permit the use of electrically operated compressor, fan, and other similar devices;
H. Perform ground maintenance on golf course grounds and tennis courts contiguous to golf courses that creates a noise disturbance across a residential or commercial property line;
I. Operate or permit the use of any motor vehicle with a gross vehicle weight rating in excess of ten thousand points, or of any auxiliary equipment attached to such a vehicle, including but not limited to refrigerated truck compressors, for a period longer than fifteen minutes in any hour while the vehicle is stationary and on a public right-of-way or public space except when movement of the vehicle is restricted by other traffic;
J. Repair, rebuild, reconstruct or dismantle any motor vehicle or other mechanical equipment or devices in a manner so as to be plainly audible across property lines.

Section 9.50.06 Exemptions.

A. The noise events in the community (e.g., airport noise, arterial traffic noise, railroad noise) that are more accurately measured by application of the General Plan noise element policy, utilizing the CNEL method;
J. Construction, repair or excavation necessary for the immediate preservation of life or property;
L. Construction, repair or excavation work performed pursuant to a valid written agreement with the City or with any of its political subdivisions which agreement provides for noise mitigation measures;
M. Any activity to the extent regulation thereof has been preempted by State or federal law;
O. Sound generated in commercial and industrial zones that are necessary and incidental to the uses permitted therein (Ord. 1417 Section 1 (part), 2008).

Section 9.50.070 Disturbances from construction activity.

A. No person shall be engaged or employed, or cause any other person to be engaged or employed, in any work of construction, erection, alteration, repair, addition, movement, demolition, or improvement to any building or structure except within the hours provided for by subsection B of this section.
B. The permitted house for such construction work are as follows:

1. October 1st through April 30th.

Monday – Friday	7:00 a.m. to 5:30 p.m.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	No permissible hours
State holidays	No permissible hours

2. May 1st through September 30th.

Monday – Friday	6:00 a.m. to 7:00 p.m.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	No permissible hours
State holidays	No permissible hours

C. For the purposed of this section, the following definitions shall apply:
   1. "Building" means any structure used or intended for supporting or sheltering any use or occupancy.
   2. "Structure" means that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

D. For purposes of this section, the following exceptions shall apply:
   1. Emergency repair of existing installations, equipment, or appliances; and
   2. Such work that complies with the terms and conditions of a written early work permit issued by the city manager or his or her designee upon a showing of a sufficient need and justification for the permit due to hot or inclement weather, the use of an unusually long process material, or other circumstances of an unusual and compelling nature.

4.6.3 EXISTING CONDITIONS

4.6.3.1 OVERVIEW OF EXISTING NOISE ENVIRONMENT

The Project area is the former Rialto Municipal Airport. With the exception of the runway and former associated airport facilities on the southern portion of the site, the site is largely vacant. The primary existing noise sources in the Project area are transportation facilities.

Transportation sources include vehicular traffic along State Route 210 (SR-210) and surface streets in the Project vicinity. Traffic on SR-210, Baseline Road, Ayala Drive, Linden Avenue, Locust Avenue, Renaissance Parkway, and other local streets in the Project vicinity are the major sources contributing to area ambient noise levels. Occasional aircraft overflight and natural sounds such as wind and birds also contribute to the ambient noise in the Project vicinity.

4.6.3.2 SENSITIVE LAND USES IN THE PROJECT VICINITY

The closest existing residences are located to the south, across Baseline Road, approximately 200 feet from the Project area. It would potentially be affected by construction and operation at the Project area. To the east, west, and north of the Project area are either vacant land, or industrial uses.

4.6.3.3 EXISTING TRAFFIC NOISE MODELING

The Traffic Impact Analysis prepared for the proposed Project (LSA 2015) provided morning and afternoon peak-hour vehicle trips generated from the Project. Based on the trip distribution in the Project vicinity, the Project's contribution to the average daily traffic (ADT) volumes along the roadway segments in the Project vicinity were calculated for each impacted segment. The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate highway traffic-related noise conditions in the vicinity of the Project area. The existing baseline condition traffic noise impact analysis were conducted and are listed in **Table 4.6-3**. The resultant noise levels are weighted and summed over 24-hour periods to determine the Community Noise Equivalent Level (CNEL) values. Due to the high proportion of truck traffic along the arterials in the vicinity of the Project area, percentages used in this analysis for medium- and heavy-duty trucks are higher than those in typical residential or mixed-use communities. Table 4.6-3 shows that traffic noise in the Project vicinity ranges from low (where the 70, 65, and 60 dBA CNEL contours are confined to within 50 feet of the roadway centerline) to moderate (where the 70 dBA CNEL contours are confined to within 50 feet of the roadway centerline but the 60 and/or 65 dBA CNEL contours extend beyond 50 feet from the roadway centerline) to high (where the 70, 65, and 60 dBA CNEL contours all extend beyond 50 feet from the roadway centerline.

Table 4.6-3 Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Casmalia Street between Alder Avenue and Locust Avenue	11,600	< 50	82	177	67.5
Casmalia Street between Locust Avenue and Linden Avenue	4,600	< 50	< 50	96	63.5
Casmalia Street between Linden Avenue and Ayala Drive	4,500	< 50	< 50	94	63.4
Renaissance Parkway west of Alder Avenue	3,300	< 50	< 50	109	63.2
Renaissance Parkway between Alder Avenue and Locust Avenue	4,000	< 50	59	123	64.0
Renaissance Parkway between Locust Avenue and Linden Avenue	2,600	< 50	< 50	93	62.2
Renaissance Parkway between Linden Avenue and Ayala Drive	3,900	< 50	58	121	63.9
Renaissance Parkway east of Ayala Drive	5,900	< 50	75	159	65.7
Baseline Road west of Alder Avenue	11,200	55	114	242	68.5
Baseline Road between Alder Avenue and Locust Avenue	14,800	65	136	292	69.7
Baseline Road between Locust Avenue and Linden Avenue	11,600	56	116	248	68.7
Baseline Road between Linden Avenue and Ayala Drive	13,700	62	130	277	69.4
Baseline Road east of Ayala Drive	12,500	59	122	261	69.0
Alder Avenue south of Casmalia Street	16,800	71	148	317	70.3
Alder Avenue between RS-210 ramps	16,100	69	144	308	70.1

Table 4.6-3 Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Alder Avenue north of Renaissance Parkway	18,200	74	156	335	70.6
Alder Avenue between Renaissance Parkway and Walnut Avenue	16,700	< 50	105	225	69.1
Alder Avenue between Walnut Avenue and Baseline Road	15,100	< 50	98	211	68.7
Laurel Avenue south of Renaissance Parkway	1,400	< 50	< 50	< 50	58.3
Locust Avenue south of Casmalia Street	3,400	< 50	54	111	63.3
Linden Avenue north of Renaissance Parkway	2,200	< 50	< 50	86	61.4
Ayala Drive south of Casmalia Street	15,000	66	138	294	69.8
Ayala Drive between SR-210 ramps	18,900	76	160	343	70.8
Ayala Drive north of Renaissance Parkway	24,400	89	186	407	71.9
Ayala Drive between Renaissance Parkway and Leiske Drive	22,400	59	127	274	70.4
Ayala Drive tween Baseline Road and Fitzgerald Avenue	19,600	54	117	251	69.8
Locust Avenue between Miro Way and Baseline Road	430	< 50	< 50	< 50	53.2
Linden Avenue between Miro Way and Baseline Road	440	< 50	< 50	< 50	53.3

Notes:
Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information
ADT = average daily traffic
CNEL = Community Noise Equivalent
dBA = A-weighted decibels
ft = feet

Source: Noise and Vibration Impact Study (LSA 2015)

4.6.4 STANDARDS OF SIGNIFICANCE

4.6.4.1 THRESHOLDS OF SIGNIFICANCE FOR NOISE

A project would have a significant effect on the environment related to noise if it would result in one of the following: exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels; a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project; a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

The applicable local noise standards governing the Project area and adjacent areas are the criteria in the City's Noise Element and the City's Municipal Code Noise Ordinance.

The City has adopted exterior and interior noise standards (see Table 4.6-2) for various land use categories. For residential uses, the exterior and interior noise standards are 60 and 45 dBA CNEL, respectively. For commercial retail and banks and restaurants, the exterior and interior noise standards are 65 and 50 dBA CNEL, respectively. For industrial uses such as manufacturing, warehousing, wholesale and utilities, the interior noise standard is 65 dBA CNEL. There is no exterior noise standard for industrial uses.

Rialto Municipal Code Section 9.50.070 specifies time-of-day constraints on construction activity; however, the Rialto Municipal Code does not contain noise level limits pertaining to construction activity. Therefore, for the purposes of this analysis, compliance with Rialto Municipal Code Section 9.50.070 is considered to satisfy the requirements of Mitigation Measure N-05.

Because the City's Municipal Code has not adopted any noise level limits for stationary sources, the above noise level limits identified in the State's Model Community Noise Control Ordinance (State of California ONC 1977) are used in this analysis for stationary source noise impact evaluation purposes.

4.6.4.2 THRESHOLDS OF SIGNIFICANCE FOR VIBRATION

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. The County of San Bernardino General Plan establishes the following applicable policies and implementations related to vibration, shown below.

> Section 83.01.090
>
> (a) Vibration standard. No ground vibration shall be allowed that can be felt without the aid of instruments at or beyond the lot line, nor shall any vibration be allowed which produces a particle velocity greater than or equal to two-tenths (0.2) inches per second measured at or beyond the lot line.
> (b) Vibration measurement. Vibration velocity shall be measured with a seismograph or other instrument capable of measuring and recording displacement and frequency, particle velocity, or acceleration. Readings shall be made at points of maximum vibration along any lot line next to a parcel within a residential, commercial and industrial land use-zoning district.
> (c) Exempt vibrations. The following sources of vibration shall be exempt from the regulations of this Section.
> (1) Motor vehicles not under the control of the subject use.
> (2) Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

Table 4.6-4 lists the potential vibration damage criteria associated with construction activities, as suggested in the *Transit Noise and Vibration Impact Assessment* (FTA 2006).

Table 4.6-4 Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Approximate L_v[1]
Reinforced-concrete, steel or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

[1] RMS velocity in decibels (VdB) re 1 micro-inch/second.
FTA = Federal Transit Administration
in/sec = inches per second
L_v = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square

Source: *Transit Noise and Vibration Impact Assessment* (FTA 2006).

FTA guidelines show that a vibration level of up to 102 VdB (an equivalent to 0.5 inch per second [in/sec] in RMS) (FTA 2006) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in RMS). The RMS values for building damage thresholds referenced above are shown in **Table 4.6-5** and are taken from the *Transportation- and Construction-Induced Vibration Guidance Manual* (Caltrans 2004).

Table 4.6-5 Guideline Vibration Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources[2]
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

[1] Transient sources create a single, isolated vibration event, such as blasting or drop balls.
[2] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
Caltrans = California Department of Transportation
in/sec = inches per second
PPV = peak particle velocity

Source: *Transportation- and Construction-Induced Vibration Guidance Manual* (Caltrans 2004).

Therefore, the County's 0.2 in/sec PPV (or 94 VdB) vibration threshold is similar to the construction vibration damage criteria for non-engineered timber and masonry buildings (Table 4.6-4) or potential vibration damage criteria for fragile buildings from transient sources (Table 4.6-5).

4.6.4.3 SIGNIFICANCE CRITERIA[1]

As a Subsequent EIR to the 2010 RSP EIR, this analysis only evaluates the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

[1] Less than significant and no impact determinations for potential Noise impacts of the proposed Project are listed Table 1-1 of Section 1.0 Executive Summary.

4.6.4.3.1 Noise Levels in Excess of Standards

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"Expose persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies"

4.6.4.3.2 Excessive Groundborne Vibration

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels"

4.6.4.3.3 Long-Term Increase in Permanent Project-Generated Traffic Noise

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project"

4.6.4.3.4 Temporary or Periodic Increase in Ambient Noise Levels

As identified in Appendix G of the CEQA Guidelines and identified in the proposed Project's NOP, a project would have a potentially significant impact if the Project would:

"A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project"

4.6.4.4 NOISE LEVELS IN EXCESS OF STANDARDS

4.6.4.4.1 Impact 4.6-1: Project Construction-Related Noise Impacts

Renaissance Specific Plan Amendment

Because the RSPA is a program level study, it does not involve construction of any specific development. Therefore, no construction noise impacts would occur, and no mitigation measures are required.

Renaissance Marketplace

Short-Term Construction Related Noise Impacts

Short-term noise impacts would be associated with excavation, grading, and building erection on the Renaissance Marketplace site during construction of the proposed Renaissance Marketplace. Construction-related, short-term noise levels would be higher than existing ambient noise levels in the area adjacent to the Renaissance Marketplace today, but would no longer occur once construction of the Renaissance Marketplace is complete.

Two types of short-term noise impacts could occur during the construction of the proposed Renaissance Marketplace. First, construction crew commute and the transport of construction equipment, materials, and fill to the site for the proposed Renaissance Marketplace would incrementally increase noise levels on access roads leading to the Renaissance Marketplace site. Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA L_{max} at 50 feet from passing trucks along access roads leading to the Renaissance Marketplace site, which could possibly cause short-term intermittent annoyances, the effect in long-term ambient noise levels would be less than 1 dBA when averaged over a longer period of time. Therefore, short-term, construction-related impacts associated with worker commute and equipment transport to the Renaissance Marketplace site would result in a less than significant impact on noise-sensitive receptors along the access routes.

The second type of short-term noise impact is related to noise generated during excavation, grading, and building erection on the Renaissance Marketplace Project area. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the Renaissance Marketplace site and, therefore, the noise levels surrounding the Renaissance Marketplace site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. **Table 4.6-6** lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, taken from the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006).

Construction of the proposed Renaissance Marketplace is expected to require the use of a few earthmovers, bulldozers, water trucks, and pickup trucks. This equipment would be used on the Renaissance Marketplace site. Based on Table 4.6-6, the maximum noise level generated by each scraper on the proposed Renaissance Marketplace site is assumed to be 84 dBA L_{max} at 50 feet from the earthmover. Each bulldozer would also generate 82 dBA L_{max} at 50 feet. The maximum noise level generated by water trucks and pickup trucks is approximately 76 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound sources with equal strength would increase the noise level by three dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the active construction area.

There are no existing residences or other noise-sensitive uses in the immediate vicinity of the Renaissance Marketplace site. However, if the proposed multifamily residences to the south of the Renaissance Marketplace site are constructed and occupied prior to the start of construction for the proposed Renaissance Marketplace, then these closest “existing” residences would be located approximately 100 feet from the construction area of Renaissance Marketplace. With the noise attenuation effect from the distance divergence, construction noise would be attenuated by 6 dBA compared to the noise level measured at 50 feet. Therefore, if constructed and occupied, these closest residences may be subject to short-term noise reaching 84 dBA L_{max} that would be generated by construction activities near the southern boundary of the Renaissance Marketplace site. Compliance with the restrictions on construction hours permitted by the City (Section 9.50.070(b) of the City of Rialto Municipal Code) would be sufficient to reduce the construction noise to a less than significant level. Therefore, no significant construction noise impacts would occur if construction of the proposed Renaissance Marketplace occurs within the permitted hours.

Table 4.6-6 RCNM Default Noise Emission Reference Levels and Usage Factors

Equipment Description	Impact Device?	Acoustical Usage Factor	Spec. 721.560 L_{max} at 50 ft (dBA, slow)	Actual Measured L_{max} at 50 ft (dBA, slow)	Number of Actual Data Samples (Count)
All Other Equipment > 5 HP	No	50	85	N/A	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	N/A	0
Blasting	Yes	N/A	94	N/A	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	N/A	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (< 25 kVA, VMS Signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	N/A	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydraulic Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	N/A	0
Impact Derive	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarifier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	40	55	75	1
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/Chipping Gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (single nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Sheers (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trench Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	N/A	0
Tractor	No	40	84	N/A	0
Vacuum Excavator (Vac-Truck)	No	40	85	85	149

Table 4.6-6 RCNM Default Noise Emission Reference Levels and Usage Factors

Equipment Description	Impact Device?	Acoustical Usage Factor	Spec. 721.560 L_{max} at 50 ft (dBA, slow)	Actual Measured L_{max} at 50 ft (dBA, slow)	Number of Actual Data Samples (Count)
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5

dBA = A-weighted decibels
FHWA = Federal Highway Administration
ft = feet
ft-lb/blow = foot-pounds per blow
HP = horsepower
N/A = Not Applicable
RCNM = Roadway Construction Noise Model

Source: *Highway Construction Noise Handbook* (FHWA 2006).

Future Anticipated Stationary Source Impacts

The proposed Renaissance Marketplace commercial/retail uses would generate noise from truck delivery, loading/unloading activities, and other activities at the parking lot. These activities are potential point sources of noise that could affect noise-sensitive receptors adjacent to the loading areas, such as multifamily residential uses to the south of the Renaissance Marketplace Project area (after they are constructed and occupied). Mitigation measures may be required to comply with the City's noise standards.

The proposed commercial/retail uses at the Renaissance Marketplace have loading/unloading areas on the south side of lots located along the southern boundary of the site. Noise associated with loading/unloading activities would potentially affect residential uses to the south of the site. Other on-site, noise-producing activities may include parking, traffic, and pedestrian activity within the parking lot of the commercial/retail uses within the Renaissance Marketplace. Most of the events are intermittent in nature and usually of a very short duration, lasting only a few seconds. The combination of the intermittent activities, even over the course of a day, does not amount to a significant amount of time.

Based on the preliminary master site plan, the shortest distance from the residences to the nearest loading/unloading areas on the southern portion of the Renaissance Marketplace Project area is 100 feet and would result in a 6 dBA noise attenuation (compared to the levels at 50 feet).

Truck Delivery and Loading/Unloading. Delivery trucks for the proposed Renaissance Marketplace commercial/retail uses would result in a maximum noise similar to noise readings from loading and unloading activities for other similar projects, which generate a noise level of 75 dBA L_{max} at 50 feet and is used in this analysis. Based on the above discussion, at a distance of 100 feet from the loading/unloading area, loading/unloading noise would be reduced to below 69 dBA L_{max} at ground level of the nearest residences to the south (after they are constructed and occupied). This range of maximum noise levels is lower than the State Model Community Noise Control Ordinance recommended exterior noise standards of 75 dBA L_{max} during the day (7:00 a.m.–10:00 p.m.), but would be potentially higher than the 65 dBA L_{max} standard during the night (10:00 p.m.–7:00 a.m.). Although typical truck unloading processes take an average of 15 to 20 minutes, this maximum noise level occurs in a much shorter period of time, just a few minutes. Therefore, noise associated with loading and unloading activities at the loading areas would not result in noise levels exceeding the daytime noise standards at

the nearest residences approximately 100 feet away. A stand-alone noise barrier with a minimum height of 8 feet would be required along the Project's southern boundary if nighttime loading/unloading activity is expected at the loading areas of these proposed Renaissance Marketplace commercial/retail uses.

Parking Lot Activity. Representative parking activities, such as employees conversing and doors slamming, would generate approximately 60 dBA L_{max} at 50 feet. This level of noise is much lower than that of the truck delivery and loading/unloading activities. The nearest residential home to the south is located approximately 75 feet from the closest parking lot of the Renaissance Marketplace. With the noise attenuation effect from the distance divergence, noise in the parking lot would be attenuated to below 60 dBA L_{max} and is not anticipated to be a significant noise issue with respect to residences to the south/southwest of the Renaissance Marketplace Project area.

Planning Area 108

Short-Term Construction Related Noise Impacts

Similarly to anticipated construction for the Renaissance Marketplace component, construction of the proposed Planning Area 108 component is expected to require the use of a few earthmovers, bulldozers, water trucks, and pickup trucks. This equipment would be used on the Planning Area 108 site. Based on Table 4.6-6, the worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the active construction area. There are no existing residences or other noise-sensitive uses in the immediate vicinity of the Planning Area 108 site. However, if the proposed residences to the east of the Planning Area 108 are constructed and occupied prior to the start of construction for the proposed Planning Area 108, then these closest "existing" residences would be located approximately 100 feet from the construction activity of Planning Area 108. With the noise attenuation effect from the distance divergence, construction noise would be attenuated by 6 dBA compared to the noise level measured at 50 feet. Therefore, if constructed and occupied, these closest residences may be subject to short-term noise reaching 84 dBA L_{max} that would be generated by construction activities near the eastern boundary of Planning Area 108. Compliance with the restrictions on construction hours permitted by the City would be sufficient to reduce the construction noise to a less than significant level. Therefore, no significant construction noise impacts would occur if construction of the proposed Planning Area 108 occurs within the permitted hours.

Future Anticipated Stationary Source Impacts

The proposed Planning Area 108 industrial/warehouse uses would generate noise from truck delivery, loading/unloading activities and other activities in the parking lot. These activities are potential point sources of noise that could affect noise-sensitive receptors adjacent to the loading areas, such as residential uses to the east of the Planning Area 108 Project area (after they are constructed and occupied).

Truck Delivery and Loading/Unloading. Delivery trucks for the proposed warehouse buildings in Planning Area 108 would result in a maximum noise similar to noise readings from loading and unloading activities for other similar projects, which generate a noise level of 75 dBA L_{max} at 50 feet from each delivery truck and is used in this analysis.

The proposed industrial/warehouse uses in Planning Area 108 have loading/unloading areas on the north and south sides of three buildings (Buildings 4, 5, and 6). Noise associated with loading/unloading activities would potentially affect residential uses to the east of Planning Area 108. Other on-site, noise-producing activities may

include parking, traffic, and pedestrian activity within the parking lot of the industrial/warehouse uses within the Planning Area 108. Most of these noise-generating occurrences are intermittent in nature and usually of a very short duration, lasting only a few seconds. The combination of the intermittent activities, even over the course of a day, does not amount to a significant amount of time.

Based on the preliminary master site plan, the shortest distance from the residences to the nearest loading/ unloading areas on the eastern portion of the Project area is 400 feet and would result in an 18 dBA noise attenuation (compared to the levels at 50 feet). However, because each of the industrial building has 124 to 136 dock doors on both north and south sides of the buildings, many of the residences to the east would be exposed to loading/unloading activity noise from more than one dock door in the same area between these buildings. It should be noted that, due to the building shielding effect, all residences to the east would be exposed to only one area where the dock doors are concentrated between the buildings. For example, residences that would be exposed to loading/unloading noise from dock doors in the area between Buildings 5 and 6 would not be exposed to dock doors between Buildings 4 and 5 because Building 5 would completely block the load dock doors between Buildings 4 and 5 for these residences. Similarly, residences that would be exposed to loading/unloading noise from dock doors between Buildings 4 and 5 would not be exposed to loading/unloading noise from dock doors between Buildings 5 and 6.

These dock doors are distributed from east to west, with varying distances to the residences to the east. At the far western side, the dock door is approximately 2,450 feet from the nearest residences to the east. At the far eastern side, the dock door is approximately 400 feet from the nearest residences to the east. The middle point of the dock door area is then approximately 1,425 feet from the nearest residences to the east. It is not anticipated that all dock doors will be utilized at the same time for each building. Therefore, it is assumed that at a maximum, half of the dock doors on each side of the building will be used by a delivery truck. Each doubling of the number of delivery trucks in operation at the same distance will result in a 3 dBA increase in the noise level experienced by the receiver. For example, for the loading docks between Buildings 5 and 6, there would be a total of 272 dock doors. Assuming there will be up to half of these dock doors in use, there would be 136 trucks conducting loading/unloading operations at the same time, the combined noise level of which at a distance of 50 feet would be 21 dBA higher than the noise from 1 truck in operation. Therefore, noise associated with loading/unloading activity from the area between Buildings 5 and 6 would be at a source level of 96 dBA L_{max} at 50 ft. Similarly, noise from the loading area between Buildings 4 and 5 (from a combined total of 128 dock doors) would be 96 dBA L_{max} at 50 feet. Noise from the loading area on the south side of Building 4 (with a total of 68 dock doors in use) would be 93 dBA L_{max}. Noise from the loading area on the north side of Building 6 (from a total of 68 dock doors) would be 93 dBA L_{max} at 50 feet.

Table 4.6-7 lists the noise level from the combined dock doors from these four sub-areas and their distance attenuation, building edge shielding, and the projected noise levels at the nearest receiver locations to the east of Planning Area 108. Table 4.6-7 shows that the projected maximum loading/unloading noise levels at the nearest residences to the east of Planning Area 108 would range between 54 and 57 dBA L_{max}. This range of maximum noise levels is lower than the typical exterior noise standards of 75 dBA L_{max} during the day (7:00 a.m.–10:00 p.m.) and the 65 dBA L_{max} standard during the night (10:00 p.m.–7:00 a.m.).

Although typical truck unloading processes take an average of 15 to 20 minutes, this maximum noise level occurs in a much shorter period of time, just a few minutes. However, because many of these dock doors would be in use, noise from loading/unloading activity could last more than 30 minutes in any hour, and the most stringent noise standard should be used for the impact assessment. Because traffic on Linden Avenue currently has the 60 dBA

CNEL extending to 84 feet from the roadway centerline on both sides of the road (see Table 4.6-3), traffic noise in this area east of the industrial/ warehouse uses would generate maximum noise levels exceeding 60 dBA L_{max}, which is higher than the maximum noise levels generated by the loading/unloading noise from these dock doors. Therefore, noise associated with loading and unloading activities at the loading areas would not result in noise levels exceeding the daytime noise standards at the nearest residences approximately 100 feet away to the east. A stand-alone noise barrier with a minimum height of 8 feet is recommended along the Project's eastern boundary between the driveways if nighttime loading/unloading activity is expected at the loading areas of these proposed industrial/warehouse uses. This would ensure that no noise level would exceed the City of Rialto's Noise Standards of 45 dBA and 50 dBA nighttime exterior noise levels for single- and multifamily residences, respectively, to the east of Planning Area 108.

Table 4.6-7 Summary of Loading/Unloading Nosie – Planning Area 108

Location/Number of Dock Doors in Use	Noise Level, dBA L_{max}			
	Combined Loading Dock Noise at 50 ft	Distance Attenuation	Intervening Building Edge/Sound Walls[1]	Noise Level at Receiver
Residences to the East, 1,425 ft from the Middle of the Loading Area				
Building 4 South/62 dock doors	93	29	10	54
Building 4 North/62 and Building 5 South/66 dock doors	96	29	10	57
Building 5 North/ 68 and Building 6 South/66 dock doors	96	29	10	57
Building 6 North/68 dock doors	93	29	10	54

[1] Intervening building edge/sound walls reduce noise by blocking the transmission path and provide attenuation effect for noise.
ft = feet
dBA = A-weighted decibels

Sources: Compiled by LSA Associates, Inc. (2015).
Note: The City's threshold for noise from stationary sources is 50 dBA at the receiving property line.

Parking Lot Activity. Representative parking activities, such as employees conversing and doors slamming, would generate approximately 60 dBA L_{max} at 50 feet. This level of noise is much lower than that of the truck delivery and loading/unloading activities. The nearest residential home to the east is located approximately 150 feet from the closest parking lot of the Planning Area 108 industrial/warehouse uses. With the noise attenuation effect from the distance divergence (a reduction of 10 dBA at 150 feet compared to the noise level measured at 50 feet), noise in the parking lot would be attenuated to below 50 dBA L_{max}. This range of noise levels is lower than the traffic noise on Linden Avenue and is not anticipated to be a significant noise issue with respect to residences to the east of the Planning Area 108 Project area.

4.6.4.5 EXCESSIVE GROUNDBORNE VIBRATION

4.6.4.5.1 Impact 4.6-2: Project Impacts on Groundborne Vibration Or Groundborne Noise Levels

Renaissance Specific Plan Amendment

Because the RSPA is a program-level study, it does not involve construction of any specific development. Therefore, no construction vibration impacts would occur, and no mitigation measures are required.

Renaissance Marketplace

Short-term vibration impacts would be associated with excavation, grading, and building erection on site during construction of the proposed Project. Short-term, construction-related vibration levels would be higher than existing ambient vibration levels in the area adjacent to the Renaissance Marketplace site today, but would no longer occur once construction of the Renaissance Marketplace is complete.

The Renaissance Marketplace site is bounded by Renaissance Parkway to the north, Linden Avenue to the west, Ayala Drive to the east, and proposed residential uses to the south. If these proposed residential land uses to the south are constructed and occupied prior to the start of construction on the Renaissance Marketplace site, then these residential land uses would be the closest land uses subject to potential construction vibration from construction of Renaissance Marketplace. For commercial or office buildings adjacent to the Project area, based on Table 4.6-5, it would take a vibration PPV level of more than 2 in/sec to potentially result in any building damages. Table 4.6-6 shows that none of the construction activities anticipated on the Renaissance Marketplace site would result in a vibration level that would reach 2 in/sec PPV. The vibration level from a rock crusher would be between that of a vibratory roller and pile driving. Therefore, no building damages would occur as a result of the construction of Renaissance Marketplace.

Since vibration impacts occur normally within the buildings, the distance to the nearest sensitive uses, for vibration impact analysis purposes, is measured between the nearest off-site sensitive use buildings and the Project boundary (assuming the heavy duty equipment would be used at or near the Project boundary). The nearest sensitive use buildings would be at 100 feet to the south from the southern boundary of Renaissance Marketplace, if the proposed residential units are built and occupied prior to the start of construction for the Renaissance Marketplace. At a distance of 100 feet from the construction area, they would receive 18 VdB vibration reduction from distance attenuation alone, compared to the vibration level measured at 25 feet.

Bulldozers and other heavy-tracked construction equipment generate approximately 87 VdB of ground-borne vibration when measured at 25 feet, based on the *Transit Noise and Vibration Impact Assessment* (FTA 2006). This level of ground-borne vibration exceeds the threshold of human perception, which is around 65 VdB. Although this range of ground-borne vibration levels would result in potential annoyance at residences adjacent to the Renaissance Marketplace site that were built and occupied prior to the start of construction for the Renaissance Marketplace, these ground-borne vibration levels would not cause any damage to these modern-day residential buildings. Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities, such as those in the backyards or patios at the multifamily residences to the south (if constructed and occupied prior to the start of the construction on the Renaissance Marketplace site).

As shown in Table 4.6-4, FTA guidelines show that a vibration level of up to 102 VdB (an equivalent to 0.5 in/sec in RMS) (FTA 2006) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in RMS). The RMS values for building damage thresholds referenced in Table 4.6-4 were taken from the *Transportation- and Construction-Induced Vibration Guidance Manual* (Caltrans 2004). **Table 4.6-8** shows the PPV values and vibration levels in terms of VdB at 25 feet from the construction vibration source.

Table 4.6-8 Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	**0.210**	**94**
Hoe Ram	0.089	87
Large Bulldozer	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks	**0.076**	**86**
Jackhammer	**0.035**	**79**
Small Bulldozer	0.003	58

Note: Equipment and associated source vibration levels that are expected to be used on the Project area are shown in **bold**.
ft = foot/feet PPV = peak particle velocity
in/sec = inches per second VdB = velocity decibels
L_v = velocity in decibels

Source: Federal Transit Administration (2006).

Vibration level from standard construction equipment is shown below for various pieces of construction equipment that are expected to be used on the Project area:

- Rollers, Scrapers, Excavators ..... 94 VdB at 25 feet
- Large dozers, Front End Loaders, Grader, Backhoe..... 87 VdB at 25 feet
- Loaded trucks ..... 86 VdB at 25 feet
- Jackhammers, Forklift..... 79 VdB at 25 feet

Based on the following formula for vibration transmission (FTA 2006), LvdB (D) = LvdB (25 feet) – 30 Log (D/25), where D represents the distance at which the vibration level is of interest compared to that of 25 feet, the vibration level at 50 feet is 9 VdB lower than the vibration level at 25 feet. Vibration at 100 feet from the source is 18 VdB lower than the vibration level at 25 feet. Therefore, sensitive receptors at 50 feet from the construction activity may be exposed to ground-borne vibration up to 85 VdB.

Table 4.6-9 lists the projected vibration level from various construction equipment on the Renaissance Marketplace Project area to the sensitive uses in the Project vicinity. For typical construction activity, the equipment with the highest vibration generation potential is the vibratory roller, which would generate 94 VdB at 25 feet. With the vibration attenuation through distance divergence, the vibration from project construction would be reduced to 85 VdB or lower at the residential buildings to the south of the Renaissance Marketplace Project area. This range of vibration levels from construction equipment or activity would be below the County's 0.2 in/sec PPV (or 94 VdB) threshold. No significant construction vibration impacts would occur, and no mitigation measures are required.

Table 4.6-9 Summary of Construction Equipment and Activity Vibration – Renaissance Marketplace

Equipment/Activity	Vibration Level, VdB at 25 ft	Distance Attenuation	Intervening Buildings/Sound Walls[1]	Vibration Level
Residences to the South, 100 ft				
Vibratory Roller, Scrapers, Excavators[2]	94	18	0	76
Large dozers, Front End Loaders, Grader, Backhoe	87	18	0	69
Loaded trucks	86	18	0	68
Jackhammers, Forklift	79	18	0	61

Note: The County's threshold for vibration is 0.2 in/sec or approximately 94 VdB at the receiving property structure/building.
[1] Intervening buildings/sound walls put weight on the transmission path and provide damping effect for vibration.
[2] Roller represents the construction equipment with the highest vibration potential that would be used on-site. Other equipment would result in at least 7 VdB lower in vibration compared to that of rollers.
ft = feet VdB = vibration level decibels

Source: Compiled by LSA Associates, Inc. (2015).

Planning Area 108

Similar to the discussion above for the Renaissance Marketplace, construction on the Planning Area 108 site has the potential to result in ground-borne vibration higher than ambient vibration levels without the construction activity.

Table 4.6-10 lists the projected vibration level from various construction equipment on the Planning Area 108 Project area to the sensitive uses in the Project vicinity. For typical construction activity, the equipment with highest vibration generation potential is the vibratory roller, which would generate 94 VdB at 25 feet. With the vibration attenuation through distance divergence, the vibration from project construction would be reduced to 85 VdB or lower at the residential buildings to the east of the Renaissance Marketplace Project area, if built and occupied prior to the start of the construction on the Planning Area 108 site. This range of vibration levels from construction equipment or activity would be below the County's 0.2 in/sec PPV (or 94 VdB) threshold. No significant construction vibration impacts would occur. No mitigation measures are required.

Table 4.6-10 Summary of Construction Equipment and Activity Vibration – Planning Area 108

Equipment/Activity	Vibration Level, VdB at 25 ft	Distance Attenuation	Intervening Buildings/Sound Walls[1]	Vibration Level
Residences to the East, 100 ft				
Vibratory Roller, Scrapers, Excavators[2]	94	18	0	76
Large dozers, Front End Loaders, Grader, Backhoe	87	18	0	69
Loaded trucks	86	18	0	68
Jackhammers, Forklift	79	18	0	61

Note: The County's threshold for vibration is 0.2 in/sec or approximately 94 VdB at the receiving property structure/building.
[1] Intervening buildings/sound walls put weight on the transmission path and provide damping effect for vibration.
[2] Roller represents the construction equipment with the highest vibration potential that would be used on-site. Other equipment would result in at least 7 VdB lower in vibration compared to that of rollers.
ft = feet VdB = vibration level decibels

Source: Compiled by LSA Associates, Inc. (2015).

Long-Term Operational Vibration Impacts

Operation of the proposed Project and Renaissance Marketplace and Planning Area 108 components would not involve any vibration sources that people would be exposed to or generate excessive ground-borne vibration or ground-borne noise. Vehicles with rubber tires on roadway segments surrounding the Project area would not generate any significant ground-borne vibration that would exceed the 65 VdB perception threshold. No significant ground-borne vibration impacts would occur; therefore, no mitigation is required.

Based on Figure 10-1, Generalized Ground Surface Vibration Curves, included in the *Transit Noise and Vibration Impact Assessment* (FTA 2006), rapid transit or light rail vehicles traveling at 50 miles per hour (mph) generate approximately 67 VdB of vibration at a distance of 100 feet from the track centerline. As stated in Tables 4.6-4 and 4.6-5, the vibration threshold for Category 2 (building where people sleep) is 72 VdB for frequent events and 80 VdB for infrequent events. The level of on-site vibration resulting from operation of the proposed Project would not exceed these vibration thresholds; therefore, no impact would occur and mitigation is warranted.

4.6.4.6 LONG-TERM INCREASE IN PERMANENT PROJECT-GENERATED TRAFFIC NOISE

4.6.4.6.1 Impact 4.6-3: Project Impacts on Ambient Noise Levels In The Project Vicinity Above Levels Existing Without The Project

The Traffic Impact Analysis prepared for the proposed Project (LSA 2015) provided average daily traffic (ADT) volumes in the Project vicinity. Based on the Project trips distribution in the Project vicinity, the Project's contribution to the ADT volumes along the roadway segments in the Project vicinity were calculated for each impacted segment.

Guidelines included in the FHWA highway traffic noise prediction model (FHWA RD-77-108) were used to evaluate highway traffic-related noise conditions in the vicinity of the Project area. The resultant noise levels are weighted and summed over 24-hour periods to determine the CNEL values.

Renaissance Specific Plan Amendment

Tables 4.6-11, **4.6-12**, and **4.6-13** provide the existing, opening year, and cumulative (2035) conditions with and without both Renaissance Marketplace and Planning Area 108 condition noise levels, respectively, adjacent to roads near the proposed entire RSPA Project area. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn.

Data in Tables 4.6-11 and 4.6-13 show that, under existing and cumulative (2035) with both Renaissance Marketplace and Planning Area 108 conditions, traffic noise levels would increase more than 1.5 dBA for most of the roadway segments in the Project vicinity, with the exception of the following:

- **Existing With RSPA**
    - Casmalia Street between Alder Avenue and Locust Avenue ..... 0.9 dBA
    - Ayala Drive south of Casmalia Street ..... 1.2 dBA
- **Cumulative (2035) with RSPA**
    - None

As shown in Table 4.6-12, under opening year with both Renaissance Marketplace and Planning Area 108 conditions, traffic noise levels in the Project vicinity for the following roadway segments would increase more than 1.5 dBA:

- **Opening Year With RSPA**
    - Renaissance Parkway between Alder Avenue and Locust Avenue ..... 2.9 dBA
    - Renaissance Parkway between Locust Avenue and Linden Avenue ..... 4.5 dBA
    - Renaissance Parkway between Linden Avenue and Ayala Drive ..... 5.2 dBA
    - Locust Avenue south of Casmalia Street ..... 2.7 dBA
    - Linden Avenue north of Renaissance Parkway ..... 4.0 dBA
    - Linden Avenue between Renaissance Parkway and Miro Way..... 3.2 dBA
    - Linden Avenue between Miro Way and Baseline Road ..... 3.2 dBA
    - Linden Avenue between Renaissance Parkway and Miro Way..... 8.6 dBA
    - Linden Avenue between Miro Way and Baseline Road ..... 8.7 dBA
    - Miro Way between Locust Avenue and Linden Avenue ..... 3.1 dBA

However, along these roadway segments, there are no existing noise-sensitive uses that would be impacted by these potentially significant traffic noise level increases. Along most roadway segments west of Linden Avenue, land uses would be commercial, industrial, or institutional. These land uses are not considered noise sensitive. Only the proposed residential uses, public park, and school within the RSPA that are located east of Linden Avenue are considered noise sensitive, and potential traffic noise impacts on these proposed on-site noise-sensitive uses would be evaluated under the future worst-case conditions under the cumulative with both Renaissance Marketplace and Planning Area 108 conditions included, as shown in Table 4.6-13.

Proposed on-site residential uses, school, and public parks along Ayala Drive as well as on-site residences along Linden Avenue between Renaissance Parkway and Baseline Road would be potentially exposed to relatively high traffic noise levels in the following areas:

- **Sub-Area 115 (High Density Residential), Sub-Area 123 (School), Sub-Areas 126 and 128 (Public Parks)**
    - Within 86 feet of the centerline of Ayala Drive: 70 dBA CNEL
    - Within 184 feet of the centerline of Ayala Drive: 65 dBA CNEL
    - Within 396 feet of the centerline of Ayala Drive: 60 dBA CNEL

For the school (Sub-Area 123) and public park (Sub-Area 126) along Ayala Drive, if outdoor active use areas are proposed within 184 feet of the Ayala Drive centerline, sound walls with a minimum height of 6 feet are recommended along the Project boundary along Ayala Drive or along the perimeter of the active use areas that are directly exposed to traffic on Ayala Drive. For residential uses proposed in Sub-Area 115, any outdoor living areas (e.g., patios and/balconies/decks) or recreational areas (e.g., barbecue area or children's playground) within 184 feet of the Ayala Drive centerline should be protected with a sound wall with a minimum height of 6 feet. Higher walls may be necessary if these outdoor living/recreational areas are proposed within 86 feet (70 dBA CNEL) of the centerline of Ayala Drive.

- **Sub-Area 110 and 116 (medium High Density Residential), Sub-Area 113 (Low Density Residential), Sub-Areas 126 (Public Park)**
    - Within 95 feet of the centerline of Linden Avenue between Renaissance Parkway and Miro Way: 65 dBA CNEL
    - Within 205 feet of the centerline of Linden Avenue between Renaissance Parkway and Miro Way: 60 dBA CNEL
    - Within 86 feet of the centerline of Linden Avenue between Miro Way and Baseline Road: 65 dBA CNEL
    - Within 186 feet of the centerline of Linden Avenue between Miro Way and Baseline Road: 60 dBA CNEL

For the public park (Sub-Area 126) along Linden Avenue, if outdoor active use areas are proposed within 86 feet of the Linden Avenue centerline, sound walls with a minimum height of 6 feet are recommended along the Project boundary along Linden Avenue or along the perimeter of the active use areas that are directly exposed to traffic on Linden Avenue. For residential uses proposed in Sub-Areas 110, 116, and 113, any outdoor living areas (e.g., backyards/patios and/balconies/decks) or recreational areas (e.g., barbecue area or children's playground) within 95 feet of the Linden Avenue centerline should be protected with a sound wall with a minimum height of 6 feet.

