3.1 INTRODUCTION

This section contains revisions to the RDEIR based upon (1) additional or revised information required to prepare a response to a specific comment; (2) applicable updated information that was not available at the time of RDEIR publication; and/or (3) typographical errors. This section also includes additional mitigation measures to fully respond to commenter concerns as well as provide additional clarification to mitigation requirements included in the RDEIR. The provision of these additional mitigation measures does not alter any impact significance conclusions as disclosed in the RDEIR. Changes made to the RDEIR are identified here in strikeout text to indicate deletions and in <u>underlined text</u> to signify additions.

3.2 RDEIR REVISIONS IN RESPONSE TO WRITTEN COMMENTS

The following text has been revised in response to comments received on the RDEIR.

Page 1-5, Chapter 1, Executive Summary. The following minor technical revision has been made to Table 2-2 in response to comments by the Law Offices of Robert C. Hawkins.

The most prominent land use in the IBC is office, with substantial amounts of industrial/warehouse uses and 4,524 4,779 medium- and high-density residential units and 45 232 density bonus units for a total of 4,569 5,011 existing dwelling units.

Page 1-7 Executive Summary. The following text has been revised based on the Airport Land Use Commission action on the project on June 17, 2010



3.3 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines (Section 15126[a]) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." The alternatives were based, in part, on their potential ability to reduce or eliminate the following impacts determined to be significant and unavoidable for the proposed project:

- Air Quality
- Land Use
- Noise
- Transportation and Traffic

Page 2-5, Chapter 2, Introduction, Table 2-1, NOP Written Comment Summary. The following minor technical revision has been made to Table 2-2 in response to comments by the Irvine Ranch Water District.

Table 2-1				
	NOP Written Comment Summary			
Commenting Agency/Person	Comment Summary	Issue Addressed In:		
Irvine Ranch Water District	The conceptual location for a community park must be fully described and analyzed in the EIR. Need to discuss the impact of hydrology and water quality on the San Joaquin Marsh. The SAMP must be updated as specific projects become known.	Sections 5.7, <i>Hydrology and Water Quality</i> , 5.12 , <u>5.14</u> , <i>Utilities and Service Systems</i> , and 5.14 , <u>5.12</u> , <i>Recreation</i>		

Pages 3-13 Chapter 3, Project Description, Figure 3-4. IBC Vision Plan Framework. The following minor technical revision has been made to Figure 3-4 to identify the land use as high density residential in response to comments by the University of California – Irvine. The revised figure is included as Appendix E to this FEIR.

Figure 3-4 IBC Vision Plan Framework

Pages 3-20 and 3-25 Chapter 3, Project Description, Tables 3-2 and 3-3. IBC Vision Plan Framework. The following technical correction has been made by City staff: The Hines Master Plan has been moved from the pending project list in Table 3-4 to the approved project list in Table 3-3.

Table 3-2Summary of Approved IBC Development Projects				
Project Name	Use Type	Description	Units or Square Feet by Use	
The Lofts on Von Karman	Residential	116-unit residential	116 units	
2801 Kelvin	Residential	248-unit residential	248 units	
The Carlyle	Residential	156-unit residential	156-units	

Avalon/ Jamboree 1	Residential	280-unit residential	280 units
Central Park	Residential/Office/ Retail	1,380-unit residential	1,380 units, 90,000 sf office, 19,700 sf retail
CUP Childcare - 17575 Cartwright	Child Care	CUP for Child care center w/Admin Relief for Playground Area and Parking	11,580 sf school
CUP Church - 17751 Mitchell North	Church	CUP for La Puerta Abierta Church	82,000 sf church
CUP Hotel – 17061 Fitch	Hotel	CUP for 132-room Hotel	132 rooms (78,365 sf)
CUP Hotel - 2300 Main	Hotel	CUP for 170-room Aloft Extended Stay Hotel	170 rooms
Tentative Parcel Map - 17352 Von Karman	Office Condos	Tent. Parcel Map to divide 97,740 sf building	3,995 sf office; 31,903 sf mfg. 23,104 warehouse
Tentative Parcel Map - Daimler	Office Condos	Tent. Parcel Map to create one-lot for office condominiums	
Park Place	Residential/Office/ Retail	Development Agreement and CUP	2,008 units 308 hotel rooms 3.7 million sf of office 350,000 sf of retail ¹
Hines Master Plan	18582 Teller and 2722 Michelson	<u>Office/Retail</u>	<u>Master Plan for 295,000 sf</u> office (Phase 1), 490,000 sf office (Phase 2), 15,500 sf retail/restaurant
Courses City of Indian 2000			

Source: City of Irvine 2009. 1 Subject to change pursuant to the provisions of the existing Development Agreement.



Table 3-3				
Su	mmary of Pending IBC	CNonresidential De	evelopment Projects	
Project Name	Address	Use Type	Description	
Element Hotel	17662 Armstrong	Hotel	CUP for 122-room hotel	
Hines Master Plan	18582 Teller and 2722 Michelson	Office/Retail	Master Plan for 295,000 sf office (Phase 1), 490,000 sf office (Phase 2), 15,500 sf retail/restaurant	
Irvine Crossings Master Plan Modification and TPM	17871 Von Karman	Office/Industrial	Master Plan Modification to reduce office space and increase industrial/warehouse space in an existing building in PA 36 (4,726 sf office, 196,300 sf industrial)	
Diamond Jamboree Master Plan Modification	2600-2798 Alton		Master Plan Modification for Shared Parking/reallocation of uses for Diamond Jamboree Center	
Master Plan for GIFREHC Center	18691 Jamboree Road	Office/Retail/Hotel	Master Plan for GIFREH Multi-Use Center (250,000 sf office, 39,000 sf retail, 350 room hotel)	
Allergan Master Plan Modification	18522 Von Karman	Office	Master Plan Modification for the addition of a 250,000 sf office building	
McGaw - Tentative Tract Map	1555 and 1565 McGaw, 17173 Gillette	Office Condos	Tentative Tract Map for seven office condominiums on two lots	
Modification to CUP for Park Place	3333 Michelson	Office	Minor modification to CUP 87-CP-0829 (Park Place)	
Alton - Tentative Parcel Map for Non-Residential Condos	2152 Alton	Office Condos	Tentative Parcel Map 2008-189 to create 15 non- residential condo units in PA 36	
Business Center - Tentative Parcel Map	2062 and 2070 Business Center Dr	Office Condos	Tentative Parcel Map 2008-137 to create 2 parcels for condominium purposes in PA 36	
Source: City of Irvine 2009				

Pages 3-43 through 3-49, Chapter 3, Project Description. The following minor technical revisions have been made to Kilroy project description in response to comments by the Kilroy Realty Corporation.

Access to the Kilroy project site <u>is currently planned to</u> will be provided from Von Karman Avenue, by way of a private street that bisects the property north to south...

The Kilroy project consists of <u>up to</u> four residential structures <u>which will likely consist of one or both of the</u> <u>following developed with two different</u> building types. The two buildings fronting Von Karman Avenue <u>are</u> <u>currently proposed to be</u> would consist of five-story podia over three levels of parking garage (two levels are subterranean). The <u>These two podium style</u> buildings would comprise a combination of flats and twostory townhomes that front along Von Karman Avenue and the internal streets. The remaining two structures located toward the rear boundaries of the project <u>will likely</u> consist of three-level parking garages wrapped around four-story residential units made up entirely of flats...

The CUP will allow for the development of <u>up to</u> 469 dwelling units, including <u>up to</u> 122 density bonus units, and approve a TDR in order to maintain the overall development intensity cap within the IBC. The <u>At maximum buildout, the</u> TDR is required to increase allowable development intensity on the site, measured as is an additional <u>110 50</u> AM peak-hour intensity values, <u>117 53</u> PM peak-hour intensity values, and <u>1,646 529</u> ADT values. The total intensity allocation to the site will be 170 AM peak-hour intensity values, 185 PM peak-hour intensity values, and 1,840 ADT values.

The Kilroy project applicant is requesting approval of Tentative Tract Map (00419204-PTT) to allow for the subdivision of $\underline{up to}$ 469 residential attached units....