Table 4.6-11 Existing Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108

	Existing Without Renaissance Marketplace and Planning Area 108 (Baseline)					Existing With Renaissance Marketplace and Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Casmalia Street between Alder Avenue and Locust Avenue	11,600	< 50	82	177	67.5	20,000	8,400	55	118	254	69.9	0.9
Casmalia Street between Locust Avenue and Linden Avenue	4,600	< 50	< 50	96	63.5	9,900	5,300	< 50	74	159	66.8	3.2
Casmalia Street between Linden Avenue and Ayala Drive	4,500	< 50	< 50	94	63.4	11,900	7,400	< 50	84	180	67.6	2.1
Renaissance Parkway west of Alder Avenue	3,300	< 50	< 50	109	63.2	19,100	15,800	77	161	346	70.8	7.2
Renaissance Parkway between Alder Avenue and Locust Avenue	4,000	< 50	59	123	64.0	23,400	19,400	87	184	395	71.7	6.1

Table 4.6-11 Existing Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

Roadway Segment	Existing Without Renaissance Marketplace and Planning Area 108 (Baseline)					Existing With Renaissance Marketplace and Planning Area 108						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Renaissance Parkway between Locust Avenue and Linden Avenue	2,600	< 50	< 50	93	62.2	18,800	16,200	76	160	342	70.8	6.9
Renaissance Parkway between Linden Avenue and Ayala Drive	3,900	< 50	58	121	63.9	27,000	23,100	95	203	435	72.3	6.8
Renaissance Parkway east of Ayala Drive	5,900	< 50	75	159	65.7	12,500	6,600	59	122	261	69.0	3.1
Baseline Road west of Alder Avenue	11,200	55	114	242	68.5	27,000	15,800	95	203	435	72.3	2.8
Baseline Road between Alder Avenue and Locust Avenue	14,800	65	136	292	69.7	32,100	17,300	107	227	488	73.1	2.1
Baseline Road between Locust Avenue and Linden Avenue	11,600	56	116	248	68.7	27,900	16,300	97	207	445	72.5	2.8

Table 4.6-11 Existing Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Existing Without Renaissance Marketplace and Planning Area 108 (Baseline)					Existing With Renaissance Marketplace and Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Baseline Road between Linden Avenue and Ayala Drive	13,700	62	130	277	69.4	33,700	20,000	110	235	504	73.3	2.6
Baseline Road east of Ayala Drive	12,500	59	122	261	69.0	22,500	10,000	85	180	385	71.5	1.8
Alder Avenue south of Casmalia Street	16,800	71	148	317	70.3	30,000	13,200	102	217	467	72.8	1.7
Alder Avenue between SR-210 Ramps	16,100	69	144	308	70.1	36,300	20,200	116	246	530	73.6	2.9
Alder Avenue north of Renaissance Parkway	18,200	74	156	335	70.6	45,700	27,500	134	287	617	74.6	3.6
Alder Avenue between Renaissance Parkway and Walnut Avenue	16,700	< 50	105	225	69.1	35,800	19,100	81	174	375	72.4	3.3

Table 4.6-11 Existing Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

Roadway Segment	Existing Without Renaissance Marketplace and Planning Area 108 (Baseline)					Existing With Renaissance Marketplace and Planning Area 108						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Alder Avenue between Walnut Avenue and Baseline Road	15,100	< 50	98	211	68.7	27,400	12,300	68	146	314	71.3	2.6
Laurel Avenue south of Renaissance Parkway	1,400	< 50	< 50	< 50	58.3	3,800	2,400	< 50	< 50	84	62.7	4.4
Locust Avenue south of Casmalia Street	3,400	< 50	54	111	63.3	17,400	14,000	72	152	325	70.4	2.4
Linden Avenue north of Renaissance Parkway	2,200	< 50	< 50	84	61.4	11,800	9,600	57	118	251	68.7	3.1
Ayala Drive south of Casmalia Street	15,000	66	138	294	69.8	23,000	8,000	86	182	391	71.6	1.2
Ayala Drive between SR 210-Ramps	18,900	76	160	343	70.8	32,400	13,500	107	229	491	73.1	1.9
Ayala Drive north of Renaissance Parkway	24,400	89	189	407	71.9	42,600	18,200	128	274	589	74.3	2.1

Table 4.6-11 Existing Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Existing Without Renaissance Marketplace and Planning Area 108 (Baseline)					Existing With Renaissance Marketplace and Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ayala Drive between Renaissance Parkway and Leiske Drive	22,400	59	127	274	70.4	38,600	16,200	85	183	394	72.7	2.3
Ayala Drive between Baseline Road and Fitzgerald Avenue	19,600	54	117	251	69.8	32,300	12,700	76	162	350	72.0	2.1
Locust Avenue between Renaissance Parkway and Miro Way	0	< 50	< 50	< 50	26.9	16,300	16,300	< 50	103	222	69.0	N/A
Locust Avenue between Miro Way and Baseline Road	430	< 50	< 50	< 50	53.2	11,000	10,570	< 50	79	171	67.3	4.1
Linden Avenue between Renaissance Parkway and Miro Way	0	< 50	< 50	< 50	26.9	9,200	9,200	< 50	71	152	66.5	N/A

Table 4.6-11 Existing Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Existing Without Renaissance Marketplace and Planning Area 108 (Baseline)					Existing With Renaissance Marketplace and Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Linden Avenue between Miro Way and Baseline Road	440	< 50	< 50	< 50	53.3	9,400	8,960	< 50	72	154	66.6	1.7
Miro Way between Locust Avenue and Linden Avenue	0	< 50	< 50	< 50	26.9	4,100	4,100	< 50	< 50	89	63.0	N/A

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
N/A = Not Applicable (no existing baseline traffic noise level)

Source: Compiled by LSA Associates, Inc. (2015).

Table 4.6-12 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108

	Opening Year Without Renaissance Marketplace and Planning Area 108 (Baseline)					Opening Year With Renaissance Marketplace and Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Casmalia Street between Alder Avenue and Locust Avenue	16,900	< 50	106	227	69.2	21,700	4,800	58	125	268	70.2	1.0
Casmalia Street between Locust Avenue and Linden Avenue	8,500	< 50	67	144	66.2	8,700	200	< 50	68	146	66.3	0.1
Casmalia Street between Linden Avenue and Ayala Drive	7,400	< 50	61	131	65.6	10,200	2,800	< 50	76	162	67.0	1.4
Renaissance Parkway west of Alder Avenue	5,200	< 50	70	146	65.2	7,200	2,000	< 50	86	181	66.6	1.4
Renaissance Parkway between Alder Avenue and Locust Avenue	6,100	< 50	77	162	65.9	11,900	5,800	57	118	252	68.8	2.9
Renaissance Parkway between Locust Avenue and Linden Avenue	4,000	< 50	59	123	64.0	11,200	7,200	55	114	242	68.5	4.5

Table 4.6-12 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Opening Year Without Renaissance Marketplace and Planning Area 108 (Baseline)					Opening Year With Renaissance Marketplace and Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Renaissance Parkway between Linden Avenue and Ayala Drive	6,100	< 50	77	162	65.9	20,600	14,500	80	169	363	71.1	5.2
Renaissance Parkway east of Ayala Drive	7,100	< 50	85	179	66.5	9,100	2,000	< 50	99	211	67.6	1.1
Baseline Road west of Alder Avenue	17,000	71	149	320	70.3	21,000	4,000	81	172	368	71.2	0.9
Baseline Road between Alder Avenue and Locust Avenue	20,000	79	166	356	71.0	25,200	5,200	91	194	415	72.0	1.0
Baseline Road between Locust Avenue and Linden Avenue	17,300	72	151	324	70.4	20,500	3,200	80	169	362	71.1	0.7
Baseline Road between Linden Avenue and Ayala Drive	20,100	79	167	357	71.0	25,100	5,000	91	193	414	72.0	1.0

Table 4.6-12 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Opening Year Without Renaissance Marketplace and Planning Area 108 (Baseline)					Opening Year With Renaissance Marketplace and Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Baseline Road east of Ayala Drive	15,400	67	140	299	69.9	19,200	3,800	77	162	347	70.8	0.9
Alder Avenue south of Casmalia Street	25,900	93	197	423	72.1	29,600	3,700	101	215	462	72.7	0.6
Alder Avenue between SR-210 Ramps	25,800	93	197	422	72.1	28,700	2,900	99	211	453	72.6	0.5
Alder Avenue north of Renaissance Parkway	28,800	99	211	454	72.6	31,400	2,600	105	224	481	73.0	0.4
Alder Avenue between Renaissance Parkway and Walnut Avenue	25,400	65	138	298	70.9	25,900	500	65	140	302	71.0	0.1
Alder Avenue between Walnut Avenue and Baseline Road	20,700	56	121	260	70.0	21,800	1,100	58	125	269	70.3	0.3

Table 4.6-12 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Opening Year Without Renaissance Marketplace and Planning Area 108 (Baseline)					Opening Year With Renaissance Marketplace and Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Laurel Avenue south of Renaissance Parkway	2,200	< 50	< 50	59	60.3	2,200	0	< 50	< 50	59	60.3	0.0
Locust Avenue south of Casmalia Street	7,900	< 50	91	192	67.0	14,900	7,000	66	137	293	69.7	2.7
Linden Avenue north of Renaissance Parkway	3,200	< 50	< 50	106	63.1	8,100	4,900	< 50	92	196	67.1	4.0
Ayala Drive south of Casmalia Street	18,800	76	160	342	70.8	22,000	3,200	84	177	380	71.4	0.6
Ayala Drive between SR 210-Ramps	22,000	84	177	380	71.4	28,700	6,700	99	211	453	72.6	1.2
Ayala Drive north of Renaissance Parkway	26,800	95	202	433	72.3	35,600	8,800	114	243	523	73.5	1.2
Ayala Drive between Renaissance Parkway and Leiske Drive	24,800	63	136	293	70.8	28,900	4,100	70	151	325	71.5	0.7

Table 4.6-12 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Opening Year Without Renaissance Marketplace and Planning Area 108 (Baseline)					Opening Year With Renaissance Marketplace and Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ayala Drive between Baseline Road and Fitzgerald Avenue	21,100	57	122	263	70.1	25,700	4,600	65	140	300	71.0	0.9
Locust Avenue between Renaissance Parkway and Miro Way	4,700	< 50	< 50	97	63.6	9,900	5,200	< 50	74	159	66.8	3.2
Locust Avenue between Miro Way and Baseline Road	4,400	< 50	< 50	93	63.3	9,100	4,700	< 50	70	150	66.5	3.2
Linden Avenue between Renaissance Parkway and Miro Way	1,100	< 50	< 50	< 50	57.3	7,900	6,800	< 50	64	137	65.9	8.6
Linden Avenue between Miro Way and Baseline Road	1,100	< 50	< 50	< 50	57.3	8,100	7,000	< 50	65	139	66.0	8.7

Table 4.6-12 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace and Planning Area 108 (continued)

	Opening Year Without Renaissance Marketplace and Planning Area 108 (Baseline)					Opening Year With Renaissance Marketplace and Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Miro Way between Locust Avenue and Linden Avenue	970	< 50	< 50	< 50	56.8	2,000	1,030	< 50	< 50	55	59.9	3.1

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet

Source: Compiled by LSA Associates, Inc. (2015).

Renaissance Marketplace

Tables 4.6-13 and 4.6-14 provide the existing and opening year with Renaissance Marketplace condition noise levels, respectively, adjacent to roads near the proposed Renaissance Marketplace Project area. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn.

Data in Tables 4.6-13 and 4.6-14 show that, under existing and opening year with Renaissance Marketplace conditions, traffic noise levels in the Project vicinity from the following roadway segments would increase more than 1.5 dBA:

- **Existing With Renaissance Marketplace**
    - Renaissance Parkway west of Alder Avenue ..... 1.9 dBA
    - Renaissance Parkway between Alder Avenue and Locust Avenue ..... 4.0 dBA
    - Renaissance Parkway between Locust Avenue and Linden Avenue ..... 5.4 dBA
    - Renaissance Parkway between Linden Avenue and Ayala Drive ..... 6.6 dBA
    - Linden Avenue north of Renaissance Parkway ..... 2.1 dBA
- **Opening Year With Renaissance Marketplace**
    - Renaissance Parkway between Alder Avenue and Locust Avenue ..... 2.2 dBA
    - Renaissance Parkway between Locust Avenue and Linden Avenue ..... 4.0 dBA
    - Renaissance Parkway between Linden Avenue and Ayala Drive ..... 4.9 dBA
    - Linden Avenue between Renaissance Parkway and Miro Way..... 3.9 dBA
    - Linden Avenue between Miro Way and Baseline Road ..... 3.0 dBA
    - Miro Way between Locust Avenue and Linden Avenue ..... 1.8 dBA

However, along these roadway segments, there are no existing noise-sensitive uses that would be impacted by these potentially significant traffic noise level increases. In addition, traffic noise levels along Miro Way between Locust Avenue and Linden Avenue would have the 70, 65, and 60 dBA CNEL contours all within 50 feet of the roadway centerline with or without the Renaissance Marketplace. Project-related traffic noise level increases along other roadway segments that would potentially affect off-site land uses would all be less than 1.5 dBA.

Because the proposed residential uses within the RSPA are considered noise sensitive, potential traffic noise impacts on on-site noise-sensitive uses is evaluated under the future worst-case conditions under the cumulative with both Renaissance Marketplace and Planning Area 108 included, discussed above.

Table 4.6-13 Existing Traffic Noise Levels Without and With Renaissance Marketplace

	Existing Without Renaissance Marketplace (Baseline)					Existing With Renaissance Marketplace						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Casmalia Street between Alder Avenue and Locust Avenue	11,600	< 50	82	177	67.5	11,800	200	< 50	83	179	67.6	0.1
Casmalia Street between Locust Avenue and Linden Avenue	4,600	< 50	< 50	96	63.5	4,600	0	< 50	< 50	96	63.5	0.0
Casmalia Street between Linden Avenue and Ayala Drive	4,500	< 50	< 50	94	63.4	4,500	0	< 50	< 50	94	63.4	0.0
Renaissance Parkway west of Alder Avenue	3,300	< 50	< 50	109	63.2	5,100	1,800	< 50	69	144	65.1	1.9
Renaissance Parkway between Alder Avenue and Locust Avenue	4,000	< 50	59	123	64.0	9,900	5,900	< 50	105	223	68.0	4.0
Renaissance Parkway between Locust Avenue and Linden Avenue	2,600	< 50	< 50	93	62.2	9,100	6,500	< 50	99	211	67.6	5.4
Renaissance Parkway between Linden Avenue and Ayala Drive	3,900	< 50	58	121	63.9	17,800	13,900	73	154	330	70.5	6.6
Renaissance Parkway east of Ayala Drive	5,900	< 50	75	159	65.7	7,700	1,800	< 50	89	189	66.9	1.2
Baseline Road west of Alder Avenue	11,200	55	114	242	68.5	12,200	1,000	58	120	257	68.9	0.4

Table 4.6-13 Existing Traffic Noise Levels Without and With Renaissance Marketplace (continued)

	Existing Without Renaissance Marketplace (Baseline)					Existing With Renaissance Marketplace						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Baseline Road between Alder Avenue and Locust Avenue	14,800	65	136	292	69.7	15,300	500	67	139	298	69.9	0.2
Baseline Road between Locust Avenue and Linden Avenue	11,600	56	116	248	68.7	12,100	500	58	120	255	68.8	0.1
Baseline Road between Linden Avenue and Ayala Drive	13,700	62	130	277	69.4	15,100	1,400	66	138	296	69.8	0.4
Baseline Road east of Ayala Drive	12,500	59	122	261	69.0	14,300	1,800	64	133	285	69.6	0.6
Alder Avenue south of Casmalia Street	16,800	71	148	317	70.3	16,900	100	71	149	319	70.3	0.0
Alder Avenue between SR-210 Ramps	16,100	69	144	308	70.1	16,400	300	70	146	312	70.2	0.1
Alder Avenue north of Renaissance Parkway	18,200	74	156	335	70.6	19,300	1,100	77	162	348	70.9	0.3
Alder Avenue between Renaissance Parkway and Walnut Avenue	16,700	< 50	105	225	69.1	19,200	2,500	54	115	247	69.7	0.6
Alder Avenue between Walnut Avenue and Baseline Road	15,100	< 50	98	211	68.7	17,600	2,500	51	108	233	69.3	0.6
Laurel Avenue south of Renaissance Parkway	1,400	< 50	< 50	< 50	58.3	1,400	0	< 50	< 50	< 50	58.3	0.0

Table 4.6-13 Existing Traffic Noise Levels Without and With Renaissance Marketplace (continued)

	Existing Without Renaissance Marketplace (Baseline)					Existing With Renaissance Marketplace						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Locust Avenue south of Casmalia Street	3,400	< 50	54	111	63.3	3,900	500	< 50	58	121	63.9	0.6
Linden Avenue north of Renaissance Parkway	2,200	< 50	< 50	84	61.4	3,500	1,300	< 50	55	113	63.5	2.1
Ayala Drive south of Casmalia Street	15,000	66	138	294	69.8	15,900	900	68	143	306	70.0	0.2
Ayala Drive between SR 210-Ramps	18,900	76	160	343	70.8	23,500	4,600	87	185	397	71.7	0.9
Ayala Drive north of Renaissance Parkway	24,400	89	189	407	71.9	31,500	7,100	105	224	482	73.0	1.1
Ayala Drive between Renaissance Parkway and Leiske Drive	22,400	59	127	274	70.4	27,400	5,000	68	146	314	71.3	0.9
Ayala Drive between Baseline Road and Fitzgerald Avenue	19,600	54	117	251	69.8	25,500	5,900	65	139	299	70.9	1.1
Locust Avenue between Renaissance Parkway and Miro Way	0	< 50	< 50	< 50	26.9	0	0	< 50	< 50	< 50	26.9	0.0
Locust Avenue between Miro Way and Baseline Road	430	< 50	< 50	< 50	53.2	430	0	< 50	< 50	< 50	53.2	0.0

Table 4.6-13 Existing Traffic Noise Levels Without and With Renaissance Marketplace (continued)

	Existing Without Renaissance Marketplace (Baseline)					Existing With Renaissance Marketplace						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Linden Avenue between Renaissance Parkway and Miro Way	0	< 50	< 50	< 50	26.9	0	0	< 50	< 50	< 50	26.9	0.0
Linden Avenue between Miro Way and Baseline Road	440	< 50	< 50	< 50	53.3	440	0	< 50	< 50	< 50	53.3	0.0
Miro Way between Locust Avenue and Linden Avenue	0	< 50	< 50	< 50	26.9	0	0	< 50	< 50	< 50	26.9	0.0

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet

Source: Compiled by LSA Associates, Inc. (2015).

Table 4.6-14 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace

	Opening Year Without Renaissance Marketplace (Baseline)					Opening Year With Renaissance Marketplace						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Casmalia Street between Alder Avenue and Locust Avenue	16,900	< 50	106	227	69.2	17,100	200	< 50	106	229	69.2	0.0
Casmalia Street between Locust Avenue and Linden Avenue	8,500	< 50	67	144	66.2	8,500	0	< 50	67	144	66.2	0.0
Casmalia Street between Linden Avenue and Ayala Drive	7,400	< 50	61	131	65.6	7,400	0	< 50	61	131	65.6	0.0
Renaissance Parkway west of Alder Avenue	5,200	< 50	70	146	65.2	7,000	1,800	< 50	84	178	66.5	1.3
Renaissance Parkway between Alder Avenue and Locust Avenue	6,100	< 50	77	162	65.9	10,200	4,100	< 50	107	228	68.1	2.2
Renaissance Parkway between Locust Avenue and Linden Avenue	4,000	< 50	59	123	64.0	9,900	5,900	< 50	105	223	68.0	4.0
Renaissance Parkway between Linden Avenue and Ayala Drive	6,100	< 50	77	162	65.9	18,900	12,800	76	160	343	70.8	4.9
Renaissance Parkway east of Ayala Drive	7,100	< 50	85	179	66.5	8,900	1,800	< 50	98	208	67.5	1.0
Baseline Road west of Alder Avenue	17,000	71	149	320	70.3	17,900	900	73	154	331	70.5	0.2

Table 4.6-14 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace (continued)

	Opening Year Without Renaissance Marketplace (Baseline)					Opening Year With Renaissance Marketplace						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Baseline Road between Alder Avenue and Locust Avenue	20,000	79	166	356	71.0	20,400	400	80	168	361	71.1	0.1
Baseline Road between Locust Avenue and Linden Avenue	17,300	72	151	324	70.4	17,300	0	72	151	324	70.4	0.0
Baseline Road between Linden Avenue and Ayala Drive	20,100	79	167	3 57	71.0	20,100	0	79	167	357	71.0	0.0
Baseline Road east of Ayala Drive	15,400	67	140	299	69.9	17,100	1,700	71	150	321	70.3	0.4
Alder Avenue south of Casmalia Street	25,900	93	197	423	72.1	26,000	100	93	198	424	72.2	0.1
Alder Avenue between SR-210 Ramps	25,800	93	197	422	72.1	26,200	400	94	199	426	72.2	0.1
Alder Avenue north of Renaissance Parkway	28,800	99	211	454	72.6	29,900	1,100	102	217	466	72.8	0.2
Alder Avenue between Renaissance Parkway and Walnut Avenue	25,400	65	138	298	70.9	25,900	500	65	140	302	71.0	0.1
Alder Avenue between Walnut Avenue and Baseline Road	20,700	56	121	260	70.0	21,800	1,100	58	125	269	70.3	0.3
Laurel Avenue south of Renaissance Parkway	2,200	< 50	< 50	59	60.3	2,200	0	< 50	< 50	59	60.3	0.0

Table 4.6-14 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace (continued)

	Opening Year Without Renaissance Marketplace (Baseline)					Opening Year With Renaissance Marketplace						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Locust Avenue south of Casmalia Street	7,900	< 50	91	192	67.0	8,400	500	< 50	94	200	67.3	0.3
Linden Avenue north of Renaissance Parkway	3,200	< 50	< 50	106	63.1	4,400	1,200	< 50	63	131	64.4	1.3
Ayala Drive south of Casmalia Street	18,800	76	160	342	70.8	19,700	900	78	165	353	71.0	0.2
Ayala Drive between SR 210-Ramps	22,000	84	177	380	71.4	26,600	4,600	94	201	431	72.3	0.9
Ayala Drive north of Renaissance Parkway	26,800	95	202	433	72.3	33,900	7,100	110	236	506	73.3	1.0
Ayala Drive between Renaissance Parkway and Leiske Drive	24,800	63	136	293	70.8	28,600	3,800	70	150	323	71.4	0.6
Ayala Drive between Baseline Road and Fitzgerald Avenue	21,100	57	122	263	70.1	25,400	4,300	65	138	298	70.9	0.8
Locust Avenue between Renaissance Parkway and Miro Way	4,700	< 50	< 50	97	63.6	6,100	1,400	< 50	54	115	64.7	1.1
Locust Avenue between Miro Way and Baseline Road	4,400	< 50	< 50	93	63.3	5,300	900	< 50	< 50	105	64.1	0.8

Table 4.6-14 Opening Year Traffic Noise Levels Without and With Renaissance Marketplace (continued)

	Opening Year Without Renaissance Marketplace (Baseline)					Opening Year With Renaissance Marketplace						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Linden Avenue between Renaissance Parkway and Miro Way	1,100	< 50	< 50	< 50	57.3	2,700	1,600	< 50	< 50	67	61.2	3.9
Linden Avenue between Miro Way and Baseline Road	1,100	< 50	< 50	< 50	57.3	2,200	1,100	< 50	< 50	59	60.3	3.0
Miro Way between Locust Avenue and Linden Avenue	970	< 50	< 50	< 50	56.8	1,500	530	< 50	< 50	< 50	58.6	1.8

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet

Source: Compiled by LSA Associates, Inc. (2015).

Planning Area 108

Tables 4.6-15 and **4.6-16** provide the existing and opening year with Planning Area 108 condition noise levels, respectively, adjacent to roads near the proposed Planning Area 108 Project area. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn.

Data in Tables 4.6-15 and 4.6-16 show that, under existing and opening year with Planning Area 108 conditions, traffic noise levels in the Project vicinity from the following roadway segments would increase more than 1.5 dBA:

- **Existing With Planning Area 108**
    - Casmalia Street between Linden Avenue and Ayala Drive..... 2.1 dBA
    - Locust Avenue south of Casmalia Street..... 4.1 dBA
    - Linden Avenue north of Renaissance Parkway ..... 2.1 dBA
    - Locust Avenue between Miro Way and Baseline Road..... 10.0 dBA
    - Linden Avenue between Miro Way and Baseline Road ..... 11.0 dBA
- **Opening Year With Planning Area 108**
    - Locust Avenue south of Casmalia Street..... 2.6 dBA
    - Linden Avenue north of Renaissance Parkway ..... 3.2 dBA
    - Locust Avenue between Renaissance Parkway and Miro Way..... 2.6 dBA
    - Locust Avenue between Miro Way and Baseline Road..... 2.8 dBA
    - Linden Avenue between Renaissance Parkway and Miro Way..... 7.6 dBA
    - Linden Avenue between Miro Way and Baseline Road ..... 8.0 dBA
    - Miro Way between Locust Avenue and Linden Avenue ..... 1.8 dBA

However, along these roadway segments, there are no existing noise-sensitive uses that would be impacted by these potentially significant traffic noise level increases. Under the existing with Planning Area 108 conditions, traffic noise levels along Renaissance Parkway (from west of Alder Avenue to east of Ayala Drive) would have lower traffic noise levels than those under the existing baseline conditions. In addition, traffic noise levels along Miro Way between Locust Avenue and Linden Avenue would have the 70, 65, and 60 dBA CNEL contours all within 50 feet of the roadway centerline with or without the Planning Area 108. Project-related traffic noise level increases along other roadway segment that would potentially affect off-site land uses would all be less than 1.5 dBA.

Because the proposed residential uses within the RSPA are considered noise-sensitive, potential traffic noise impacts on on-site noise-sensitive uses is evaluated under the future worst-case conditions under the cumulative with both Renaissance Marketplace and Planning Area 108 included, discussed above.

Table 4.6-15 Existing Traffic Noise Levels Without and With Planning Area 108

	Existing Without Planning Area 108 (Baseline)					Existing With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Casmalia Street between Alder Avenue and Locust Avenue	11,600	< 50	82	177	67.5	16,200	4,600	< 50	103	221	69.0	1.4
Casmalia Street between Locust Avenue and Linden Avenue	4,600	< 50	< 50	96	63.5	4,700	100	< 50	< 50	97	63.6	0.1
Casmalia Street between Linden Avenue and Ayala Drive	4,500	< 50	< 50	94	63.4	7,300	2,800	< 50	61	130	65.5	2.1
Renaissance Parkway west of Alder Avenue	3,300	< 50	< 50	109	63.2	3,600	300	< 50	56	115	63.6	-1.5
Renaissance Parkway between Alder Avenue and Locust Avenue	4,000	< 50	59	123	64.0	5,800	1,800	< 50	75	157	65.6	-2.4
Renaissance Parkway between Locust Avenue and Linden Avenue	2,600	< 50	< 50	93	62.2	3,900	1,300	< 50	58	121	63.9	-3.7
Renaissance Parkway between Linden Avenue and Ayala Drive	3,900	< 50	58	121	63.9	5,600	1,700	< 50	73	153	65.5	-5.0
Renaissance Parkway east of Ayala Drive	5,900	< 50	75	159	65.7	6,100	200	< 50	77	162	65.9	-1.0
Baseline Road west of Alder Avenue	11,200	55	114	242	68.5	14,200	3,000	64	133	284	69.5	0.6

Table 4.6-15 Existing Traffic Noise Levels Without and With Planning Area 108 (continued)

	Existing Without Planning Area 108 (Baseline)					Existing With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Baseline Road between Alder Avenue and Locust Avenue	14,800	65	136	292	69.7	19,700	4,900	78	165	353	71.0	1.1
Baseline Road between Locust Avenue and Linden Avenue	11,600	56	116	248	68.7	14,800	3,200	65	136	292	69.7	0.9
Baseline Road between Linden Avenue and Ayala Drive	13,700	62	130	277	69.4	18,700	5,000	76	159	341	70.7	0.9
Baseline Road east of Ayala Drive	12,500	59	122	261	69.0	14,600	2,100	65	135	289	69.7	0.1
Alder Avenue south of Casmalia Street	16,800	71	148	317	70.3	20,300	3,500	80	168	360	71.1	0.8
Alder Avenue between SR-210 Ramps	16,100	69	144	308	70.1	18,600	2,500	75	158	339	70.7	0.5
Alder Avenue north of Renaissance Parkway	18,200	74	156	335	70.6	19,800	1,600	78	165	354	71.0	0.1
Alder Avenue between Renaissance Parkway and Walnut Avenue	16,700	< 50	105	225	69.1	16,700	0	< 50	105	225	69.1	-0.6
Alder Avenue between Walnut Avenue and Baseline Road	15,100	< 50	98	211	68.7	15,100	0	< 50	98	211	68.7	-0.6
Laurel Avenue south of Renaissance Parkway	1,400	< 50	< 50	< 50	58.3	1,400	0	< 50	< 50	< 50	58.3	0.0

Table 4.6-15 Existing Traffic Noise Levels Without and With Planning Area 108 (continued)

	Existing Without Planning Area 108 (Baseline)					Existing With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Locust Avenue south of Casmalia Street	3,400	< 50	54	111	63.3	9,900	6,500	< 50	105	223	68.0	4.1
Linden Avenue north of Renaissance Parkway	2,200	< 50	< 50	84	61.4	5,800	3,600	< 50	75	157	65.6	2.1
Ayala Drive south of Casmalia Street	15,000	66	138	294	69.8	17,300	2,300	72	151	324	70.4	0.4
Ayala Drive between SR 210-Ramps	18,900	76	160	343	70.8	21,000	2,100	81	172	368	71.2	-0.5
Ayala Drive north of Renaissance Parkway	24,400	89	189	407	71.9	26,200	1,800	94	199	426	72.2	-0.8
Ayala Drive between Renaissance Parkway and Leiske Drive	22,400	59	127	274	70.4	22,700	300	60	129	277	70.4	-0.9
Ayala Drive between Baseline Road and Fitzgerald Avenue	19,600	54	117	251	69.8	19,800	200	55	117	252	69.9	-1.0
Locust Avenue between Renaissance Parkway and Miro Way	0	< 50	< 50	< 50	26.9	3,900	3,900	< 50	< 50	86	62.8	N/A
Locust Avenue between Miro Way and Baseline Road	430	< 50	< 50	< 50	53.2	4,300	3,870	< 50	< 50	91	63.2	10.0

Table 4.6-15 Existing Traffic Noise Levels Without and With Planning Area 108 (continued)

	Existing Without Planning Area 108 (Baseline)					Existing With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Linden Avenue between Renaissance Parkway and Miro Way	0	< 50	< 50	< 50	26.9	5,300	5,300	< 50	< 50	105	64.1	N/A
Linden Avenue between Miro Way and Baseline Road	440	< 50	< 50	< 50	53.3	6,400	5,960	< 50	56	119	64.9	11.6
Miro Way between Locust Avenue and Linden Avenue	0	< 50	< 50	< 50	26.9	480	480	< 50	< 50	< 50	53.7	N/A

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet
N/A = Not Applicable (no existing baseline traffic noise levels)

Source: Compiled by LSA Associates, Inc. (2015).

Table 4.6-16 Opening Year Traffic Noise Levels Without and With Planning Area 108

	Opening Year Without Planning Area 108 (Baseline)					Opening Year With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Casmalia Street between Alder Avenue and Locust Avenue	16,900	< 50	106	227	69.2	21,500	4,600	58	124	267	70.2	1.0
Casmalia Street between Locust Avenue and Linden Avenue	8,500	< 50	67	144	66.2	8,700	200	< 50	68	146	66.3	0.1
Casmalia Street between Linden Avenue and Ayala Drive	7,400	< 50	61	131	65.6	10,200	2,800	< 50	76	162	67.0	1.4
Renaissance Parkway west of Alder Avenue	5,200	< 50	70	146	65.2	5,500	300	< 50	72	152	65.4	0.2
Renaissance Parkway between Alder Avenue and Locust Avenue	6,100	< 50	77	162	65.9	7,900	1,800	< 50	91	192	67.0	1.1
Renaissance Parkway between Locust Avenue and Linden Avenue	4,000	< 50	59	123	64.0	5,200	1,200	< 50	70	146	65.2	1.2
Renaissance Parkway between Linden Avenue and Ayala Drive	6,100	< 50	77	162	65.9	7,800	1,700	< 50	90	191	66.9	1.0
Renaissance Parkway east of Ayala Drive	7,100	< 50	85	179	66.5	7,300	200	< 50	86	183	66.6	0.1
Baseline Road west of Alder Avenue	17,000	71	149	320	70.3	20,100	3,100	79	167	357	71.0	0.7

Table 4.6-16 Opening Year Traffic Noise Levels Without and With Planning Area 108 (continued)

	Opening Year Without Planning Area 108 (Baseline)					Opening Year With Planning Area 108						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Baseline Road between Alder Avenue and Locust Avenue	20,000	79	166	356	71.0	24,900	4,900	91	192	412	72.0	1.0
Baseline Road between Locust Avenue and Linden Avenue	17,300	72	151	324	70.4	20,500	3,200	80	169	362	71.1	0.7
Baseline Road between Linden Avenue and Ayala Drive	20,100	79	167	357	71.0	25,100	5,000	91	193	414	72.0	1.0
Baseline Road east of Ayala Drive	15,400	67	140	299	69.9	17,400	2,000	72	152	325	70.4	0.5
Alder Avenue south of Casmalia Street	25,900	93	197	423	72.1	29,400	3,500	101	214	460	72.7	0.6
Alder Avenue between SR-210 Ramps	25,800	93	197	422	72.1	28,400	2,600	99	209	450	72.5	0.4
Alder Avenue north of Renaissance Parkway	28,800	99	211	454	72.6	30,300	1,500	103	219	470	72.8	0.2
Alder Avenue between Renaissance Parkway and Walnut Avenue	25,400	65	138	298	70.9	25,400	0	65	138	298	70.9	0.0
Alder Avenue between Walnut Avenue and Baseline Road	20,700	56	121	260	70.0	20,700	0	56	121	260	70.0	0.0
Laurel Avenue south of Renaissance Parkway	2,200	< 50	< 50	59	60.3	2,200	0	< 50	< 50	59	60.3	0.0

Table 4.6-16 Opening Year Traffic Noise Levels Without and With Planning Area 108 (continued)

	Opening Year Without Planning Area 108 (Baseline)					Opening Year With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Locust Avenue south of Casmalia Street	7,900	< 50	91	192	67.0	14,400	6,500	64	134	286	69.6	2.6
Linden Avenue north of Renaissance Parkway	3,200	< 50	< 50	106	63.1	6,800	3,600	< 50	82	174	66.3	3.2
Ayala Drive south of Casmalia Street	18,800	76	160	342	70.8	21,100	2,300	81	172	369	71.3	0.5
Ayala Drive between SR 210-Ramps	22,000	84	177	380	71.4	24,100	2,100	89	188	403	71.8	0.4
Ayala Drive north of Renaissance Parkway	26,800	95	202	433	72.3	28,600	1,800	99	210	452	72.6	0.3
Ayala Drive between Renaissance Parkway and Leiske Drive	24,800	63	136	293	70.8	25,000	200	64	137	295	70.9	0.1
Ayala Drive between Baseline Road and Fitzgerald Avenue	21,100	57	122	263	70.1	21,300	200	57	123	265	70.2	0.1
Locust Avenue between Renaissance Parkway and Miro Way	4,700	< 50	< 50	97	63.6	8,500	3,800	< 50	67	144	66.2	2.6
Locust Avenue between Miro Way and Baseline Road	4,400	< 50	< 50	93	63.3	8,300	3,900	< 50	66	142	66.1	2.8

Table 4.6-16 Opening Year Traffic Noise Levels Without and With Planning Area 108 (continued)

	Opening Year Without Planning Area 108 (Baseline)					Opening Year With Planning Area 108						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Linden Avenue between Renaissance Parkway and Miro Way	1,100	< 50	< 50	< 50	57.3	6,300	5,200	< 50	55	118	64.9	7.6
Linden Avenue between Miro Way and Baseline Road	1,100	< 50	< 50	< 50	57.3	7,000	5,900	< 50	59	126	65.3	8.0
Miro Way between Locust Avenue and Linden Avenue	970	< 50	< 50	< 50	56.8	1,500	530	< 50	< 50	< 50	58.6	1.8

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet

Source: Compiled by LSA Associates, Inc. (2015).

4.6.4.7 TEMPORARY OR PERIODIC INCREASE IN AMBIENT NOISE LEVELS

4.6.4.7.1 Impact 4.6-4: Project Impacts on substantial temporary or Periodic Increases in Ambient Noise Levels in the Project Vicinity Above Levels Existing without the Project

As discussed in Section 4.6.4.4 short-term construction related noise impacts would not be significant. Because the RSPA is a program level study, it does not involve construction of any specific development. Therefore, no construction noise impacts would occur, and no mitigation measures are required. Short-term noise impacts would be associated with excavation, grading, and building erection on the Renaissance Marketplace and the Planning Area 108 sites during construction of the proposed Renaissance Marketplace and Planning Area 108 projects. Construction-related, short-term noise levels would be higher than existing ambient noise levels in the area adjacent to the Renaissance Marketplace and Planning Area 108 today, but would no longer occur once construction of the Renaissance Marketplace and Planning Area 108 are complete.

Compliance with the restrictions on construction hours permitted by the City would be sufficient to reduce the construction noise to a less than significant level. Therefore, no significant construction noise impacts would occur if construction of the proposed Renaissance Marketplace and Planning Area 108 occurs within the permitted hours.

4.6.4.8 MITIGATION MEASURES

Construction Impacts. Construction of the proposed Project would not result in noise levels exceeding the maximum noise level allowed at the closest residences. However, the following measures would further reduce short-term, construction-related noise impacts associated with the proposed Project:

Mitigation Measure NOI-1: Prior to the issuance of any grading plan, the applicant shall demonstrate to the satisfaction of the Public Works Director that the following notes are shown on the grading plans:

1. During all Project area excavation and grading on site, the Project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
2. The Project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors.
3. During all Project area construction, the construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors.

   During all Project area construction, the construction contractor shall limit all construction-related activities that would result in high noise levels to the hours shown in Section 9.50.070(b) of the City of Rialto Municipal Code.

On-Site Operational Impacts. The following mitigation measures are required for on-site operations.

Mitigation Measure NOI-2: Prior to the issuance of any grading permits within Planning Area 104 (Renaissance Marketplace) or Planning Area 108, the applicant shall demonstrate that the following noise barriers are shown on the building plans or have been constructed in locations where nighttime loading activity is proposed:

1. A stand-alone noise barrier with a minimum height of 8 feet is required along the southern boundary of the Renaissance Marketplace if nighttime loading/unloading activity is expected at the loading areas of these proposed Renaissance Marketplace commercial/retail uses.
2. A stand-alone noise barrier with a minimum height of 8 feet is required along the eastern boundary of Planning Area 108 between the driveways if nighttime loading/unloading activity is expected at the loading areas of these proposed industrial/warehouse uses.

Mitigation Measure NOI-3: Prior to the issuance of any grading, the applicant shall demonstrate that the following mitigation measures have been incorporated into the project design or that the mitigation does not apply to the current development:

N-01 Construction activities shall be limited to the City's allowable hours of construction activities shown in Table 4.11-2 (repeated in Table E in this noise study) in accordance with the City's Noise Ordinance.

N-02 All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

N-03 Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from any nearby noise sensitive uses, unless safety or technical factors take precedence, subject to City approval.

N-04 Stationary combustion equipment such as pumps or generators operating within 300 feet of any nearby noise sensitive uses shall be shielded with a noise protection barrier.

N-05 The City shall require that a noise impact analysis be prepared for all proposed residential subdivisions within the Specific Plan and for any commercial or business developments located adjacent to existing or proposed noise sensitive land uses. Each noise impact analysis shall identify potential construction noise impacts and provide mitigation, if necessary to reduce the construction noise impacts to within the City noise level standards of the Noise Element of the Rialto General Plan.

N-06 The City shall require that a noise impact analysis be prepared for all proposed residential subdivisions within the Specific Plan, and proposed commercial retail or business uses located adjacent to Alder Avenue,

Baseline Road, SR-210, or adjacent to other sensitive on-site or off-site uses. Each noise impact analysis shall identify potential direct, project-related, transportation noise impacts and provide mitigation, if necessary, to reduce the traffic noise impacts as well as other onsite stationary noise impacts to within the City noise level standards of the Land Use Element of the Rialto General Plan (shown in Table 4.11-1 in the RSP DEIR and repeated in Table 4.6-2 in this Recirculated Draft SEIR).

N-07 The City shall require that a vibration impact analysis be prepared for all proposed residential subdivisions within the Specific Plan and for any commercial or business developments located adjacent to existing or proposed vibration sensitive land uses. Each vibration impact analysis shall identify potential construction-related vibration impacts and provide mitigation, if necessary, to reduce the construction to within the County vibration level standards.

N-08 The City shall require that a vibration impact analysis be prepared for any commercial or business developments located adjacent to existing or proposed vibration sensitive land uses. Each vibration analysis shall identify potential sources of vibration impacts and provide mitigation, if necessary, to reduce the vibration impacts to within the County standards.

Traffic Noise Impacts. The following mitigation measures are required for traffic noise impacts:

Mitigation Measure NOI-4: Prior to Certificate of Occupancy or City acceptance of the Public Parks (as applicable), the applicant shall demonstrate that required sound barriers have been constructed for the following Planning Areas:

1. For the school (Sub-Area 123) and public park (Sub-Area 126) along Ayala Drive with outdoor active use areas within 184 feet of the Ayala Drive centerline, sound walls with a minimum height of 6 feet are required along the Project boundary along Ayala Drive or along the perimeter of the active use areas that are directly exposed to traffic on Ayala Drive. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed.
2. For residential uses proposed in Sub-Area 115 with outdoor living areas (e.g., patios and balconies/decks) or recreational areas (e.g., barbecue area or children's playground) within 184 feet of the Ayala Drive centerline, a sound wall with a minimum height of 6 feet should be constructed along the project boundary along Ayala Drive or along the perimeter of the outdoor living/ recreational areas that are directly exposed to traffic on Ayala Drive. Higher walls may be necessary if these outdoor living/recreational areas are proposed within 86 feet (70 dBA CNEL) of the centerline of Ayala Drive. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed.

3. For the public park (Sub-Area 126) along Linden Avenue with outdoor active use areas proposed within 86 feet of the Linden Avenue centerline, prior to the occupancy of these residential units, sound walls with a minimum height of 6 feet are recommended along the Project boundary along Linden Avenue or along the perimeter of the active use areas that are directly exposed to traffic on Linden Avenue. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed.
4. For residential uses proposed in Sub-Areas 110, 116, and 113 with outdoor living areas (e.g., backyards/patios and balconies/decks) or recreational areas (e.g., barbecue area or children's playground) within 95 feet of the Linden Avenue centerline, prior to the occupancy of the residential units, outdoor living/recreational areas should be protected with a sound wall with a minimum height of 6 feet. The Development Services Director/Planning Division may also allow the applicant to prepare a site-specific noise study that demonstrates noise walls are not needed.

The MMRP for the RSP includes eight noise mitigation measures, and these noise mitigation measures will be followed in the implementation of the RSPA.

Level of Significance after Mitigation

With implementation of the identified mitigation measures, potential short-term, construction-related noise impacts would be reduced to below a level of significance.

4.7 TRAFFIC AND TRANSPORTATION

4.7.1 INTRODUCTION

This section describes the potential effects of the proposed Project on the site and its surroundings relative to transportation. The descriptions and analyses in this section are based on information contained in the 2010 RSP Final EIR, and in the Traffic Impact Analysis for the Renaissance Specific Plan Amendment, prepared in September 2016 LSA Associates, Inc., (LSA) and a Memorandum to the TIA prepared on September 21, 2016 by Translutions, Inc., included as Appendix H of this Recirculated Draft SEIR. Potential effects are evaluated relative to conflict with applicable plans, ordinances, and policies establishing measures of effectiveness for the performance of the circulation system; conflict with an applicable congestion management program, and increase hazards due to a design feature. All other significance thresholds and potential impacts of the proposed Project were addressed in the NOP (Appendix A) which determined there would be no new or additional impacts, or that impacts would be less than significant, and therefore need not be further considered in this Recirculated Draft SEIR.

First, the Regulatory Framework for the RSPA Project area is provided. Following the regulatory framework, both the "Existing Conditions" and Impact Analysis sections are subdivided into sub-sections for the three projects under analysis: the Renaissance Specific Plan Amendment (RSPA Project), the Renaissance Marketplace, and Planning Area 108. Referenced figures and tables are included sequentially at the end of the section.

4.7.2 REGULATORY FRAMEWORK

4.7.2.1 SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS POLICIES AND PROGRAMS

The Southern California Association of Governments (SCAG) is the designated Metropolitan Planning Organization (MPO) for the southern California region. The federal government mandates SCAG to research and draw up plans to address the region's transportation needs. SCAG's Transportation Programs relevant to the proposed RSPA Project are as follows:

4.7.2.1.1 *Regional Transportation Improvement Program*

The Regional Transportation Improvement Program (RTIP) is a listing of all transportation projects proposed over a 6-year period for the SCAG region. The projects include highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, signal synchronization, intersection improvements, and freeway ramps. In the SCAG region, a biennial RTIP update is produced on an even-year cycle.

The RTIP implements projects and programs listed in the Regional Transportation Plan (RTP). Pursuant to State law, County Transportation Commissioners have the responsibility of proposing County projects using current RTP projects, programs, and policies as a guide, from among submittals by cities and local agencies. The locally prioritized list of projects are sent to SCAG for review, and then SCAG develops the RTIP based on consistency with the current RTP, inter-county connectivity, financial constraint, and conformity satisfaction.