Access to the Kilroy site <u>is currently planned to would</u> be provided from Von Karman Avenue, by way of a private street that bisects the property north to south. Approximately 350 feet into the site, the private street terminates into a T-intersection and runs east to west. A fire lane will be located along each side of the project site at the furthest east and westerly boundaries for emergency vehicle access purposes. <u>At maximum buildout The the Kilroy project is anticipated to will</u> provide a minimum of 1,038 parking spaces to serve the proposed number of units, which are located within parking garages or surface on-street parking....

The Kilroy project is planned for development in <u>one or more phases</u>, <u>depending on the market and</u> <u>economy</u> <u>a single phase</u>, including site preparation, grading, installation and connection of utilities, construction of access and parking, perimeter landscaping, and construction of the residential buildings. Traffic circulation, stormwater drainage, water, electrical, gas, and sewer system improvements will be integrated with the existing City- and utility-owned infrastructure as necessary.

Page 5.2-14, Section 5.2, Air Quality. The following PDF has been revised to identify timing of the analysis.

- PDF 2-5 Prior to issuance of building permit for any For all residential projects located within 1,000 feet of an industrial facility that emits substantial odors, including which includes but is not limited to
 - wastewater treatment plants
 - composting, greenwaste, or recycling facilities
 - fiberglass manufacturing facilities
 - painting/coating operations
 - coffee roasters
 - food processing facilities,



the Project Applicant shall submit an odor assessment to the Community Development Director prior to approval of any future discretionary action that verifies that the South Coast Air Quality Management District (SCAQMD) has not received three or more verified odor complaints <u>from any</u> <u>facility located within 1,000 feet of the site proposed for residential development</u>. If the Odor Assessment identifies that the facility has received three such complaints, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential odors to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units

Page 5.2-14, Section 5.2, Air Quality. The following PDF has been revised based on comments received by the South Coast Air Quality Management District.

- PDF 2-6 Applicants for new developments in the Irvine Business Complex shall require that the construction contractor utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available. The construction contractor shall be made aware of this requirement prior to the start of construction activities. Use of commercially available Tier 3 or higher off-road equipment, or:
 - of year 2006 or newer construction equipment for engines rated equal to 175 horsepower (hp) and greater;

- year 2007 and newer construction equipment for engines rated equal to 100 hp but less than 175 hp; and
- <u>2008 and newer construction equipment for engines rated equal to or greater than over 50 hp</u> horsepower.

<u>The use of such equipment shall be stated on all grading plans. The construction contractor shall</u> maintain a list of all operating equipment in use on the project site. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site.

Page 5.5-12, Section 5.5, Geology and Soils. The following minor technical revision has been made to Table 2-2 in response to comments by the Law Offices of Robert C. Hawkins.

Excavations extending deeper than about two feet are expected to encounter wet soil conditions and groundwater may be encountered at depths greater than 5 to 10 feet during construction...

Page 5.6-23, Section 5.6, Hazards and Hazardous Materials. The following PDFs have been revised based on comments received by the John Wayne Airport and the Airport Land Commission for Orange County.

- PDF 6-1 As described in the proposed zoning for the project, related to building height limitations, recordation of aviation easements, obstruction lighting and marking, and airport proximity disclosures and signage shall be provided per Orange County consistent with the Airport Environs Land Use Plan standards for John Wayne Airport.
- PDF 6-4 As required by the proposed zoning code, applications for new residential and/or residential mixed-use development shall submit data to the Director of Community Development, to evaluate compatibility with surrounding uses with respect to issues including but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination, heliports/helistops and John Wayne Airport compatibility. Structures that penetrate the 100:1 Notification Surface shall file a Form 7460-1 Notice of Proposed Construction or Alternation with Federal Aviation Administration. Residential land uses shall be prohibited in Safety Zone 3.

Page 5.6-23, Section 5.6, Hazards and Hazardous. The following minor technical revision has been made to PDF 6-3 to specify applicable oversight agencies.

PDF 6-3 As described in the proposed zoning code related to hazardous material standards, individual development sites may have existing facilities, such as underground storage tanks, transformers or clarifiers, that contain hazardous materials would be demolished as part of a proposed development. To mitigate any hazardous-materials-related impacts-during the removal of such related to these facilities, the project applicant shall submit a Site Assessment prior to the City deeming the development application complete the Director of Community Development, in conjunction with the Orange County Fire Authority, shall include specific project conditions of approval as part of the discretionary review process for the proposed development. If hazardous materials are identified during the site assessment, the appropriate response/remedial measures will be implement in accordance with the directives of the Orange County Fire Authority (OCFA), Orange County Health Care Agency (OCHCA) and/or the Regional Water Quality Control Board (RWQCB), as appropriate. If soils are encountered during site development that are suspected of being impacted by hazardous materials, work will be halted and site conditions will be evaluated by a qualified environmental professional. The results of the evaluation will be submitted to OCFA, OCHCA, and/or RWQCB, and the appropriate response/remedial measures will be implemented, as directed by OCFA, OCHCA, RWQCB, or other applicable oversight agencies, until all specified requirements of the oversight agencies are satisfied and a no-further-action status is attained.

Page 5.6-23-Section 5.6, Hazards and Hazardous Materials. The following project design feature has been added pursuant to City Council direction as part of the project approval on July 13, 2010

PDF 6-6 Residential development shall not be permitted within a one-parcel buffer surrounding the property at 17451 Von Karman, based on existing parcelization as of the date of the certification of the Environmental Impact Report. The area within the one parcel buffer is depicted in Figure 1 in the City of Irvine Zoning Code Chapter 5-8.

Page 5.7-40-5.7-41, Section 5.7, Hydrology and Water Quality. The following text has been revised to address floodproofing requirements for buildings within the 100-year flood plain.

Impact 5.7-4: Portions of the project site proposed for development are located within a 100-year flood hazard area. [Thresholds HYD-7 AND HYD-8]

Impact Analysis: As discussed in Section 5.7.1.1, according to the FIRMs produced for the Irvine Business Complex area, the 100-year floodplain is conveyed within the existing drainage channels and the remainder of the areas are within Zone X, which is defined as areas determined to be outside the 500-year floodplain. However, as part of the Irvine Business Complex Master Drainage Study, several portions of the channels may be insufficient for containing the 100-year storm flows based on the updated Orange County Hydrology Manual methodologies. It should be noted that while the Irvine Business Complex Master Drainage Study includes calculations of flood inundation and proposed flood proofing elevations, these calculations are considered preliminary and are subject to verification. Final elevations will be verified by the City of Irvine, based on site-specific studies prepared by

applicants' engineers which will be reviewed in conjunction with individual projects. Individual projects must demonstrate that they will not increase ponding on adjacent properties. As required by PPP 7-1, by designing each project to be elevated or flood-proofed one foot above the anticipated 100-year flood elevation, impacts related to flood zones are considered less than significant. Page 5.8-8, Section 5.8, Land Use. The following minor technical revision has been made to PDF 8-2 to specify applicable oversight agencies.

Page 5.8-8, Section 5.8, Land Use. The following minor technical revision has been made to PDF 8-2 to specify applicable oversight agencies.

PDF 8-2 As described in the proposed zoning code relating to compatibility with surrounding uses, the IBC mixed-use environment is an urbanized area, and land use compatibility issues are expected to occur. Therefore, applications for new residential and/or residential mixed-use development shall submit data, as determined by the Director of Community Development, for the City to evaluate compatibility with surrounding uses with respect to issues including, but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination. Compatibility with adjacent uses shall be determined through consistency with local, state, and federal regulations including but not limited to the City of Irvine Municipal Code, South Coast Air Quality Management District, Orange County Fire Authority (OCFA), Orange County Health Care Agency (OCHCA) and/or the Regional Water Quality Control Board (RWQCB).



Page 5.8-29, Section 5.8, Land Use. The following minor technical revision has been made in response to comments by the University of California – Irvine.

UCI owns and operates a property along the east side of Jamboree Road between Campus Drive and Fairchild Road, adjacent to the IBC. According to the UCI 2007 LRDP, the site, known as North Campus—which is currently occupied by academic and support facilities, an arboretum, and a child development center—is planned to be redeveloped with up to 950,000 square feet of office/research space and 455 435 multifamily dwelling units by the year 2036...

Page 5.11-2, Section 5.11, Public Services. The following minor technical revision has been made to change the following requirement from an existing PPP to a Project Design Feature.

PPP 11-4 PDF 11-3 A Click2Enter radio frequency access system shall be installed at any vehicle and pedestrian access point controlled by privacy gates within the project area (proposed Zoning Code).