4.7.2.1.2 *Regional Transportation Plan/Sustainable Communities Strategy*

The SCAG RTP looks ahead 20 years and addresses all modes of the transportation system. The RTP/Sustainable Communities Strategy (SCS) reflects research and policy initiatives from each mode: active transportation, aviation

and airport ground access, corridor planning, goods movement, high-speed rail, intelligent transportation systems, safety and security, transit, and transportation finance. Preparation and adoption of the RTP/SCS allows project sponsors to fully qualify for federal funding. The plan takes into account operations and maintenance costs to ensure longevity and cost effectiveness. It includes several components, including Active Transportation, Aviation and Airport Ground Access, Congestion Management, Environmental Justice, Goods Movement, Growth Forecast, Highways and Arterials, Intelligent Transportation Systems, Passenger Rail, Performance Measures, a Project List, and Public Participation and Consultation.

4.7.2.2 SAN BERNARDINO ASSOCIATED GOVERNMENTS

The San Bernardino Associated Governments (SANBAG) is the council of governments and transportation planning agency for San Bernardino County. It is responsible for cooperative regional planning and furthering an efficient multi-modal transportation system.

As the County Transportation Commission (CTC), SANBAG supports freeway construction projects, regional and local road improvements, train and bus transportation, railroad crossings, call boxes, ridesharing, congestion management efforts and long-term planning studies. SANBAG administers Measure I, the half-cent transportation sales tax approved by County voters in 1989 and extended in 2004, which provides local funding for a variety of transportation improvements—including freeways, regional and local roadways and transit—through 2040. In November 2005, SANBAG adopted the Measure I Mitigation Nexus Study Report (Nexus Study), which established each jurisdiction's fair-share contribution for regional transportation facilities in San Bernardino County. Each jurisdiction is required to develop its own development mitigation program to achieve a specific level of fair share development contributions for regional transportation improvements as established by the Nexus Study. In the case of Rialto, the fair share contribution is in the form of an impact fee assessed on new development.

Funds under this program are collected and spent by each local jurisdiction on improvements specifically for the regional transportation system. A jurisdiction must have its fair share available to spend on a transportation project for which it requests funds through SANBAG. Often such funds are used as a match to access Measure I sales tax funds or a variety of State and federal funds that SANBAG may have available for a particular improvement project.

As the CTC, SANBAG is also responsible for overseeing certain federal and State funding programs. SANBAG's oversight responsibilities include coordinating with federal, State, and local agencies to allocate or award funds to projects that will provide the greatest transportation benefit to existing and future roadway systems. SANBAG develops, or participates in the development of, the Countywide Transportation Plan, RTP, Federal Transportation Improvement Program, Non-Motorized Transportation Plan, Passenger Rail Short-Rage Transit Plan, Long Range Transit Plan, Regional Greenhouse Gas Reduction Plan, San Bernardino Valley Coordinated Traffic Signal System Plan, and the San Bernardino County Public Transit – Human Services Transportation Coordination Plan.

4.7.2.3 CITY OF RIALTO GENERAL PLAN

The City of Rialto updated its General Plan in 2010. The City of Rialto General Plan Update (General Plan) is the long-range planning document that puts forward a path for realizing the community's vision. The Plan provides a policy framework for action and direction of physical development of the City over 20 or 30 years. The Circulation Element of the City's General Plan, titled "Making the Connections," includes the following transportation-related goals and policies applicable to the proposed RSPA Project:

Goal 4-1*: Provide transportation improvements to reduce traffic congestion associated with regional and local trip increases.*

- ***Policy 4-1.1****: Establish and maintain standards for a variety of street classifications to serve both local and regional traffic, including Major Arterial Highways, Major Arterials, Secondary Arterials, Collector Streets, and Local Streets.*

- ***Policy 4-1.2****: Establish standards for spacing between access driveways on roadways of each classification, and encourage shared access between adjacent parcels to minimize the number of access points and improve safety along adjacent roadways.*

- ***Policy 4-1.3****: Establish and maintain standards for private roadways.*

- ***Policy 4-1.4****: Close gaps in the City's roadway network by extending the roadway grid through the Rialto Municipal Airport site as per the Renaissance Specific Plan and by pursuing UPRR overcrossing replacement/widening south of Interstate 10.*

- ***Policy 4-1.6****: Coordinate with the California Department of Transportation, San Bernardino Association of Governments, and neighboring jurisdictions to accommodate growing volumes of east-west traffic. This Plan envisions Riverside Avenue, Baseline Road, and Foothill Boulevard to become six-lane arterials.*

- ***Policy 4-1.7****: Cooperate with SANBAG in the implementation of Tier 1 through Tier 4 of the San Bernardino Valley Coordinated Traffic Signal System Plan.*

- ***Policy 4-1.8****: Cooperate with SANBAG and Omnitrans in the implementation of the Inland Intelligent Transportation Systems Strategic Plan.*

- ***Policy 4-1.9****: Work with Caltrans to improve coordination of traffic signals at freeway interchanges with those on City streets.*

- ***Policy 4-1.17****: Require new streets and improvements to connect to established streets.*

- ***Policy 4-1.20****: Design City streets so that signalized intersections operate at Level of Service (LOS) D or better during the morning and evening peak hours, and require new development to mitigate traffic impacts that degrade LOS below that level. The one exception will be Riverside Avenue south of the Metrolink tracks all the way to the City's southern border, which can operate at LOS E.*

- ***Policy 4-1.21****: Design City streets so that unsignalized intersections operate with no vehicular movement having an average delay greater than 120 seconds during the morning and evening peak hours, and require new development to mitigate traffic impacts that increase delay above that level.*

Goal 4-2: *Protect residential neighborhoods from through traffic impacts.*

- ***Policy 4-2.1****: Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets for access to the development and its parking.*

- ***Policy 4-2.2****: Discourage non-local traffic from using neighborhood streets.*

- ***Policy 4-2.3****: Minimize new residential driveways on Arterial Roadways.*

Goal 4-5*: Ensure the provision of adequate, convenient, and safe parking for all land uses.*

- ***Policy 4-5.1****: Support provision of park-and-ride facilities near the I-10 and SR-210 freeways to encourage carpooling, van pooling, and other ride sharing opportunities.*

- ***Policy 4-5.4****: Allow for joint use and the sharing of parking facilities in mixed-use developments and for other projects which demonstrate the benefits of alternative parking approaches.*

- ***Policy 4-5.5****: Consider establishing parking districts at locations in addition to Downtown where such districts would assist with economic development and redevelopment objectives.*

Goal 4-6: *Provide for all residents and businesses to have equal access to reliable and convenient public transit services.*

- ***Policy 4-6.3:*** *Require major developments to include bus turnouts, bus shelters, and other transit facilities as appropriate.*

- ***Policy 4-6.5****: Encourage clean, lighted, and convenient bus shelters and transit stops that are within walking distance of major activity areas and residential neighborhoods and along arterial roadways.*

Goal 4-8: *Establish and maintain a comprehensive system of pedestrian trails and bicycle routes that provide viable connections throughout the City.*

- ***Policy 4-8.1****: Expand Class I bicycle trails with amenities, particularly adjacent to open space areas, utility and flood control corridors, and abandoned rail corridors.*

- ***Policy 4-8.3****: Connect school facilities, parks, and other activity nodes within residential neighborhoods with bicycle trails on neighborhood streets.*

- ***Policy 4-8.4****: Require provision of secure bicycle storage, including bicycle racks and lockers, at the Metrolink station, public parks, schools, shopping centers, park-and-ride facilities, and other major activity centers.*

- ***Policy 4-8.5****: Require major developments to include bicycle storage facilities, including bicycle racks and lockers.*

Goal 4-9*: Promote walking.*

- ***Policy 4-9.1:*** *Install sidewalks where they are missing, and make improvements to existing sidewalks for accessibility purposes. Priority should be given to needed sidewalk improvement near schools and activity centers. Provide wider sidewalks in areas with higher pedestrian volumes.*

- ***Policy 4-9.2****: Require sidewalks and parkways on all streets in new development.*

- ***Policy 4-9.3:*** *Provide pedestrian-friendly and safety improvements, such as crosswalks and pedestrian signals, in all pedestrian activity areas.*

- ***Policy 4-9.4****: Accommodate pedestrians and bicyclists — in addition to automobiles —when considering new development projects.*

- ***Policy 4-9.5:*** *Seek to maintain pedestrian access in the event of any temporary or permanent street closures.*

- ***Policy 4-9.6****: Encourage new development to provide pedestrian paths through projects, with outlets to adjacent collectors, secondary, and arterial roadways.*

- ***Policy 4-9.7****: Require ADA compliance on all new or modified handicap ramps.*

Goal 4-10*: Provide a circulation system that supports Rialto's position as a logistics hub.*

- ***Policy 4-10.1****: Designate and enforce truck routes for use by commercial trucking as part of the project approval process.*

- ***Policy 4-10.3****: Develop appropriate noise mitigation along truck routes to minimize noise impacts on nearby sensitive land uses.*

- ***Policy 4-10.4****: Encourage the development of adequate on-site loading areas to minimize interference of truck loading activities with efficient traffic circulation on adjacent roadways.*

4.7.3 EXISTING CONDITIONS

4.7.3.1 LEVEL OF SERVICE STANDARDS

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of levels of service (which are defined using the letter grades A through F). These levels recognize that, while an absolute limit exists as to the amount of traffic traveling through a given intersection (the absolute capacity), the conditions that motorists experience rapidly deteriorate as traffic approaches the absolute capacity. Under such conditions, congestion is experienced. There is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stall) can cause considerable fluctuations in speeds and delays. This near-capacity situation is labeled Level of Service (LOS) E. Beyond LOS E, capacity has been exceeded, and arriving traffic will exceed the ability of the intersection to accommodate it. An upstream queue will then form and continue to expand in length until the demand volume again declines.

Table 4.7-1 shows the level of service definitions and criteria for unsignalized and signalized intersections. **Table 4.7-2** shows the level of service definitions for roadway segments, and **Table 4.7-3** shows level of service criteria for roadway segments based on the City's Traffic Impact Analysis (TIA) Guidelines.

The General Plan establishes LOS D as the minimum level of service to be maintained on all roadway segments and intersections in the vicinity of the Specific Plan area. The General Plan states that any new development is required to mitigate traffic impacts exceeding these levels. However, per the City's TIA guidelines, significant project impact occurs at an intersection when the project causes the level of service to fall below LOS D or causes the peak hour delay to increase as follows:

- LOS A/B: by 10.0 seconds
- LOS C: by 8.0 seconds
- LOS D: by 5.0 seconds
- LOS E: by 2.0 seconds
- LOS F: by 1.0 second.

Therefore, for study intersections, improvements are recommended when the RSPA Project deteriorates the level of service to below D, or when the RSPA Project causes significant impacts (sliding scale of change of delay). For roadway segments, the City does not have significant project impact criteria. Therefore, improvements only are recommended when a roadway operates below LOS D.

All freeway ramp termini are under the jurisdiction of Caltrans, which considers acceptable level of service to be between C and D for all intersections under its jurisdiction; therefore, all signalized intersections under Caltrans jurisdiction must operate with a weighted average delay of 45 seconds or less. Signalized study intersections under the jurisdiction of Caltrans operating at delays of more than 45 seconds are required to be mitigated to acceptable standards.

4.7.3.2 RENAISSANCE SPECIFIC PLAN AMENDMENT

The Specific Plan area is located generally south of SR-210, north of Baseline Road, west of Ayala Drive, and east of Locust Avenue. Primary access to the Project area is from SR-210 via the Alder Avenue and Ayala Drive interchanges.

- **Alder Avenue.** Alder Avenue is a north-south roadway. The width of Alder Avenue varies from two to four lanes in the vicinity of the Project area.

- **Laurel Avenue.** Laurel Avenue is currently a two-lane undivided north-side roadway terminating south of SR-210.

- **Locust Avenue.** Locust Avenue is a north-south roadway. It is currently a two-lane roadway north of Casmalia Street with a four-lane bridge over SR-210. The roadway is not constructed between Renaissance Parkway and Baseline Road. South of Baseline Road, Locust Avenue is a two-lane roadway.

- **Linden Avenue.** Linden Avenue is a north-south roadway. It is currently a two-lane roadway north of Casmalia Street with a four lane bridge over SR-210. The roadway is not constructed between Renaissance Parkway and Miro Way. South of Miro Way, Linden Avenue is a two-lane roadway.

- **Ayala Drive.** Ayala Drive is a north-south roadway. The width of Ayala Drive varies from two to four lanes in the vicinity of the Project area.

- **Renaissance Parkway.** Renaissance Parkway is generally a four-lane roadway between Alder Avenue and Ayala Drive. It is an east-west roadway.

- **Baseline Road.** Baseline Road varies from two to four lanes in the project area. Portions of Baseline Road have a two-way left-turn lane. It is an east-west roadway.

Traffic conditions were examined for the weekday daily, a.m., and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

As explained below, based on the trip generation, and in consultation with City staff, it was determined that it is unlikely that the RSPA Project would have new circulation impacts outside the Specific Plan study area beyond what was disclosed as part of the Renaissance Specific Plan TIA and Final EIR because the project generates approximately the same number of trips and would have a similar trip distribution as what was previously analyzed in the 2010 Renaissance Specific EIR. Only study intersections and roadways segments within the Specific Plan area would be potentially affected. Based on the trip generation and discussions with City staff, traffic operations were analyzed at the intersections and roadway segments listed below. Intersections are labeled in **Figure 4.7-1: Study Area Intersections**.

Intersections

1. Alder Avenue/Casmalia Street;
2. Alder Avenue/SR-210 Westbound Ramps;
3. Alder Avenue/SR-210 Eastbound Ramps;
4. Alder Avenue/Easton Street-Renaissance Parkway;
5. Alder Avenue/Walnut Street;
6. Alder Avenue/Miro Way;
7. Alder Avenue/Baseline Road;
8. Laurel Avenue/Casmalia Street;
9. Laurel Avenue/Renaissance Parkway;
10. Locust Avenue/Casmalia Street;
11. Locust Avenue/Renaissance Parkway;
12. Locust Avenue/Miro Way;
13. Locust Avenue/Baseline Road;
14. Linden Avenue/Casmalia Street;
15. Linden Avenue/Renaissance Parkway;
16. Linden Avenue/Residential Access;
17. Linden Avenue/Miro Way;
18. Linden Avenue/Baseline Road;
19. Ayala Drive/Casmalia Street;
20. Ayala Drive/SR-210 Westbound Ramps;
21. Ayala Drive/SR-210 Eastbound Ramps;
22. Ayala Drive/Renaissance Parkway-Easton Street;
23. Ayala Drive/Proposed Street (North);
24. Ayala Drive/Leiske Drive;
25. Ayala Drive/Fitzgerald Avenue;
26. Ayala Drive/Proposed Street (South);
27. Ayala Drive/Baseline Road;
28. Fitzgerald Avenue/Baseline Road;
29. Maple Avenue/Miro Way; and
30. Maple Avenue/Baseline Road.

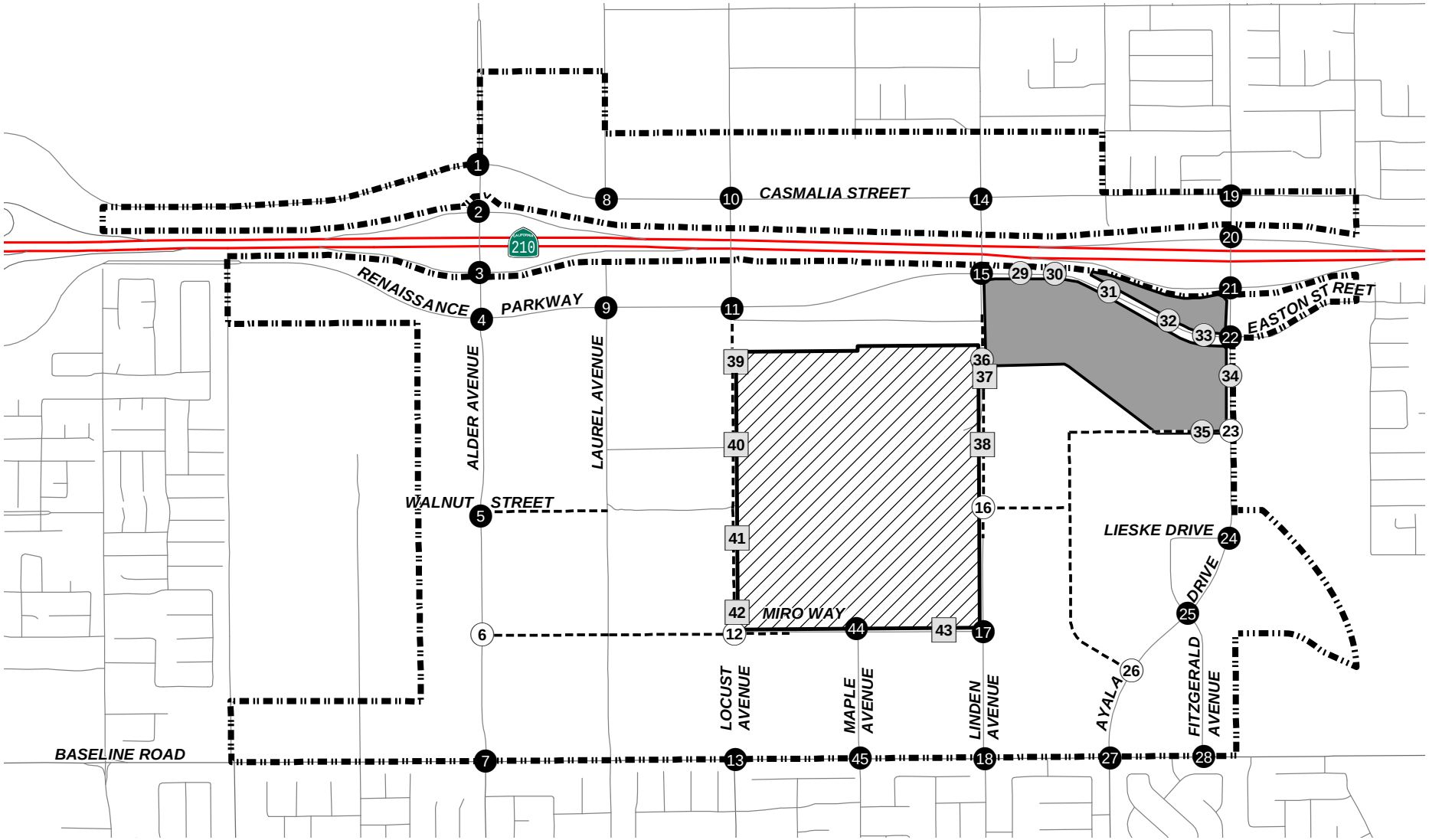
Roadway Segments

1. Casmalia Street east of Alder Avenue;
2. Casmalia Street east of Locust Avenue;
3. Casmalia Street west of Ayala Drive;
4. Renaissance Parkway west of Alder Avenue;
5. Renaissance Parkway east of Alder Avenue;
6. Renaissance Parkway between Locust Avenue and Linden Avenue;
7. Renaissance Parkway west of Ayala Drive;
8. Renaissance Parkway east of Ayala Drive;
9. Baseline Road west of Alder Avenue;
10. Baseline Road east of Alder Avenue;
11. Baseline Road west of Linden Avenue;
12. Baseline Road between Linden Avenue and Ayala Drive;
13. Baseline Road east of Ayala Drive;
14. Alder Avenue south of Casmalia Street;
15. Alder Avenue between SR-210 Ramps;
16. Alder Avenue north of Renaissance Parkway;
17. Alder Avenue between Renaissance Parkway and Walnut Avenue;
18. Alder Avenue between Walnut Avenue and Baseline Road;
19. Laurel Avenue south of Renaissance Parkway;
20. Locust Avenue west of Casmalia Street;
21. Linden Avenue north of Renaissance Parkway;
22. Ayala Drive south of Casmalia Street;
23. Ayala Drive between SR-210 Ramps;
24. Ayala Drive north of Renaissance Parkway;
25. Ayala Drive between Renaissance Parkway and Proposed Street (North);
26. Ayala Drive between Proposed Street (North) and Leiske Drive;
27. Ayala Drive between Leiske Drive and Fitzgerald Avenue;
28. Ayala Drive between Fitzgerald Avenue and Proposed Street (South);
29. Ayala Drive between Proposed Street (South) and Baseline Road;
30. Locust Avenue between Renaissance Parkway and Miro Way;
31. Locust Avenue between Miro Way and Baseline Road;
32. Linden Avenue between Renaissance Parkway and Miro Way;
33. Linden Avenue between Miro Way and Baseline Road; and
34. Miro Way between Locust Avenue and Linden Avenue.

4.7.3.2.1 *Existing Intersection Conditions*

4.7.3.2.1.1 *Existing Intersection and Roadway Levels of Service*

Table 4.7-4 summarizes the intersection levels of service under "Existing Conditions" and shows that two study area intersections are currently operating at unsatisfactory levels of service. **Table 4.7-5** summarizes roadway volumes and the results of the roadway level of service analysis under "Existing Conditions". It shows that four study area roadway segments are currently operating at unsatisfactory levels of service.



Source: LSA, 2015

Figure 4.7-1: Study Area Intersections

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4.7.3.3 RENAISSANCE MARKETPLACE

The proposed Renaissance Marketplace would be located in the northeast portion of the Specific Plan area in Planning Areas 101 and 104. Access to the Renaissance Marketplace would be provided from Renaissance Parkway, Ayala Drive, Linden Avenue, and a proposed street providing access to the residential planning areas south of the Renaissance Marketplace.

Traffic conditions were examined for the weekday daily, a.m., and p.m. peak hour conditions. Given that the Renaissance Marketplace is located within the boundaries of the Specific Plan, the same study area intersections and roadway segments listed for the RSPA Project were analyzed; see Figure 4.701. In addition, all driveways to the Renaissance Marketplace were analyzed:

29. Marketplace Dwy 1/Renaissance Pkwy
30. Marketplace Dwy 2/Renaissance Pkwy
31. Marketplace Dwy 3/Renaissance Pkwy
32. Marketplace Dwy 4/Renaissance Pkwy
33. Marketplace Dwy 5/Renaissance Pkwy
34. Ayala Drive/Marketplace Dwy 6
35. Marketplace Dwy 7/Proposed St (North)
36. Linden Avenue/Marketplace Dwy 8

4.7.3.3.1 *Existing Intersection and Roadway Levels of Service*

Table 4.7-6 summarizes the intersection levels of service under "Existing Conditions" and shows that two study area intersections are currently operating at unsatisfactory levels of service. **Table 4.7-7** summarizes roadway volumes and the results of the roadway levels of service analysis under "Existing Conditions." It shows four study area roadway segments are currently operating at unsatisfactory levels of service.

4.7.3.4 PLANNING AREA 108

Planning Area 108 is located on the north side of Miro Way between Locust and Linden Avenues. Access to the future warehousing uses will be provided by four driveways on Locust Avenue, three driveways on Linden Avenue, and one driveway on Miro Way.

Traffic conditions were examined for the weekday daily, a.m., and p.m. peak hour conditions. Because Planning Area 108 is located within the boundaries of the Specific Plan, the same study area intersections and roadway segments listed for the RSPA and shown in Figure 4.7-1 were analyzed. In addition, all driveways to Planning Area 108 were analyzed:

37. Linden Avenue/Planning Area 108 Driveway 1
38. Linden Avenue/Planning Area 108 Driveway 2
39. Locust Avenue/Planning Area 108 Driveway 4
40. Locust Avenue/Planning Area 108 Driveway 5
41. Locust Avenue/Planning Area 108 Driveway 6
42. Locust Avenue/Planning Area 108 Driveway 7
43. Planning Area 108 Driveway 8/Miro Way

4.7.3.4.1 *Existing Intersection and Roadway Levels of Service*

Table 4.7-8 summarizes the intersection LOS under "Existing Conditions" and shows that two study area intersections are currently operating at unsatisfactory levels of service. **Table 4.7-9** summarizes roadway volumes and the results of the roadway LOS analysis under "Existing Conditions". It shows that four study area roadway segments are currently operating at unsatisfactory levels of service.

4.7.4 STANDARDS OF SIGNIFICANCE

4.7.4.1 SIGNIFICANCE CRITERIA[1]

As a Subsequent EIR to the 2010 RSP Final EIR, this analysis only includes the significance criteria that apply to the proposed Specific Plan Amendment area, the Renaissance Marketplace, and Planning Area 108.

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether a proposed project may produce significant transportation impacts, the following questions are to be analyzed and evaluated. Specific to this project, would the RSPA Project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

As explained above, the analysis provided in the NOP (Appendix A) which determined there would be no new or additional impacts related to air traffic patterns; inadequate emergency access; or conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. As such, no analysis is required in this Recirculated Draft SEIR.

[1] Less than significant and no impact determinations for potential Traffic and Transportation impacts of the proposed Project are listed Table 1-1 of Section 1.0 Executive Summary.

4.7.5 IMPACTS AND MITIGATION MEASURES

4.7.5.1 RENAISSANCE SPECIFIC PLAN AMENDMENT

This section of the traffic analysis identifies the impacts associated with the proposed RSPA under the following scenarios:

- Existing with Renaissance Specific Plan Amendment Conditions
- Year 2035 with Renaissance Specific Plan Amendment Conditions

For a comparison to without-Project conditions, "Existing without Renaissance Specific Plan Amendment Conditions" are included under "Existing Conditions," above. "Year 2035 without Renaissance Specific Plan Amendment" conditions are described below.

4.7.5.1.1 *Trip Generation*

The trip generation for the RSPA was approved by City staff and is based on rates from the Institute of Transportation Engineers (ITE) *Trip Generation*, 9th Edition. The RSPA is expected to generate 124,101 daily net new PCE trips, with 9,533 net new passenger-car-equivalent (PCE)[2] trips occurring during in the a.m. peak hour, and 11,218 net new PCE trips occurring during the p.m. peak hour.

The RSPA would generate trips similar to the number of trips forecast for the 2010 Renaissance Specific Plan. The proposed RSPA would generate 784 fewer net new trips during the a.m. peak hour, 131 more net new trips during the p.m. peak hour, and 6,196 more net new daily trips.

4.7.5.1.2 *Existing with Renaissance Specific Plan Amendment Conditions*

4.7.5.1.2.1 *Impact 4.7-1: Project Impacts under "Existing with Renaissance Specific Plan Amendment" conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Under the "Existing with Renaissance Specific Plan Amendment" condition, 20 intersections would operate at unsatisfactory levels of service, as shown in Table 4.7-4. Based on the City's significant impact criteria, the RSPA would have a significant impact at all 20 of these intersections. At those intersections operating at an unsatisfactory LOS, the addition of project traffic increases the intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F. In addition, the RSPA would have a significant impact at the intersection of Locust Avenue/Baseline Road, which would experience a satisfactory LOS D, but the addition of project traffic would increase the intersection delay by more than 5.0 seconds.

Table 4.7-5 summarizes "Existing with Renaissance Specific Plan Amendment" roadway volumes and the results of the roadway LOS analysis. It shows that 13 study area roadway segments would operate at an unsatisfactory LOS.

[2] PCE trips comprise passenger-car trips, plus truck trips converted to passenger-car trips using SANBAG conversion rates.

The City does not have significant project impact criteria for roadway segments; however, improvements are recommended when a roadway segment operates at an unsatisfactory level of service.

The TIA Study (LSA 2015) identified mitigation measures that would reduce the significant adverse impacts on the above intersections and roadway segments to a less-than-significant level. The measures are listed in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.1.2.2 *Impact 4.7-2: Project Impacts to Design Feature Hazards*

The circulation system for the Specific Plan Amendment provides multi-modal access to serve vehicles, bicycles, and pedestrians. The RSPA would not substantially increase hazards due to a design feature. The on-street public bicycle lane previously provided on Alder Avenue across the SR-210 will be provided on Locust Avenue across the SR-210. Roadway and intersections designs under the RSPA Project would be required to meet City roadway design criteria requirements through review by the Rialto Department of Public Works, as well as the County of San Bernardino Transportation Commission. In addition, a contribution to area-wide traffic improvements, as stipulated under Section 4.7.5.4—Recommended Improvements and 4.7.5.5—Mitigation Measures, would further ensure that hazards would be reduced and the impact would be less than significant.

4.7.5.1.3 *Year 2035 without Renaissance Specific Plan Amendment Conditions*

By 2035, the 2010 Renaissance Specific Plan Project is anticipated to be built out. Therefore, Specific Plan roadways would be constructed to ultimate widths with bike lanes and sidewalks as delineated in the Specific Plan document. **Table 4.7-10** summarizes "Year 2035 without Renaissance Specific Plan Amendment" levels of service. As shown in the table, 18 study intersections would operate at unsatisfactory levels of service.

Table 4.7-11 summarizes roadway volumes and the results of the roadway levels of service analysis and shows 18 study area roadway segments would operate at an unsatisfactory levels of service under "Year 2035 without Renaissance Specific Plan Amendment" conditions.

4.7.5.1.4 *Year 2035 with Renaissance Specific Plan Amendment Conditions*

4.7.5.1.4.1 *Impact 4.7-3: Project Impacts under Year 2035 with Renaissance Specific Plan Amendment Conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Under the "Year 2035 with Renaissance Specific Plan Amendment" condition, 26 intersections would operate at unsatisfactory levels of service, as shown in Table 4.7-11. Based on the City's significant impact criteria, the RSPA would have a significant impact at all 26 of these intersections. At these locations, the addition of RSPA traffic would increase the intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F.

Table 4.7-11 summarizes "Year 2035 with Renaissance Specific Plan Amendment" roadway volumes and the results of the roadway LOS analysis and shows 22 study area roadway segments would operate at unsatisfactory levels of service. The City does not have significant project impact criteria for roadway segments; however, improvements are recommended when a roadway segment operates at an unsatisfactory level of service. Mitigation measures are provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.2 RENAISSANCE MARKETPLACE

Potential impacts associated with the proposed Renaissance Marketplace were assessed under the following scenarios:

- Existing with Renaissance Marketplace Conditions
- Operational Year with Renaissance Marketplace Conditions
- Cumulative with Renaissance Marketplace Conditions

For a comparison to without-project conditions, "Existing without Renaissance Marketplace" conditions are included under "Existing Conditions," above. "Operational Year without Renaissance Marketplace" conditions, and "Cumulative without Renaissance Marketplace" conditions, are described below.

4.7.5.2.1 *Trip Generation*

The trip generation for the Renaissance Marketplace was approved by City staff and is based on ITE *Trip Generation*, 9th Edition. The Renaissance Marketplace is expected to generate 17,780 net new daily trips, with 468 net new trips occurring during in the a.m. peak hour, and 1,482 net new trips occurring during the p.m. peak hour.

4.7.5.2.2 *Existing with Renaissance Marketplace Conditions*

4.7.5.2.2.1 *Impact 4.7-4: Project Impacts under Existing with Renaissance Marketplace Conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Table 4.7-6 summarizes "Existing with Renaissance Marketplace" intersection levels of service and shows that six study area intersections are forecast to operate at unsatisfactory levels of service. Based on the City's significant impact criteria, the Renaissance Marketplace would have a significant impact at these six study intersections. At these intersections operating at an unsatisfactory level of service, the addition of the Marketplace traffic increases intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F.

In addition, the Renaissance Marketplace would also have a significant impact at the intersection of Ayala Drive/Renaissance Parkway-Easton Street. Although this intersection operates at satisfactory LOS D, the addition of the Renaissance Marketplace traffic would increase the intersection delay by more than 5.0 seconds; therefore, a significant impact would occur.

Table 4.7-7 summarizes roadway volumes and the results of the LOS analysis and shows seven study area roadway segments would operate at an unsatisfactory level of service under "Existing with Renaissance Marketplace" conditions. The City does not have significant project impact criteria for roadway segments; however, improvements are recommended when a roadway segment operates at an unsatisfactory level of service. Mitigation measures are provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.2.2.2 *Impact 4.7-5: Project Impacts of the Renaissance Marketplace to Design Feature Hazards.*

The circulation system for the Renaissance Marketplace site provides multi-modal access to serve vehicles, bicycles, and pedestrians. The Renaissance Marketplace would not substantially increase hazards due to a design

feature. Roadway and intersections designs would be required to meet City roadway design criteria requirements through review by the Rialto Department of Public Works, as well as the County of San Bernardino Transportation Commission. In addition, contribution to area-wide traffic improvements, as stipulated under Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures, would further ensure that hazards would be reduced and the impact would be less than significant.

4.7.5.2.3 *Operational Year without Renaissance Marketplace Conditions*

Operational year intersection geometrics would be generally the same as under "Existing Conditions". The only exception is Laurel Avenue, which would connect Renaissance Parkway with Baseline Road. As approved during the City's scoping agreement process, traffic volumes for operational year conditions were developed by applying a 2.0 percent per annum growth rate to the "Existing without Renaissance Marketplace" traffic volumes.

Table 4.7-12 summarizes the results of this analysis and shows that four study area intersections are forecast to operate at unsatisfactory levels of service. **Table 4.7-13** summarizes roadway volumes and the results of the roadway LOS analysis and shows four study area roadway segments are forecast to operate at unsatisfactory levels of service.

4.7.5.2.4 *Operational Year with Renaissance Marketplace Conditions*

4.7.5.2.4.1 *Impact 4.7-6: Project Impacts, under Operational Year with Renaissance Marketplace Conditions, to an Applicable plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Table 4.7-12 shows that seven study area intersections are forecast to operate at unsatisfactory levels of service under "Operational Year with Renaissance Marketplace" conditions. Based on the City's significant impact criteria, the Renaissance Marketplace would have a significant impact at the six of the seven study intersections operating at unsatisfactory conditions. At these intersections operating at an unsatisfactory level of service, the addition of the Renaissance Marketplace traffic would increase intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F. The Renaissance Marketplace would not have a significant impact at the intersection of Locust Avenue/Casmalia Street because project traffic would not increase the intersection delay by 5.0 seconds when operating at LOS E.

In addition, the Renaissance Marketplace would also have a significant impact at the intersection of Ayala Drive/Renaissance Parkway-Easton Street. Although this intersection would operate at satisfactory LOS D, the addition of the Renaissance Marketplace traffic would increase the intersection delay by more than 5.0 seconds; therefore, a significant impact would occur.

Table 4.7-13 summarizes roadway volumes and the results of the roadway LOS analysis and shows that five study area roadway segments are forecast to operate at unsatisfactory levels of service. The City does not have significant project impact criteria for roadway segments; however, improvements are recommended when a roadway segment operates at an unsatisfactory level of service. Mitigation measures are provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.2.5 *Cumulative without Renaissance Marketplace Conditions*

Cumulative traffic volumes were developed by adding cumulative project trips to "Operational Year without Renaissance Marketplace" traffic volumes. Information concerning cumulative projects in the vicinity of the RSPA are was obtained from the City. The trip generation for cumulative projects was developed using rates from the ITE *Trip Generation*, 9th Edition or from previously prepared TIAs. Cumulative projects are expected to generate 84,986 net daily PCE trips, with 6,507 net PCE trips occurring during the a.m. peak hour, and 7,798 net PCE trips occurring in the p.m. peak hour.

Table 4.7-14 summarizes the results of this analysis and shows that 12 study area intersections are forecast to operate at unsatisfactory levels of service under "Cumulative without Renaissance Marketplace" conditions. **Table 4.7-15** summarizes roadway volumes and the results of the roadway LOS analysis and shows that 15 study area roadway segments are forecast to operate at unsatisfactory levels of service under "Cumulative without Renaissance Marketplace" conditions.

4.7.5.2.6 *Cumulative with Renaissance Marketplace Conditions*

4.7.5.2.6.1 *Impact 4.7-7: Project Impacts under Cumulative with Renaissance Marketplace Conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Table 4.7-14 shows that 15 study area intersections are forecast to operate at unsatisfactory levels of service under "Cumulative with Renaissance Marketplace" conditions. Based on the City's significant impact criteria, the Renaissance Marketplace would have a significant impact at the 14 of the 15 study intersections operating at unsatisfactory conditions. At these intersections operating at an unsatisfactory level of service, the addition of the Renaissance Marketplace traffic would increase intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F. The Renaissance Marketplace would not have a significant impact at the intersection of Ayala Drive/Leiske Drive because project traffic would not increase the intersection delay by 2.0 seconds when operating at LOS E.

In addition, the Renaissance Marketplace would also have a significant impact at the following four intersections operating at a satisfactory level of service because the addition of the Renaissance Marketplace traffic would increase the intersection delay by more than 5.0 seconds: Alder Avenue/Easton Street-Renaissance Parkway; Linden Avenue/Renaissance Parkway; Ayala Drive/Casmalia Street; and Ayala Drive/Renaissance Parkway-Easton Street.

Table 4.7-15 summarizes roadway volumes and the results of the roadway LOS analysis and shows 14 study area roadway segments are forecast to operate at unsatisfactory conditions. The City does not have significant project impact criteria for roadway segments; however, improvements are recommended below when a roadway segment operates at an unsatisfactory LOS. Mitigation is provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.3 PLANNING AREA 108

This section of the report identifies the impacts associated with the proposed Planning Area 108 under the following scenarios:

- Existing with Planning Area 108 Conditions
- Operational Year with Planning Area 108 Conditions
- Cumulative with Planning Area 108 Conditions

For a comparison to without-project conditions, "Existing without Planning Area 108" conditions are included under "Existing Conditions," above. "Operational Year without Planning Area 108" conditions, and "Cumulative without Planning Area 108" conditions, are described below.

4.7.5.3.1 *Trip Generation*

The trip generation for Planning Area 108 was approved by City staff and is based on ITE rates. Planning Area 108 is expected to generate 23,833 daily total PCE trips, with 2,008 PCE trips occurring during in the a.m. peak hour, and 2,138 PCE trips occurring during the p.m. peak hour.

It should be noted that in the time since the Renaissance Specific Plan Amendment (RSPA) Traffic Impact Analysis (TIA), dated September 20, 2016 was prepared, minor changes were made to the site plan for PA 108. The revisions to the PA 108 site plan would not change the results or conclusions of the TIA. As stated in the TIA, the analysis for PA 108 was conducted to consider the site layout of PA 108 and to provide guidance for CEQA review. The square footage and land use as shown on the updated site plan for PA 108 is 3,994,000, which is less than the 4,000,000 million square feet of warehouse uses analyzed in the TIA. The uses are identical and so the total traffic trips generated by PA 108 will be incrementally less compared to what was evaluated in the TIA. The analysis is thus conservative since the square footage has been reduced. The site plan does make minor modifications to the location of driveway but the potential for project trips to change in direction based on these driveways is limited to within the project boundary at the intersections of Locust Avenue/Miro Way, Maple Avenue/Miro Way and Linden Avenue/Miro Way. Should any change in directional flow of project traffic result at these intersections, it will be analyzed in project-specific traffic analyses that are required to be conducted for each specific development within PA 108.

4.7.5.3.2 *Existing with Planning Area 108 Conditions*

4.7.5.3.2.1 *Impact 4.7-8: Project Impacts under Existing with Planning Area 108 Conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Table 4.7-8 summarizes "Existing with Planning Area 108" intersection levels of service and shows that four study area intersections are forecast to operate at unsatisfactory levels of service. Based on the City's significant impact criteria, Planning Area 108 would have a significant impact at all four intersections. At these intersections operating at an unsatisfactory level of service, the addition of Planning Area 108 traffic would increase intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F.

In addition, Planning Area 108 would have a significant impact at the intersections of Laurel Avenue/Casmalia Street, Linden Avenue/Miro Way; and Ayala Drive/Baseline Road. Although these intersections operate at satisfactory LOS D, the addition of Planning Area 108 traffic would increase delay by more than 5.0 seconds; therefore, a significant impact would occur.

Table 4.7-9 summarizes roadway volumes and the results of the LOS analysis and shows that five study area roadway segments would operate at an unsatisfactory level of service under "Existing with Planning Area 108"

conditions. The City does not have significant impact criteria for roadway segments; however, improvements are recommended when a roadway segment operates at an unsatisfactory LOS. Mitigation is provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.3.2.2 *Impact 4.7-9: Project Impacts of Planning Area 108 to Design Feature Hazards*

The circulation system for Planning Area 108 provides multi-modal access to serve vehicles, bicycles, and pedestrians. Planning Area 108 would not substantially increase hazards due to a design feature. Roadway and intersections designs would be required to meet City roadway design criteria requirements through review by the Rialto Department of Public Works, as well as the County of San Bernardino Transportation Commission. In addition, contribution to area-wide traffic improvements, as stipulated under Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures, would further ensure that hazards would be reduced and the impact would be less than significant.

4.7.5.3.3 *Operational Year without Planning Area 108 Conditions*

Operational year intersection geometrics would be generally the same as under "Existing Conditions". The only exception is Laurel Avenue, which would connect Renaissance Parkway with Baseline Road. As approved during the City's scoping agreement process, traffic volumes for operational year conditions were developed by applying a 2.0 percent per annum growth rate to the "Existing without Planning Area 108"project traffic volumes.

Table 4.7-16 summarizes the results of this analysis and shows that four study area intersections are forecast to operate at unsatisfactory levels of service. **Table 4.7-17** summarizes roadway volumes and the results of the roadway LOS analysis and shows that four study area roadway segments are forecast to operate at unsatisfactory levels of service.

4.7.5.3.4 *Operational Year with Planning Area 108 Conditions*

4.7.5.3.4.1 *Impact 4.7-10: Project Impacts under Operational Year with Planning Area 108 Conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Table 4.7-16 summarizes the results of this analysis and shows that five study area intersections are forecast to operate at unsatisfactory levels of service under "Operational year with Planning Area 108" conditions. Based on the City's significant impact criteria, Planning Area 108 would have a significant impact at four of the five study intersections operating at unsatisfactory conditions. At these intersections operating at an unsatisfactory level of service, the addition of Planning Area 108 traffic would increase intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F. Planning Area 108 would not have a significant impact at the intersection of Locust Avenue/Casmalia Street because project traffic would not increase the intersection delay by 2.0 seconds when operating at LOS E.

In addition, Planning Area 108 would also have a significant impact at the intersections of Laurel Avenue/Casmalia Street, Linden Avenue/Miro Way, and Ayala Drive/Baseline Road. Although these intersections would operate at satisfactory LOS D, the addition of Planning Area 108 traffic would increase the intersection delay by more than 5.0 seconds; therefore, a significant impact would occur.

Table 4.7-17 summarizes roadway volumes and the results of the roadway LOS analysis and shows that five study area roadway segments are forecast to operate at unsatisfactory levels of service. Mitigation is provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.3.5 *Cumulative without Planning Area 108 Conditions*

Cumulative traffic volumes were developed by adding cumulative project trips to "Operational Year without Planning Area 108" project traffic volumes. Information concerning cumulative projects in the vicinity of the Specific Plan area was obtained from the City. The trip generation for cumulative projects was developed using ITE rates or from previously prepared TIAs. Cumulative projects are expected to generate 73,245 net daily PCE trips, with 4,488 net PCE trips occurring during the a.m. peak hour and 6,630 net PCE trips occurring in the p.m. peak hour.

Table 4.7-18 summarizes the results of this analysis and shows that 12 study area intersections are forecast to operate at unsatisfactory levels of service under "Cumulative without Planning Area 108" conditions. **Table 4.7-19** summarizes roadway volumes and the results of the roadway LOS analysis and shows that 13 study area roadway segments are forecast to operate at unsatisfactory levels of service under "Cumulative without Planning Area 108" conditions.