Page 5.11-3, Section 5.11, Public Services. The following minor technical revision has been made to correct the buildout figure for the IBC

5.11.1.4 Cumulative Impacts

The geographic area for cumulative analysis of fire protection services is the service territory for OCFA. In recent history, Orange County cities and unincorporated areas have undergone a transition from undeveloped and agricultural land to urban developed areas, resulting in residential and employment population increases and associated increases in the demand for public services, including fire protection and emergency medical services. The contribution of these projects to area growth is reflected in Orange County projections and has been taken into account in long-range planning efforts on behalf of the county, the City of Irvine, and the agencies providing public services to the area. At buildout, a total of 7,583 17,038 residential units are projected for the IBC (including units that are already approved, under construction, in process, potential new units, and density bonus units)...

Page 5.11-5, Section 5.11, Public Services. The following project Design Feature has been added to the list of applicable PDF's

PPP 11-4 PDF 11-3 A Click2Enter radio frequency access system shall be installed at any vehicle and pedestrian access point controlled by privacy gates within the project area (proposed Zoning Code).

Page 5.11-6, Section 5.11, Public Services. The following minor technical revision has been made to update the Irvine Police Department service letter for the IBC Vision Plan project response based on the 7,583 additional units and a 1.3 person per dwelling unit multiplier.

Based on the potential for 7,583 dwelling units (including pending units, potential new units, and potential density bonus units) beyond what currently exists in the IBC, an additional $\frac{13}{10}$ police officers and $\frac{5}{4}$ nonsworn support personnel would be required...

Page 5.11-9, Section 5.11, Public Services, Table 5.11-2, IUSD School Capacity and Current Enrollment. The following minor technical revisions have been made to Table 5.11-2 in response to comments by the Irvine Unified School District.

Table 5.11-2 IUSD School Capacity and Current Enrollment

School	Capacity	Current Enrollment			
Culverdale Elementary	652	620-<u>645</u>			
Westpark Elementary	640	583 <u>584</u>			
South Lake Middle School	690	567 <u>566</u>			
University High School	2360 <u>2,444</u>	2356 <u>2,444</u>			
Source: Ruiz 2009.					

Page 5.11-9, Section 5.11, Public Services, Table 5.11-3, SAUSD School Capacity and Current Enrollment. The following minor technical revisions have been made to Table 5.11-3 in response to comments by the Santa Ana Unified School District.

<i>Table 5.11-3</i>					
SAUSL	SAUSD School Capacity and Current Enrollment				
School	Capacity	Current Enrollment			
Monroe Elementary School	486	508 _477_			
McFadden Intermediate School	974	1,519<u>1,510</u>			
Century High School	2,048	2,540<u>2,339</u>			
Source: Dixon 2008.					

Page 5.11-9, Section 5.11, Public Services, Table 5.11-5, IUSD Student Generation. The following minor technical revisions have been made to the text on page 5.11-11 and Table 5.11-5 in response to updated student generation factors received by the Irvine Unified School District.

There is a potential for 2,325 additional new units, including pending units, and 757 density bonus units, for a total of 3,082 residential units in the Irvine Unified School District (IUSD) portion of the IBC. The proposed project would generate an additional 3,477 1.195 students according to the district-wide student generation rates as shown in Table 5.11-5.

Table 5.11-5 IUSD Student Generation				
Grade LevelTotal UnitsDistrictwide Generation RateGrade LevelTotal Units(student per dwelling unit)New Students				
К-6	3,082	0.575 0.201	1,772_619	
7–8	3,082	0.325 0.060	1002 <u>185</u>	
9–12	3,082	0.228<u></u>0.127	703<u>391</u>	
Total	3,276 <u>3,082</u>	1.128_ 0.389	3,477 <u>1,195</u>	
Source: Ruiz 2009.				



Page 5.11-12, Section 5.11, Public Services. The following minor technical revision has been made in response to comments by the Santa Ana Unified School District.

... The current SAUSD development fees, as of July 14, 2008 September 9, 2009, are \$2.97_\$4.84 per square foot for residential development and \$0.47 per commercial and senior housing square foot. SAUSD will need to place relocatable classrooms at each of the schools in this project's assigned attendance area and may need to study boundary changes and the need for new facilities to accommodate this development.