4.7.5.3.6 *Cumulative with Planning Area 108 Conditions*

4.7.5.3.6.1 *Impact 4.7-11: Project Impacts under Cumulative with Planning Area 108 Conditions, to an Applicable Plan, Ordinance or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, and Exceed the Level of Service Standard*

Table 4.7-18 summarizes the results of this analysis and shows that 16 study area intersections are forecast to operate at unsatisfactory levels of service under "Cumulative with Planning Area 108" conditions. Based on the City's significant impact criteria, Planning Area 108 would have a significant impact at all 16 study intersections operating at unsatisfactory conditions. At these intersections operating at an unsatisfactory level of service, the addition of Planning Area 108 traffic would increase intersection delay by more than 2.0 seconds when operating at LOS E and by more than 1.0 second when operating at LOS F.

In addition, Planning Area 108 would have a significant impact at the following two intersections operating at a satisfactory level of service because the addition of Planning Area 108 traffic would increase the intersection delays by more than 5.0 seconds: Linden Avenue/Renaissance Parkway; and Ayala Drive/Renaissance Parkway-Easton Street.

Table 4.7-19 summarizes roadway volumes and the results of the roadway LOS analysis and shows that 17 study area roadway segments are forecast to operate at unsatisfactory conditions. The City does not have significant project impact criteria for roadway segments; however, improvements are recommended below when a roadway segment operates at an unsatisfactory LOS. Mitigation is provided in Section 4.7.5.4—Recommended Improvements, and 4.7.5.5—Mitigation Measures.

4.7.5.4 RECOMMENDED IMPROVEMENTS

4.7.5.4.1 *Renaissance Specific Plan Amendment*

At intersections where the level of service is forecast to be unsatisfactory or where the project would have a significant impact as defined by the City's TIA Guidelines, improvements have been identified to offset significant impacts and/or to maintain conformance with City standards. **Table 4.7-20** lists the improvements required to meet the City's level of service standard and offset project impacts. **Table 4.7-21** and **Table 4.7-22** show the number of lanes required to improve the LOS to satisfactory conditions.

4.7.5.5 MITIGATION MEASURES

4.7.5.5.1 *Renaissance Specific Plan Amendment*

Mitigation Measure TRANS-1: Prior to the issuance of building permits, the City Traffic Engineer shall review individual site-specific development proposals to evaluate whether such proposals would cause LOS failure at Project intersections. If it is determined that traffic generated from such proposal would cause LOS failure, the applicant shall provide, either through construction of and/or monetary contribution for, improvements listed in Table 4.7-20, Table 4.7-21, and Table 4-7-22 of the Recirculated Draft SEIR. Such improvements and/or monetary contribution shall be provided in proportion to an individual project's impacts on traffic and to the satisfaction of the City Traffic Engineer.

4.7.5.5.2 *Renaissance Marketplace*

Mitigation Measure TRANS-2: Prior to the issuance of building permits, the Renaissance Marketplace project applicant shall enter into a Development Agreement (DA) with the City of Rialto. This DA shall describe the timing and implementation of project-specific improvements, as well as existing funding mechanisms and proportional fair-share contributions, for the improvements listed in Table 4.7-23, Table 4.7-24, Table 4.7-25, and Table 4.7-26 of the Recirculated Draft SEIR. Where no existing funding mechanism exists for recommended improvements, the DA shall stipulate that the project applicant shall pay not less than the fair share contribution to mitigate project impacts.

4.7.5.5.3 *Planning Area 108*

Mitigation Measure TRANS-3: Prior to issuance of building permits, the Planning Area 108 (PA 108) applicant shall enter into a Development Agreement (DA) with the City of Rialto. This DA shall describe the timing and implementation of project-specific improvements, as well

as existing funding mechanisms and proportional fair-share contributions, for the improvements listed in Table 4.7.27, Table 4.7-28, Table 4.7-29, and Table 4.7-30 of the Recirculated Draft SEIR. Where no existing funding mechanism exists for recommended improvements, the DA shall stipulate that the applicant shall pay not less than the fair share contribution to mitigate project impacts.

Table 4.7-1 Level of Service Definitions and Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)	Definition
A	≤ 10	≤ 10	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	> 10 and ≤ 15	> 10 and ≤ 20	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	> 15 and ≤ 25	> 20 and ≤ 35	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	> 25 and ≤ 35	> 35 and ≤ 55	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	> 35 and ≤ 50	> 55 and ≤ 80	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	> 50	> 80	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Table 4.7-2 Level of Service Definitions for Roadways

Level of Service	Definition
A	Describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control Delay at the boundary intersection is minimal. The travel speed exceeds 85% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
B	Describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary is not significant. The travel speed is between 67% and 85% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
C	Describes stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersection may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
D	Indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersection. The travel speed is between 40% and 50% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
E	Characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersection. The travel speed is between 30% and 40% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
F	Characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersection, as indicated by high delay and extensive queuing. The travel speed is between 30% or less of the base free-flow speed, and the volume-to-capacity ratio is greater than 1.0.

Table 4.7-3 Level of Service Criteria for Roadways

Roadway Classification	No. of Lanes	Two-Way Traffic Volume (ADT)		
		Service Level C	Service Level D	Service Level E
Local	2	2,500 – 2,799	2,800 – 3,099	3,100 +
Collector (60' or 64')	2	9,900 – 11,199	11,200 – 12,499	12,500 +
Industrial (45')	2	9,900 – 11,199	11,200 – 12,499	12,500 +
Arterial	2	14,400 – 16,199	16,200 – 17,999	18,000 +
Secondary Highway	4	16,900 – 19,399	19,400 – 21,199	22,000 +
Modified Arterial (100)	4	26,200 – 29,599	29,600 – 32,999	33,000 +
Arterial	6	38,700 – 44,099	44,100 – 49,499	49,500 +

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Table 4.7-4 RSPA: Existing and Existing with RSPA Intersection Levels of Service

	Intersection	Control	Without Renaissance Specific Plan Amendment (RSPA)				With Renaissance Specific Plan Amendment				Significant Project Impact?
			A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1	Alder Ave/Casmalia Street	Signal	52.4	D	41.0	D	>100	F *	>100	F *	**Yes**
2	Alder Ave/SR-210 Westbound Ramps	Signal	34.6	C	21.0	C	>100	F *	98.7	F *	**Yes**
3	Alder Ave/SR-210 Eastbound Ramps	Signal	33.6	C	18.9	B	34.6	C	25.3	C	No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	21.7	C	18.8	B	33.0	C	72.4	E *	**Yes**
5	Alder Ave/Walnut Street	Signal	3.1	A	10.0	A	8.3	A	13.1	B	No
6	Alder Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		32.3	D	43	E *	**Yes**
7	Alder Ave/Baseline Rd	Signal	56.9	E *	46.9	D	>100	F *	98.8	F *	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	11.0	B	16.3	C	14.4	B	46.9	E *	**Yes**
9	Laurel Ave/Renaissance Pkwy	Signal	8.1	A	14.4	B	17.7	B	17.2	B	No
10	Locust Ave/Casmalia Street	Signal	51.0	D	40.4	D	65.4	E *	81.9	F *	**Yes**
11	Locust Ave/Renaissance Pkwy	Signal	43.6	D	36.2	D	44.0	D	89.5	F *	**Yes**
12	Locust Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		13.9	B	16.2	C	No
13	Locust Ave/Baseline Rd	Signal	27.2	C	23.9	C	39.9	D	36.7	D	**Yes**
14	Linden Ave/Casmalia St	Signal	35.2	D	30.3	C	36.8	D	31.4	C	No
15	Linden Ave/Renaissance Pkwy	Signal	35.3	D	26.7	C	37.4	D	72.2	E *	**Yes**
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	*Future Intersection*		*Future Intersection*		16.6	C	19.1	C	No
17	Linden Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		13.5	B	>100	F *	**Yes**
18	Linden Ave/Baseline Rd	TWSC	26.6	D	33.7	D	>100	F *	>100	F *	**Yes**
19	Ayala Dr/Casmalia St	Signal	33.4	C	38.4	D	40.0	D	>100	F *	**Yes**
20	Ayala Dr/SR-210 Westbound Ramps	Signal	26.8	C	21.6	C	31.7	C	31.5	C	No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	12.4	B	18.6	B	17.9	B	33.7	C	No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	23.2	C	19.5	B	37.7	D	63	E *	**Yes**
23	Ayala Dr/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		>100	F *	>100	F *	**Yes**
24	Ayala Dr/Lieske Dr	TWSC	12.5	B	24.7	C	>100	F *	74.8	F *	**Yes**
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F *	20.7	C	>100	F *	>100	F *	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*		*Future Intersection*		>100	F *	>100	F *	**Yes**
27	Ayala Dr/Baseline Rd	Signal	41.3	D	44.8	D	72.4	E *	66.6	E *	**Yes**
28	Fitzgerald Ave/Baseline Rd	TWSC	17.2	C	21.8	C	46.7	E *	>100	F *	**Yes**
44	Maple Avenue/Miro Way	TWSC	8.5	A	8.5	A	8.5	A	8.7	A	-
45	Maple Avenue/Baseline Road	TWSC	11.8	B	11.7	B	37.3	E *	50.3	F *	**Yes**

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-5 RSPA: Existing and Existing with RSPA Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Renaissance Specific Plan Amendment				With Renaissance Specific Plan Amendment			
				Daily Volume	Daily V/C[2]	LOS		Daily Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	11,545	0.58	B		16,911	0.85	D	
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	4,518	0.23	B		5,022	0.25	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	4,436	0.22	B		7,620	0.38	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	3,282	0.13	B		7,371	0.30	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	3,938	0.16	B		16,094	0.65	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	2,545	0.10	B		14,978	0.61	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	3,829	0.16	B		23,452	0.95	E	*
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	5,840	0.24	B		8,956	0.36	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	11,121	0.56	B		18,000	0.91	D	
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	14,748	0.80	D		23,731	1.29	F	*
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	11,559	0.63	B		18,644	1.01	F	*
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	13,672	0.56	B		23,267	0.95	E	*
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	12,478	0.51	B		17,922	0.73	C	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	16,724	0.68	B		21,074	0.86	D	
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	16,014	0.65	B		20,647	0.84	D	
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	18,186	0.74	C		23,589	0.96	E	*
17	Alder Avenue between Renaissance Parkway and Walnut Ave.	2	2-Lane Arterial	16,651	0.84	D		19,600	0.99	E	*
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	15,092	0.76	C		17,827	0.90	D	
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	1,403	0.10	B		1,769	0.13	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	3,371	0.14	B		11,882	0.48	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	2,173	0.09	B		8,618	0.35	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	14,992	0.61	B		19,466	0.79	D	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	18,893	0.77	C		28,751	1.17	F	*
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	24,354	0.99	E	*	38,461	1.56	F	*
25	Ayala Drive between Renaissance Pkwy and Proposed St. (North)	3	4-Lane Secondary Highway	22,365	1.21	F	*	35,013	1.90	F	*
26	Ayala Drive between Proposed St. (North) and Leiske Drive	3	4-Lane Secondary Highway		*Future Roadway*			33,581	1.82	F	*
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	22,205	1.20	F	*	25,955	1.41	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed St. (South)	3	4-Lane Secondary Highway		*Future Roadway*			22,108	1.20	F	*
29	Ayala Drive between Proposed St. (South) and Baseline Road	3	4-Lane Secondary Highway	19,509	1.06	F	*	26,266	1.42	F	*
30	Locust Ave. between Renaissance Parkway and Miro Way	2	2-Lane Arterial		*Future Roadway*			9,629	0.49	B	
31	Locust Ave. between Miro Way and Baseline Road	2	2-Lane Arterial		*Future Roadway*			5,355	0.27	B	
32	Linden Ave. between Renaissance Parkway and Miro Way	2	2-Lane Arterial		*Future Roadway*			7,591	0.38	B	
33	Linden Ave. between Miro Way and Baseline Road	2	2-Lane Arterial	440	0.02	B		7,976	0.40	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial		*Future Roadway*			2,407	0.12	B	

Notes:
PA = Planning Area
LOS = Level of Service. V/C = Volume to Capacity
* Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the capacity is 6,150 daily vehicles.

Table 4.7-6 Renaissance Marketplace: Existing and Existing with Renaissance Marketplace Intersection Levels of Service

	Intersection	Control	Without Renaissance Marketplace				With Renaissance Marketplace				Significant Project Impact?
			A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1	Alder Ave/Casmalia Street	Signal	52.4	D	41.0	D	53.8	D	41.5	D	No
2	Alder Ave/SR-210 Westbound Ramps	Signal	34.6	C	21.0	C	34.5	C	20.9	C	No
3	Alder Ave/SR-210 Eastbound Ramps	Signal	33.6	C	18.9	B	33.6	C	24.5	C	No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	21.7	C	18.8	B	23.2	C	26.8	C	No
5	Alder Ave/Walnut Street	Signal	3.1	A	10.0	A	3.2	A	11.9	B	No
6	Alder Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
7	Alder Ave/Baseline Rd	Signal	56.9	E *	46.9	D	61.2	E *	51	D	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	11.0	B	16.3	C	11.0	B	16.6	C	No
9	Laurel Ave/Renaissance Pkwy	Signal	8.1	A	14.4	B	8.4	A	10.2	B	No
10	Locust Ave/Casmalia Street	Signal	51.0	D	40.4	D	52.7	D	41.9	D	No
11	Locust Ave/Renaissance Pkwy	Signal	43.6	D	36.2	D	43.7	D	36.6	D	No
12	Locust Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
13	Locust Ave/Baseline Rd	Signal	27.2	C	23.9	C	27.5	C	24.5	C	No
14	Linden Ave/Casmalia St	Signal	35.2	D	30.3	C	36.1	D	30.6	C	No
15	Linden Ave/Renaissance Pkwy	Signal	35.3	D	26.7	C	29.1	C	30	C	No
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
17	Linden Ave/Miro Way	TWSC	8.4	A	8.6	A	8.4	A	8.6	A	No
18	Linden Ave/Baseline Rd	TWSC	26.6	D	33.7	D	28.4	D	49	E *	**Yes**
19	Ayala Dr/Casmalia St	Signal	33.4	C	38.4	D	34.4	C	38.7	D	No
20	Ayala Dr/SR-210 Westbound Ramps	Signal	26.8	C	21.6	C	27.8	C	21.5	C	No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	12.4	B	18.6	B	12.7	B	21.5	C	No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	23.2	C	19.5	B	34.4	C	48.8	D	**Yes**
23	Ayala Dr/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		39.2	E *	>100	F *	**Yes**
24	Ayala Dr/Lieske Dr	TWSC	12.5	B	24.7	C	12.9	B	39.4	E *	**Yes**
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F *	20.7	C	>100	F *	56.3	F *	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
27	Ayala Dr/Baseline Rd	Signal	41.3	D	44.8	D	42.2	D	49.5	D	No
28	Fitzgerald Ave/Baseline Rd	TWSC	17.2	C	21.8	C	18.5	C	37.6	E *	**Yes**
29	Marketplace Dwy 1/Renaissance Pkwy	TWSC	*Future Intersection*		*Future Intersection*		9.6	A	10.4	B	No
30	Marketplace Dwy 2/Renaissance Pkwy	Signal	*Future Intersection*		*Future Intersection*		17.4	B	19.4	B	No
31	Marketplace Dwy 3/Renaissance Pkwy	TWSC	*Future Intersection*		*Future Intersection*		9.1	A	10	A	No
32	Marketplace Dwy 4/Renaissance Pkwy	Signal	*Future Intersection*		*Future Intersection*		20.6	C	38.2	D	No
33	Marketplace Dwy 5/Renaissance Pkwy	TWSC	*Future Intersection*		*Future Intersection*		8.9	A	11.3	B	No
34	Ayala Drive/Marketplace Dwy 6	TWSC	*Future Intersection*		*Future Intersection*		12.4	B	14.6	B	No
35	Marketplace Dwy 7/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		8.7	A	9.5	A	No
36	Linden Avenue/Marketplace Dwy 8	TWSC	*Future Intersection*		*Future Intersection*		0.0	A	0	A	No
37	Linden Avenue/PA108 Driveway 1	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
38	Linden Avenue/PA108 Driveway 2	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
39	Locust Avenue/PA108 Driveway 4	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
40	Locust Avenue/PA108 Driveway 5	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
41	Locust Avenue/PA108 Driveway 6	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
42	Locust Avenue/PA108 Driveway 7	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
43	PA108 Driveway 8/Miro Way	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
44	Maple Avenue/Miro Way	TWSC	8.5	A	8.5	A	8.5	A	8.5	A	No
45	Maple Avenue/Baseline Road	TWSC	11.8	B	11.7	B	12.7	B	15.9	C	No

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-7 Renaissance Marketplace: Existing and Existing with Renaissance Marketplace Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Renaissance Marketplace				With Renaissance Marketplace			
				Volume	Daily V/C[2]	LOS		Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	11,545	0.58	B		11,723	0.59	B	
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	4,518	0.23	B		4,518	0.23	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	4,436	0.22	B		4,436	0.22	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	3,282	0.13	B		5,060	0.21	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	3,938	0.16	B		9,897	0.40	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	2,545	0.10	B		9,038	0.37	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	3,829	0.16	B		17,788	0.72	C	
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	5,840	0.24	B		7,618	0.31	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	11,121	0.56	B		12,187	0.62	B	
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	14,748	0.80	D		15,282	0.83	D	
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	11,559	0.63	B		12,093	0.66	B	
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	13,672	0.56	B		15,096	0.61	B	
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	12,478	0.51	B		14,256	0.58	B	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	16,724	0.68	B		16,902	0.69	C	
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	16,014	0.65	B		16,369	0.67	B	
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	18,186	0.74	C		19,297	0.78	C	
17	Alder Ave. between Renaissance Parkway and Walnut Ave.	2	2-Lane Arterial	16,651	0.84	D		19,141	0.97	E	*
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	15,092	0.76	C		17,582	0.89	D	
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	1,403	0.10	B		1,403	0.10	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	3,371	0.14	B		3,903	0.16	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	2,173	0.09	B		3,415	0.14	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	14,992	0.61	B		15,880	0.65	B	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	18,893	0.77	C		23,483	0.95	E	*
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	24,354	0.99	E	*	31,419	1.28	F	*
25	Ayala Dr. between Renaissance Pkwy and Proposed St. (North)	3	4-Lane Secondary Highway	22,365	1.21	F	*	27,375	1.48	F	*
26	Ayala Drive between Proposed St. (North) and Leiske Drive	3	4-Lane Secondary Highway		*Future Roadway*			29,348	1.59	F	*
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	22,205	1.20	F	*	29,187	1.58	F	*
28	Ayala Drive between Fitzgerald Dr. and Proposed St. (South)	3	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
29	Ayala Drive between Proposed St. (South) and Baseline Road	3	4-Lane Secondary Highway	19,509	1.06	F	*	25,425	1.38	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
31	Locust Avenue between Miro Way and Baseline Road	2	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
32	Linden Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	440	0.02	B		440	0.02	B	
34	Miro Way between Locust Avenue and Linden Ave.	2	2-Lane Arterial		*Future Roadway*				*Future Roadway*		

Notes:
LOS = Level of Service. V/C = Volume to Capacity
* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

Table 4.7-8 Planning Area 108: Existing and Existing with Planning Area 108 Intersection Levels of Service

	Intersection	Control	Without Planning Area 108				With Planning Area 108				Significant Project Impact?
			A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		
			Delay		Delay		Delay		Delay		
			(sec.)	LOS	(sec.)	LOS	(sec.)	LOS	(sec.)	LOS	
1	Alder Ave/Casmalia Street	Signal	52.4	D	41.0	D	57.0	E *	91.2	F *	**Yes**
2	Alder Ave/SR-210 Westbound Ramps	Signal	34.6	C	21.0	C	36.4	D	32.1	C	No
3	Alder Ave/SR-210 Eastbound Ramps	Signal	33.6	C	18.9	B	33.8	C	19.1	B	No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	21.7	C	18.8	B	25.1	C	21.4	C	No
5	Alder Ave/Walnut Street	Signal	3.1	A	10.0	A	3.1	A	10	A	No
6	Alder Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
7	Alder Ave/Baseline Rd	Signal	56.9	E *	46.9	D	81.2	F *	63.7	E *	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	11.0	B	16.3	C	11.7	B	25.9	D	**Yes**
9	Laurel Ave/Renaissance Pkwy	Signal	8.1	A	14.4	B	10.0	A	17.2	B	No
10	Locust Ave/Casmalia Street	Signal	51.0	D	40.4	D	52.7	D	44.5	D	No
11	Locust Ave/Renaissance Pkwy	Signal	43.6	D	36.2	D	43.9	D	38.5	D	No
12	Locust Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		No
13	Locust Ave/Baseline Rd	Signal	27.2	C	23.9	C	31.7	C	31.5	C	No
14	Linden Ave/Casmalia St	Signal	35.2	D	30.3	C	36.7	D	30.4	C	No
15	Linden Ave/Renaissance Pkwy	Signal	35.3	D	26.7	C	35.2	D	31.6	C	No
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	*Future Intersection*		*Future Intersection*		11.1	B	11.8	B	-
17	Linden Ave/Miro Way	TWSC	8.4	A	8.6	A	10.9	B	30.6	D	**Yes**
18	Linden Ave/Baseline Rd	TWSC	26.6	D	33.7	D	>100	F *	>100	F *	**Yes**
19	Ayala Dr/Casmalia St	Signal	33.4	C	38.4	D	38.8	D	38.6	D	No
20	Ayala Dr/SR-210 Westbound Ramps	Signal	26.8	C	21.6	C	27.1	C	25.4	C	No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	12.4	B	18.6	B	12.7	B	19	B	No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	23.2	C	19.5	B	23.4	C	22.1	C	No
23	Ayala Dr/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
24	Ayala Dr/Lieske Dr	TWSC	12.5	B	24.7	C	12.6	B	25	C	No
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F *	20.7	C	>100	F *	21.4	C	No
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
27	Ayala Dr/Baseline Rd	Signal	41.3	D	44.8	D	47.5	D	48.8	D	**Yes**
28	Fitzgerald Ave/Baseline Rd	TWSC	17.2	C	21.8	C	20.2	C	25.1	D	No
29	Marketplace Dwy 1/Renaissance Pkwy	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
30	Marketplace Dwy 2/Renaissance Pkwy	Signal	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
31	Marketplace Dwy 3/Renaissance Pkwy	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
32	Marketplace Dwy 4/Renaissance Pkwy	Signal	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
33	Marketplace Dwy 5/Renaissance Pkwy	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
34	Ayala Drive/Marketplace Dwy 6	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
35	Marketplace Dwy 7/Proposed St (North)	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
36	Linden Avenue/Marketplace Dwy 8	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
37	Linden Avenue/PA108 Driveway 1	TWSC	*Future Intersection*		*Future Intersection*		12.0	B	12.1	B	No
38	Linden Avenue/PA108 Driveway 2	TWSC	*Future Intersection*		*Future Intersection*		11.6	B	11.9	B	No
39	Locust Avenue/PA108 Driveway 4	TWSC	*Future Intersection*		*Future Intersection*		12.3	B	16	C	No
40	Locust Avenue/PA108 Driveway 5	TWSC	*Future Intersection*		*Future Intersection*		11.5	B	12.9	B	No
41	Locust Avenue/PA108 Driveway 6	TWSC	*Future Intersection*		*Future Intersection*		11.1	B	11.4	B	No
42	Locust Avenue/PA108 Driveway 7	TWSC	*Future Intersection*		*Future Intersection*		11.2	B	11	B	No
43	PA108 Driveway 8/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		9.8	A	9.9	A	No
44	Maple Avenue/Miro Way	TWSC	8.5	A	8.5	A	8.5	A	8.6	A	No
45	Maple Avenue/Baseline Road	TWSC	11.8	B	11.7	B	15.0	B	16.6	C	No

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-9 Planning Area 108: Existing and Existing with Planning Area 108 Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Planning Area 108				With Planning Area 108			
				Daily Volume	Daily V/C[2]	LOS		Daily Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	11,545	0.58	B		16,137	0.82	C	
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	4,518	0.23	B		4,672	0.24	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	4,436	0.22	B		7,210	0.36	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	3,282	0.13	B		3,538	0.14	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	3,938	0.16	B		5,730	0.23	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	2,545	0.10	B		3,825	0.16	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	3,829	0.16	B		5,535	0.23	B	
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	5,840	0.24	B		6,010	0.24	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	11,121	0.56	B		14,135	0.71	B	
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	14,748	0.80	D		19,616	1.06	F	*
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	11,559	0.63	B		14,743	0.80	D	
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	13,672	0.56	B		18,610	0.76	C	
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	12,478	0.51	B		14,556	0.59	B	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	16,724	0.68	B		20,244	0.82	D	
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	16,014	0.65	B		18,542	0.75	C	
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	18,186	0.74	C		19,722	0.80	D	
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	2-Lane Arterial	16,651	0.84	D		16,651	0.84	D	
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	15,092	0.76	C		15,092	0.76	C	
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	1,403	0.10	B		1,403	0.10	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	3,371	0.14	B		9,867	0.40	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	2,173	0.09	B		5,781	0.24	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	14,992	0.61	B		17,288	0.70	C	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	18,893	0.77	C		20,937	0.85	D	
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	24,354	0.99	E	*	26,146	1.06	F	*
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	4-Lane Secondary Highway	22,365	1.21	F	*	22,621	1.23	F	*
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	22,205	1.20	F	*	22,461	1.22	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4-Lane Secondary Highway	19,509	1.06	F	*	19,765	1.07	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*			3,832	0.16	B	
31	Locust Avenue between Miro Way and Baseline Road	2	4-Lane Secondary Highway		*Future Roadway*			4,252	0.17	B	
32	Linden Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*			5,212	0.21	B	
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	440	0.02	B		6,364	0.32	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial		*Future Roadway*			476	0.02	B	

Notes:
LOS = Level of Service. V/C = Volume to Capacity
* Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

Table 4.7-10 RSPA: Year 2035 and Year 2025 with RSPA Intersection Levels of Service

	Intersection	Control	Without Renaissance Specific Plan Amendment						With Renaissance Specific Plan Amendment						Significant Project Impact?
			A.M Peak Hour			P.M Peak Hour			A.M Peak Hour			P.M Peak Hour			
			Delay (sec.)	LOS		Delay (sec.)	LOS		Delay (sec.)	LOS		Delay (sec.)	LOS		
1	Alder Ave/Casmalia Street	Signal	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
2	Alder Ave/SR-210 Westbound Ramps	Signal	71.3	E	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
3	Alder Ave/SR-210 Eastbound Ramps	Signal	40.0	D		49.7	D		46.4	D		74.4	E	*	**Yes**
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	86.2	F	*	>100	F	*	91.9	F	*	>100	F	*	**Yes**
5	Alder Ave/Walnut Street	Signal	9.8	A		18.3	B		10.0	A		19.5	B		No
6	Alder Ave/Miro Way	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
7	Alder Ave/Baseline Rd	Signal	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	64.3	F	*	>100	F	*	68.5	F	*	>100	F	*	**Yes**
9	Laurel Ave/Renaissance Pkwy	Signal	14.0	B		14.8	B		17.2	B		16.3	B		No
10	Locust Ave/Casmalia Street	Signal	99.5	F	*	96.7	F	*	>100	F	*	98.2	F	*	**Yes**
11	Locust Ave/Renaissance Pkwy	Signal	45.6	D		>100	F	*	85.8	F	*	>100	F	*	**Yes**
12	Locust Ave/Miro Way	TWSC	24.2	C		52.5	F	*	38.9	E	*	>100	F	*	**Yes**
13	Locust Ave/Baseline Rd	Signal	43.8	D		47.8	D		63.8	E	*	61.5	E	*	**Yes**
14	Linden Ave/Casmalia St	Signal	42.0	D		37.3	D		42.5	D		39.6	D		No
15	Linden Ave/Renaissance Pkwy	Signal	37.4	D		49.5	D		44.8	D		>100	F	*	**Yes**
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	13.5	B		17.6	C		71.6	F	*	>100	F	*	**Yes**
17	Linden Ave/Miro Way	TWSC	14.1	B		30.2	D		26.1	D		>100	F	*	**Yes**
18	Linden Ave/Baseline Rd	TWSC	25.6	D		25.3	D		59.9	F	*	46.2	E	*	**Yes**
19	Ayala Dr/Casmalia St	Signal	62.0	E	*	65.0	E	*	68.7	E	*	74.5	E	*	**Yes**
20	Ayala Dr/SR-210 Westbound Ramps	Signal	49.6	D	*	45.2	D	*	80.4	F	*	64.4	E	*	**Yes**
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	18.0	B		39.0	D		26.9	C		87	F	*	**Yes**
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	39.2	D		64.8	E	*	48.4	D		>100	F	*	**Yes**
23	Ayala Dr/Proposed St (North)	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
24	Ayala Dr/Lieske Dr	TWSC	12.8	B		48.4	E	*	68.3	F	*	>100	F	*	**Yes**
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F	*	>100	F	*	93.2	F	*	>100	F	*	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	0.0	A		0.0	A		>100	F	*	>100	F	*	**Yes**
27	Ayala Dr/Baseline Rd	Signal	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
28	Fitzgerald Ave/Baseline Rd	TWSC	65.2	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
44	Maple Avenue/Miro Way	TWSC	8.8	A		9.8	A		8.9	A		9.8	A		No
45	Maple Avenue/Baseline Road	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-11 RSPA: Year 2035 and Year 2035 with RSPA Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Renaissance Specific Plan Amendment				With Renaissance Specific Plan Amendment			
				Volume	Daily V/C[2]	LOS		Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	18,839	0.95	E	*	23,981	1.21	F	*
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	11,122	0.56	B		11,448	0.58	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	10,221	0.52	B		13,618	0.69	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	19,327	0.79	C		21,357	0.87	D	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	17,212	0.70	C		24,333	0.99	E	*
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	14,223	0.58	B		21,427	0.87	D	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	18,113	0.74	C		29,237	1.19	F	*
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	12,394	0.50	B		13,843	0.56	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	27,842	1.41	F	*	33,715	1.70	F	*
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	29,094	1.58	F	*	37,647	2.04	F	*
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	26,504	1.44	F	*	33,098	1.79	F	*
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	30,668	1.25	F	*	38,994	1.59	F	*
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	21,941	0.89	D		25,580	1.04	F	*
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	31,924	1.30	F	*	35,910	1.46	F	*
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	39,522	1.61	F	*	40,703	1.65	F	*
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	46,624	1.90	F	*	48,519	1.97	F	*
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	2-Lane Arterial	34,400	1.74	F	*	34,341	1.73	F	*
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	26,586	1.34	F	*	26,697	1.35	F	*
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	3,109	0.23	B		3,383	0.25	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	19,027	0.77	C		20,498	0.83	D	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	10,618	0.43	B		12,611	0.51	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	26,222	1.07	F	*	27,367	1.11	F	*
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	31,528	1.28	F	*	34,770	1.41	F	*
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	39,121	1.59	F	*	44,460	1.81	F	*
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	4-Lane Secondary Highway	31,891	1.30	F	*	37,812	1.54	F	*
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	4-Lane Secondary Highway	31,135	1.69	F	*	36,477	1.98	F	*
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	31,051	1.68	F	*	34,758	1.88	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	4-Lane Secondary Highway	25,363	1.37	F	*	28,006	1.52	F	*
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4-Lane Secondary Highway	25,138	1.36	F	*	32,253	1.75	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	2-Lane Arterial	17,042	0.86	D		18,459	0.93	E	*
31	Locust Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	12,783	0.65	B		13,897	0.70	B	
32	Linden Avenue between Renaissance Parkway and Miro Way	2	2-Lane Arterial	11,909	0.60	B		14,381	0.73	B	
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	10,631	0.54	B		12,416	0.63	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial	3,282	0.17	B		3,412	0.17	B	

Notes:
LOS = Level of Service. V/C = Volume to Capacity
* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

Table 4.7-12 Renaissance Marketplace: Operational Year and Operational Year with Renaissance Marketplace Intersection Levels of Service

	Intersection	Control	Without Renaissance Marketplace				With Renaissance Marketplace				Significant Project Impact?
			A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1	Alder Ave/Casmalia Street	Signal	53.4	D	41.3	D	54.8	D	41.4	D	No
2	Alder Ave/SR-210 Westbound Ramps	Signal	35.2	D	21.5	C	36.6	D	21.4	C	No
3	Alder Ave/SR-210 Eastbound Ramps	Signal	33.7	C	18.8	B	33.6	C	25.2	C	No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	21.8	C	19.0	B	23.6	C	25.6	C	No
5	Alder Ave/Walnut Street	Signal	3.2	A	10.2	B	3.2	A	12.3	B	No
6	Alder Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		No
7	Alder Ave/Baseline Rd	Signal	59.0	E *	47.6	D	61.7	E *	51.6	D	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	11.1	B	16.6	C	11.1	B	16.9	C	No
9	Laurel Ave/Renaissance Pkwy	Signal	13.2	B	14.3	B	13.5	B	14.9	B	No
10	Locust Ave/Casmalia Street	Signal	59.9	E *	41.5	D	61.8	E *	43.2	D	No
11	Locust Ave/Renaissance Pkwy	Signal	43.5	D	36.4	D	45.6	D	36.7	D	No
12	Locust Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		No
13	Locust Ave/Baseline Rd	Signal	27.3	C	24.0	C	28.8	C	28.4	C	No
14	Linden Ave/Casmalia St	Signal	35.5	D	30.4	C	35.5	D	30.8	C	No
15	Linden Ave/Renaissance Pkwy	Signal	35.4	D	26.8	C	36.7	D	30.2	C	No
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
17	Linden Ave/Miro Way	TWSC	8.4	A	8.6	A	0.0	A	0	A	No
18	Linden Ave/Baseline Rd	TWSC	27.7	D	35.4	E *	30.0	D	53.6	F *	**Yes**
19	Ayala Dr/Casmalia St	Signal	33.7	C	38.4	D	35.0	C	39.2	D	No
20	Ayala Dr/SR-210 Westbound Ramps	Signal	27.1	C	23.2	C	30.0	C	28.9	C	No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	12.4	B	18.7	B	16.4	B	26.5	C	No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	23.4	C	19.6	B	34.9	C	48.8	D	**Yes**
23	Ayala Dr/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		42.0	E *	>100	F *	**Yes**
24	Ayala Dr/Lieske Dr	TWSC	12.6	B	25.3	D	13.0	B	40.1	E *	**Yes**
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F *	21.6	C	>100	F *	61.1	F *	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
27	Ayala Dr/Baseline Rd	Signal	41.3	D	45.0	D	42.4	D	49.9	D	No
28	Fitzgerald Ave/Baseline Rd	TWSC	17.6	C	22.6	C	19.0	C	40.1	E *	**Yes**
29	Marketplace Dwy 1/Renaissance Pkwy	TWSC	*Future Intersection*		*Future Intersection*		9.6	A	10.4	B	No
30	Marketplace Dwy 2/Renaissance Pkwy	Signal	*Future Intersection*		*Future Intersection*		17.4	B	19.4	B	No
31	Marketplace Dwy 3/Renaissance Pkwy	TWSC	*Future Intersection*		*Future Intersection*		9.2	A	10	A	No
32	Marketplace Dwy 4/Renaissance Pkwy	Signal	*Future Intersection*		*Future Intersection*		20.6	C	38.2	D	No
p33	Marketplace Dwy 5/Renaissance Pkwy	TWSC	*Future Intersection*		*Future Intersection*		9.0	A	11.3	B	No
34	Ayala Drive/Marketplace Dwy 6	TWSC	*Future Intersection*		*Future Intersection*		12.5	B	14.8	B	No
35	Marketplace Dwy 7/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		8.7	A	9.5	A	No
36	Linden Avenue/Marketplace Dwy 8	TWSC	*Future Intersection*		*Future Intersection*		8.4	A	8.7	A	No
37	Linden Avenue/PA108 Driveway 1	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
38	Linden Avenue/PA108 Driveway 2	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
39	Locust Avenue/PA108 Driveway 4	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
40	Locust Avenue/PA108 Driveway 5	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
41	Locust Avenue/PA108 Driveway 6	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
42	Locust Avenue/PA108 Driveway 7	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
43	PA108 Driveway 8/Miro Way	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
44	Maple Avenue/Miro Way	TWSC	8.5	A	8.5	A	8.5	A	8.5	A	No
45	Maple Avenue/Baseline Road	TWSC	11.9	B	11.8	B	12.0	B	12.1	B	No

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-13 Renaissance Marketplace: Operational Year and Operational Year with Renaissance Marketplace Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Renaissance Marketplace				With Renaissance Marketplace			
				Daily Volume	V/C[2]	LOS		Daily Volume	V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	11,776	0.59	B		11,954	0.60	B	
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	4,608	0.23	B		4,608	0.23	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	4,525	0.23	B		4,525	0.23	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	3,348	0.14	B		5,126	0.21	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	4,017	0.16	B		6,863	0.28	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	2,596	0.11	B		7,930	0.32	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	3,906	0.16	B		12,439	0.51	B	
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	5,957	0.24	B		7,735	0.31	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	11,343	0.57	B		12,233	0.62	B	
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	15,043	0.82	D		15,933	0.86	D	
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	11,790	0.64	B		12,324	0.67	B	
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	13,945	0.57	B		15,369	0.62	B	
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	12,728	0.52	B		14,506	0.59	B	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	17,058	0.69	C		17,236	0.70	C	
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	16,334	0.66	B		16,689	0.68	B	
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	18,550	0.75	C		19,084	0.78	C	
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	2-Lane Arterial	16,984	0.86	D		17,518	0.88	D	
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	15,394	0.78	C		15,928	0.80	C	
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	1,431	0.10	B		1,431	0.10	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	3,438	0.14	B		3,970	0.16	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	2,216	0.09	B		3,458	0.14	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	15,292	0.62	B		16,180	0.66	B	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	19,271	0.78	C		21,227	0.86	D	
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	24,841	1.01	F	*	27,862	1.13	F	*
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	4-Lane Secondary Highway	22,812	1.24	F	*	27,078	1.47	F	*
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	4-Lane Secondary Highway		*Future Roadway*			29,348	1.59	F	*
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	22,205	1.20	F	*	29,187	1.58	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4-Lane Secondary Highway	19,899	1.08	F	*	26,491	1.44	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
31	Locust Avenue between Miro Way and Baseline Road	2	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
32	Linden Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	449	0.02	B		449	0.02	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial		*Future Roadway*			0	0.00	B	

Notes:
LOS = Level of Service. V/C = Volume to Capacity
Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

4.7-14 Renaissance Marketplace: Cumulative and Cumulative with Renaissance Marketplace Intersection Levels of Service

	Intersection	Control	Without Renaissance Marketplace						With Renaissance Marketplace						Significant Project Impact
			A.M Peak Hour			P.M Peak Hour			A.M Peak Hour			P.M Peak Hour			
			Delay (sec.)	LOS		Delay (sec.)	LOS		Delay (sec.)	LOS		Delay (sec.)	LOS		
1	Alder Ave/Casmalia Street	Signal	89.6	F	*	70.3	E	*	>100	F	*	>100	F	*	**Yes**
2	Alder Ave/SR-210 Westbound Ramps	Signal	70.7	E	*	56.9	E	*	99.5	F	*	>100	F	*	**Yes**
3	Alder Ave/SR-210 Eastbound Ramps	Signal	35.3	D		24.3	C		42.7	D		30.7	C		No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	26.4	C		41.5	D		43.0	D		50.8	D		**Yes**
5	Alder Ave/Walnut Street	Signal	7.7	A		9.0	A		7.7	A		9	A		No
6	Alder Ave/Miro Way	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
7	Alder Ave/Baseline Rd	Signal	>100	F	*	83.3	F	*	>100	F	*	>100	F	*	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	21.6	C		32.6	D		33.5	D		>100	F	*	**Yes**
9	Laurel Ave/Renaissance Pkwy	Signal	13.7	B		14.6	B		14.1	B		16.4	B		No
10	Locust Ave/Casmalia Street	Signal	93.9	F	*	57.7	E	*	98.0	F	*	84.8	F	*	**Yes**
11	Locust Ave/Renaissance Pkwy	Signal	44.0	D		38.0	D		44.1	D		96.5	F	*	**Yes**
12	Locust Ave/Miro Way	TWSC	12.4	B		13.0	B		17.2	C		19.8	C		No
13	Locust Ave/Baseline Rd	Signal	32.4	C		31.8	C		39.0	D		39.1	D		No
14	Linden Ave/Casmalia St	Signal	36.1	D		32.0	C		41.1	D		32.8	C		No
15	Linden Ave/Renaissance Pkwy	Signal	37.0	D		33.9	C		38.7	D		53.5	D		**Yes**
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	0.0	A		10.2	B		16.6	C		18.5	C		-
17	Linden Ave/Miro Way	TWSC	9.0	A		12.2	B		14.1	B		>100	F	*	**Yes**
18	Linden Ave/Baseline Rd	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
19	Ayala Dr/Casmalia St	Signal	34.0	C		43.0	D		44.8	D		52.5	D		**Yes**
20	Ayala Dr/SR-210 Westbound Ramps	Signal	28.8	C		25.4	C		33.5	C		29.8	C		No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	16.4	B		25.7	C		17.3	B		34	C		No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	37.7	D		43.6	D		38.9	D		53.4	D		**Yes**
23	Ayala Dr/Proposed St (North)	TWSC	48.2	E	*	>100	F	*	57.6	F	*	>100	F	*	**Yes**
24	Ayala Dr/Lieske Dr	TWSC	13.4	B		39.1	E	*	13.4	B		39.8	E	*	No
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F	*	60.3	F	*	>100	F	*	65	F	*	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*			*Future Intersection*			*Future Intersection*			*Future Intersection*			No
27	Ayala Dr/Baseline Rd	Signal	50.7	D		57.2	E	*	65.6	E	*	67.6	E	*	**Yes**
28	Fitzgerald Ave/Baseline Rd	TWSC	25.2	D		63.6	F	*	32.2	D		86	F	*	**Yes**
29	Marketplace Dwy 1/Renaissance Pkwy	TWSC	*Future Intersection*			*Future Intersection*			9.9	A		11.8	B		No
30	Marketplace Dwy 2/Renaissance Pkwy	Signal	*Future Intersection*			*Future Intersection*			16.4	B		19	B		No
31	Marketplace Dwy 3/Renaissance Pkwy	TWSC	*Future Intersection*			*Future Intersection*			10.1	B		10.2	B		No
32	Marketplace Dwy 4/Renaissance Pkwy	Signal	*Future Intersection*			*Future Intersection*			17.8	B		25.8	C		No
33	Marketplace Dwy 5/Renaissance Pkwy	TWSC	*Future Intersection*			*Future Intersection*			9.9	A		12.5	B		No
34	Ayala Drive/Marketplace Dwy 6	TWSC	*Future Intersection*			*Future Intersection*			12.8	B		14.8	B		No
35	Marketplace Dwy 7/Proposed St (North)	TWSC	*Future Intersection*			*Future Intersection*			8.7	A		9.7	A		No
36	Linden Avenue/Marketplace Dwy 8	TWSC	*Future Intersection*			*Future Intersection*			14.2	B		20.2	C		No
37	Linden Avenue/PA108 Driveway 1	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
38	Linden Avenue/PA108 Driveway 2	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
39	Locust Avenue/PA108 Driveway 4	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			**Yes**
40	Locust Avenue/PA108 Driveway 5	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
41	Locust Avenue/PA108 Driveway 6	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
42	Locust Avenue/PA108 Driveway 7	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
43	PA108 Driveway 8/Miro Way	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
44	Maple Avenue/Miro Way	TWSC	9.0	A		9.6	A		8.9	A		9.9	A		No
45	Maple Avenue/Baseline Road	TWSC	43.6	E	*	>100	F	*	>100	F	*	>100	F	*	**Yes**

Notes: PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-15 Renaissance Marketplace: Cumulative and Cumulative with Renaissance Marketplace Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Renaissance Marketplace				With Renaissance Marketplace			
				Volume	Daily V/C[2]	LOS		Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	21,453	1.08	F	*	21,631	1.09	F	*
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	8,607	0.43	B		8,607	0.43	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	10,139	0.51	B		10,139	0.51	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	5,426	0.22	B		7,204	0.29	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	7,894	0.32	B		11,897	0.48	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	5,203	0.21	B		11,164	0.45	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	7,763	0.32	B		20,583	0.84	D	
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	7,264	0.30	B		9,042	0.37	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	19,730	1.00	E	*	20,618	1.04	F	*
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	24,829	1.35	F	*	25,183	1.36	F	*
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	20,478	1.11	F	*	20,478	1.11	F	*
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	25,009	1.02	F	*	25,009	1.02	F	*
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	17,383	0.71	C		19,161	0.78	C	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	29,343	1.19	F	*	29,521	1.20	F	*
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	28,037	1.14	F	*	28,392	1.15	F	*
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	29,670	1.21	F	*	30,781	1.25	F	*
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	2-Lane Arterial	24,756	1.25	F	*	25,290	1.28	F	*
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	20,359	1.03	F	*	21,427	1.08	F	*
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	2,106	0.15	B		2,106	0.15	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	14,358	0.58	B		14,890	0.61	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	6,765	0.27	B		8,007	0.33	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	21,088	0.86	D		21,976	0.89	D	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	24,030	0.98	E	*	28,620	1.16	F	*
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	28,539	1.16	F	*	35,604	1.45	F	*
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	4-Lane Secondary Highway	24,974	1.35	F	*	28,845	1.56	F	*
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	4-Lane Secondary Highway		*Future Roadway*			29,817	1.62	F	*
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	24,239	1.31	F	*	29,654	1.61	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	4-Lane Secondary Highway		*Future Roadway*			25,628	1.39	F	*
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4-Lane Secondary Highway	21,282	1.15	F	*	25,628	1.39	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway	8,449	0.34	B		9,871	0.40	B	
31	Locust Avenue between Miro Way and Baseline Road	2	4-Lane Secondary Highway	8,211	0.33	B		9,099	0.37	B	
32	Linden Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway	6,266	0.25	B		7,834	0.32	B	
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	7,002	0.35	B		8,036	0.41	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial	1,445	0.07	B		1,979	0.10	B	

Notes:
LOS = Level of Service. V/C = Volume to Capacity
* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

Table 4.7-16 Planning Area 108: Operational Year and Operational Year with Planning Area 108 Intersection Levels of Service

	Intersection	Control	Without Planning Area 108				With Planning Area 108				Significant Project Impact
			A.M Peak Hour		P.M Peak Hour		A.M Peak Hour		P.M Peak Hour		
			Delay		Delay		Delay		Delay		
			(sec.)	LOS	(sec.)	LOS	(sec.)	LOS	(sec.)	LOS	
1	Alder Ave/Casmalia Street	Signal	53.4	D	41.3	D	60.7	E *	>100	F *	**Yes**
2	Alder Ave/SR-210 Westbound Ramps	Signal	35.2	D	21.5	C	38.0	D	32.6	C	No
3	Alder Ave/SR-210 Eastbound Ramps	Signal	33.7	C	18.8	B	35.0	C	20.6	C	No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	21.8	C	19.0	B	25.1	C	21.7	C	No
5	Alder Ave/Walnut Street	Signal	3.2	A	10.2	B	3.2	A	10.6	B	No
6	Alder Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		No
7	Alder Ave/Baseline Rd	Signal	59.0	E *	47.6	D	85.8	F *	65.4	E *	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	11.1	B	16.6	C	11.8	B	26.4	D	**Yes**
9	Laurel Ave/Renaissance Pkwy	Signal	13.2	B	14.3	B	13.7	B	17.3	B	No
10	Locust Ave/Casmalia Street	Signal	59.9	E *	41.5	D	60.5	E *	45.4	D	No
11	Locust Ave/Renaissance Pkwy	Signal	43.5	D	36.4	D	44.9	D	36.6	D	No
12	Locust Ave/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		No
13	Locust Ave/Baseline Rd	Signal	27.3	C	24.0	C	31.6	C	31.7	C	No
14	Linden Ave/Casmalia St	Signal	35.5	D	30.4	C	35.4	D	30.7	C	No
15	Linden Ave/Renaissance Pkwy	Signal	35.4	D	26.8	C	35.4	D	31.6	C	No
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	*Future Intersection*		*Future Intersection*		11.2	B	12.1	B	-
17	Linden Ave/Miro Way	TWSC	8.4	A	8.6	A	11.0	B	33	D	**Yes**
18	Linden Ave/Baseline Rd	TWSC	27.7	D	35.4	E *	>100	F *	>100	F *	**Yes**
19	Ayala Dr/Casmalia St	Signal	33.7	C	38.4	D	39.2	D	38.7	D	No
20	Ayala Dr/SR-210 Westbound Ramps	Signal	27.1	C	23.2	C	27.5	C	25.4	C	No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	12.4	B	18.7	B	13.2	B	20.2	C	No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	23.4	C	19.6	B	24.6	C	24.1	C	No
23	Ayala Dr/Proposed St (North)	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
24	Ayala Dr/Lieske Dr	TWSC	12.6	B	25.3	D	12.7	B	25.6	D	No
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F *	21.6	C	>100	F *	22.3	C	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*		*Future Intersection*		*Future Intersection*		*Future Intersection*		-
27	Ayala Dr/Baseline Rd	Signal	41.3	D	45.0	D	48.6	D	49.4	D	**Yes**
28	Fitzgerald Ave/Baseline Rd	TWSC	17.6	C	22.6	C	20.8	C	26.1	D	No
29	Marketplace Dwy 1/Renaissance Pkwy	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
30	Marketplace Dwy 2/Renaissance Pkwy	Signal	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
31	Marketplace Dwy 3/Renaissance Pkwy	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
32	Marketplace Dwy 4/Renaissance Pkwy	Signal	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
33	Marketplace Dwy 5/Renaissance Pkwy	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
34	Ayala Drive/Marketplace Dwy 6	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
35	Marketplace Dwy 7/Proposed St (North)	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
36	Linden Avenue/Marketplace Dwy 8	TWSC	*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		*Does Not Exist*		No
37	Linden Avenue/PA108 Driveway 1	TWSC	*Future Intersection*		*Future Intersection*		12.1	B	12.4	B	No
38	Linden Avenue/PA108 Driveway 2	TWSC	*Future Intersection*		*Future Intersection*		11.7	B	12.2	B	No
39	Locust Avenue/PA108 Driveway 4	TWSC	*Future Intersection*		*Future Intersection*		12.4	B	16.2	C	No
40	Locust Avenue/PA108 Driveway 5	TWSC	*Future Intersection*		*Future Intersection*		11.6	B	13.1	B	No
41	Locust Avenue/PA108 Driveway 6	TWSC	*Future Intersection*		*Future Intersection*		11.1	B	11.5	B	No
42	Locust Avenue/PA108 Driveway 7	TWSC	*Future Intersection*		*Future Intersection*		11.3	B	11.1	B	No
43	PA108 Driveway 8/Miro Way	TWSC	*Future Intersection*		*Future Intersection*		9.8	A	10	A	No
44	Maple Avenue/Miro Way	TWSC	8.5	A	8.5	A	8.5	A	8.6	A	No
45	Maple Avenue/Baseline Road	TWSC	11.9	B	11.8	B	15.5	C	17	C	No

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

4.7-17 Planning Area 108: Operational Year and Operational Year with Planning Area 108 Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Planning Area 108				With Planning Area 108			
				Volume	Daily V/C[2]	LOS		Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	11,776	0.59	B		16,368	0.83	D	
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	4,608	0.23	B		4,762	0.24	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	4,525	0.23	B		7,299	0.37	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	3,348	0.14	B		3,604	0.15	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	4,017	0.16	B		5,809	0.24	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	2,596	0.11	B		3,876	0.16	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	3,906	0.16	B		5,612	0.23	B	
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	5,957	0.24	B		6,127	0.25	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	11,343	0.57	B		14,357	0.73	B	
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	15,043	0.82	D		19,911	1.08	F	*
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	11,790	0.64	B		14,974	0.81	D	
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	13,945	0.57	B		18,883	0.77	C	
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	12,728	0.52	B		14,806	0.60	B	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	17,058	0.69	C		20,578	0.84	D	
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	16,334	0.66	B		18,862	0.77	C	
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	18,550	0.75	C		20,086	0.82	D	
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	2-Lane Arterial	16,984	0.86	D		16,984	0.86	D	
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	15,394	0.78	C		15,394	0.78	C	
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	1,431	0.10	B		1,431	0.10	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	3,438	0.14	B		9,934	0.40	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	2,216	0.09	B		5,824	0.24	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	15,292	0.62	B		17,588	0.71	C	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	19,271	0.78	C		21,315	0.87	D	
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	24,841	1.01	F	*	26,633	1.08	F	*
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	4-Lane Secondary Highway	22,812	1.24	F	*	23,068	1.25	F	*
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	22,649	1.23	F	*	22,905	1.24	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	4-Lane Secondary Highway		*Future Roadway*				*Future Roadway*		
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4-Lane Secondary Highway	19,899	1.08	F	*	20,155	1.09	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*			3,832	0.16	B	
31	Locust Avenue between Miro Way and Baseline Road	2	4-Lane Secondary Highway		*Future Roadway*			4,260	0.17	B	
32	Linden Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*			5,212	0.21	B	
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	449	0.02	B		6,373	0.32	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial		*Future Roadway*			476	0.02	B	

Notes:
LOS = Level of Service. V/C = Volume to Capacity
* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

Table 4.7-18 Planning Area 108: Cumulative and Cumulative with Planning Area 108 Intersection Levels of Service

	Intersection	Control	Without Planning Area 108						With Planning Area 108						Significant Project Impact?
			A.M Peak Hour			P.M Peak Hour			A.M Peak Hour			P.M Peak Hour			
			Delay (sec.)	LOS		Delay (sec.)	LOS		Delay (sec.)	LOS		Delay (sec.)	LOS		
1	Alder Ave/Casmalia Street	Signal	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
2	Alder Ave/SR-210 Westbound Ramps	Signal	97.9	F	*	>100	F	*	99.5	F	*	>100	F	*	**Yes**
3	Alder Ave/SR-210 Eastbound Ramps	Signal	40.7	D		29.2	C		42.7	D		30.7	C		No
4	Alder Ave/Easton St-Renaissance Pkwy	Signal	42.2	D		50.1	D		43.0	D		50.8	D		No
5	Alder Ave/Walnut Street	Signal	7.4	A		8.8	A		7.7	A		9	A		No
6	Alder Ave/Miro Way	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
7	Alder Ave/Baseline Rd	Signal	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
8	Laurel Ave/Casmalia Street	TWSC	33.5	D		94.9	F	*	33.5	D		>100	F	*	**Yes**
9	Laurel Ave/Renaissance Pkwy	Signal	13.3	B		14.8	B		14.1	B		16.4	B		No
10	Locust Ave/Casmalia Street	Signal	75.0	E	*	84.0	F	*	98.0	F	*	84.8	F	*	**Yes**
11	Locust Ave/Renaissance Pkwy	Signal	44.0	D		52.1	D		44.1	D		96.5	F	*	**Yes**
12	Locust Ave/Miro Way	TWSC	15.8	C		15.1	C		17.2	C		19.8	C		No
13	Locust Ave/Baseline Rd	Signal	38.9	D		38.6	D		39.0	D		39.1	D		No
14	Linden Ave/Casmalia St	Signal	37.9	D		30.8	C		41.1	D		32.8	C		No
15	Linden Ave/Renaissance Pkwy	Signal	35.5	D		35.7	D		38.7	D		53.5	D		**Yes**
16	Linden Ave/Residential Access - PA 108 Dwy 3	TWSC	*Future Intersection*			*Future Intersection*			16.6	C		18.5	C		No
17	Linden Ave/Miro Way	TWSC	12.8	B		>100	F	*	14.1	B		>100	F	*	**Yes**
18	Linden Ave/Baseline Rd	TWSC	>100	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**
19	Ayala Dr/Casmalia St	Signal	43.9	D		52.1	D		44.8	D		52.5	D		No
20	Ayala Dr/SR-210 Westbound Ramps	Signal	33.4	C		28.0	C		33.5	C		29.8	C		No
21	Ayala Dr/SR-210 Eastbound Ramps	Signal	13.3	B		21.3	C		17.3	B		34	C		No
22	Ayala Dr/Renaissance Pkwy-Easton St	Signal	28.3	C		27.8	C		38.9	D		53.4	D		**Yes**
23	Ayala Dr/Proposed St (North)	TWSC	*Future Intersection*			*Future Intersection*			57.6	F	*	>100	F	*	**Yes**
24	Ayala Dr/Lieske Dr	TWSC	13.0	B		27.6	D		13.4	B		39.8	E	*	**Yes**
25	Ayala Dr/Fitzgerald Ave	TWSC	>100	F	*	25.4	D		>100	F	*	65	F	*	**Yes**
26	Ayala Dr/Proposed St (South)	TWSC	*Future Intersection*			*Future Intersection*			*Future Intersection*			*Future Intersection*			No
27	Ayala Dr/Baseline Rd	Signal	63.1	E	*	55.6	E	*	65.6	E	*	67.6	E	*	**Yes**
28	Fitzgerald Ave/Baseline Rd	TWSC	28.2	D		35.4	E	*	32.2	D		86	F	*	**Yes**
29	Marketplace Dwy 1/Renaissance Pkwy	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
30	Marketplace Dwy 2/Renaissance Pkwy	Signal	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
31	Marketplace Dwy 3/Renaissance Pkwy	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
32	Marketplace Dwy 4/Renaissance Pkwy	Signal	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
33	Marketplace Dwy 5/Renaissance Pkwy	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
34	Ayala Drive/Marketplace Dwy 6	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
35	Marketplace Dwy 7/Proposed St (North)	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
36	Linden Avenue/Marketplace Dwy 8	TWSC	*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			*Does Not Exist*			No
37	Linden Avenue/PA108 Driveway 1	TWSC	*Future Intersection*			*Future Intersection*			13.4	B		15.6	C		No
38	Linden Avenue/PA108 Driveway 2	TWSC	*Future Intersection*			*Future Intersection*			12.9	B		15.2	C		No
39	Locust Avenue/PA108 Driveway 4	TWSC	*Future Intersection*			*Future Intersection*			18.2	C		36.2	E	*	**Yes**
40	Locust Avenue/PA108 Driveway 5	TWSC	*Future Intersection*			*Future Intersection*			16.3	C		23.6	C		No
41	Locust Avenue/PA108 Driveway 6	TWSC	*Future Intersection*			*Future Intersection*			15.2	C		18.8	C		No
42	Locust Avenue/PA108 Driveway 7	TWSC	*Future Intersection*			*Future Intersection*			15.8	C		18.9	C		No
43	PA108 Driveway 8/Miro Way	TWSC	*Future Intersection*			*Future Intersection*			10.4	B		11.1	B		No
44	Maple Avenue/Miro Way	TWSC	8.9	A		9.7	A		8.9	A		9.9	A		No
45	Maple Avenue/Baseline Road	TWSC	84.1	F	*	>100	F	*	>100	F	*	>100	F	*	**Yes**

Notes:
PA = Planning Area
* = Exceeds Level of Service
TWSC = Two-Way Stop Control; T-Int. = T-Intersection
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 4.7-19 Planning Area 108: Cumulative and Cumulative with Planning Area 108 Roadway Segment Levels of Service and Traffic Volumes

	Roadway Segment	Existing Condition Number of Lanes	Existing Condition Functional Classification[1]	Without Planning Area 108				With Planning Area 108			
				Volume	Daily V/C[2]	LOS		Volume	Daily V/C[2]	LOS	
1	Casmalia Street east of Alder Avenue	2	2-Lane Arterial	17,039	0.86	D		21,631	1.09	F	*
2	Casmalia Street east of Locust Avenue	2	2-Lane Arterial	8,453	0.43	B		8,607	0.43	B	
3	Casmalia Street west of Ayala Drive	2	2-Lane Arterial	7,365	0.37	B		10,139	0.51	B	
4	Renaissance Parkway west of Alder Avenue	4	4-Lane Secondary Highway	6,948	0.28	B		7,204	0.29	B	
5	Renaissance Parkway east of Alder Avenue	4	4-Lane Secondary Highway	10,105	0.41	B		11,897	0.48	B	
6	Renaissance Parkway between Locust Avenue and Linden Avenue	4	4-Lane Secondary Highway	9,884	0.40	B		11,164	0.45	B	
7	Renaissance Parkway west of Ayala Drive	4	4-Lane Secondary Highway	18,877	0.77	C		20,583	0.84	D	
8	Renaissance Parkway east of Ayala Drive	4	4-Lane Secondary Highway	8,872	0.36	B		9,042	0.37	B	
9	Baseline Road west of Alder Avenue	2	2-Lane Arterial	17,604	0.89	D		20,618	1.04	F	*
10	Baseline Road east of Alder Avenue	3	4-Lane Secondary Highway	20,315	1.10	F	*	25,183	1.36	F	*
11	Baseline Road west of Linden Avenue	3	4-Lane Secondary Highway	17,294	0.94	E	*	20,478	1.11	F	*
12	Baseline Road between Linden Avenue and Ayala Drive	4	4-Lane Secondary Highway	20,071	0.82	D		25,009	1.02	F	*
13	Baseline Road east of Ayala Drive	4	4-Lane Secondary Highway	17,083	0.69	C		19,161	0.78	C	
14	Alder Avenue south of Casmalia Street	4	4-Lane Secondary Highway	26,001	1.06	F	*	29,521	1.20	F	*
15	Alder Avenue between SR-210 Ramps	4	4-Lane Secondary Highway	25,864	1.05	F	*	28,392	1.15	F	*
16	Alder Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	29,245	1.19	F	*	30,781	1.25	F	*
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	2-Lane Arterial	25,290	1.28	F	*	25,290	1.28	F	*
18	Alder Avenue between Walnut Avenue and Baseline Road	2	2-Lane Arterial	21,427	1.08	F	*	21,427	1.08	F	*
19	Laurel Avenue south Renaissance Parkway	2	2-Lane Collector	2,106	0.15	B		2,106	0.15	B	
20	Locust Avenue south of Casmalia Street	4	4-Lane Secondary Highway	8,394	0.34	B		14,890	0.61	B	
21	Linden Avenue north of Renaissance Parkway	4	4-Lane Secondary Highway	4,399	0.18	B		8,007	0.33	B	
22	Ayala Drive south of Casmalia Street	4	4-Lane Secondary Highway	19,680	0.80	D		21,976	0.89	D	
23	Ayala Drive between SR 210-Ramps	4	4-Lane Secondary Highway	26,576	1.08	F	*	28,620	1.16	F	*
24	Ayala Drive north of Renaissance Parkway	4	4-Lane Secondary Highway	33,812	1.37	F	*	35,604	1.45	F	*
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	4-Lane Secondary Highway	28,589	1.55	F	*	28,845	1.56	F	*
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	4-Lane Secondary Highway	29,561	1.60	F	*	29,817	1.62	F	*
27	Ayala Drive between Leiske Drive and Fitzgerald	3	4-Lane Secondary Highway	29,398	1.59	F	*	29,654	1.61	F	*
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	4-Lane Secondary Highway		*Future Roadway*			25,628	1.39	F	*
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4-Lane Secondary Highway	25,372	1.38	F	*	25,628	1.39	F	*
30	Locust Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*			9,871	0.40	B	
31	Locust Avenue between Miro Way and Baseline Road	2	4-Lane Secondary Highway		*Future Roadway*			9,099	0.37	B	
32	Linden Avenue between Renaissance Parkway and Miro Way	2	4-Lane Secondary Highway		*Future Roadway*			7,834	0.32	B	
33	Linden Avenue between Miro Way and Baseline Road	2	2-Lane Arterial	2,112	0.11	B		8,036	0.41	B	
34	Miro Way between Locust Avenue and Linden Avenue	2	2-Lane Arterial		*Future Roadway*			1,979	0.10	B	

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* = Exceeds LOS Standard
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(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.

4.7-20 RSPA: Recommended Intersection Improvements

	Intersection	Existing with Renaissance Specific Plan Amendment	Year 2035 with Renaissance Specific Plan Amendment
1	Alder Ave/Casmalia Street	NBR with overlap phasing	Re-stripe WBR to WBTR, restripe WBT to 2nd WBL, NBR with overlap phasing
2	Alder Ave/SR-210 Westbound Ramps	Re-stripe to provide second NBL	Re-stripe to provide second NBL, Re-stripe to provide a SBR, Restripe to provide 2nd WBL and one shared WBTR
3	Alder Ave/SR-210 Eastbound Ramps		EBL, Re-stripe EBTL to EBLTR
4	Alder Ave/Easton St-Renaissance Pkwy	Re-stripe SBR to SBTR	2nd SBL, Re-stripe SBR to SBTR, WBR with overlap phasing
6	Alder Ave/Miro Way	Signal	Signal, SBL
7	Alder Ave/Baseline Rd	NBT,EBTR, WBT	NBT, NBR, 2nd SBL, SBT, overlap phasing to SBR, EBT, EBR, WBT, WBR
8	Laurel Ave/Casmalia Street	Signal	Signal
10	Locust Ave/Casmalia Street	2nd EBL	2nd EBL
11	Locust Ave/Renaissance Pkwy	NBL, NBT, Re-stripe NBLTR to NBTR	NBL, NBT, Re-stripe NBLTR to NBTR, Re-stripe SBR to SBTR
12	Locust Ave/Miro Way		Signal
13	Locust Ave/Baseline Rd	WBR	WBR
15	Linden Ave/Renaissance Pkwy	NBL, Re-stripe NBLTR to NBTR	NBL, NBT
16	Linden Ave/Residential Access		All-way stop control, NBTL, SBL, SBT
17	Linden Ave/Miro Way-PA108 Dwy 3	Signal	Signal
18	Linden Ave/Baseline Rd	Signal	Signal, Re-stripe WBR to WBTR, 2nd SBL
19	Ayala Dr/Casmalia St	overlap phasing to EBR	Overlap phasing to EBR
20	Ayala Dr/SR-210 Westbound Ramps		SBR
21	Ayala Dr/SR-210 Eastbound Ramps		Re-stripe NBT to NBTR
22	Ayala Dr/Renaissance Pkwy-Easton St	2nd EBL, EBR	2nd EBL, EBR with overlap phasing
23	Ayala Dr/Proposed St (North)	Signal, NBL	Signal, NBL
24	Ayala Dr/Lieske Dr	Signal	Signal
25	Ayala Dr/Fitzgerald Ave	Signal, Re-stripe NBR to NBT	Signal, Re-stripe NBR to NBT
26	Ayala Dr/Proposed St (South)	Signal, NBL	Signal, NBL
27	Ayala Dr/Baseline Rd	2nd NBL, Re-stripe NBR to NBTR, SBR	2nd NBL, Re-stripe NBR to NBTR, EBR with overlap phasing, SBR with overlap phasing
28	Fitzgerald Ave/Baseline Rd	Signal	Signal
39	Maple Avenue/Baseline Road	Signal	Signal
45	Maple Avenue/Baseline Road	Signal	Signal

Notes:
PA = Planning Area
NBL = northbound left-turn lane; NBT = northbound through lane; NBR = northbound right-turn lane; NBTR =shared northbound through/right-turn lane;
SBL = southbound left-turn lane; SBT = southbound through lane; SBR = southbound right-turn lane; SBTR = shared southbound through/right-turn lane;
EBL = eastbound left-turn lane; EBT = eastbound through lane; EBR = eastbound right-turn lane; EBTL = shared eastbound through/left-turn lane;
EBLTR = shared eastbound left/through/right-turn lane; EBTR = shared eastbound through/right-turn lane;
WBL = westbound left-turn lane; WBT = westbound through lane; WBR = westbound right-turn lane; WBTR = shared westbound through/right-turn lane

Table 4.7-21 RSPA: Existing with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		Proposed Functional Classification[1]	With Renaissance Specific Plan With Recommended Improvements[3]		
		Existing	w/ Improvements		Daily Volume	V/C[2]	LOS
7	Renaissance Parkway west of Ayala Drive	4	4	4-Lane Modified Arterial	23,452	0.64	B
10	Baseline Road east of Alder Avenue	3	**4**	4-Lane Modified Arterial	23,731	0.65	B
11	Baseline Road west of Linden Avenue	3	**4**	4-Lane Secondary Highway	18,644	0.76	C
12	Baseline Road between Linden Avenue and Ayala Drive	4	4	**4-Lane Modified Arterial**	23,267	0.64	B
16	Alder Avenue north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	23,589	0.65	B
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	**4**	**4-Lane Secondary Highway**	19,600	0.80	D
23	Ayala Drive between SR 210-Ramps	4	4	**4-Lane Modified Arterial**	28,751	0.79	C
24	Ayala Drive north of Renaissance Parkway	4	**6**	**6-Lane Arterial**	38,461	0.70	D
25	Ayala Drive between Renaissance Pkwy and Proposed Street (North)	3	**6**	**6-Lane Arterial**	35,013	0.64	C
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	**6**	**6-Lane Arterial**	33,581	0.61	C
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	25,955	0.71	B
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	**4**	**4-Lane Modified Arterial**	22,108	0.61	B
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	**4**	**4-Lane Modified Arterial**	26,266	0.72	C

Notes:
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* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per lane capacity is 6,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

Table 4.7-22 RSPA: Year 2035 with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	With Renaissance Specific Plan With Recommended Improvements[3]		
		Existing	w/ Improvements		Daily Volume	V/C[2]	LOS
1	Casmalia Street east of Alder Avenue	2	**4**	**4-Lane Modified Arterial**	23,981	0.66	B
5	Renaissance Parkway east of Alder Avenue	4	4	**4-Lane Modified Arterial**	24,333	0.67	B
7	Renaissance Parkway west of Ayala Drive	4	4	**4-Lane Modified Arterial**	29,237	0.80	C
9	Baseline Road west of Alder Avenue	2	**6**	**6-Lane Arterial**	33,715	0.61	B
10	Baseline Road east of Alder Avenue	3	**6**	**6-Lane Arterial**	37,647	0.69	B
11	Baseline Road west of Linden Avenue	3	**6**	**6-Lane Arterial**	33,098	0.60	B
12	Baseline Road between Linden Avenue and Ayala Drive	4	**6**	**6-Lane Arterial**	38,994	0.71	C
13	Baseline Road east of Ayala Drive	4	**6**	**6-Lane Arterial**	25,580	0.47	B
14	Alder Avenue south of Casmalia Street	4	**6**	**6-Lane Arterial**	35,910	0.65	B
15	Alder Avenue between SR-210 Ramps	4	**6**	**6-Lane Arterial**	40,703	0.74	C
16	Alder Avenue north of Renaissance Parkway	4	**6**	**6-Lane Arterial**	48,519	0.88	D
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	**6**	**6-Lane Arterial**	34,341	0.63	B
18	Alder Avenue between Walnut Avenue and Baseline Road	2	**4**	**4-Lane Modified Arterial**	26,697	0.73	C
22	Ayala Drive south of Casmalia Street	4	4	**4-Lane Modified Arterial**	27,367	0.60	C
23	Ayala Drive between SR 210-Ramps	4	**6**	**6-Lane Arterial**	34,770	0.63	B
24	Ayala Drive north of Renaissance Parkway	4	**6**	**6-Lane Arterial**	44,460	0.81	D
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	**6**	**6-Lane Arterial**	37,812	0.69	B
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	**6**	**6-Lane Arterial**	36,477	0.66	B
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**6**	**6-Lane Arterial**	34,758	0.63	B
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	**4**	**4-Lane Modified Arterial**	28,006	0.77	C
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	**4**	**4-Lane Modified Arterial**	32,253	0.89	D
30	Locust Avenue between Renaissance Parkway and Miro Way	2	**4**	**4-Lane Secondary Highway**	18,459	0.75	C

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(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

Table 4.7-23 Renaissance Marketplace: Recommended Intersection Improvements

Intersection		Circulation Improvement		
		Existing With Renaissance Marketplace	Operational Year With Renaissance Marketplace	Cumulative With Renaissance Marketplace
1	Alder Ave/Casmalia Street			Re-stripe WBR to WBTR, restripe WBT to 2nd WBL, NBR with overlap phasing
2	Alder Ave/SR-210 Westbound Ramps			Re-stripe to provide second NBL
4	Alder Ave/Easton St-Renaissance Pkwy			Re-stripe SBR to SBTR
6	Alder Ave/Miro Way			Signal, SBL
7	Alder Ave/Baseline Rd	WBT	WBT	NBT, EBTR, WBT
8	Laurel Ave/Casmalia Street			Signal
10	Locust Ave/Casmalia Street		2nd EBL	2nd EBL
11	Locust Ave/Renaissance Pkwy			NBL, Re-stripe NBLTR to NBTR
15	Linden Ave/Renaissance Pkwy			NBL
17	Linden Ave/Miro Way-PA108 Dwy 3			Signal
18	Linden Ave/Baseline Rd	Signal	Signal	Signal
19	Ayala Dr/Casmalia St			overlap phasing to EBR
22	Ayala Dr/Renaissance Pkwy-Easton St	2nd EBL	2nd EBL, EBR with overlap phasing	2nd EBL
23	Ayala Dr/Proposed St (North)	Signal, NBL	Signal, NBL	Signal, NBL
24	Ayala Dr/Lieske Dr	Signal	Signal	Signal
25	Ayala Dr/Fitzgerald Ave	Signal	Signal	Signal
27	Ayala Dr/Baseline Rd			2nd NBL, Re-stripe NBR to NBTR, SBR
28	Fitzgerald Ave/Baseline Rd	Signal	Signal	Signal
31	Market Place Dwy 3/Renaissance Pkwy			
45	Maple Avenue/Baseline Road			Signal

Notes:
PA = Planning Area
NBL = northbound left-turn lane; NBT = northbound through lane; NBR = northbound right-turn lane; NBTR =shared northbound through/right-turn lane;
SBL = southbound left-turn lane; SBT = southbound through lane; SBR = southbound right-turn lane; SBTR = shared southbound through/right-turn lane;
EBL = eastbound left-turn lane; EBT = eastbound through lane; EBR = eastbound right-turn lane; EBTL = shared eastbound through/left-turn lane;
EBLTR = shared eastbound left/through/right-turn lane; EBTR = shared eastbound through/right-turn lane;
WBL = westbound left-turn lane; WBT = westbound through lane; WBR = westbound right-turn lane; WBTR = shared westbound through/right-turn lane

Table 4.7-24 Renaissance Marketplace: Existing with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	With Renaissance Marketplace Conditions[3]		
		Existing	With Improvements		Daily Volume	V/C[2]	LOS
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	**4**	**4-Lane Secondary Highway**	19,141	0.78	C
23	Ayala Drive between SR 210-Ramps	4	4	**4-Lane Modified Arterial**	23,483	0.65	B
24	Ayala Drive north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	31,419	0.86	D
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	**4**	**4-Lane Modified Arterial**	27,375	0.75	C
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	**4**	**4-Lane Modified Arterial**	29,348	0.81	C
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	29,187	0.80	C
29	Ayala Drive between Baseline Road and Fitzgerald Avenue	3	**4**	**4-Lane Modified Arterial**	25,425	0.70	B

Notes:
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(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

Table 4.7-25 Marketplace: Operational Year with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	Plus Renaissance Marketplace Conditions[3]		
		Existing	With Improvements		Daily Volume	V/C[2]	LOS
24	Ayala Drive north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	27,862	0.77	C
25	Ayala Drive between Renaissance Parkway and Proposed Street (North)	3	**4**	**4-Lane Modified Arterial**	27,078	0.74	C
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	**4**	**4-Lane Modified Arterial**	29,348	0.81	C
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	29,187	0.80	C
29	Ayala Drive between Baseline Road and Fitzgerald Avenue	3	**4**	**4-Lane Modified Arterial**	25,233	0.69	B

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(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0

Table 4.7-26 Renaissance Marketplace: Cumulative Roadway with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	With Renaissance Marketplace Conditions[3]		
		Existing	With Improvements		Daily Volume	V/C[2]	LOS
1	Casmalia Street east of Alder Avenue	2	**4**	**4-Lane Secondary Highway**	21,631	0.88	D
9	Baseline Road west of Alder Avenue	2	**4**	**4-Lane Secondary Highway**	20,618	0.84	D
10	Baseline Road east of Alder Avenue	3	**4**	**4-Lane Modified Arterial**	25,183	0.69	B
11	Baseline Road west of Linden Avenue	3	**4**	**4-Lane Secondary Highway**	20,478	0.83	D
12	Baseline Road between Linden Avenue and Ayala Drive	4	4	**4-Lane Modified Arterial**	25,009	0.69	B
14	Alder Avenue south of Casmalia Street	4	4	**4-Lane Modified Arterial**	29,521	0.81	C
15	Alder Avenue between SR-210 Ramps	4	4	**4-Lane Modified Arterial**	28,392	0.78	C
16	Alder Avenue north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	30,781	0.85	D
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	**4**	**4-Lane Modified Arterial**	25,290	0.69	B
18	Alder Avenue between Walnut Avenue and Baseline Road	2	**4**	**4-Lane Secondary Highway**	21,427	0.87	D
23	Ayala Drive between SR 210-Ramps	4	4	**4-Lane Modified Arterial**	28,620	0.79	C
24	Ayala Drive north of Renaissance Parkway	4	**6**	**6-Lane Arterial**	35,604	0.65	B
25	Ayala Drive between Renaissance Pkwy and Proposed Street (North)	3	**4**	**4-Lane Modified Arterial**	28,845	0.79	C
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	**4**	**4-Lane Modified Arterial**	29,817	0.82	D
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	29,654	0.81	D
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	**4**	**4-Lane Modified Arterial**	25,628	0.70	B
29	Ayala Drive between Baseline Road and Fitzgerald Avenue	3	**4**	**4-Lane Modified Arterial**	25,628	0.70	B

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(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

Table 4.7-27 Planning Area 108: Recommended Intersection Improvements

Intersection		Circulation Improvement		
		Existing With Planning Area 108	**Operational Year With Planning Area 108**	**Cumulative With Planning Area 108**
1	Alder Ave/Casmalia Street	Re-stripe WBR to WBTR, restripe WBT to 2nd WBL	Re-stripe WBR to WBTR, restripe WBT to 2nd WBL	Re-stripe WBR to WBTR, re-stripe WBT to 2nd WBL, NBR with overlap phasing
2	Alder Ave/SR-210 Westbound Ramps			Re-stripe to provide second NBL
6	Alder Ave/Miro Way			Signal, SBL
7	Alder Ave/Baseline Rd	EBTR, WBT	EBTR, WBT	NBT, EBTR, WBT
8	Laurel Ave/Casmalia Street	Signal	Signal	Signal
10	Locust Ave/Casmalia Street		2nd EBL	2nd EBL
11	Locust Ave/Renaissance Pkwy			NBL, Re-stripe NBLTR to NBTR
15	Linden Ave/Renaissance Pkwy			NBL
17	Linden Ave/Miro Way-PA108 Dwy 3	Signal	Signal	Signal
18	Linden Ave/Baseline Rd	Signal	Signal	Signal
22	Ayala Dr/Renaissance Pkwy-Easton St			2nd EBL
23	Ayala Dr/Proposed St (North)			Signal, NBL
24	Ayala Dr/Lieske Dr			Signal
25	Ayala Dr/Fitzgerald Ave	Signal	Signal	Signal
27	Ayala Dr/Baseline Rd	Re-stripe NBR to NBTR	Re-stripe NBR to NBTR	2nd NBL, Re-stripe NBR to NBTR
28	Fitzgerald Ave/Baseline Rd			Signal
39	Locust Avenue/PA108 Driveway 4			Signal, SBL
45	Maple Avenue/Baseline Road			Signal

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SBL = southbound left-turn lane; SBT = southbound through lane; SBR = southbound right-turn lane; SBTR = shared southbound through/right-turn lane;
EBL = eastbound left-turn lane; EBT = eastbound through lane; EBR = eastbound right-turn lane; EBTL = shared eastbound through/left-turn lane;
EBLTR = shared eastbound left/through/right-turn lane; EBTR = shared eastbound through/right-turn lane;
WBL = westbound left-turn lane; WBT = westbound through lane; WBR = westbound right-turn lane; WBTR = shared westbound through/right-turn lane

Table 4.7-28 Planning Area 108: Existing Roadway with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	With Planning Area 108[3]		
		Existing	w/ Improvements		Daily		
					Volume	V/C[2]	LOS
10	Baseline Road east of Alder Avenue	3	**4**	4-Lane Secondary Highway	19,616	0.80	D
24	Ayala Drive north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	26,146	0.72	B
25	Ayala Drive between Renaissance Pkwy and Proposed Street (North)	3	**4**	**4-Lane Modified Arterial**	22,621	0.62	B
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	22,461	0.62	B
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	4	4-Lane Secondary Highway	19,765	0.80	D

Notes:
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* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

Table 4.7-29 Planning Area 108: Operational Year with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	With Planning Area 108[3]		
		Existing	w/ Improvements		Daily		
					Volume	V/C[2]	LOS
10	Baseline Road east of Alder Avenue	3	**4**	4-Lane Secondary Highway	19,911	0.81	D
24	Ayala Drive north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	26,633	0.73	C
25	Ayala Drive between Renaissance Pkwy and Proposed Street (North)	3	**4**	**4-Lane Modified Arterial**	23,068	0.63	B
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	22,649	0.62	B
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	**4**	4-Lane Secondary Highway	20,155	0.82	D

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(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

Table 4.7-30 Planning Area 108: Cumulative Roadway with Improvements Roadway Levels of Service

	Roadway Segment	Number of Lanes		With Improvements Functional Classification[1]	With Planning Area 108[3]		
		Existing	w/ Improvements		Daily Volume	V/C[2]	LOS
1	Casmalia Street east of Alder Avenue	2	**4**	**4-Lane Secondary Highway**	21,631	0.88	D
9	Baseline Road west of Alder Avenue	2	**4**	**4-Lane Secondary Highway**	20,618	0.84	D
10	Baseline Road east of Alder Avenue	3	**4**	**4-Lane Modified Arterial**	25,183	0.69	B
11	Baseline Road west of Linden Avenue	3	**4**	**4-Lane Modified Arterial**	20,478	0.83	D
12	Baseline Road between Linden Avenue and Ayala Drive	4	4	**4-Lane Modified Arterial**	25,009	0.69	B
14	Alder Avenue south of Casmalia Street	4	4	**4-Lane Modified Arterial**	29,521	0.81	C
15	Alder Avenue between SR-210 Ramps	4	4	**4-Lane Modified Arterial**	28,392	0.78	C
16	Alder Avenue north of Renaissance Parkway	4	4	**4-Lane Modified Arterial**	30,781	0.85	D
17	Alder Avenue between Renaissance Parkway and Walnut Avenue	2	**4**	**4-Lane Modified Arterial**	25,290	0.69	B
18	Alder Avenue between Walnut Avenue and Baseline Road	2	**4**	**4-Lane Secondary Highway**	21,427	0.87	D
23	Ayala Drive between SR 210-Ramps	4	4	**4-Lane Secondary Highway**	28,620	0.79	C
24	Ayala Drive north of Renaissance Parkway	4	**6**	**6-Lane Arterial**	35,604	0.65	B
25	Ayala Drive between Renaissance Pkwy and Proposed Street (North)	3	**4**	**4-Lane Modified Arterial**	28,845	0.79	C
26	Ayala Drive between Proposed Street (North) and Leiske Drive	3	**4**	**4-Lane Modified Arterial**	29,817	0.82	D
27	Ayala Drive between Leiske Drive and Fitzgerald	3	**4**	**4-Lane Modified Arterial**	29,654	0.81	D
28	Ayala Drive between Fitzgerald Drive and Proposed Street (South)	3	**4**	**4-Lane Modified Arterial**	25,628	0.70	B
29	Ayala Drive between Proposed Street (South) and Baseline Road	3	**4**	4-Lane Modified Arterial	25,628	0.70	B

Notes:
PA = Planning Area
LOS = Level of Service. V/C = Volume to Capacity
Bold = Recommended Improvements
* = Exceeds LOS Standard
(1) The functional classification is based the existing roadway configuration and on Exhibit D in City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013.
(2) Capacity based on City of Rialto's Traffic Impact Analysis Report Guidelines and Requirements, December 2013. On three lane roadway segments, the v/c is based on a per lane capacity. For a Secondary Highway, the per-lane capacity is 6,150 daily vehicles. For a 6- Land Modified Arterial, the per-lane capacity is 9,150 daily vehicles.
(3) In most cases less improvements are required to improve the v/c to less than 1.0.

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4.8 UTILITIES

4.8.1 INTRODUCTION

This section discusses impacts associated with the potential for the proposed Project to impact existing utilities or utility service providers on or in the vicinity of the Project area. Potential effects are evaluated relative to the construction of new storm water drainage facilities or expansion of existing facilities and the availability of water supplies to serve the Project from existing entitlements and resources, or are new or expanded entitlements. All other significance thresholds and potential impacts of the proposed Project were addressed in the proposed Project's NOP (January 2015), which determined there would be no new or additional impacts, or that impacts would be less than significant and therefore need not be further considered in this Recirculated Draft SEIR. Please refer to the proposed Project's NOP attached as Appendix A.

Various agencies and utility providers were consulted during preparation of this section (see Section 8, Report Preparation Resources). Technical reports used during the preparation of this section include the following:

- Water Supply Assessment, Renaissance Specific Plan, Rialto, California, MBA, September 2008 (Updated January 2015) (Appendix I).
- Renaissance Specific Plan Master Plan of Drainage, Encompass Associates, Inc., March 4, 2008 (Updated April 2014) (Appendix E).
- Hydrology Study for Renaissance Shopping Center, DRC Engineering, Inc., November 2014 (Appendix F).

4.8.2 REGULATORY FRAMEWORK

4.8.2.1 FEDERAL

Federal Water Pollution Control Act

In 1972, the Federal Water Pollution Control Act (Clean Water Act) was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The Clean Water Act focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste dischargers, and required implementation of control measures to minimize pollutant discharges. The Clean Water Act was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial storm water discharges. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish application requirements for specific categories of industries, including construction projects that encompass greater than or equal to five acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to one acre. The regulations require that stormwater and non-stormwater runoff associated with construction activity, which discharges either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4s), must be regulated by an NPDES permit.

4.8.2.2 STATE

California Water Code Section 10910-10915

Senate Bill (SB) SB 610 (2001) (California Water Code Section 10910 through 10915) requires that each "public water system" as defined in the Act prepare and approve a Water Supply Assessment (WSA) for any project with the following characteristics:

- A residential development of more than 500 dwelling units;
- A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the Projects specified above; and
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Water Supply Assessment must evaluate the proposed Project's water demand and determine if the local water supplier has adequate supplies to serve the Project. The WSA may incorporate information from an adopted UMWP if the proposed Project was accounted for in the plan. If the Project was not considered in an adopted UMWP, the WSA must include sufficient information to analyze the Project's potential water impacts, such as the identification of existing water entitlements, water rights, or water service contracts relevant to the Project's water supply, the amount of water received pursuant to such entitlements, rights, or contracts, and any plans for acquiring additional water supplies if necessary to meet future demand.

Senate Bill 221

Senate Bill 221 requires cities to impose a condition on tentative map approval for large residential subdivision Projects requiring written verification from the proposed water agency that sufficient water will be available during normal, single-dry, and multiple-dry years within a 20-year projection to meet the estimated demand associated with the proposed subdivision, in addition to existing and planned future uses.

California Porter-Cologne Water Quality Control Act

The State of California's Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) provides the basis for water quality regulation within California. The Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the State. Waste discharge requirements (WDR) resulting from the report are issued by the Regional Water Quality Control Board (RWQCB). In practice, these requirements are typically integrated within the National Pollution Discharge Elimination System (NPDES) permitting process.

The State Water Resources Control Board (SWRCB) carries out its water quality protection authority through the adoption of specific Water Quality Control Plans (Basin Plans). These plans establish water quality standards for particular bodies of water. California water quality standards are composed of three parts: the designation of beneficial uses of water, water quality objectives to protect those uses, and implementation programs designed to achieve and maintain compliance with the water quality objectives.

The Santa Ana RWQCB is responsible for the Basin Plan that covers this portion of San Bernardino County including the Project area. The RWQCB implements management plans to modify and adopt standards under provisions set forth in section 303(c) of the Federal CWA and California Water Code (Division 7, Section 13240). Under Section 303(d) of the 1972 CWA, the State is required to develop a list of waters with segments that do not meet water quality standards.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610 through 10656) requires that all urban water suppliers use a 20-year planning horizon in preparing urban water management plans and update them every five years. While generally aimed at encouraging water suppliers to implement water conservation measures, it also created long-term planning obligations. An Urban Water Management Plan (UWMP) is required to describe and evaluate sources of water supply, reasonable and practical efficient uses, reclamation, and demand management activities.

California Public Utilities Commission

The California Public Utilities Commission (PUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to assure California utility customers safe, reliable utility service at reasonable rates, protect utility customers from fraud, and promote a healthy California economy.

4.8.2.3 LOCAL

City of Rialto General Plan, Conservation Element

The Conservation Element of the City's General Plan includes the following applicable goals and policies related to utility systems:

Goal 2-28*: Protect and enhance Rialto's surface waters and groundwater basins.*

- ***Policy 2-28.1****: Work with local water agencies and the State and Federal governments to clean up and mitigate perchlorate contamination within the basin.*
- ***Policy 2-28.2****: Maximize recharge of local groundwater basins by minimizing impervious surfaces and protecting open space recharge areas.*
- ***Policy 2-28.3****: Design sidewalks, roads, and driveways to minimize impervious surfaces; provide flood control channels with permeable bottoms to help restore groundwater aquifers.*
- ***Policy 2-28.4****: Prohibit the use of septic tanks, and where necessary, assist in the financing of sewer connections and hook-ups.*

- ***Policy 2-28.5****: Apply methodologies and assign responsibility to protect the quality of groundwater from pollution by landfills and industrial uses.*
- ***Policy 2-28.6****: Improve surface drainage facilities, and continue tertiary sewage treatment to protect the Santa Ana River watershed as a potable water source.*
- ***Policy 2-28.7****: Continue to maintain Lytle Creek as a water source.*
- ***Policy 2-28.8****: Reduce spreading of high nitrate fertilizers, herbicides, pesticides, and other chemicals in City landscaping that can contaminate groundwater; encourage the public to reduce the use of chemicals in maintenance of landscaping.*

Goal 2-29*: Conserve water resources.*

- ***Policy 2-29.1****: Require new development to use features, equipment, technology, landscaping, and other methods to reduce water consumption.*
- ***Policy 2-29.2****: Use reclaimed water as available for irrigation of City parks, median strips, and other public areas, and encourage its use in industrial applications, large turf and expansive landscaped areas, golf courses, mining, and other uses where potable quality of water is not necessary to its application.*
- ***Policy 2-29.3****: Educate the community about the importance of water-conserving techniques and avoiding wasteful water habits.*

Goal 2-31: *Conserve energy resources.*

- ***Policy 2-31.1****: Require the incorporation of energy conservation features into the design of all new construction and site development activities.*
- ***Policy 2-31.2****: Provide incentives for the installation of energy conservation measures in existing multi-unit residential and commercial developments, including technical assistance and possibly low-interest loans.*
- ***Policy 2-31.3****: Educate the public regarding the need for energy conservation techniques which can be employed and systems which are available.*

City of Rialto Code

All utility improvements constructed as part of the proposed Project will be required to meet applicable uniform codes (i.e., plumbing, fire and building,) including potable water and sewer systems, water conservation requirements, electrical cables and wiring, natural gas lines, solid waste containers and enclosures, and telephone lines. The City's development review process and construction inspection program will ensure that these improvements are constructed according to appropriate applicable standards.

4.8.3 EXISTING CONDITIONS

The active land uses within the RSP area currently utilize all basic utility services.

4.8.3.1 WATER

The RSP area overlaps three water districts: the City of Rialto Utilities Division, the West Valley Water District, and the Fontana Water Company. However, the Project area considered by this Recirculated Draft SEIR (i.e. the area of the Specific Plan Amendment within the RSP area) is within the Fontana Water Company and the City of Rialto Utilities Division District (City of Rialto Water District). The West Valley Water District serves the area north of SR-210, which is outside of the Project area as considered by this Recirculated Draft SEIR. The Fontana Water Company serves the area south of SR-210 and west of Linden Avenue. The City of Rialto provides water service to the area east of Linden Avenue and south of SR-210, which contains the entirety of the Project area as considered by this Recirculated SEIR. Figure 3-10 provides an overview of the overall RSP's conceptual water supply system, which contains the area of the Project area considered by this Recirculated Draft SEIR.

Each of these water purveyors has UWMPs that disclose information on water quality and supply. In addition, a project specific Water Supply Assessment (WSA) was prepared (2008) for the RSP and was updated in January 2015; and is included in this Recirculated Draft SEIR as Appendix I. The 2008 WSA, the 2015 update to the WSA, and RSP EIR included analysis of the three water districts: the City of Rialto Utilities Division, the West Valley Water District, and the Fontana Water Company. However, the proposed Project considered by this Recirculated Draft SEIR does not include areas of the RSP area within the West Valley Water District or Fontana Water Company District.

City of Rialto Water District

The City of Rialto obtains its water supply from several sources. The City's primary source of water is from the City-owned groundwater wells within five different groundwater basins in the upper Santa Ana River Basin. The five basins are the Rialto Basin, Lytle Creek Basin, Chino Basin, North Riverside Basin, and the Bunker Hill Basin. Within these basins, there are a total of fourteen City-owned wells. Currently a total of six of the City's fourteen wells are operational; the remainder of the City's wells are not currently operational due to perchlorate contamination. The remainder of the water used by the City is purchased from the San Bernardino Valley Municipal Water District (SBVMWD) and Lytle Creek surface water treated at the Oliver P. Roemer Filtration Plant (WFF). The WFF is owned and operated by the West Valley Water District and the City of Rialto maintains a 25% ownership stake of the WFF (City of Rialto Urban Water Management Plan, 2010).

West Valley Water District

Annual water supply production of the West Valley Water District is comprised of District groundwater wells, Lytle Creek surface water, State Water Project (SWP) water treated at the WFF, and purchased groundwater through the Baseline Feeder (BLF) pipeline. The main source of supply is from the District's eighteen groundwater wells, which have recently provided over 60% of the yearly District production (West Valley Water District Water Master Plan, 2012).

Fontana Water Company (FWC)

Fontana Water Company water supply is produced from Lytle Creek surface flow, from groundwater wells in the Lytle Basin, Rialto Basin, Chino Basin, and No Man's Land. A portion of the water supply is purchased from Cucamonga Valley Water District. Water from the SWP is purchased from the Inland Empire Utilities Agency and the San Bernardino Valley Municipal Water District. Fontana Water Company produces groundwater from thirty-eight wells located in the previously identified basins (Fontana Water Company Urban Water Management Plan, 2010).

4.8.3.2 STORMWATER

Currently, the area north of SR-210 (which is within the RSP area, but outside of the Project area as considered by this Recirculated Draft SEIR), drains into the Cactus channel, which outlets into the existing San Bernardino County Flood Control District's Cactus Basin #5. The area south of SR-210 drains to Baseline Avenue. Baseline Avenue drains easterly toward Cactus Avenue, but currently there are no storm drains in Baseline Avenue to intercept site runoff. Figure 3-10 provides an overview of the system plan for the RSP area's conceptual storm drainage. As shown in the plan, the RSP area will require construction of four major east-west drain systems as further described below.

Proposed alignments of major storm drains are designed to accommodate the proposed site plan and location of major street improvements. The RSP area is divided into Subareas "A", "B", "C", "D" and "E". Subarea "A" will serve the proposed retail properties along the south side of the freeway and will connect to Basin 5. Subarea "B" will accommodate the middle portion of the site and will drain to Basin 4. Subarea "C" will serve the proposed industrial planning areas, and is proposed to connect to Basin 3. A portion of the property along the west side of Alder Avenue will be picked up in Subarea C. The southerly line, Subarea "D", will be alighted in Baseline Road and will handle the properties west of Alder Avenue, as well as the southern portions adjacent along the north side of Baseline Road.

The first most northerly storm drain will be constructed in Renaissance Parkway and along the southerly boundary of the retail property at the southeast corner of Renaissance Parkway and Ayala Drive. The second storm drain will be constructed along the southerly boundary of the residential portion of the RSP. The third storm drain will be constructed in Miro Way. The fourth and most southerly storm drain will be constructed in Baseline Road and will ultimately drain into Cactus Basin #2. Discharging flows into the Cactus Basin will require approval from the San Bernardino County Flood Control District.

According to the Master Plan of Drainage prepared for the Project (EA 2014), the existing drainage of the site is in a south-southeasterly direction. Gradients in the area are aligned with both Sierra Avenue to the west and Riverside Drive to the northeast. The Project is part of a larger area tributary to the Cactus Basin System, which is maintained by the San Bernardino County Flood Control District. The Cactus System is intended to contain a network of five detention basins, three of which are currently utilized.

Basins 1 and 2 are along the west side of Cactus Avenue, south of Baseline Road. Basin 3 is located along the north side of Baseline Road and is ready for construction. It is connected to Basin 2 by way of an existing improved channel. Basin 4 is currently not designed and the Project is unscheduled; however, the Flood Control District plans to build it upstream of Basin 3, next to Jerry Eaves Park. Basin 5 is currently excavated by existing mining operations, and is located upstream of Basin 4, along the east side of Ayala Drive, south of Easton Drive and the SR 210 All of the referenced detention basins are outside of the Project area.

The proposed Project is also expected to need an interim drainage basin due to downstream facilities not yet completed by outside agencies. The proposed Project would provide an alternative interim drainage facility for the Renaissance Marketplace component, south of the site of Planning Area 104 (as newly-designed by the RSP Amendment), should downstream facilities be determined to not be eligible for stormwater flows.

4.8.4 STANDARDS OF SIGNIFICANCE

4.8.4.1 SIGNIFICANCE CRITERIA[1]

As a Subsequent EIR to the 2010 RSP EIR, this analysis only evaluates the significance criteria that apply to the proposed Specific Plan Amendment area as described in Section 3.0.

4.8.4.1.1 Water and Stormwater

The following criteria for establishing the significance of potential impacts on utilities were derived from Appendix G of the California Environmental Quality Act (CEQA) guidelines. A significant impact would occur if the proposed Project would:

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4.8.5 IMPACTS AND MITIGATION MEASURES

4.8.5.1 WATER

4.8.5.1.1 Impact 4.8.1: Project Impacts on Water Demand for the RSP Area

According to the WSA prepared for the RSP (2008), the total projected water demand at build-out is approximately 4,543 acre-feet annually (AFA), with 1,356 AFA expected to be sourced from the City of Rialto, 3,068 AFA expected to be sourced from Fontana Water Company, and 1,019 AFA expected to be sourced from West Valley Water.

However, water demand projections have been adjusted from the 2008 WSA in conjunction with the preparation of this Recirculated Draft SEIR. As compared to the original projections of the 2008 WSA, the overall total projected water demand at build-out of the RSP, including the proposed Project, is approximately 3,807 AFA, reflecting a total projected reduced demand of 736 AFA. Between the three water districts, 456 AFA is expected to be sourced from the City of Rialto (10 AFA reduction), 2,342 AFA is expected to be sourced from Fontana Water Company (726 AFA reduction), and 1,019 AFA from West Valley Water (no change in AFA). The augmentations to the projected water demand from each of the three water districts are reflected in **Table 4.8.1** below.

[1] Less than significant and no impact determinations for potential Utilities impacts of the proposed Project are listed Table 1-1 of Section 1.0 Executive Summary.

Table 4.8-1 Renaissance Specific Plan Water Demand Comparison (2008 WSA Update)

City of Rialto				
Existing (Table 16 of WSA)				
Land Use	**Unit Water Demand**	**Unit Water Demand**	**Proposed New (excluding existing)**	**Water Demand (AFA)**
Commercial/Office	3,500 (gpd/ac)	3.92 (AF/ac)	202 ac	792
Residential	600 (gpd/connection)	0.67 (AF/connection)	842 connections	564
Total New Demand				1356
Demand Already Accounted for in UWMP				900 AFA
Total Additional Project Demand				**456 AFA**
Proposed				
Land Use	**Unit Water Demand**	**Unit Water Demand**	**Proposed New (excluding existing)**	**Water Demand (AFA)**
Commercial/Office	3,500 (gpd/ac)	3.92 (AF/ac)	104.9	411
Residential	600 (gpd/connection)	0.67 (AF/connection)	1,262 connections	846
Park	4,000 (gpd/ac)	4.48 (AF/ac)	20 ac	90
Total New Water Demand				1346
Demand Already Accounted for in UWMP				900 AFA
			Total Additional Project Demand	446 AFA
Minus 2008 WSA				**(10) AFA**
Fontana Water Company				
Existing (Table 42 of WSA)				
Land Use	**Unit Water Demand**	**Unit Water Demand**	**Proposed New (including existing)**	**Water Demand (AFA)**
Commercial	3,000 (gpd/ac)	3.36 (AF/ac)	563 ac	1,892
Residential	900 (gpd/connection)	1.01 (AF/connection)	1,098 connections	1,109
Parks	4,000 (gpd/ac)	4.48 (AF/ac)	15 ac	67
			Total New Water Demand	**3,068 AFA**
Proposed				
Land Use	**Unit Water Demand**	**Unit Water Demand**	**Proposed New (including existing)**	**Water Demand (AFA)**
Commercial	3,000 (gpd/ac)	3.36 (AF/ac)	697 ac	2342 AFA
Total New Water Demand				2342 AFA

Table 4.8-1 Renaissance Specific Plan Water Demand Comparison (2008 WSA Update) (continued)

Minus 2008 WSA				**(726) AFA**
West Valley Water				
Existing - NO CHANGE (Table 30 of WSA)				
Land Use	**Unit Water Demand**	**Annual Unit Water Demand (AF/ac/YR)**	**Proposed New (including existing)**	**Water Demand (AFA)**
Commercial	3,500	3.92	260	1,019
Total Additional Project Demand				**1,019 AFA**

Source: Lewis Operating Corporation, January 2015.

As three water districts currently provide water to the RSP area, the WSA considered the capacity of each district to supply their area of responsibility within the RSP area.

City of Rialto Water District

The WSA prepared for the RSP in 2008 relied on City of Rialto water projections from the 2005 City of Rialto Urban Water Management Plan. The WSA update prepared in 2015 relied on City of Rialto water projections from the 2010 City of Rialto Urban Water Management Plan.

At build-out, water demand of the RSP, including the proposed Project, within the City of Rialto's service area is projected to be approximately 1,346 AFA. However, the City has indicated that the redevelopment of the Rialto Airport (a large portion of the Renaissance Specific Plan area) was taken into account within its Urban Water Management Plan (UWMP). The UWMP had projected water demand for the redevelopment area would be 900 acre-feet, which was an underestimation of 456 acre-feet when compared with revised calculations for the RSP, including the proposed Project. The 456 AFA amount has been subsequently reduced to 446 AFA, per revisions to the RSP WSA in January 2015. Therefore, the additional 446 acre-feet of water not accounted for in the UWMP analysis, was analyzed to determine if the Project would have any adverse effects to the City of Rialto water service area.

Based on the City of Rialto 2010 UWMP, the City's water supply is projected to be 14,040 AFA for 2015 through 2030. Also based on the City's 2010 Urban Water Management Plan, the City's water demand is projected to be 11, 676 AFA for 2015, and 10,064 AFA for 2020 through 2030 (the decrease in demand reflects protected increase in water conservation measures).

As identified in the 2008 WSA prepared for the RSP, the City's Urban Water Management Plan accounts for redevelopment of the RSP area having a 900 AFA allocation of the City's total demand. The 2008 WSA identified the City's UWMP underestimating demand from the RSP area by 456 AFA, which has been subsequently re-evaluated as a reduction to 446 AFA. Based on revision to the 2008 WSA (January 2015), the underestimated amount is 446 AFA. Based on the City's 2010 UMWP water supply projections are 14,040 AFA for 2015 through 2030, there will be a surplus amount of 2,364 AFA for 2015 and 3,976 AFA for 2020 through 2030, which will be able to account for 446 AFA underestimated demand for the RSP area.

Therefore, the City's surplus supply with the RSP, including the proposed Project, would be accommodated at build-out of the RSP area. (Other developments which may not have been accounted for in the City's 2010 UWMP are analyzed in the Cumulative Impact Section). Therefore, the City's supplies are sufficient to meet demand for the RSP, including the proposed Project, within the City's service area.

Fontana Water Company (FWC)

At buildout, demand within the FWC's service area within the project is projected to be approximately 2,342 AFA. With the project, and during a multiple dry year period, FWC's water supply is projected to be 50,959 AFA in 2035. With the project, water demand district-wide is projected to equal supply at 50,959 AFA. Therefore, FWC's supplies are sufficient to meet demand for the project within the district's service area.

West Valley Water District

At buildout, demand within the WVWD's service area within the project is projected to be approximately 1,019 AFA. With the project, and during a multiple dry year period, WVWD's water supply is projected to be 57,067 AFA. With the project, water demand district-wide is projected to be 46,019 AFA at buildout. Therefore, WVWD's surplus supply is projected to be 11,048 AFA with the project at buildout. Therefore, WVWD's supplies are sufficient to meet demand for the project within the district's service area.

Summary of Impacts

At build-out, the RSP is projected to have an annual water demand of 3,807 AFA. Between the three water companies that currently serve the Project area, adequate supply is available to serve the RSP area during multiple drought years (2008 and 2015 update). Furthermore, the WSA has confirmed the City of Rialto and Fontana Water District would have adequate supply available to serve the Project area.

In addition, there are existing lines in the area and no off-site construction would be needed to supply water to the Project area. Therefore, no capital improvements on the existing water supply infrastructure are required in addition to any associated fees and thus the Project-related impacts to the environment through the construction or expansion of existing facilities would be less-than- significant.

4.8.5.2 STORMWATER

4.8.5.2.1 Impact 4.8.2: Project impacts on Realignment of Major Storm Drains in the RSP Area

Build-out of the RSP, including the proposed Project, would result in the realignment of major storm drains in the vicinity of the RSP area to allow for RSP development and associated roadway improvements.

According to the Master Plan of Drainage (Encompass Associates, 2014) prepared for the Project in conjunction with the RSP EIR, the amount of stormwater that will flow into the Cactus Basin complex will actually decrease with build-out of the RSP when compared with existing conditions in the RSP area. The amount of decrease is anticipated to be approximately three percent. The reduction is anticipated due to improved facilities associated with build-out of the RSP area and the overall decrease in the amount of impervious areas (e.g. removal of former airport facilities, such as runways). The 2014 Master Plan of Drainage concluded that the peak discharge from the RSP area during a major storm event is estimated to be approximately 1,213 cubic feet per second, which is less than the maximum allowable rate of 1,250 cubic feet per second, per the 2014 Master Plan of Drainage.

Preliminary assessment conducted in conjunction with the RSP EIR indicated that Cactus Basin Number 1 may require an improved spillway to accommodate build-out of the RSP. Potential impacts of this improvement would be mitigated with standard engineering, permitting, and construction conditions. Based on this and the overall decrease in impervious flows, subarea flow routing changes, and the planned implementation of more retention basins with the Cactus Basin System, impacts related to the construction or expansion of existing stormwater facilities were determined to be less-than-significant in the RSP EIR. The proposed Project would not result in significant land use changes within the RSP area which would result in new or previously unidentified potential impacts.

As previously described, the Renaissance Marketplace is a specific component of the proposed Project. Per Mitigation Measure HYD-1 in the RSP EIR, specific proposed developments within the RSP area are required to have individual project-specific hydrology studies prepared prior to consideration of project approval. A site-specific Hydrology Study (DRC Engineering, November 2014) has been prepared for the Renaissance Marketplace component of the proposed Project. The study does not identify any previously unidentified potential impacts of this specific component of the proposed Project. A site-specific Hydrology Study will be prepared for the Planning Area 108 component of the proposed Project, but based on the analysis for the RSP area, significant impacts are not anticipated.

Summary of Impacts

The proposed Project, including the Renaissance Marketplace and Planning Area 108 components, would not result in new or previously unidentified potential impacts to stormwater infrastructure in the vicinity of the RSP area. As was determined for build-out of the RSP in the RSP EIR, impacts of the proposed Project would be less-than-significant.

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5 CUMULATIVE

5.1 CEQA REQUIREMENTS

The CEQA Guideline Section 15130 requires identification of related projects, both public and private that together with the Renaissance Specific Plan Amendment (RSP), Renaissance Marketplace component, and Planning Area 108 component, could have cumulative impacts on the environment. The RSPA area is a large area and would involve such extensive development that it is appropriate to evaluate the Project relative to build-out projections for the entire City of Rialto. Development of the RSP is included in the build-out calculations in the 2010 General Plan Update. The RSPA and implementation of the Renaissance Marketplace and Planning Area 108 components would not substantially change the intensity of development planned for the RSP area, and would be consistent with the anticipated impacts analyzed in the 2010 General Plan Update EIR. Information on buildout of the City was taken from the City of Rialto 2010 General Plan Update and EIR.

Pursuant to CEQA Guidelines Section 15130, the analysis for cumulative impacts is framed as follows:

- **Cumulative Impact Setting:** Discuss the project in relation to build-out of Rialto. In addition, regional plans (water quality control plan, air quality plan, integrated waste management plan, etc.) that are applicable to the Project will be identified.
- **Cumulative Impact Analysis:** For each environmental impact topic, the analysis will be divided into two parts:
    - **Cumulative Project Impacts:** A description of the cumulative impacts based on the 2010 General Plan Update build-out projections and the "universe" in which they occur; and
    - **Project Impacts:** Whether or not the Project's contribution to the cumulative impact is "cumulatively considerable" (i.e. the incremental effects of the Project are considerable when viewed in connection with the effects of anticipated build-out of Rialto).
- **Mitigation Measures:** Measures for mitigating or avoiding the Project's contribution to any significant cumulative impact.
- **Level of Significance after Mitigation:** A conclusion based on the analysis of what the environmental impact is after mitigation (i.e., less than significant or significant).

5.2 CUMULATIVE IMPACT SETTING

5.2.1 RENAISSANCE SPECIFIC PLAN AMENDMENT (RSPA)

The EIR certified for the 2010 Renaissance Specific Plan evaluated cumulative impacts associated with the adopted Specific Plan. The RSP EIR identified that the approved RSP would result in the following cumulatively considerable impacts: Air quality, traffic noise, traffic (freeway congestion) and climate change.

Subsequent to the certification of the RSP EIR, the City certified the 2010 General Plan Update (GPU) EIR. The 2010 General Plan Update EIR identified the following cumulative environmental impacts from growth within the City through 2040: Greenhouse Gas Emissions.

The GPU establishes a blueprint for future land development within the City of Rialto that meets community desires and balances the environmental protection goals with the need for housing, infrastructure, and economic vitality. The GPU applies to the all of the City of Rialto and directs population growth and plans for infrastructure needs, development, and resource protection. The GPU included the adoption of the General Plan Elements, which set the goals and policies that guide future development. It also included a corresponding land use map, transportation and transit maps, a development opportunities map, in addition to implementing polices. The GPU focuses on family-oriented communities, attracting high quality new development and improving physical development, a healthy and diverse economic environment, and active communities. The GPU EIR was certified in conjunction with adoption of the GPU in December 2010. The GPU EIR comprehensively evaluated environmental impacts that would result from Plan implementation, including information related to existing site conditions, analyses of the types and magnitudes of project level and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts.

The proposed RSPA project and Renaissance Marketplace and Planning Area 108 components are located in the incorporated City of Rialto within the western portion of San Bernardino County (see Figure 3-1). The SR-210 Freeway, which provides regional east-west access, is immediately north of the site, while the I-10 Freeway is approximately 3.7 miles south of the site, and SR-215 is located approximately 3.5 miles northeast of the site. A summary of the proposed RSP Amendment land use changes is provided in Table 3-2 in Chapter 3.0.

5.2.2 RIALTO BUILD-OUT PROJECTIONS

The GPU EIR projected that the City's population would increase 26 percent from 2008 to 2040 to 125,256 residents. **Table 5-1** summarizes the potential build-out of the City of Rialto. The 2010 General Plan Update projections include the anticipated development of the Renaissance Specific Plan. **Table 5-2** shows the potential build-out of the Renaissance Specific Plan. **Table 5-3** provides the City of Rialto as well as adjacent cities and San Bernardino County.

Table 5-1 Summary Build-Out

	Existing Land Use (2008)			General Plan (2040)			Percent Change		
	City	SOI	Total	City	SOI	Total	City	SOI	Total
Dwelling Units	26,694	7,446	34,140	35,037	16,485	51,522	31%	121%	51%
Population	99,064	27,472	125,960	125,256	55,447	180,703	26%	102%	43%
Non-Residential Square Feet (000s)	33,864	8,274	42,138	59,954	10,942	70,897	77%	32%	68%

Source: City of Rialto 2010 General Plan Update

Table 5-2 Potential Build-Out of the Renaissance Specific Plan

Acres	1,315
Dwelling Units	1,745
Population	5,297
Non-Residential Square Feet	15,704,000

Source: City of Rialto 2010 General Plan Update

Table 5-3 Sub-Regional Growth Forecasts

	Population		Households		Employment		% Change in Pop Growth
	2008	2035	2005	2035	2005	2035	
Rialto	98,900	125,200	25,100	34,700	22,900	32,800	21%
Fontana	193,900	259,100	48,600	66,700	47,600	69,000	25%
Colton	52,100	71,700	15,000	21,100	24,000	29,600	27%
San Bernardino County	2,016,000	2,750,000	606,000	847,000	701,000	1,059,000	27%

Source: Southern California Association of Governments, 2012-2035 Regional Transportation Plan (Growth Forecast Appendix).

5.3 CUMULATIVE IMPACT ANALYSIS

Section 15355 of the State CEQA Guidelines defines a cumulative impact as a result of the combination of the project evaluated in the Recirculated Draft SEIR, together with other projects causing related impacts. The environmental impacts of past and present projects that have already been implemented have been incorporated into this General Plan update as existing conditions. As such, they do not need to be addressed here. The assessment of impacts resulting from implementation of proposed general plan policies presented in earlier chapters of this Recirculated Draft SEIR is based on the cumulative effects of the plan throughout the entire planning area, assuming full build-out of all reasonably expected land use potential as expressed through the land use types/intensity policies. This section will, therefore, focus on potential cumulative impacts resulting from activities within the planning area that could combine with effects resulting from growth and environmental changes occurring outside of the planning area, and within the West Valley subregion of San Bernardino County.

The City of Rialto General Plan Update (GPU) establishes a blueprint for future land development within the City of Rialto that meets community desires and balances the environmental protection goals with the need for housing, infrastructure, and economic vitality. The GPU applies to the all of the City of Rialto and directs population growth and plans for infrastructure needs, development, and resource protection. The GPU included the adoption of the General Plan Elements, which set the goals and policies that guide future development. It also included a corresponding land use map,

The analysis in this section addresses each of the environmental factors addressed in the Recirculated Draft SEIR by first summarizing the impacts discussed at the project level. The cumulative impacts are then discussed in relation to the cumulative build-out projections shown in Table 5-1.

5.3.1 AESTHETICS

Aesthetic impacts relate to the existing visual character or quality of the site and issues of visual blight.

Proposed Project Impacts

Development of the proposed Project would convert predominantly urban vacant land to residential, commercial, and light industrial land uses, substantially changing the aesthetic nature of the Project area. However, existing conditions on the Project area, vacant areas of sparse vegetation and/or vacant, abandoned former airport facilities, are considered as having negative visual characteristics. Thus, while RSP development on the proposed Project area, including the Renaissance Marketplace and Planning Area 108 components, would substantially alter the existing visual character of the Project area, the proposed development can be considered an improvement in the visual characteristic of the Project area. Additionally, the Renaissance Marketplace development and the Planning Area 108 development would comply with City design requirements. Therefore, potential visual character impacts would remain less than significant.

As a component of the proposed Project, the Renaissance Marketplace would be up to an approximately 566,764 square foot retail center. This retail component of the proposed Project may draw business from existing commercial centers in the region. While is it not possible to determine with absolute certainty that the proposed Project will have no economic effects on existing retail businesses in the primary or secondary trade areas, it is anticipated that the proposed Project would not have a significant enough impact to cause urban decay in the primary or secondary trade areas.

The UDA retail leakage analysis for the primary and secondary trade areas reflected continued overall excess of retail demand from the trade area residents, as compared to retail supply. To the extent to which there is sufficient demand to support proposed retail development, including the proposed Project, there would be no negative impacts to market shares of existing businesses. The UDA concluded that proposed retail development, including the proposed Project, may improve the balance between supply and demand in the primary and secondary trade areas. Additionally, the location of the proposed Project on the SR-210 Freeway, a significant gateway to the Project area and City, provides regional visibility and immediate access from Alder and Ayala Drives. Thus, the UDA concluded that that while the proposed Project and other proposed retail development projected would add to the available supply of retail outlets, current and projected strength of the retail demand in the proposed Project's primary and secondary trade areas would support this supply which is currently inadequate and projected to remain below retail demand.

Based on these findings, development of the proposed Project would not contribute to urban decay and therefore would not result in a degradation of the existing visual character in the primary or secondary trade areas. The potential impact would, therefore, be less than significant.

Cumulative Impacts under Projected Build-Out Conditions

The City of Rialto General Plan Update EIR identifies aesthetics, light, and glare impacts to be less than significant with compliance of its goals and policies. Existing overhead transmission lines would continue to be converted to underground lines as development within the specific plan area and in the surrounding area continues. As long as the proposed RSP project and other cumulative development projects are consistent with the City's applicable goals and policies relative to aesthetics, light, and glare, potential impacts are considered to be less cumulatively considerable.

Mitigation Measures

Implementation of Mitigation Measure AES-1 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The Project would not make a substantial contribution to cumulatively considerable aesthetic impact or to urban decay in the Project vicinity.

5.3.2 AIR QUALITY

Air quality impacts relate to the applicable air quality plan, air quality standards and violations, cumulative impacts, and sensitive receptors.

Proposed Project Impacts

The City's General Plan is consistent with the SCAG RCP Guidelines and the SCAQMD AQMP. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the South Coast Air Basin 2012 AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below:

1. The Project, including the Renaissance Marketplace and Planning Area 108 components, would result in short-term construction and long-term pollutant emissions that are within the approved RSP projections and would not result in new significant air quality impacts; therefore, the Project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.
2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed Project is not defined as significant.

The land use envisioned for the RSPA would not be more intense than one that could be developed on site under the current zoning in the General Plan. Based on the consistency analysis presented above, the proposed Project is consistent with the General Plans and the regional AQMP.

Renaissance Specific Plan Amendment

Since both the approved Renaissance Specific Plan (RSP) and the currently proposed RSPA are in program-level planning review, construction would not occur under this plan comparison. Therefore, no comparison of construction emissions between the two plans has been conducted. It is expected that construction emissions under the RSPA would be similar to those of the approved RSP, and that both would exceed the daily emissions thresholds established by SCAQMD.

Operational emissions for criteria pollutants would exceed the SCAQMD emissions thresholds of VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ under the previously approved RSP. Under the currently proposed RSPA, operational emissions for criteria pollutants would exceed the SCAQMD emissions thresholds of VOC, NO_X, CO, PM_{10}, and $PM_{2.5;}$ however,

emissions of SO_X would remain lower than the SCAQMD emission threshold. Therefore, no new significant air quality impacts would occur under the currently proposed RSPA.

Renaissance Marketplace

With compliance with SCAQMD Rules 402 and 403, daily regional construction emissions would not exceed the daily thresholds of most criteria pollutant emission thresholds established by the SCAQMD, except for the emissions of VOC, which are expected to exceed the SCAQMD daily emission threshold for VOC (i.e., 75 lbs/day) during the construction of Renaissance Marketplace. Since the construction emissions predicted for the construction of the RSP would already exceed the daily emissions threshold of VOC, no new exceedance would occur, and therefore no new significant impacts would occur for the construction of Renaissance Marketplace. Construction emission rates would not exceed the Localized Significance Thresholds (LSTs) for the residences 100 feet (30 meters) from the boundary of Renaissance Marketplace.

Three of the SCAQMD emission thresholds for criteria pollutants would be exceeded by the Renaissance Marketplace-related operational emissions. Since the operational emissions predicted for the RSP would exceed the daily emissions thresholds of these criteria pollutants, no new exceedance would occur, and no new significant impacts would occur for the Renaissance Marketplace. The operational emission rates for the Renaissance Marketplace would not exceed the LSTs for residences in the Project area within the 100 feet (30 meters) distance for LST analyses. Therefore, the proposed operational activity for the Renaissance Marketplace would not result in a locally significant air quality impact.

Planning Area 108

With compliance with SCAQMD Rules 402 and 403, daily regional construction emissions would not exceed the daily thresholds of most criteria pollutant emission thresholds established by the SCAQMD, with the exception of VOC and NO_X, which are expected to exceed the SCAQMD's daily emission thresholds during the construction of Planning Area 108. Since the construction emissions predicted for the construction of the RSP would exceed the daily emissions threshold of VOC and NO_X, no new exceedance would occur, and no new significant impacts would occur for the construction of Planning Area 108. Construction emission rates would not exceed the LSTs for the residences 100 feet (30 meters) from the boundary of Planning Area 108.

Five of the SCAQMD emission thresholds for criteria pollutants would be exceeded by the Planning Area 108-related operational emissions. Since the operational emissions predicted for the RSP would exceed the daily emissions thresholds of these criteria pollutants, no new exceedance would occur, and no new significant impacts would occur for Planning Area 108. The proposed operational activity for the Planning Area 108 would not result in a locally significant air quality impact.

Cumulative Impacts under Projected Build-Out Conditions

As a part of the overall RSP, the Renaissance Marketplace and Planning Area 108 projects would contribute criteria pollutants to the area during the construction of individual projects. A number of individual projects in the area may be under construction simultaneously with the Renaissance Marketplace and Planning Area 108 projects. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. However, each project would be required to comply with the SCAQMD's standard construction measures. The

proposed Renaissance Marketplace and Planning Area 108 projects' short-term construction emissions would not result in new exceedance of the SCAQMD significance thresholds. Therefore, they will not have any new significant short-term cumulative impacts.

The Project's long-term operational emissions would not result in new exceedance of the SCAQMD criteria pollutant thresholds. As climate change impacts are cumulative in nature, no typical single project can result in emissions of such a magnitude that it, in and of itself, would be significant on project basis. Therefore, as the change in GHG emissions would not result in any new exceedance of the SCAQMD proposed thresholds, the proposed Projects would result in less than significant cumulative impacts on GCC. Therefore, the proposed Projects would not result in a significant long-term cumulative impact.

Mitigation Measures

None recommended with implementation of the Specific Plan Amendment and components.

Level of Significance after Mitigation

The Project would not make a new substantial contribution to cumulatively considerable air quality impacts or conflict with implementation of the air quality management plan for the South Coast Air Basin.

5.3.3 BIOLOGICAL RESOURCES

This section addresses cumulative impacts related to special status species, habitats, and potential effects relative to the interference migratory species or corridors.

Proposed Project Impacts

The proposed Project was determined to have less than significant impacts on listed or sensitive wildlife, sensitive plants and habitat, or indirect impacts, with the exception of one federally endangered species, the San Bernardino Kangaroo Rat (SBKR), and one species of concern, the Burrowing Owl (BUOW), as well as nesting birds subject to protection under the Migratory Bird Treaty Act. However, with implementation of mitigation measures, potential impacts would be less than significant for the Project area.

Cumulative Impacts under Projected Build-Out Conditions

Although, the RSP has the potential to impact the species listed above, project level impacts would be less than significant with the application of mitigation measures. These measures include the provision of replacement habitat in the event that the SBKR or BUOW are found on the project. Since mitigation reduces project impacts to levels that are less than significant, and since the replacement of occupied habitat is required if SBKR BUOW are found on the Project area, cumulative impacts would be less than significant.

Mitigation Measures

Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The proposed Project would not make a substantial contribution to cumulative considerable impacts to biological resources.

5.3.4 GREENHOUSE GAS EMISSIONS

This section addresses cumulative impacts related to greenhouse gas emissions and compliance with the applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Cumulative Impacts under Projected Build-Out Conditions

As climate change impacts are cumulative in nature, no typical single project can result in emissions of such a magnitude that it, in and of itself, would be significant on project basis. Therefore, as the change in GHG emissions would not result in any new exceedance of the SCAQMD proposed thresholds, the proposed projects would result in less than significant cumulative impacts on GCC.

The Renaissance Marketplace and Planning 108 projects would be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the components. With implementation of Project Feature GHG-1 and application of regulatory requirements, the Project would not conflict with or impede implementation of reduction goals identified in AB 32, the Governor's EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. Therefore, the contributions of these projects to cumulative GHG emissions would be less than significant.

Mitigation Measures

Implementation of Mitigation Measure GHG-1 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The proposed Project would not make a new substantial contribution to cumulative considerable impacts to greenhouse gas emissions.

5.3.5 HYDROLOGY AND WATER QUALITY

Hydrology and water quality impacts relate to the potential for violation of water quality standards, groundwater supplies, and drainage patterns.

Proposed Project Impacts

Due to its size, the proposed Project, including the Renaissance Marketplace and Planning Area 108 components, has the potential to adversely affect the hydrology and water quality of the proposed Project area and the surrounding vicinity. However, the Recirculated Draft SEIR found potential impacts to be less than significant. With compliance with applicable local, State, and federal regulations, impacts to water quality standards and requirements were found to be less than significant for the construction of the Project. Operational impacts were found to be potentially significant to water quality; although with implementation of the recommended mitigation measures, potential water quality impacts would be reduced to a less than significant level. The Project's proposed drainage facilities would be sized to adequately treat runoff water from the Project area. Implementation of the recommended mitigation measures would reduce impacts related to stormwater runoff to less than significant.

Cumulative Impacts under Projected Build-Out Conditions

The potential for hydrology and water quality impacts is the areas immediately upstream and downstream of the RSP Amendment area. As development occurs, local surface and groundwater resources will be incrementally impacted as native soils are covered over, which will decease percolation and increase runoff and urban pollutants. These impacts will be reduced as long as local water agencies maintain their Urban Water Management Plans, which are now required by recent changes in State law. In addition, the cumulative projects, including the proposed project, will be required to prepare Stormwater Pollutant Prevention Plans (SWPPP), which will prevent construction-related pollutants from contaminating stormwater. Larger future development projects will be required to prepare Water Quality Management Plans (WQMP), based on the size and nature of the future project. The proposed project's Water Supply Assessment states that the local water providers have the ability and supply to meet projected water demands, including the proposed projects, in the year 2025. Buildout of the City of Rialto has been evaluated in the Urban Water Management Plans, so future development is included within the projected water demand for these agencies, and thus potential impacts will be less than significant. Some of the proposed projects will be required to produce WSA based on their nature and size. Some of the cumulative projects as proposed will be built within the Federal Emergency Management Agency (FEMA) 100-year flood plains; however, to of Rialto's Development Code. For the preceding reasons, cumulative impacts will not be considerable.

The City of Rialto General Plan concludes that water supply impacts will be potentially significant, but can be mitigated, avoided, or reduced to a less than significant level. Goals and policies within the City of Rialto General Plan will assist the reduction of potential impacts to a less than significant level.

Mitigation Measures

Implementation of Mitigation Measures HYD-1, HYD-2, HYD-3, HYD-4, HYD-5, and HYD-6 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The proposed Project would not make a substantial contribution to cumulatively considerable impacts to hydrology and water quality.

5.3.6 NOISE

Noise impacts relate to exposing persons to generation of noise levels and/or groundborne vibrations levels above applicable standards, and increasing temporary or permanent noise levels above applicable standards.

Proposed Project Impacts

The proposed Project was found to exceed noise standards within the City of Rialto General Plan and for the County of San Bernardino. Compliance with the restrictions on construction hours permitted by the City would be sufficient to reduce the construction noise to a less than significant level. With implementation of recommended mitigation measures, construction-related and long-term on-site stationary source impacts would be reduced to less than significant levels. The proposed Project, including the Renaissance Marketplace and Planning Area 108 components would cause potentially significant traffic noise level increases. However, implementation of recommended mitigation measures would reduce impacts to a less than significant level.

Cumulative Impacts under Projected Build-Out Conditions

The universe for noise impacts is the general areas east, west, and south of the site, since the areas to the north are separated from the site by the SR-210 Freeway. An area of an approximate one-mile radius around the site to the east, south, and west is considered the universe for noise impacts. Cumulative traffic increase and resulting noise can be attributed to these projects plus ambient traffic near the project area. Project cumulative noise levels are shown in **Table 5-4**.

Table 5-4 Cumulative Year (2035) Traffic Noise Levels Without and With RSPA

	Cumulative Year (2035) Without RSPA (Baseline)					Cumulative Year (2035) With RSPA (including Renaissance Marketplace and Planning Area 108)						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Casmalia Street between Alder Avenue and Locust Avenue	12,600	< 50	87	187	67.9	19,500	6,900	54	116	250	69.8	1.9
Casmalia Street between Locust Avenue and Linden Avenue	4,600	< 50	< 50	96	63.5	11,500	6,900	< 50	82	176	67.5	4.0
Casmalia Street between Linden Avenue and Ayala Drive	4,800	< 50	< 50	98	63.7	11,000	6,200	< 50	79	171	67.3	3.6
Renaissance Parkway west of Alder Avenue	5,300	< 50	70	148	65.3	21,300	16,000	82	173	371	71.3	6.0
Renaissance Parkway between Alder Avenue and Locust Avenue	7,100	< 50	85	179	66.5	21,700	14,600	83	175	376	71.4	4.9
Renaissance Parkway between Locust Avenue and Linden Avenue	5,200	< 50	70	146	65.2	19,100	13,900	77	161	346	70.8	5.6
Renaissance Parkway between Linden Avenue and Ayala Drive	6,700	< 50	82	173	66.3	22,300	15,600	84	179	383	71.5	5.2
Renaissance Parkway east of Ayala Drive	7,000	< 50	84	178	66.5	13,800	6,800	63	130	278	69.4	2.9
Baseline Road west of Alder Avenue	18,200	74	156	335	70.6	31,400	13,200	105	224	481	73.0	2.4

Table 5-4 Cumulative Year (2035) Traffic Noise Levels Without and With RSPA (continued)

	Cumulative Year (2035) Without RSPA (Baseline)					Cumulative Year (2035) With RSPA (including Renaissance Marketplace and Planning Area 108)						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Baseline Road between Alder Avenue and Locust Avenue	20,500	80	169	362	71.1	33,600	13,100	110	234	503	73.3	2.2
Baseline Road between Locust Avenue and Linden Avenue	17,100	71	150	321	70.3	30,700	13,600	104	221	474	72.9	2.6
Baseline Road between Linden Avenue and Ayala Drive	20,200	79	167	359	71.1	34,900	14,700	113	240	516	73.4	2.3
Baseline Road east of Ayala Drive	15,500	67	141	301	69.9	23,800	8,300	88	186	400	71.8	1.9
Alder Avenue south of Casmalia Street	18,600	75	158	339	70.7	32,600	14,000	108	229	493	73.1	2.4
Alder Avenue between SR-210 Ramps	18,200	74	156	335	70.6	41,500	23,300	126	269	579	74.2	3.6
Alder Avenue north of Renaissance Parkway	20,800	81	171	366	71.2	49,900	29,100	142	304	655	75.0	3.8
Alder Avenue between Renaissance Parkway and Walnut Avenue	17,400	< 50	108	232	69.3	35,600	18,200	81	173	373	72.4	3.1
Alder Avenue between Walnut Avenue and Baseline Road	15,500	< 50	100	215	68.8	27,400	11,900	68	146	314	71.3	2.5
Laurel Avenue south of Renaissance Parkway	1,500	< 50	< 50	< 50	58.6	3,800	2,300	< 50	< 50	84	62.7	4.1

Table 5-4 Cumulative Year (2035) Traffic Noise Levels Without and With RSPA (continued)

	Cumulative Year (2035) Without RSPA (Baseline)					Cumulative Year (2035) With RSPA (including Renaissance Marketplace and Planning Area 108)						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Locust Avenue south of Casmalia Street	4,800	< 50	66	139	64.8	20,900	16,100	81	171	367	71.2	6.4
Linden Avenue north of Renaissance Parkway	3,100	< 50	< 50	104	62.9	12,700	9,600	59	123	263	69.0	6.1
Ayala Drive south of Casmalia Street	18,100	74	156	333	70.6	27,400	9,300	96	205	439	72.4	1.8
Ayala Drive between SR 210-Ramps	20,800	81	171	366	71.2	34,900	14,100	113	240	516	73.4	2.2
Ayala Drive north of Renaissance Parkway	26,500	94	200	430	72.2	44,700	18,200	132	283	608	74.5	2.3
Ayala Drive between Renaissance Parkway and Leiske Drive	25,200	64	138	296	70.9	38,900	13,700	86	184	396	72.8	1.9
Ayala Drive between Baseline Road and Fitzgerald Avenue	20,100	55	119	255	69.9	31,400	11,300	74	159	343	71.9	2.0
Locust Avenue between Renaissance Parkway and Miro Way	4,100	< 50	< 50	89	63.0	18,800	14,700	53	113	244	69.6	6.6
Locust Avenue between Miro Way and Baseline Road	1,400	< 50	< 50	< 50	58.3	14,200	12,800	< 50	94	202	68.4	10.1

Table 5-4 Cumulative Year (2035) Traffic Noise Levels Without and With RSPA (continued)

	Cumulative Year (2035) Without RSPA (Baseline)					Cumulative Year (2035) With RSPA (including Renaissance Marketplace and Planning Area 108)						
Roadway Segment	**ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**ADT**	**Change in ADT**	**Centerline to 70 dBA CNEL (ft)**	**Centerline to 65 dBA CNEL (ft)**	**Centerline to 60 dBA CNEL (ft)**	**CNEL (dBA) 50 ft from Centerline of Outermost Lane**	**Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane**
Linden Avenue between Renaissance Parkway and Miro Way	3,800	< 50	< 50	84	62.7	14,500	10,700	< 50	95	205	68.5	5.8
Linden Avenue between Miro Way and Baseline Road	2,400	< 50	< 50	62	60.7	12,500	10,100	< 50	86	186	67.9	7.2
Miro Way between Locust Avenue and Linden Avenue	900	< 50	< 50	< 50	56.4	3,600	2,700	< 50	< 50	81	62.4	6.0

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = feet

Source: Compiled by LSA Associates, Inc. (2015).

Mitigation Measures

Implementation of Mitigation Measures NOI-1, NOI-2, NOI-3, and NOI-4 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The proposed Project would not make a substantial contribution to cumulatively considerable impacts to noise impacts.

5.3.7 TRAFFIC AND TRANSPORTATION

Transportation and traffic addresses the impacts of the Project on roadway and intersection capacity and level of service (LOS), as well as road hazards, emergency access, and plans for alternative transportation.

Proposed Project Impacts

Based on the Project's traffic impact analysis of the RSPA, the Renaissance Marketplace project, and the Planning Area 108 project, the proposed Project would result in significant impacts to study intersections level of service. With implementation of the recommended mitigation measures, the impact due to increased traffic at intersections will be less than significant. The Project was determined not to increase hazards substantially as long as all applicable City regulations are abided by and contributions to area-wide traffic improvements are completed. The circulation system for the Specific Plan Amendment provides multi-modal access to serve vehicles, bicycles, and pedestrians. Thus, the proposed Project would not conflict with alternative transportation, and impacts are less than significant.

Cumulative Impacts under Projected Build-Out Conditions

To assess existing and ambient growth, the traffic study examined existing traffic conditions along with these related projects and projected area wide growth, with and without the proposed project. Therefore, the traffic study takes into account the cumulative impacts of the project. As growth occurs, there will be cumulatively considerable traffic impacts and congestion on SR-210. Prior to the issuance of building permits, the developer of the proposed project will be required to construct various improvements to these roadways in order to mitigate cumulative considerable impacts. Additionally, the related projects and other conduits of ambient growth will be required to abide by all applicable traffic regulations and potentially the regulations of the San Bernardino County CMP.

Mitigation Measures

Implementation of Mitigation Measures TRANS-1, TRANS-2, TRANS-3, and TRANS-4 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The proposed Project would not make a substantial contribution to cumulatively considerable impacts to traffic and transportation impacts.

5.3.8 UTILITIES

Utilities impacts related to the construction of new storm water drainage facilities or expansion of existing facilities and the availability of water supplies to serve the Project from existing entitlements and resources, or are new or expanded entitlements.

Proposed Project Impacts

The Project area considered by this Recirculated Draft SEIR is limited to areas of the RSP entirely located within the water service area of the City of Rialto, the Recirculated Draft SEIR has confirmed the City of Rialto would have adequate supply available to serve the Project area. In addition, there are existing lines in the area and it is unlikely that off-site construction would be needed to supply water to the Project area. Therefore, no capital improvements on the existing water supply infrastructure are required in addition to any associated fees and thus the Project-related impacts to the environment through the construction or expansion of existing facilities would be less-than- significant.

The proposed Project, including the Renaissance Marketplace and Planning Area 108 components, would not result in new or previously unidentified potential impacts to stormwater infrastructure in the vicinity of the RSP area. As was determined for build-out of the RSP in the RSP EIR, impacts of the proposed Project would be less-than-significant.

Cumulative Impacts under Projected Build-Out Conditions

The cumulative projects and future City projects will most likely necessitate the expansion of existing facilities. The burden of improving these facilities will be shared amongst the additional users through payment of development impact fees, which will pay their respective “fair-share” of costs associated with required expansions at the reclamation plant. Thus, impacts in this regard will not be cumulatively considerable.

As development occurs, local surface and groundwater resources will be incrementally impacted as native soils are covered over, which will decease percolation and increase runoff and urban pollutants. These impacts will be reduced as long as local water agencies maintain their Urban Water Management Plans, which are now required by recent changes in State law. The individual cumulative projects will be required to abide by all applicable regulations for storm water quality. These may require the preparation of the following:

• Water Quality Certifications from the RWQCB;

• SWPPP to prevent adverse water quality affects; and

• WQMP based on the nature and size of the proposed project.

These measures are required to be implemented in order to maintain effluent flows and pollutant concentrations to approximately their current levels. The City of Rialto General Plan identifies the drainage impacts of the City at buildout to be less than significant. Therefore, as long as the cumulative projects abide by the goals and policies of the General Plan and all other applicable regulations, the impacts to stormwater drainage will not be cumulatively considerable.

The proposed project's Water Supply Assessment states that the local agencies have the ability and supply to meet projected water demands, including the proposed projects, up to the year 2025. Since three water districts currently provide water to the project area, the WSA looked at the capacity of each district to supply their area of responsibility within the project area. The cumulative projects can be included within the projected water demand, and thus impacts will be less than significant. Some of the proposed projects will be required to produce WSA based on their nature and size. In order to ensure its long-term ability to serve all future water demands within its service area, the water districts intend to pursue multiple strategies including:

• Purchasing or leasing additional groundwater rights from willing parties within the local groundwater basin;

• Multiple forms of potential coordination with the Metropolitan Water District (MWD) to secure additional imported water supplies from northern California;

• Banking imported water within the local basin pursuant to a storage agreement with the Chino watermaster;

• Constructing a surface water treatment facility; and

• Implementing a water-recycling program.

The City of Rialto General Plan identifies the water supply impacts as potentially significant adverse effects that can be mitigated, avoided, or substantially lessened. The goals and policies of the General Plan assist the mitigation of adverse impacts to less than significant levels. Therefore, as long as the cumulative projects abide by the goals and policies of the General Plan as well as follow all other applicable water supply requirements, the impacts to water supplies will not be cumulatively considerable.

The development of the cumulative projects will incrementally increase the amount of solid waste requiring disposal. The solid waste from the cumulative projects will be transported to the Mid-Valley Sanitary Landfill, which currently has a closure date of 2033. Since the closure date is approximately 23 years from now, the impacts in regards to solid waste disposal will not be cumulatively considerable.

Since effects to all individual utilities have been determined to be not cumulatively considerable, the impacts in totality will not be cumulatively considerable.

Mitigation Measures

Implementation of Mitigation Measure HYD-1 would reduce potential impacts to less than significant.

Level of Significance after Mitigation

The proposed Project would not make a substantial contribution to cumulatively considerable impacts to utilities.

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6 GROWTH, UNAVOIDABLE, IRREVERSIBLE IMPACTS

6.1 GROWTH-INDUCING IMPACTS

A project may have two types of growth inducing impacts: direct and indirect. To assess the potential for growth-inducing impacts, the Project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated under the California Environmental Quality Act (CEQA Guidelines Section 15126.2[d]).

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area, such as a new residential community, that requires additional commercial uses to support residents.

The Project proposes to increase the business and commercial uses from 9.3 million square feet (835,200 square feet of which is existing and expected to remain) in the 2010 RSP EIR to 10.7 million square feet (818,583 square feet of which is existing and expected to remain), and decrease the residential uses from 1,667 units (149.5 acres) to 1,262 units (104.5 acres).

The business and commercial uses included in the proposed Project would be expected to result in 13,882 new jobs (314 more than what was previously analyzed in the 2010 RSP EIR), most of which would be occupied by employees expected to reside in surrounding areas. However, it is unknown as to what proportion of the new employees of the proposed Project would be or become residents to the City of Rialto. Assuming, as a worst case scenario that all employees will come from outside the City of Rialto, the population influx of project employees into the City would represent approximately 48 percent of the City's projected population growth from 2010 to 2030 (13,882 employees compared to 28,996 residents). The Project contributes significantly to the predicted population growth compared to the predicted population growth of the City, and would therefore have a growth-inducing impact on the City of Rialto and surrounding areas. However, the large influx of employment that will be associated with the Project is expected to have a generally beneficial impact on Rialto and the surrounding communities in terms of providing a better balance of jobs with housing, reduced commute lengths, reduce vehicle miles traveled and associated reductions in air pollutant and greenhouse gas emissions.

The County of San Bernardino is expected to grow by 775,704 persons from 2010 to 2030. The RSP (RSP) Project area represents an increase of approximately 2 percent of the population throughout the County. Therefore, the proposed Project also will also have a regional growth-inducing impact with respect to population.

The proposed Project is a redevelopment/reuse of infill land within the borders of the City of Rialto. The Project would not result in the extension of roads or other infrastructure into undeveloped areas that are outside of the Project boundary. Since this Project is wholly within an urbanized area it would not encourage growth to extend into outlying rural areas.

6.2 UNAVOIDABLE ADVERSE IMPACTS

CEQA Guidelines Section 15126.2(a)(b) requires an Environmental Impact Report (EIR) to identify and focus on the significant environmental effects of the proposed Project, including effects that cannot be avoided if the proposed Project were implemented.

This section describes significant impacts, including those that can be mitigated but not reduced to a less than significant level. Where there are impacts that cannot be alleviated without imposing a Project alternative, their implications, and the reason why the Project is being proposed, notwithstanding their effect, are described. Development of the proposed Project, including implementation of recommended mitigation measures, will result in some of the same impacts that were identified in the previously certified 2010 RSP EIR. The following four impacts include:

Air Quality

- Construction air emissions: Construction of the Project would exceed the South Coast Air Quality Management District's (SCAQMD's) regional significance emission thresholds for Volatile Organic Compound (VOC), Carbon Monoxide (CO), Nitrogen Oxides (NO_x), PM_{10}, and $PM_{2.5}$ emissions during one or more of the Project's construction periods from 2009 to 2019 after application of mitigation measures.
- Operational air emissions: During all operational phases, the operation of the proposed Project would exceed the SCAQMD's regional significance emission thresholds for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ after application of mitigation measures.
- Cumulative air quality emissions: Because construction and operational emissions would exceed SCAQMD thresholds, the proposed Project would have significant cumulative air quality impacts. No mitigation is available to reduce this impact to a less than significant level.

Climate Change

- Climate Change impacts (Inventory and AB 32): Greenhouse gas emissions from construction and operation of the Project has the potential to be inconsistent with AB 32's Greenhouse Gas (GHG) reduction goal by failing to reduce GHG emissions by at least 28 percent below a California Air Resources Board (ARB) 2020 No Action Taken Scenario. Despite the fact that the proposed Project could potentially meet AB 32's GHG emissions reduction goal, it cannot do so without the actions of multiple third parties, including but not limited to CARB, EPA, and local air districts, who must adopt and fully implement GHG reduction requirements applicable to numerous other economic sectors. The City of Rialto lacks the authority to compel these third party agencies to engage in these activities. Pursuant to CEQA Guidelines Section 15091(a)(2), lead agencies may not rely upon mitigation that is within the responsibility or jurisdiction of another public agency.

6.3 2010 RENAISSANCE SPECIFIC PLAN ENVIRONMENTAL IMPACT ANALYSIS SUMMARY

The Final Environmental Impact Report for the 2010 Renaissance Specific Plan identified the following impacts of the specific plan cannot be mitigated to a level that is less than significant: short-term air quality impacts (construction), long-term air quality impacts (operational, cumulative, and inconsistency with the Air Quality

Management Plan (AQMP)), long-term noise impacts (Project traffic on off-site roads), transportation impacts (freeway congestion), and climate change impacts (cumulative). The Rialto City Council determined, based on the facts set forth in the administrative record, those facts contained in the Final EIR, and any other facts set forth in materials prepared by the City and/or City consultants, that there are no feasible mitigation measures, beyond those contained within the Final EIR, that can mitigate the identified project specific and cumulative impacts identified above, to a level of less than significant. Therefore, as outlined in CEQA Section 21081(b) and CEQA Guidelines section 15093, a Statement of Overriding Considerations was adopted by the City.

The Statement of Overriding Considerations was adopted because the EIR prepared for the 2010 Renaissance Specific Plan identified significant adverse unavoidable environmental impacts. Even though these adverse impacts were not reduced to a level considered less than significant, the City determined, after balancing these impacts with the benefits of the proposed specific plan, that those impacts were outweighed by the benefits of the Renaissance Specific Plan. The City had also examined alternatives to the proposed project. Alternatives were set forth in the EIR were determined to be either no better environmentally and/or infeasible because they would have prohibited the realization of project objectives (and/or specific economic, social, and other benefits that the City finds outweigh any environmental benefits of the alternatives).

6.4 IRREVERSIBLE IMPACTS

The CEQA Guidelines describe the following three distinct categories of significant irreversible changes.

6.4.1 CHANGES IN LAND USE THAT WOULD COMMIT FUTURE GENERATIONS

The Project proposes to develop 1,439.5 gross acres of land into an integrated mixed-use community, which combines a variety of housing types with opportunities for employment, services and schools. The proposed plan would replace the existing Rialto Airport Specific Plan. Since the Rialto Airport Specific Plan was based on continued use of the airport, the closure and relocation of airport activities has rendered significant portions of this specific plan irrelevant. The 2010 RSP outlined a new vision for use of the airport and its immediate surroundings and that does not change with the proposed RSP Amendment. The proposed Project reflects current City of Rialto planning and policy, and takes into account the closure of the airport. Therefore, impacts to applicable land use plans, policies, or regulations are considered less than significant.

6.4.2 IRREVERSIBLE CHANGES FROM ENVIRONMENTAL ACTIONS

Irreversible changes to the environment could occur if hazardous substances are released during development of the Project. Compliance with the requirements and mitigation measures contained in Section 4.7 (Hazards and Hazardous Materials) of the RSP Final EIR would reduce impact to less than significant levels.

The proposed development will also preclude any potential reuse at the airport for aviation. However, that issue was previously evaluated in the 2010 RSP EIR and development pursuant to the approved RSP has already been constructed or permitted in and around the former Rialto Airport property.

Consumption of non-renewable resources would include the conversion of agricultural land, loss of potential mining resources, and consumption of energy resources such as electricity and natural gas. The previously certified 2010 RSP EIR identified that there is no Prime Farmland of Farmland of Statewide Importance within the Project area, and the Project area is not identified as a mineral resource site. Therefore, the proposed Project would not cause a significant impact in this regard.

The development of the Project area would use non-renewable resources during the construction and future use of development within the RSP Amendment area. The use of non-renewable and slowly renewable resources for the construction of homes, offices, employment centers, commercial centers such as those included in the proposed Project is typical of development throughout the region. These resources include, but are not limited to lumber and other forested products, sand and gravel, asphalt, petrochemical construction materials, steel, copper, lead, other metals, and water. No shortage of building materials have been identified that would result in a significant shortage or permanent loss of resources. No other sources of irreversible changes from environmental actions are forecast to occur.

6.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

Environmental issues presented under the Significance Criteria sub-section of all environmental topics in Chapter 4 of this Recirculated Draft SEIR were derived from environmental issues and topics identified in Appendix G of the CEQA Guidelines. The only environmental issues in Appendix G not presented in Chapter 4 were those where the Project either had no impact or a less-than-significant impact under all issues under an environmental topic, and they are as follows:

Agriculture and Forestry Resources. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would have a significant impact on agriculture or forestry resources if the proposed project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

- Conflict with existing zoning for agricultural use, or a Williamson Act contract;

- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));

- Result in the loss of forest land or conversion of forest land to non-forest use; or

- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

The Project area is partially developed with former industrial and commercial land uses, primarily associated with former airport facilities. The Project would not adversely affect any existing agricultural resources or operations. The property does not contain any forest land or support forestry services. No Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance is mapped in the Project vicinity, so the proposed Project would not adversely affect other agricultural properties or result in the conversion of farmland to non-agricultural use or forest land to a non-forestry use.

The Project area is currently developed with office buildings. The site's agricultural timberland production potential is low due to existing on-site development as well as surrounding development. State farmland mapping shows the Project area as "Other Land" and "Urban and Built-Up Land," indicating that this land has already been converted to non-agricultural use.[1] There are no existing agricultural or forestry uses/operations at or adjacent to the site. The Project area is not zoned for agriculture or timberland uses or subject to a Williamson Act contract.

Cultural Resources. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on mineral resources if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

The proposed Project would not affect any site presently listed on a local, state, or National historical register. The potential for significant impacts to buried resources is considered low based on consultation with the Native American Heritage Commission (NAHC). However, to reduce this potentially significant impact to a level of less than significant, mitigation measures from the previously certified 2010 Renaissance Specific Plan EIR will be applicable to the proposed Project, including Mitigation Measure CR-4, which requires monitoring of development-related excavation is required during all construction-related ground disturbances.

The project area has both a low and undetermined probability of containing significant paleontological resources. According to the 2010 Renaissance Specific Plan EIR, implementation of mitigation is required on portions of the Specific Plan area located between Linden Avenue and the eastern Specific Plan boundary, including areas considered by the proposed Project for land use re-designation and for the specific Renaissance Marketplace component of the Project. According to the EIR prepared for the 2010 Renaissance Specific Plan, the Project area is not located within a known or suspected cemetery and there are no known human remains within the Project area.

Hazards and Hazardous Materials. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on mineral resources if the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

[1] California Department of Conservation, Division of Land Resources Protection, 2003. *Santa Clara County Important Farmland 2002*. July.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Potential impacts related to the presence of contaminated soils and disposal of contaminated soils during construction would be mitigated to a level of less than significant with implementation of mitigation measures identified in the EIR prepared for the 2010 Renaissance Specific Plan. The proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Project area is not included on a hazardous sites list compiled pursuant to California Government Code Section 65962.5[2].

No schools are presently located within one-quarter mile of the Specific Plan area; the closest school site is Locust Elementary School, located 1/3 mile southwest of the Specific Plan area. Any future school developed on-site and within the surrounding area would be subject to the oversight of the California Department of Toxic Substances Control, as required by State law.

The Rialto Municipal Airport formerly occupied a substantial portion of land within the Specific Plan area. It is anticipated that the operations of this airport will be transferred to the San Bernardino International Airport (former Norton Air Force Base) located approximately 11 miles southeast of the site. The Project area is not located within two miles of a private airstrip.

The proposed Project would not impair or physically interfere with an adopted emergency response or evacuation plan. The proposed Project would not expose people or structures to a risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. According to the EIR prepared for the 2010 Renaissance Specific Plan, the County General Plan indicates that the area is categorized as having a “low” risk from wildland fires.3

[2] California, State of, Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed: October 8, 2014.
[3] Michael Brandman Associates. Draft Environmental Impact Report for the Renaissance Specific Plan, Rialto, California. May 3, 2010

Mineral Resources. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on mineral resources if the proposed project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

The City of Rialto General Plan does not identify any regionally or locally important mineral resources on the Project area. The proposed Project would not remove any locally or regionally important mineral resources from production or preclude access to important mineral resources.

Land Use. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on population or housing if the proposed project would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The proposed Project does not include the construction of public roads, structures, or other improvements that would physically divide or separate neighborhoods within the established community. The proposed Project would not conflict with applicable land use plans, policies, or regulations, including the Southern California Association of Governments' (SCAG) Regional Transportation Plan (RTP) 2012-2035 Sustainable Communities Strategy (SCS) (adopted April 2012) and the City of Rialto General Plan (updated December 2010). The project is located within the 2010 Renaissance Specific Plan area, but is not consistent with land use designations and zoning for specific lots as defined within the Specific Plan area. However, the proposed land uses represent some re-distribution of previously-identified land uses in the Renaissance Specific Plan. Since the proposed Project would be consistent with the 2010 Renaissance Specific Plan. The land uses are generally the same or very similar to what was proposed in the 2010 plan however, the redistribution and relocation of the land uses in intended to provide a more efficient land use concept and to better separate residential and non-residential uses for better land use compatibility. No land use conflicts have been identified. The potential environmental effects of the proposed land use changes are evaluated in the other chapters of this EIR. According to the EIR prepared for the 2010 Renaissance Specific Plan, the Specific Plan area is not located within a habitat conservation plan or natural community's conservation plan.

Population and Housing. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on population or housing if the proposed project would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

No potentially significant impacts to population and housing are identified in the 2010 Renaissance Specific Plan EIR. Residential land uses proposed by the Project would not exceed residential land uses as planned by the 2010 Renaissance Specific Plan EIR

Public Services. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on population or housing if the proposed project would:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

    - Fire protection?

    - Police protection?

    - Schools?

    - Parks?

    - Other public facilities?

Police and fire protection for the proposed Project would be handled by those agencies already providing these services to the immediate vicinity. As a means to provide adequate funding for fire protection, police, and other essential public services, the city has established development impact fees that are charged to all new development within Rialto. Therefore, implementation of the proposed Project, with payment of the required development impact fees, would result in a less than significant impact on emergency services, fire protection, and police protection. Implementation of a Traffic Control Plan, as determined necessary by the City of Rialto, would reduce the potential for short term impacts to emergency services, fire, and police protection to occur. Furthermore, no potentially significant impacts to schools, parks or other public facilities, are identified in the 2010 Renaissance Specific Plan EIR.

In addition, there are fewer residences proposed with the RSPA than identified in the 2010 Renaissance Specific Plan EIR and therefore, fewer students will be generated with the project. Future development within Renaissance Specific Plan will pay development impact fees as established by applicable school district at the time building permits are issued. The proposed project provides for a future K-8 school within the RSPA area. Future high school students would attend existing high schools within the Rialto Unified School District or the Fontana Unified School District.

Recreation. Based on criteria derived from Appendix G to the CEQA Guidelines, a project would normally have a significant impact on population or housing if the proposed project would:

- Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

- Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No potentially significant impacts to neighborhood and regional parks or other recreational facilities are identified in the 2010 Renaissance Specific Plan EIR.

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7 ALTERNATIVES

7.1 DEVELOPMENT OF ALTERNATIVES

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this Draft Environmental Impact Report (EIR) contains a comparative impact assessment of alternatives to the proposed Project. The primary purpose of this section is to provide decision makers and the public with a reasonable degree of feasible Project alternatives that could attain most of the basic Project objectives, while avoiding or reducing any of the Project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines Section 15126.6):

- An EIR need not consider every conceivable alternative to a Project;
- An EIR should identify alternatives that were considered by the Lead Agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic Project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects

7.2 PROJECT CHARACTERISTICS AND OBJECTIVES

Section 3.0, *Project Description*, indicates that the proposed Project is an amendment to the approved 2010 RSP. The goal of the RSP Amendment is the relocation of business and industrial uses to the west of Linden Avenue, relocating all residential land uses and the public park to the east of the Linden Avenue, and implementation of the Renaissance Marketplace retail development.

The proposed Project considered by this Recirculated Draft SEIR includes the following actions:

- An update of the 2010 Renaissance Specific Plan and related texts and figures throughout the RSP
- Updates to residential development standards to reflect housing trends
- Relocation of all residential land uses to the east of Linden Avenue
- Relocation of Business Center land use to west of Linden Avenue
- Precise Plan of Design for the Renaissance Marketplace retail development
- Precise Plan of Design for the Planning Area 108 development
- Change in Land Use in Planning Area 19
- Change FAR of Corp Center from .75 to .50
- Potential interim storm drain basins
- Maintain Renaissance Parkway in its current alignment
- Revised Sign Standards for freeway pylon signs

- Revised street sections
- Terminate Miro Way east at Linden Avenue
- Increased public park area
- Relocation of public school site to east side of Linden Avenue

As a component of the proposed Project, the Renaissance Marketplace would be an approximately 566,764 square foot retail center. The retail center would include a 139,896 square foot free-standing discount super store, plus additional major retail sites, a health club, a movie theater, restaurants, a gas station, a day care center, a drug store, and additional in-line retail. Access to the Renaissance Marketplace would be provided from Renaissance Parkway, Ayala Drive, Linden Avenue and a proposed street that would provide access to the residential planning areas south of the Renaissance Marketplace. The Renaissance Marketplace would be constructed in two phases.

The Planning Area 108 component of the proposed Project would include approximately 4 million square feet of industrial/warehouse uses. The development would include three building, each between 1.2 and 1.4 million square feet. Planning Area 108 is located on the north side of Miro Way between Locust and Linden Avenues. Access to the proposed industrial/warehouse uses would be provided by four driveways on Locust Avenue, three driveways on Linden Avenue, and one driveway on Miro Way. The development in Planning Area 108 would be constructed in three phases.

As stated in Section 3.0, *Project Description*, a clear statement of Project objectives will assist the City in developing a reasonable range of alternatives, and aids the decision-makers in their consideration of the Project. According to the developer and City staff, the proposed Project has the following objectives:

- To implement the approved RSP as amended;
- To facilitate the redevelopment of the former Rialto Municipal Airport;
- To implement and facilitate the development the Renaissance Marketplace retail project;
- To implement and facilitate the development of the Planning Area 108 industrial/warehouse project;
- To facilitate development through efficient land use planning and phased infrastructure design;
- To provide a range of housing options including single-family (detached and attached) housing and multi-family housing that are financially self-supporting and contribute to the City's economic base;
- To create public recreational and open spaces;
- To create an expanded Business Center capable of accommodating a wide range of land uses contributing to jobs-housing balance, including commercial, employment, business center, educational, and corporate center uses;
- To create a range of job and economic development opportunities for local individuals and businesses; and
- To develop a master planned community that has a unique character and quality with a commitment to sustainability, flexible planning, high quality architecture and site design, and the provision of attractive on-site open space, public spaces, recreational facilities, and landscape design.

7.3 PROPOSED PROJECT – SIGNIFICANT IMPACTS

This EIR has identified the following significant impacts of the Proposed RSP Amendment Project:

- Short-Term Air Quality (construction);
- Long-Term Air Quality (operation, cumulative);
- Greenhouse Gas Emissions (cumulative impact).

7.4 ALTERNATIVES EVALUATED BUT REJECTED AS INFEASIBLE

This analysis incorporates the alternatives previously evaluated in the 2010 RSP EIR. The potential for alternatives for the Specific Plan area is limited because many of the sites surrounding the specific plan area have been developed or have been approved for development based on the approved 2010 RSP. These constructed or approved developments occur mostly within the Employment or Business Center land use areas. Therefore, some alternative land use plans were not considered because altering the land use mix would not be possible due approved development already implementing the land use and reducing or eliminating land uses within the Specific Plan Amendment area would result in an imbalance of the land use mix originally planned in approved Specific Plan. Alternative designs similar to the Proposed RSP Project, consistent with the General Plan's specific plan designation, were considered, but were eventually rejected because they would cause the same or equivalent environmental impacts compared to the proposed Project, mainly due to the size of the site and the expected level of development a site of this size would reasonably support.

Alternative Sites Analysis

CEQA requires the evaluation of alternative sites if moving the proposed Project to another site would eliminate or avoid one or more significant impacts of the proposed Project. The impacts to both short-term and regional long-term air quality would occur regardless of location, with the exception of potential health risks to sensitive receptors due to the proximity of residential uses to this site. The significant impact from noise would also be reduced if the RSP Project were moved to a different location, if that location were not adjacent to residential areas.

But, again it is not likely that such adjacency issues would not occur for other infill sites. The proposed uses of the RSP Project would generate similar levels of noise on any alternate site. Furthermore, an alternate site would result in equal trips generated as the proposed Project, so air quality and global climate change impacts from construction or from vehicle trip generation would remain significant and unavoidable. It is also unknown if an alternative site would have immediate access to rail or public transit. The Project area contains no appreciable amount of occupied habitat, which could be present on other sites.

This analysis demonstrates that impacts of development as proposed on an alternative site would be equivalent to those of the proposed Project if it were developed in the same general area of the City. However, no sites of this size zoned for similar types of uses are available within the City or have such an optimum location relative to nearby freeways.

Furthermore, the proposed Project is amending an approved Specific Plan. These proposed land uses have already been approved, but are proposed to be reorganized within a portion of the existing RSP. As development and

entitlements have already been approved in portions of the RSP, relocating the residential, commercial, and town center components of the specific plan would upset the balance of land uses and proposed infrastructure plans intended to make the RSP area an efficient land use design. Therefore, an alternative site is not a feasible or viable option for this Project.

7.5 ALTERNATIVES SELECTED FOR DETAILED ANALYSIS

After review of an extensive range of potential alternatives to the proposed Project, the following were selected for more detailed analysis in this section:

- **No Project – No Development Alternative:** The Project area would remain in its existing condition and the proposed Project would not be developed.
- **Reduced Site Plan Alternative:** This alternative would develop approximately eight million square feet of low intensity business and commercial uses as well as 800 single-family residential units on the site compared to the proposed Project.
- **Mixed Use I Alternative:** This alternative examined impacts from a total of 14.5 million square feet of new development, including 2 million square feet of commercial uses, approximately 6.8 million square feet of business park uses, 5.7 million square feet of light industrial uses, up to 1,747 residential units near the existing residential neighborhoods south of Baseline Road, and various public uses.
- **Mixed Use II Alternative:** This alternative examined impacts from a total of 6.86 million square feet of new development, including 0.4 million square feet of commercial uses, approximately 6.4 million square feet of business park and light industrial uses, up to 3,853 residential units, and various public uses.
- **Technology/Education Park Alternative:** This alternative would utilize the site for a mixture of educational and business park uses that focused on high or green technologies, plus a number of educational uses such as private and/or public schools, parks, a community center, etc.
- **Alternative Sites:** Due to the various environmental constraints and opportunities of the proposed Project area (i.e., proximity to the SR-210 Freeway, closure of the Rialto Airport, etc.), no alternative sites to the proposed Project area is available to be examined.

The following sections analyze these potentially feasible alternatives to the proposed Project. This analysis compares the proposed Project and each individual Project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of Significance (i.e., both alternatives would result in a “Less than Significant Impact”). The actual degree of impact may be slightly different under each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

7.5.1 NO PROJECT – NO DEVELOPMENT ALTERNATIVE

7.5.1.1 DESCRIPTION OF ALTERNATIVE

Under the No Project Alternative, the proposed Project would not be developed and the site would remain in its vacant condition.

7.5.1.2 IMPACT ANALYSIS

Aesthetics, Light, and Glare

This alternative would allow the site to remain in its underutilized and somewhat vacant condition. Therefore, this alternative would have reduced impacts on aesthetics, light, and glare compared to the proposed Project. However, the existing unsightly disturbed areas would remain in their present condition.

Agriculture and Mineral Resources

The site would remain vacant or support existing developed uses, so there would be no impacts related to agricultural or mineral resources. The EIR determined that the proposed Project would not have significant impacts on agricultural or mineral resources.

Air Quality

This alternative would result in no development on the site, so there would be no air quality impacts from construction or from vehicle/truck trip generation from new uses, although emissions from existing uses would remain. For similar reasons, this alternative would also eliminate potential impacts from greenhouse gas emissions. Both of these impacts were found to be significant for the proposed Project.

Biological Resources

This alternative would leave the site in its largely vacant or underutilized condition, which would allow a limited amount of plant and animal species to continue utilizing the site. The EIR concluded that the Project would not have significant impacts to biological resources (e.g., removing natural habitat that supports sensitive species).

Cultural Resources

This alternative would leave the site in its present condition so there would be no impacts on cultural resources. The EIR determined the Project would not have significant impacts to cultural resources. However, any potential impacts would be reduced to less than significant levels through the implementation of recommended mitigation measures (i.e., resource surveys, recovery, and monitoring of grading).

Geology and Soils

Under this alternative, the site would remain in its present state so there would be no potential impacts to future structures from geotechnical constraints. While the EIR determined that implementation of the proposed Project would have various geotechnical impacts, they would be reduced to less than significant levels through the implementation of the recommended mitigation measures.

Hazards and Hazardous Materials

Under this alternative, the site would remain in its present condition so there would be no increased impacts from hazards or hazardous materials associated with new uses. Implementation of the proposed Project would have impacts related to hazardous materials potentially used by various industrial uses on the site, as well as the potential for accidental spills during construction. However, these potential impacts were reduced to less than

significant levels through compliance with existing laws and regulations regarding hazardous materials, and the implementation of the recommended mitigation measures. This alternative would leave the many contaminated sites on the Project property in their present condition and would not result in their remediation or cleanup compared to the proposed Project.

Hydrology and Water Quality

Under this alternative, the site would remain in its present condition so there would be no potential impacts to existing drainages or water quality. However, this alternative would not result in improvements to drainage channels and related drainage structures, which would leave the Project area and upstream properties still vulnerable to historical flooding. With implementation of the planned flood control improvements and recommended mitigation measures, the proposed Project is not expected to produce any significant impacts to hydrology or water quality.

Land Use

The site would remain in its present condition under this alternative, which is not consistent with current land use and zoning by the City's General Plan.

Noise

This alternative would result in no increased noise impacts since the site would remain in its present condition, including vacant land and underutilized uses. Traffic from the proposed Project is expected to create significant increases in ambient traffic noise levels offsite, which cannot be mitigated to a less than significant level.

Population, Housing, and SCAG Consistency

This alternative would leave the site in its present condition and therefore would not result in increased population, housing or employment. The Project will produce these growth impacts in the Rialto area but it has been determined that the Project will be consistent with regional growth policies.

Public Services and Recreation

This alternative would result in no increase in the need for police, fire, school, or park services. Therefore, this alternative would have fewer impacts compared to the proposed Project. However, the EIR determined the RSP Project would not produce significant impacts to public services or recreation with implementation of established development impact fees and the proposed fire station site on the RSP site.

Transportation

This alternative would allow the site to remain in its present condition prevent additional impacts of traffic on local roads and the State Route 210 (SR-210) Freeway. With the exception of several freeway segments, the EIR determined that the transportation impacts of the proposed Project, relative to local roadways, intersections, and the freeways, could be reduced to less than significant levels with implementation of the recommended mitigation measures, including onsite road and intersection improvements and fair share contributions to offsite intersection and road improvements. Therefore, impacts under this alternative would be less than the Project, and significant adverse unavoidable impacts with respect to freeway congestion would be eliminated.

Utility Systems

Under this alternative, the site would remain in its present condition so there would be no potential impacts to existing or planned utility systems (i.e., no increase in the consumption of water or energy resources, or the additional production of wastewater or solid waste). With construction of planned improvements and payment of established development impact fees, the proposed Project is not expected to produce any significant impacts on these systems.

Global Climate Change

This alternative would result in no new development on the site, so there would be no global climate change impacts from construction or from truck and vehicle trip generation and greenhouse gas emissions. Therefore, this alternative would eliminate the significant unavoidable global climate change impacts of the proposed Project from its anticipated emission of greenhouse gases.

7.5.1.3 CONCLUSION

The No Project – No Development Alternative would eliminate all of the significant impacts from construction and operation of the proposed Project, including short- and long-term air quality, noise, traffic, and greenhouse gas emissions. However, this alternative does not achieve any of the objectives of the proposed Project, which is consistent with the City's General Plan, and would not generate substantial benefits to the City and local economy, mainly by providing thousands of new jobs and additional tax revenues to the City.

7.5.2 NO PROJECT – EXISTING CONDITIONS ALTERNATIVE

Under the No Project – Existing Conditions Alternative the proposed Project would not be built and the existing land uses approved with the 2010 RSP would remain in effect. Future development would be consistent with the land uses in their approved locations. Environmental impacts would be the same as those evaluated in the 2010 RSP EIR. The EIR found that significant impacts would occur to:

- Short-Term Air Quality (construction);
- Long-Term Air Quality (operation, cumulative, and AQMP inconsistency);
- Long-Term Noise (from Project traffic on offsite roads);
- Transportation (freeway congestion); and
- Greenhouse Gas Emissions (cumulative impact).

7.5.2.1 CONCLUSION

The No Project – Existing Conditions Alternative would result in an incremental increase in significant impacts from construction and operation of the proposed Project, including short- and long-term air quality, noise, traffic, and greenhouse gas emissions because the Project proposes fewer residential units, and would generate less traffic. This alternative would achieve some of the objectives of the proposed Project, which is consistent with the City's General Plan, but would not result in an efficient land design and infrastructure use.

7.5.3 REDUCED SITE PLAN ALTERNATIVE

7.5.3.1 DESCRIPTION OF ALTERNATIVE

This alternative was included in the 2010 RSP EIR and would have the same results for the proposed Project. This alternative proposes to reduce development within the residential and commercial areas. The proposed Project includes 405 fewer residential units than the 2010 RSP and approximately 1.2 million square feet more of commercial and industrial area than the 2010 RSP. As such, the reduced Site Plan alternative would still have fewer residential units and commercial area than the proposed Project. The RSP Amendment area has both residential and commercial areas within the RSP Amendment Area. Therefore, the analysis for this Alternative would remain the same for the Specific Plan Amendment as it was evaluated for the 2010 RSP. The analysis from the 2010 RSP EIR is provided below.

This alternative would develop approximately 8 million square feet of low intensity business and commercial uses as well as 800 single-family residential units on the site compared to the proposed Project. Based on rates similar to those of the proposed Project, this alternative would generate a population of 2,480 new residents compared to 5,167 residents from the proposed Project (-54 percent), and 7,135 new employees compared to 13,618 employees under the proposed Project (-47 percent). That area that would be disturbed by new development would remain essentially the same. Development under this alternative have less density and intensity compared to the proposed Project. A summary of land uses for this alternative is shown in **Table 7-1** compared to the Proposed RSP Project.

Table 7-1 Reduced Site Plan Alternative

Land Use	Proposed RSP Amendment Project			Reduced Site Plan		
	Acres	Square Feet	Units	Acres	Square Feet	Units
Residential	104.5	NA	1,262	149.4	NA	800
Commercial [1]	44.8	448,668	NA	53.2	300,000	NA
Business Park [2]	539.7	10.3 M	NA	450.5	4.5 M	NA
Industrial [3]	419.3	5.9 M	NA	431.4	3.2 M	NA
Other [4]	331.2	NA	NA	360.8.3	NA	NA
TOTAL	**1,439.5**	**16.6 M** [5]	**1,262**	**1,445.3**	**8.0 M**	**800**
TOTAL	**1,439.5**	**16.6 M** [5]	**1,262**	**1,445.3**	**8.0 M**	**800**
Population	**3,912**			**2,480**		
Employment	**13,932**			**7,135**		

[1] includes freeway commercial and general commercial categories.
[2] includes town center, corporate center, business center, and freeway incubator categories.
[3] includes employment (EMP) category.
[4] includes schools, parks, private recreation, open space, paseos, buffers, utilities, and right-of-way categories.
[5] includes 835,200 sq-ft of existing uses expected to remain.
M = Million
NA = not applicable

Source: summarized from Table 3-2 from Section 3, Project Description and Draft Renaissance Specific Plan

7.5.3.2 IMPACT ANALYSIS

Aesthetics, Light, and Glare

This alternative would convert the site to less intense industrial uses compared to the RSP Amendment Project. Development areas would be more limited (i.e., smaller and possibly more isolated) but the overall appearance of the site would still be industrial buildings and related improvements. Therefore, this alternative would have reduced but similar impacts on aesthetics, light, and glare compared to the proposed Project. The EIR concluded that aesthetic impacts of the proposed Project would be less than significant, so this alternative creates similar and less than significant aesthetic impacts.

Agriculture and Mineral Resources

According to the Project geotechnical report, it is not likely the site contains considerable quantities of sand or gravel (i.e., construction aggregate). In addition, the site does not contain identified prime agricultural soils. This alternative would result in impacts similar to those of the proposed Project (i.e., less than significant) and cover much of the site with improved uses and impermeable surfaces, although more of the site would have natural or permeable surfaces compared to the proposed Project.

Air Quality

Under this alternative, the site would be developed with approximately half of the industrial and other uses compared to the proposed Project. Therefore, this alternative would reduce potential construction emissions roughly in half compared to the proposed Project. As shown in Section 4.2, construction emissions under this alternative would still be significant for Volatile Organic Compound (VOC), Nitrogen oxides (NO_x), and Particulate Matter (PM_{10}) emissions compared to SCAQMD thresholds, even with implementation of the mitigation recommended for the proposed Project. Although, construction emissions for Carbon Monoxide (CO) and Particulate Matter ($PM_{2.5}$) would likely be below SCAQMD thresholds.

Similarly, even if the mitigation measures proposed for the Project were applied to this alternative, they would still not reduce the anticipated amount of VOC, NO_x, CO, PM_{10} and $PM_{2.5}$ from Project long-term operational impacts to less than significant levels, as shown in **Table 7-2**. This would be mainly due to the size of the site and the anticipated amount of new business park, commercial, and industrial uses to be located on the site, even though there would be approximately a 50 percent reduction in total emissions at buildout. In addition, the alternative is not consistent with the most recent Air Quality Management Plan (AQMP). Therefore, the alternative would make a significant contribution to cumulatively considerable impacts on air quality, both over the short-term from construction and over the long-term during Project occupancy. However, the alternative would not contribute significant odors to nearby sensitive receptors. Similar to the Proposed RSP Project, this alternative would not exceed the SCAQMD's LST or significant thresholds for health risks associated with cancer.

Therefore, this alternative would not eliminate the significant unavoidable impacts identified in DEIR Section 4.3, *Air Quality*, including exceeding construction and operational emission standards; exceeding SCAQMD's localized significance thresholds; exceed SCAQMD's cumulative regional emission thresholds; and exposing sensitive receptors to air pollutants.

Table 7-2 Reduced Site Plan - Operational Emissions (Mitigated)

Emission Component	Total Regional Construction and Operational Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions from RSP Project in any year from 2009 to 2020[1]	1,003	4,848	2,739	20	2,230	456
Estimated "Worst Case" Daily Emissions from Reduced Site Plan[2]	693	3,548	3,832	16	1,499	340
SCAQMD Operational Significance Threshold	55	55	550	150	150	55
RSP Amendment Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Reduced Site Plan Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

[1] Emissions shown assume compliance with applicable emission regulations. Worst case emissions may be from different years during period of 2009 to 2020.

[2] Emissions from 8 MSF of non-residential development assumed to be approx. 50% of 16.5 MSF.

Source: Table 4.2-4

Biological Resources

The alternative would have essentially the same impacts on biological resources compared to those of developing the proposed RSP Project (i.e., not significant with implementation of the recommended mitigation measures).

Cultural Resources

The alternative would have impacts to cultural resources similar to those of the proposed Project (i.e., less than significant), since a similar amount of land would be disturbed by development or the construction of flood control improvements.

Geology and Soils

The reduction in development under this alternative compared to the Project would result in fewer employees and residents on the Project area, so proportionately less persons and structures would be exposed to seismic hazards under this alternative. Impacts to local soils from potential erosion by water and wind would also be similar to those of the proposed Project, since a similar amount of land would be disturbed for development or the construction of flood control improvements. With implementation of Project mitigation measures potential impacts of this alternative related to geologic, seismic, grading, and soil-related constraints would remain less than significant.

Hazards and Hazardous Materials

The Project area is underdeveloped but has historical contamination of soils and groundwater. Development of the site under this alternative would have incrementally fewer impacts related to hazardous materials because approximately 50 percent less industrial uses would be built compared to the proposed Project. Impacts related to other hazards would be similar to the proposed Project.

With implementation of the recommended mitigation measure, both the proposed Project and this alternative will not have significant impacts relative to hazardous materials or hazards.

Hydrology and Water Quality

The EIR determined that the proposed Project would not produce any significant impacts to hydrology or water quality with implementation of the proposed mitigation. Development of this alternative would reduce overall development of the site by 50 percent, but would not substantially reduce the amount of land disturbed by construction. Therefore, impacts of the alternative are similar to those of the proposed Project with respect to hydrology and water quality.

Land Use

The alternative is consistent with the existing land uses or planned land uses under the City of Rialto General Plan, although it would construct less industrial uses than allowed under the General Plan. Therefore, both the proposed Project and this alternative would produce similar land use impacts. However, some potential impacts related to the intensity of site development (i.e., 8 million vs. 16.2 million square feet of industrial uses) such as traffic, air quality, and noise would be reduced by approximately 50 percent.

Noise

This alternative's long-term noise from traffic will not exceed 3dB (decibel) threshold over ambient levels, however, isolated noise levels at Project ingress/egress points will increase noise levels during peak hours for existing residents south of Baseline Road. In addition, short-term noise levels during Project construction may be significant. With implementation of the alternative and mitigation measures, potential short- and long-term noise impacts on and from the alternative can be reduced to less than significant levels. By contrast, the proposed Project is expected to have significant traffic related noise impacts.

Population, Housing, and SCAG Consistency

The alternative will generate approximately 7,135 new employees compared to 13,618 employees under the proposed Project, or approximately 47 percent fewer employees. Similarly, this alternative, compared to the proposed Project, would reduce population and housing growth in the City and surrounding areas by constructing fewer non-residential uses that would generate new residents and the need for new or additional apartments, houses, etc. This alternative would produce population and housing growth that is considerably less than that expected under the proposed Project (-54 percent), so this alternative would not create significant impacts relative to population and housing growth. Similar to the proposed Project, this alternative is consistent with SCAG's regional growth policies, and impacts would be less than significant.

Public Services and Recreation

The alternative would generate less need for additional police and fire personnel and less indirect demand on local schools (i.e., children of employees can attend the school district in which their parent works). New Projects are required to pay development impact fees and property taxes to fund services and facilities. With implementation of the required development impact fees and the provision of a new fire station site, potential impacts to public services of this alternative would be reduced to less than significant levels, similar to those of the proposed Project.

Transportation

Upon buildout, the traffic study indicated the proposed Project would generate 117,905 total trips with 10,371 peak AM trips and 11,087 peak PM trips. Based on the same trip generation rates, this alternative would generate approximately 50 percent less traffic, which would result in 71,166 total trips with 6,316 peak AM trips and 6,846 peak PM trips, as shown in **Table 7-3**. With implementation of the recommended mitigation measures, including fair-share contributions adjusted for the less intense development plan, this alternative would not create significant long-term impacts related to traffic, circulation, or parking. In contrast, the DEIR determined that the proposed Project would have significant traffic impacts at the Project entrances but not on local roadways, intersections, and freeway interchanges.

Table 7-3 Reduced Site Plan – Trip Generation

Project Phase	A.M. Peak Hour			P.M. Peak Hour			Daily
	Inbound	Outbound	Total	Inbound	Outbound	Total	
RSP Amendment Project							
Phase I (2010)	2,486	597	3,083	1,227	2,727	3,954	43,151
Phase II (2015)	5,123	1,639	6,762	2,248	4,989	7,237	79,663
Phase III (2020/2035)	7,773	2,584	10,371	3,493	7,594	11,087	117,905
Reduced Site Plan							
Phase I (2010)	1,514	419	2,023	800	1,699	2,498	26,417
Phase II (2015)	3,202	1,108	4,265	1,481	3,096	4,576	48,863
Phase III (2020/2035)	4,685	1,631	6,316	2,253	4,594	6,846	71,166

Source: DEIR Table 4.7-4

Utility Systems

The alternative would consume approximately 50 percent less water and generate approximately50 percent less wastewater and solid waste compared to the proposed Project. Local consumption of electricity and natural gas would be similarly reduced. Local service providers indicated they could accommodate the proposed Project, so it is likely they could cover services for a Project of reduced size as under this alternative. Implementation of the standard conditions and compliance with system requirements of the City and other utility providers, including applicable development impact fees, monthly user charges, along with implementation of the recommended mitigation measures would help assure that this alternative would have less than significant impacts on utilities and utility systems, similar to the proposed Project.

Global Climate Change

This alternative would still result in considerable development on the site under this alternative, although substantially less than the proposed Project. This alternative would reduce greenhouse gas emissions by 50 percent compared to the proposed Project, but would probably not reduce impacts to less than significant levels.

7.5.3.3 CONCLUSION

The Reduced Site Plan Alternative would decrease a number of Project impacts by approximately 50 percent (e.g., traffic, air quality, greenhouse gases, and utilities) and would reduce noise, traffic impacts to less than significant levels compared to the proposed Project. This alternative would still have significant air quality impacts (both short- and long-term). Since the site would be developed with less intense development, this alternative does not achieve the objectives of the Project to the same degree as the proposed Project which would result in twice as much development and provide twice as many workers to the City's job base.

7.5.4 MIXED USE I ALTERNATIVE

This alternative has the same number of dwelling units and devotes more of the non-residential uses to commercial, and less to business park and industrial uses as compared to the proposed Project. This alternative would also comprise a total of 14.5 million square feet of non-residential building floor area compared to 16.6 million square feet for the proposed Project (-10 percent). This alternative would emphasize more commercial development (200 acres compared to 48 acres). It would contain approximately 6.8 million square feet of business park uses, 5.7 million square feet of light industrial uses, various public uses, and the same number of residential units as the proposed RSP Amendment Project. This alternative was included in the 2010 RSP EIR and would have the same results for the proposed Project. The analysis from the 2010 RSP EIR is provided below.

Based on rates similar to those of the proposed Project, this alternative would generate a population of 5,167 new residents (approximately same as the proposed Project), and 14,433 new employees compared to 13,932 employees under the proposed Project (+6 percent) even though there was a reduction of 10 percent in building square footage. A summary of land uses for this alternative is shown in **Table 7-4**.

Table 7-4 Mixed Use I Alternative

Land Use	Proposed RSP Amendment Project			Mixed Use I Alternative		
	Acres	Square Feet	Units	Acres	Square Feet	Units
Residential	104.5	NA	1,262	149.4.0	NA	1,262
Commercial[1]	44.8	448,668	NA	200.0	2.0 M	NA
Business Park[2]	539.7	10.3 M	NA	348.0	6.8 M	NA
Industrial[3]	419.3	5.9 M	NA	410.0	5.7 M	NA
Other[4]	331.2	NA	NA	337.9.3	NA	NA
TOTAL	**1,439.5**	**16.6 M**[5]	**1,262**	**1,445.3**	**14.5 M**	**1,667**
Population	**3,912**					
Employment	**13,932**					

[1] includes freeway commercial and general commercial categories.

[2] includes town center, corporate center, business center, and freeway incubator categories.

[3] includes employment (EMP) category.

[4] includes schools, parks, private recreation, open space, paseos, buffers, utilities, and right-of-way categories.

[5] includes 835,200 sq-ft of existing uses expected to remain.

M = Million

NA = not applicable

Source: summarized from Table 3-2 from Section 3, Project Description and Draft Renaissance Specific Plan

7.5.4.1 IMPACT ANALYSIS

Aesthetics, Light, and Glare

This alternative would convert the site to less intense industrial uses compared to the RSP Amendment Project. Development areas would be more limited (i.e., smaller and possibly more isolated) but the overall appearance of the site would still be industrial buildings and related improvements. Therefore, this alternative would have similar impacts on aesthetics, light, and glare compared to the proposed Project. The EIR concluded that aesthetic impacts of the proposed Project would be less than significant, and as such, this alternative results in less than significant aesthetic impacts.

Agriculture and Mineral Resources

According to the Project geotechnical report, it is not likely the site contains considerable quantities of sand or gravel (i.e., construction aggregate). In addition, the site does not contain identified prime agricultural soils. This alternative would result in impacts similar to those of the proposed Project (i.e., less than significant) and cover much of the site with improved uses and impermeable surfaces, although more of the site would have natural or permeable surfaces compared to the proposed Project.

Air Quality

Under this alternative, the site would be developed with the same number of dwelling units, and roughly the same square footage of non-residential uses as the proposed Project, although the square footage dedicated to commercial use is substantially higher than the proposed Project. Construction emissions would be slightly less compared to the proposed Project. However, as shown in Section 4.2**,** construction emissions under this alternative would still be significant for VOC, NO_x, CO, PM_{10} and $PM_{2.5}$ emissions compared to SCAQMD thresholds, even with implementation of the mitigation recommended for the proposed Project (i.e., the same as the proposed Project).

This alternative would also generate substantially greater amounts of VOC, NO_x, CO, PM_{10} and $PM_{2.5}$ operational emissions compared to the proposed Project as shown in **Table 7-5**. This increase is due in part to the greater number of trips generated from the increased commercial square footage included in this alternative compared to the proposed Project. In addition, the alternative is not consistent with the most recent AQMP. Therefore, the alternative would make a significant contribution to cumulatively considerable impacts on air quality, both over the short-term from construction and over the long-term during Project occupancy. Similar to the Proposed RSP Project, this alternative would not exceed the SCAQMD's LST or significant thresholds for health risks associated with cancer. Like the proposed Project, odor impacts would be less than significant.

Therefore, this alternative would not eliminate the significant unavoidable impacts identified in DEIR Section 4.3, *Air Quality*, including exceeding construction and operational emission standards; exceeding SCAQMD's localized significance thresholds; exceed SCAQMD's cumulative regional emission thresholds; and exposing sensitive receptors to air pollutants. Since this alternative actually increases operational emissions, air quality impacts are greater compared to the proposed Project.

Table 7-5 Mixed Use I Plan – Operational Emissions (Mitigated)

Emission Component	**Total Regional Construction and Operational Emissions (pounds per day)**					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions from RSP Project in any year from 2009 to 2020[1]	1,003	4,848	2,739	20	2,230	456
Estimated "Worst Case" Daily Emissions from Mixed Use I Alternative[2]	1,219	6,244	6,744	27	2,638	598
SCAQMD Operational Significance Threshold	55	55	550	150	150	55
RSP Amendment Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Mixed Use I Plan Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

[1] Emissions shown assume compliance with applicable emission regulations. Worst case emissions may be from different years during period of 2009 to 2020.

[2] Emissions from 14 MSF of non-residential development assumed to be approx. 88% of 16.5 MSF.

Source: Table 4.2.4

Biological Resources

The alternative would have essentially the same impacts on biological resources compared to those of developing the Proposed RSP Project (i.e., not significant with implementation of the recommended mitigation measures).

Cultural Resources

The alternative would have impacts to cultural resources similar to those of the proposed Project (i.e., less than significant), since a similar amount of land would be disturbed by development or the construction of flood control improvements.

Geology and Soils

The larger number of employees compared to the proposed Project would result in a proportionately greater number of persons exposed to seismic hazards under this alternative. Impacts to local soils from potential erosion by water and wind would also be similar to those of the proposed Project since a similar amount of land would be disturbed for development or the construction of flood control improvements. With implementation of Project mitigation measures, potential impacts of this alternative related to geologic, seismic, grading, and soil-related constraints would remain less than significant.

Hazards and Hazardous Materials

The Project area is underdeveloped but has historical contamination of soils and groundwater. Development of the site under this alternative would have similar impacts related to hazardous materials because approximately the same area of industrial uses would be built compared to the proposed Project. Impacts related to other hazards would be similar to the proposed Project. As such, neither the proposed Project, nor this alternative will have significant impacts related to hazardous materials or hazards.

Hydrology and Water Quality

The EIR determined that the proposed Project would not produce any significant impacts to hydrology or water quality with implementation of proposed mitigation. Development of this alternative would not substantially reduce the amount of land disturbed by construction. Therefore, impacts of the alternative are similar to those of the proposed Project with respect to hydrology and water quality.

Land Use

The alternative is consistent with the existing land uses or planned land uses under the City of Rialto General Plan, although it would construct less industrial uses than allowed under the General Plan. Therefore, both the proposed Project and this alternative would produce similar land use impacts. Under both this alternative and the proposed Project potential impacts would be less than significant.

Noise

This alternative would generate more long-term noise from traffic since it will generate more vehicle trips compared to the proposed Project. It will also likely exceed the 3dB (decibel) threshold over ambient levels, and isolated noise levels at Project ingress/egress points will increase noise levels during peak hours for existing

residents south of Baseline Road. In addition, short-term noise levels during Project construction may also be significant. Even with implementation of mitigation measures, potential short and long-term noise impacts on and from the alternative will not be reduced to less than significant levels. Potential adverse impacts with respect to traffic noise would be significant and, due to the increased traffic under this alternative, would likely be greater than the impacts under the proposed Project.

Population, Housing, and SCAG Consistency

The alternative will generate approximately 14,433 new employees compared to 13,618 employees under the proposed Project, or approximately 6 percent more employees. This alternative would produce population and housing growth that is the same as that expected under the proposed Project, so this alternative would not create significant impacts relative to population and housing growth. Similar to the proposed Project, this alternative is consistent with SCAG's regional growth policies. Potential impacts under both the proposed Project and this alternative would be less than significant.

Public Services and Recreation

This alternative would generate roughly the same need for additional police and fire personnel, demand on local schools, and demand for recreational facilities as the proposed Project. New projects are required to pay development impact fees and property taxes to fund and offset the cost of services and facilities. With payment of the required development impact fees and the provision of a new fire station site, potential impacts to public services of this alternative would be reduced to less than significant levels, similar to those of the proposed Project.

Transportation

Upon buildout, the traffic study indicates the proposed Project would generate 117,905 total trips per day, with 10,371 peak AM trips and 11,087 peak PM trips. Based on the same trip generation rates, this alternative would generate approximately 6 percent more daily, trips as shown in **Table 7-6**. Therefore, this alternative would, as with the proposed Project, have significant and unavoidable adverse impacts with respect to freeway segments. Due to the increase in traffic for this alternative such impacts would be slightly greater compared to the proposed Project.

Table 7-6 Mixed Use I Plan – Trip Generation

Project Phase	A.M. Peak Hour			P.M. Peak Hour			Daily
	Inbound	Outbound	Total	Inbound	Outbound	Total	
RSP Amendment Project							
Phase I (2010)	2,486	597	3,083	1,227	2,727	3,954	43,151
Phase II (2015)	5,123	1,639	6,762	2,248	4,989	7,237	79,663
Phase III (2020/2035)	7,773	2,584	10,371	3,493	7,594	11,087	117,905
Mixed Use I Plan							
Phase I (2010)	2,664	737	3,560	1,407	2,989	4,396	46,493
Phase II (2015)	5,635	1,950	7,506	2,606	5,448	8.054	85,998
Phase III (2020/2035)	8,245	2,871	11,115	3,965	8,085	12,049	125,252

Source: DEIR Table 4.7-4

Utility Systems

This alternative would have roughly the same demand on utility systems as the proposed Project. Local service providers have indicated that they have the capability to accommodate the proposed Project, so it is likely they could cover services for this alternative. The impacts of both this alternative and the proposed Project would be less than significant.

Global Climate Change

This alternative would result in somewhat greater greenhouse gas emissions compared to the proposed Project due to the increase in vehicle trips. Cumulative impacts with respect to Global Climate Change would be significant, adverse and unavoidable for this alternative as well as the proposed Project.

7.5.4.2 CONCLUSION

The Mixed Use I Alternative would increase the severity of a number of significant unavoidable adverse impacts that would also be caused by the proposed Project (e.g., traffic, air quality, traffic noise, and cumulative greenhouse gas emissions) and would not lessen any impacts. In addition, while this alternative is estimated to create a slightly larger number of employees compared to the proposed Project, under this alterative more of the jobs created will be retail oriented, and will tend to be part time and lower paying than jobs generated by business park or industrial uses.

7.5.5 MIXED USE II ALTERNATIVE

This alternative was based on the original land plan for the RSP from 2006 that proposed a total of 6.8 million square feet of new development compared to 16.6 million square feet for the proposed Project (+59 percent). This alternative would emphasize more residential development compared to the Proposed RSP Amendment Project. It would contain approximately 6.8 million square feet of business park and light industrial uses, various public uses, and 3,853 residential units compared to the 1,262 units Proposed in the current RSP Amendment Project. This alternative was included in the 2010 RSP EIR and would have the same results for the proposed Project. The analysis from the 2010 RSP EIR is provided below.

Based on rates similar to those of the proposed Project, this alternative would generate a population of 11,944 new residents compared to 5,167 residents for the proposed Project (+120 percent), and 6,065 new employees compared to 13,618 employees under the proposed Project. A summary of land uses for this alternative is shown in **Table 7-7**.

Table 7-7 Mixed Use II Alternative (Summary)

Land Use	Proposed RSP Amendment Project			Mixed Use II Alternative		
	Acres	Square Feet	Units	Acres	Square Feet	Units
Residential	104.5	NA	1,262	306.9	NA	3,853
Commercial [1]	44.8	448,668	NA	43.8	0.4 M	NA
Business Park [2]	539.7	10.3 M	NA	471.9	5.3 M	NA
Industrial [3]	419.3	5.9 M	NA	98.6	1.1 M	NA
Other [4]	331.2	NA	NA	534.1	NA	NA
TOTAL	**1,439.5**	**16.6 M** [5]	**1,262**	**1,455.3**	**6.8 M**	**3,853**
Population	**3,912**			**11,944**		
Employment	**13,932**			**6,065**		

[1] includes freeway commercial and general commercial categories. M = Million NA = not applicable

[2] includes town center, corporate center, business center, and freeway incubator categories.

[3] includes employment (EMP) category.

[4] includes schools, parks, private recreation, open space, paseos, buffers, utilities, and right-of-way categories.

[5] includes 835,200 sq-ft of existing uses expected to remain.

Source: Table 3-2 in DEIR Section 3, Project Description, and Table 3-4 in Draft Renaissance Specific Plan from 2014.

7.5.5.1 IMPACT ANALYSIS

Aesthetics, Light, and Glare

This alternative would convert a greater portion of the site to residential uses compared to the RSP Amendment Project. Development areas would be more limited (i.e., smaller and possibly more isolated). This alternative would have similar impacts on aesthetics, light, and glare compared to the proposed Project. The EIR concluded that aesthetic impacts of the proposed Project would be less than significant, and this alternative creates similar and less than significant aesthetic impacts.

Agriculture and Mineral Resources

According to the Project geotechnical report, it is not likely the site contains considerable quantities of sand or gravel (i.e., construction aggregate). In addition, the site does not contain identified prime agricultural soils. This alternative would result in impacts similar to those of the proposed Project (i.e., less than significant) and cover much of the site with improved uses and impermeable surfaces, although more of the site would have natural or permeable surfaces compared to the proposed Project.

Air Quality

Under this alternative, the site would be developed with approximately half of the industrial and other uses compared to the proposed Project. Therefore, this alternative would reduce potential construction emissions roughly in half compared to the proposed Project. As shown in Section 4.2, construction emissions under this alternative would still be significant for VOC, CO, NO_x, and PM_{10} emissions compared to SCAQMD thresholds, even with implementation of the mitigation recommended for the proposed Project.

Similarly, even if the mitigation measures Proposed for the Project were applied to this alternative, they would still not reduce the anticipated amount of VOC, NO_x, CO, PM_{10} and $PM_{2.5}$ from Project long-term operational impacts to less than significant levels, as shown in **Table 7-8**. This would be mainly due to the size of the site and the anticipated amount of new business park, commercial, and industrial uses to be located on the site, even though there would be approximately a 40 percent reduction in total emissions at buildout. In addition, the alternative is not consistent with the most recent Air Quality Management Plan (AQMP). Therefore, the alternative would make a significant contribution to cumulatively considerable impacts on air quality, both over the short-term from construction and over the long-term during Project occupancy. However, the alternative would not contribute significant odors to nearby sensitive receptors. Similar to the Proposed RSP Project, this alternative would not exceed the SCAQMD's LST or significant thresholds for health risks associated with cancer.

Therefore, this alternative would not eliminate the significant unavoidable impacts identified in DEIR Section 4.3, Air Quality, including exceeding construction and operational emission standards; exceeding SCAQMD's localized significance thresholds; exceed SCAQMD's cumulative regional emission thresholds; and exposing sensitive receptors to air pollutants.

Table 7-8 Mixed Use II Plan – Operational Emissions (Mitigated)

Emission Component	**Total Regional Construction and Operational Emissions (pounds per day)**					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions from RSP Project in any year from 2009 to 2020[1]	1,003	4,848	2,739	20	2,230	456
Estimated "Worst Case" Daily Emissions from Mixed Use II Alternative[2]	831	4,258	4,598	19	1,799	408
SCAQMD Operational Significance Threshold	55	55	550	150	150	55
RSP Amendment Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Mixed Use II Plan Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

[1] Emissions shown assume compliance with applicable emission regulations. Worst case emissions may be from different years during period of 2009 to 2020.

[2] Emissions from 6.8 MSF of non-residential development and 3,853 housing assumed to be approx. 60% of 16.5 MSF and 1,747 units.

Source: Table 4.2-7

Biological Resources

The alternative would have substantially reduced impacts on biological resources compared to developing the Proposed RSP Amendment Project (i.e., significant for loss of habitat). With implementation of some of the mitigation measures recommended for the Project, this alternative would have even fewer impacts, which would be reduced to less than significant levels.

Cultural Resources

The alternative would have impacts to cultural resources similar to those of the proposed Project (i.e., less than significant), since a similar amount of land would be disturbed by development or the construction of flood control improvements.

Geology and Soils

Development of this alternative would expose fewer employees and users of the site compared to the proposed Project, so potential impacts would be incrementally reduced under this alternative. Impacts to local soils from potential erosion by water and wind would also be similar to those of the proposed Project since a similar amount of land would be disturbed for development or the construction of flood control improvements. With implementation of the City's development review process and the proposed mitigation measures, potential impacts of the alternative related to geologic, seismic, grading, and soil-related constraints would be reduced to less than significant levels.

Hazards and Hazardous Materials

The Project area is underdeveloped but has historical contamination of soils and groundwater. Development of the site under this alternative would have incrementally fewer impacts related to hazardous materials because 58 percent less industrial uses would be built compared to the proposed Project. Impacts related to other hazards would be similar to the proposed Project. With implementation of the recommended mitigation measure, both the proposed Project and this alternative will not have significant impacts relative to hazardous materials or hazards.

Hydrology and Water Quality

The EIR determined that the proposed Project would not produce any significant impacts to hydrology or water quality with implementation of the proposed mitigation. Development of this alternative would reduce overall development of the site by 58 percent, but would not substantially reduce the amount of land disturbed by construction. Therefore, impacts of the alternative are similar to those of the proposed Project with respect to hydrology and water quality.

Land Use

The alternative is consistent with the existing land uses or planned land uses under the City of Rialto General Plan, although it would construct less industrial uses than allowed under the General Plan. Therefore, both the proposed Project and this alternative would produce similar land use impacts. However, some potential impacts related to the intensity of site development (i.e., 11 vs. 16.2 million square feet of industrial uses) such as traffic, air quality, and noise would be increased as a result of the increase in residential units and traffic trips.

Noise

The alternative's long-term noise from traffic may not exceed 3dB (decibel) threshold over ambient levels, but isolated noise levels at Project ingress/egress points will increase noise levels during peak hours for existing residents south of Baseline Road. In addition, short-term noise levels during Project construction may be significant. With implementation of the alternative and mitigation measures, potential short- and long-term noise impacts on and from the alternative will be reduced to less than significant levels.

Population, Housing, and SCAG Consistency

The alternative will generate approximately 6,065 new employees compared to 13,617 employees under the proposed Project, or approximately 55 percent fewer employees. Similarly, this alternative would increase the potential inducement in population and housing growth in the City and surrounding areas by constructing fewer non-residential uses that would generate new residents and the need for new or additional apartments, houses, etc., but construct 120% more housing on this site. This alternative would produce population and housing growth that is considerably higher than that expected under the proposed Project, but this alternative would likely not create significant impacts relative to population and housing growth when viewed in a regional context. Similar to the proposed Project, this alternative is consistent with SCAG's regional growth policies. If applied to this alternative, mitigation measures in other DEIR impact sections will help reduce indirect impacts of increased housing and population (e.g., traffic, noise, air quality).

Public Services and Recreation

The alternative would generate less need for additional police and fire personnel but more demand on local schools from more houses. New Projects are required to pay development impact fees and property taxes to fund services and facilities. With implementation of the required development impact fees and the provision of a new fire station site, potential impacts to public services of this alternative would be reduced to less than significant levels, similar to those of the proposed Project.

Transportation

Upon buildout, the traffic study indicated the proposed Project would generate 117,905 total daily trips with 10,371 peak AM trips and 11,087 peak PM trips. Based on the same trip generation rates, this alternative would generate approximately 73 percent of the daily trips from the proposed Project, which would result in 85,399 total daily trips,7,579 peak AM trips and 8,215 peak PM trips, as shown in **Table 7-9**. With implementation of the recommended mitigation measures this alternative would generally create less long-term impacts related to traffic intersection congestion, although with mitigation, the impacts of the proposed Project would also be less than significant . Impacts under this alternative would also lessen the impact freeway segments, although such impacts would likely remain significant, adverse and unavoidable.

Table 7-9 Mixed Use II Plan – Trip Generation

Project Phase	A.M. Peak Hour			P.M. Peak Hour			Daily
	Inbound	Outbound	Total	Inbound	Outbound	Total	
RSP Amendment Project							
Phase I (2010)	2,486	597	3,083	1,227	2,727	3,954	43,151
Phase II (2015)	5,123	1,639	6,762	2,248	4,989	7,237	79,663
Phase III (2020/2035)	7,773	2,584	10,371	3,493	7,594	11,087	117,905
Mixed Use II Plan							
Phase I (2010)	1,816	503	2,427	935	2,038	2,998	31,700
Phase II (2015)	3,842	1,330	5,117	1,777	3,715	5,491	58,636
Phase III (2020/2035)	5,621	1,957	7,579	2,703	5,512	8,215	85,399

Source: DEIR Table 4.15-6

Utility Systems

This alternative would have roughly the same demands on utility systems as the proposed Project. Local service providers have indicated that they have the capability to accommodate the proposed Project, so it is likely they could cover services under this alternative. Impacts to utility systems would be less than significant for both this alternative and the proposed Project.

Global Climate Change

This alternative, as with the proposed Project, would result in considerable development on the site. The reduction in vehicle trips under this alternative compared to the proposed Project would substantially reduce greenhouse gas emissions from motor vehicle. However, given the size and scope of the alternative it is likely that impacts on global climate change would be remain significant, adverse and unavoidable.

7.5.5.2 CONCLUSION

The Mixed Use II Alternative would substantially decrease the magnitude of a number of Project impacts that are significant, adverse and unavoidable (e.g., traffic, air quality, greenhouse gases, noise). However, with the exception of noise, these impacts would remain, significant, adverse and unavoidable. Also, this alternative does not achieve the objectives of the Project to the same degree as the proposed Project since it would have less than half of the employment provided by the proposed Project and roughly double the number of dwelling units. The large number of homes provided in proportion to employment generating uses will also server to perpetuate the jobs/housing imbalance that exists in the Inland Empire.

7.5.6 TECHNOLOGY/EDUCATION PARK ALTERNATIVE

This alternative examined impacts from a total of 20.5 million square feet of new non-residential development compared to 16.6 million square feet for the proposed Project. Although it proposed more square footage, this alternative would emphasize uses that focus on new or "green" technology in a partnership with various educational uses, supported by some commercial uses along the freeway. This alternative would contain approximately 10 million square feet of technology-oriented business and office uses, and 10 million square feet of educational oriented uses (industrial trade schools, private and/or public post K-12 schools, etc.). It would have no residential units and only 500,000 square feet of commercial uses compared to the Proposed RSP Amendment Project. This alternative was included in the 2010 RSP EIR and would have the same results for the proposed Project. The analysis from the 2010 RSP EIR is provided below.

Based on rates similar to those of the proposed Project, this alternative would generate no new population in the City, compared to 3,912 new residents for the proposed Project. It is estimated this alternative could generate 20,000 new jobs or more, but it is difficult to estimate the precise number, as the mix of school facilities to industrial or office uses is not known at this time. A summary of land uses for this alternative is shown in **Table 7-10**.

Table 7-10 Technology/Education Park Alternative

Land Use	Proposed RSP Amendment Project			Technology/Education Park		
	Acres	Square Feet	Units	Acres	Square Feet	Units
Residential	104.5	NA	1,262	0.0	NA	0
Commercial [1]	44.8	448,668	NA	50.0	0.5 M	NA
Business Park [2]	539.7	10.3 M	NA	525.0	10.0 M	NA
Industrial [3]	419.3	5.9 M	NA	525.0	10.0 M	NA
Other [4]	331.2	NA	NA	345.3	NA	NA
TOTAL	**1,439.5**	**16.6 M** [5]	**1,262**	**1,445.3**	**20.5 M**	**0**
Population	**3,912**			**0**		
Employment	**13,932**			**+20,000 (est.)**		

[1] includes freeway commercial and general commercial categories. M = Million NA = not applicable

[2] includes town center, corporate center, business center, and freeway incubator categories.

[3] includes employment (EMP) category.

[4] includes schools, parks, private recreation, open space, paseos, buffers, utilities, and right-of-way categories.

[5] includes 835,200 sq-ft of existing uses expected to remain.

Source: summarized from Table 3-2 from Section 3, Project Description and Draft Renaissance Specific Plan

7.5.6.1 IMPACT ANALYSIS

Aesthetics, Light, and Glare

Although this alternative would convert the site to more intense industrial uses compared to the RSP Project, development areas would be somewhat more limited (i.e., smaller and possibly more isolated) but the overall appearance of the site would still be industrial and business park buildings and related improvements. Therefore, this alternative would have reduced but similar impacts on aesthetics, light, and glare compared to the proposed Project. The EIR concluded that aesthetic impacts of the proposed Project would be less than significant, so this alternative creates similar and less than significant aesthetic impacts.

Agriculture and Mineral Resources

According to the Project geotechnical report, it is not likely the site contains considerable quantities of sand or gravel (i.e., construction aggregate). In addition, the site does not contain identified prime agricultural soils. This alternative would result in impacts similar to those of the proposed Project (i.e., less than significant) and cover much of the site with improved uses and impermeable surfaces, although more of the site would have natural or permeable surfaces compared to the proposed Project.

Air Quality

Under this alternative, the site would be developed with approximately 20 percent more non- residential uses compared to the proposed Project. Therefore, this alternative may actually increase potential construction emissions compared to the proposed Project. As shown in Section 4.2, construction emissions under this alternative would be significant for VOC, CO, NO_x, and PM_{10} emissions compared to SCAQMD thresholds, even with implementation of the mitigation recommended for the proposed Project.

Similarly, even if the mitigation measures proposed for the Project were applied to this alternative, they would still not reduce the anticipated amount of VOC, NO_x, CO, PM_{10} and $PM_{2.5}$ from Project long-term operational impacts to less than significant levels, as shown in **Table 7-11**. This would be mainly due to the size of the site and the anticipated amount of new business park, commercial, and industrial uses to be located on the site, and the pollutant emissions associated with the significantly higher trips that would be generated by this alternative. In addition, the alternative is not consistent with the most recent Air Quality Management Plan (AQMP). Therefore, the alternative would make a significant contribution to cumulatively considerable impacts on air quality, both over the short- term from construction and over the long-term during Project occupancy. However, the alternative would not contribute significant odors to nearby sensitive receptors. Similar to the Proposed RSP Project, this alternative would not exceed the SCAQMD's LST or significant thresholds for health risks associated with cancer. Therefore, this alternative would not eliminate the significant unavoidable impacts identified in DEIR Section 4.3, *Air Quality*, including exceeding construction and operational emission standards; exceeding SCAQMD's localized significance thresholds; exceed SCAQMD's cumulative regional emission thresholds; and exposing sensitive receptors to air pollutants. Instead, it would significantly increase the severity of these impacts.

Table 7-11 Tech/Education Park Plan – Operational Emissions (Mitigated)

Emission Component	**Total Regional Construction and Operational Emissions (pounds per day)**					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions from RSP Project in any year from 2009 to 2020 [1]	1,003	4,848	2,739	20	2,230	456
Estimated "Worst Case" Daily Emissions from Mixed Use II Alternative [2]	1662	8,515	9,197	37	3,598	816
SCAQMD Operational Significance Threshold	55	55	550	150	150	55
RSP Amendment Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Tech/Education Park Plan Exceeds SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

[1] Emissions shown assume compliance with applicable emission regulations. Worst case emissions may be from different years during period of 2009 to 2020.

[2] Emissions from 20 MSF of non-residential development assumed to be approx. 120% of 16.5 MSF.

Source: Table 4.2-4

Biological Resources

This alternative would have basically the same impacts on biological resources compared to the proposed Project. With implementation of the mitigation measures recommended for the Project, impacts would be less than significant for this alternative as well as the proposed Project.

Cultural Resources

The alternative would have impacts to cultural resources similar to those of the proposed Project (i.e., less than significant), since a similar amount of land would be disturbed by development or the construction of flood control improvements.

Geology and Soils

Development of this alternative would have roughly the same impacts as the proposed Project which would have less than significant impacts. This alternative would expose more employees to risk, but no residents, who, presumably would spend more time on the site than employees. Impacts to local soils from potential erosion by water and wind would also be similar to those of the proposed Project since a similar amount of land would be disturbed for development or the construction of flood control improvements.

Hazards and Hazardous Materials

The Project area is underdeveloped but has historical contamination of soils and groundwater. Development of the site under this alternative would have incrementally greater impacts related to hazardous materials because more industrial uses would be built compared to the proposed Project. Impacts related to other hazards would be similar to the proposed Project. With implementation of the recommended mitigation measure, both the proposed Project and this alternative will not have significant impacts related to hazardous materials or hazards.

Hydrology and Water Quality

The EIR determined that the proposed Project would not produce any significant impacts to hydrology or water quality with implementation of the proposed mitigation. Development of this alternative would disturb roughly the same amount of land as the proposed Project. Therefore, impacts of the alternative are similar to those of the proposed Project with respect to hydrology and water quality and, like the proposed Project, are less than significant.

Land Use

This alternative is consistent with the existing land uses or planned land uses under the City of Rialto General Plan, although it would construct less industrial uses than allowed under the General Plan. Therefore, both the proposed Project and this alternative would produce similar land use impacts.

Noise

This alternative's long-term noise from traffic will likely exceed the 3dB (decibel) threshold over ambient levels, and isolated noise levels at Project ingress/egress points will increase noise levels during peak hours for off-site roadways segments. In addition, short-term noise levels during Project construction may also be significant. Even with implementation of the Project mitigation measures, potential long-term off-site traffic noise impacts would be significant, adverse and unavoidable under this alternative.

Population, Housing, and SCAG Consistency

This alternative will generate approximately 20,000 new employees compared to 13,618 employees under the proposed Project, or approximately 46 percent more employees. This alternative would produce population and housing growth that is less than that expected under the proposed Project (i.e., no additional homes), and may over the long term create pressures to increase housing in Rialto and surrounding areas. However, given the job poor nature of the Inland Empire, from a regional perspective the additional jobs would improve the jobs/housing balance. Similar to the proposed Project, this alternative is consistent with SCAG's regional growth policies and potential impacts would be less than significant.

Public Services and Recreation

The alternative would generate more need for additional police and fire personnel and no direct but possibly more indirect demand on local schools (i.e., children of employees can attend the school district in which their parent works). New projects are required to pay development impact fees and property taxes to fund services and facilities. With implementation of the required development impact fees and the provision of a new fire station site, potential impacts to public services of this alternative would be reduced to less than significant levels, similar to those of the proposed Project.

Transportation

Upon buildout, the traffic study indicated the proposed Project would generate 124,101 daily net new PCE trips with 9,533 peak AM PCE trips and 11,218 peak PM PCE trips. Based on the same trip generation rates, this alternative would generate approximately 40 percent more traffic, which would result in 170,798 total trips with a maximum 15,157 peak AM trips and 16,430 peak PM trips, as shown in **Table 7-12**.

With implementation of the recommended mitigation measures, including fair-share contributions adjusted for the more intense development plan, this alternative, could create significantly more severe adverse and unavoidable long-term impacts related to traffic, for freeway segments as well as local and arterial roadways. In contrast, the DEIR determined that the proposed Project would have significant adverse and unavoidable traffic impacts on freeway segments.

Table 7-12 Tech/Education Park Plan – Trip Generation

Project Phase	A.M. Peak Hour			P.M. Peak Hour			Daily
	Inbound	Outbound	Total	Inbound	Outbound	Total	
RSP Amendment Project							
Phase I (2010)	2,486	597	3,083	1,227	2,727	3,954	43,151
Phase II (2015)	5,123	1,639	6,762	2,248	4,989	7,237	79,663
Phase III (2020/2035)	7,773	2,584	10,371	3,493	7,594	11,087	117,905
Tech/Educ Park Plan							
Phase I (2010)	3,632	1,006	4,854	1,919	4,076	5,995	63,400
Phase II (2015)	7,684	2,659	10,235	3,553	7,429	10,982	117,271
Phase III (2020/2035)	11,275	3,914	15,157	5,406	11,024	16,430	170,798

Source: Table 4.7-4

Utility Systems

This alternative would have roughly the same demands on utility systems as the proposed Project. Local service providers have indicated that they have the capability to accommodate the proposed Project, so it is likely they could cover services under this alternative. Impacts to utility systems would be less than significant for both this alternative and the proposed Project.

Global Climate Change

This alternative, as with the proposed Project, would result in considerable development on the site. The substantial increase in vehicle trips under this alternative compared to the proposed Project would result in much higher greenhouse gas emissions from motor vehicles. The higher levels would increase the severity of significant adverse and unavoidable cumulative impacts with respect to global climate change.

7.5.6.2 CONCLUSION

The Technology/Education Park Alternative would substantially increase the magnitude of a number of significant adverse and unavoidable impacts (e.g., traffic, air quality, greenhouse gases, and noise) as compared to the proposed Project. Since the site would be developed with more employment generating development, this alternative meets one of the major objectives better than the proposed Project. However, it does not provide for a balanced community that would facilitate walk-to-work, walk-to-shop, and walk-to-play opportunities. Nor would it meet the objective of accommodating a mix of residential housing types that serve a range of lifestyles, including first-time buyers, young singles and couples, families, empty-nesters, and seniors.

7.5.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an "environmentally superior alternative". If the no Project alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives. The Mixed Use I Alternative reduces potential impacts of the RSP Amendment Project relative to traffic, air quality, and greenhouse gases, but not to less than significant levels. The Technology/Education Park Alternative would generate even more employment and tax revenues to the City, but would result in increased environmental impacts relative to long-term air quality, traffic, and greenhouse gases.

The Reduced Site Plan Alternative and the Mixed Use II Alternative substantially reduces the traffic, air quality, and greenhouse gas emission impacts of the proposed Project, but not to less than significant levels. However, they both reduce noise impacts to less than significant levels. Therefore, the Reduced Site Plan or Mixed Use II Plan is considered environmentally superior to the proposed Project. However, they do not achieve the objectives of the Project to nearly the same degree as the proposed Project.

Summary of Impacts

Table 7-13 summarizes impacts for each alternative except the No Project Alternative in comparison to the proposed Project. The No Project Alternative would have less than significant impacts or all issue areas.

Table 7-13 Summary of Impacts for Alternatives Compared to the Proposed Project

Impact Issue	Proposed Project	Reduced Site Plan	Mixed Use I	Mixed Use II	Technology/ Education
Project Residential Uses Commercial Uses Business Park Uses Lt. Industrial Uses	 1,262Units 0.45 M SF 10.3 M SF 6.0 M SF	 800 Units 0.3 M SF 4.5 M SF 3.2 M SF	 1,667 Units 2.0 M SF 6.8 M SF 5.7 M SF	 3,853 Units 0.4 M SF 5.3 M SF 1.1 M SF	 -- Units 0.5 M SF 10.0 MSF 10.0 M SF
Population	3,912	2,167	5,167	11,944	--
Employment	13,932	7,135	14,433	6,065	+20,000
Aesthetics	LTS	LTS	LTS	LTS	LTS
Agriculture	LTS	LTS	LTS	LTS	LTS
Air Quality Operation AQMP Implementation	 **Significant** **Significant**	 **Significant** **Significant**	 **Significant** **Significant**	 **Significant** **Significant**	 **Significant** **Significant**
Biological Resources	LTS	LTS	LTS	LTS	LTS
Cultural Resources	LTS	LTS	LTS	LTS	LTS
Geology & Soils	LTS	LTS	LTS	LTS	LTS
Hazards & Hazmat	LTS	LTS	LTS	LTS	LTS
Hydrology & Water Quality	LTS	LTS	LTS	LTS	LTS
Land Use & Planning	LTS	LTS	LTS	LTS	LTS
Mineral Resources	LTS	LTS	LTS	LTS	LTS
Noise (traffic noise)	**Significant**	LTS	**Significant**	LTS	**Significant**
Population & Housing	LTS	LTS	LTS	LTS	LTS
Public Services	LTS	LTS	LTS	LTS	LTS
Traffic & Circulation	**Significant (freeways)**	**Reduced 50% but Fwys still Significant**	**Reduced 12% but Fwys still Significant**	**Reduced 30% but Fwys still Significant**	**Increased 20% and Fwys still Significant**
Utilities	LTS	LTS	LTS	LTS	LTS
Climate Change	**Significant**	**Reduced but not LTS**	**Reduced but not LTS**	**Reduced but not LTS**	**Significant**
Meets Objectives?	Yes	**To a Lesser Degree**	**To a Lesser Degree**	**To a Lesser Degree**	**To a Lesser Degree**

LTS = Less Than Significant M = Million SF = Square Feet
Bold shows significant impacts or changes from impacts of the proposed Project

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8 LIST OF PREPARERS

EIR PROJECT TEAM

Lead Agency

City of Rialto

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EIR PREPARATION

Jennifer Harry, PE – Project Manager

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Alex Jewell, AICP – EIR Preparer

Jonathan Carey – EIR Preparer

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TECHNICAL STUDIES

Hydrology, DRC Engineering, Inc.

Urban Decay Analysis, David Taussig & Associates

Air Quality and Greenhouse Gas Analysis, LSA

Habitat Assessment, Michael Baker International

Habitat Suitability Assessment, Michael Baker International

Drainage Study, Encompass Associates, Inc.

Noise and Vibration Impact Study, LSA

Traffic Impact Study, LSA

Water Supply Assessment, MBA

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