Page 5.11-13, Section 5.11, Public Services, Table 5.11-8, Pending IBC Residential Development Projects and Number of Students Generated. The following minor technical revisions have been made to the text on page 5.11-13 and Table 5.11-8 in response to updated student generation factors received by the Irvine Unified School District.

	Table 5.11-8 Pending IBC Residential Development Projects and Number of Students Generated				
Project Name	Location by District	Total Units (including Density Bonus Units)	Districtwide Generation Rate (student per dwelling unit)	New Students	
2851 Alton	Irvine Unified School District	170	0.402	68 <u>66</u>	
2852 Kelvin	Irvine Unified School District	194	0.402	78 <u>75</u>	
Subtotal	Irvine Unified School District	364	0.402 <u>0.389</u>	146 <u>142</u>	

The pending IBC residential projects would generate approximately <u>146</u> <u>142</u> students for IUSD, 760 students for SAUSD, and 176 students for TUSD...

Page 5.12-12, Section 5.12, Recreation. The following minor technical revision has been made in response to comments from the Remy, Thomas, Moose and Manley, LLP.

At buildout, a total of 17,038 residential units are projected for the IBC (including 9,015 existing and approved residential units and 440 density bonus units), generating a total of 22,149 residents. Based on the City's Park Code, buildout of the IBC would generate a need for a total of 110.2 acres of parkland at buildout. This demand in the IBC would be met through park dedications from individual residential projects. Neighborhood park acreage, or corresponding amenities, would be provided at a rate of 3 acres per 1,000 population, and in-lieu fees would be paid for community park acreage at a land value rate for 2 acres per 1,000 population. According to the General Plan, a total of 127,311 residential units are projected for the City's buildout, generating a total of 165,504 residents the Orange County Projections for the City in 2035, the City of Irvine is projected to have a population of 270,009 people. Based on the City's Park Code, buildout of the City of Irvine would generate a need for a total of 827.5 1,350 acres of parkland and/or the equivalent in amenities, improvements, or fees, not including private neighborhood parkland or the equivalent in improvements or dedicated recreational amenities. Currently, there are a total of 493.7 acres of parkland throughout the City. The remainder of the 1,350 acres would be provided through neighborhood park dedication or equivalent amenities or fees in conjunction with individual residential project approvals. Therefore, As such, recreational needs of future residents of the IBC area, in conjunction with cumulative development in accordance with the adopted General Plan, would add to citywide and regional demand for parks and recreational facilities, and the appropriate land and/or improvements and fees for city required parks will be exacted in conjunction with approval of individual development projects...

Appendix N, Traffic Study. Appendix F to the FEIR includes revisions to Appendix N of the RDEIR in response to comments.

Appendix F Revised Traffic Study Pages

Page 5.13-1, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Manatt, Phelps & Phillips LLP.

...The current IBC development intensity database will not change as a result of the IBC Vision Plan; however, as new land uses are proposed, the database will be updated accordingly and reconciled with the City's traffic model, which assumes buildout of the land use assumptions of the Vision Plan...

Page 5.13-2, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from the Orange County Transportation Authority.

The City of Irvine and study area are currently served by rail transit at the Irvine Station off Barranca Parkway. The Tustin Metrolink Station, located on Edinger Avenue also provides connections to the IBC area. There are several almost sixty Amtrak and Metrolink trains per weekday serving the Irvine station and 25 Metrolink trains per weekday serving the Tustin station both stations, and Irvine Station is also served by Amtrak. There is a current planning effort underway to implement a service expansion program by Metrolink by the year 2010. This expansion will reduce the headways of trains between Fullerton Metrolink station to the north of the study area and Laguna Niguel/Mission Viejo station to the south of the study area. This expansion will improve services at both the Irvine and Tustin Metrolink Stations.

Page 5.13-3, Section 5.13, Transportation and Traffic, Figure 5.13-2. IBC Study Area Traffic Analysis Zones. The following minor technical revision to identify TAZ 293 has been made in response to comments from the Irvine Ranch Water District. The Revised figure is included as Appendix E to this FEIR.

Figure 5.13-2 IBC Study Area Traffic Analysis Zones

Page 5.13-12, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Manatt, Phelps & Phillips LLP.

... The most conservative (highest) peak hour trip rate for each land use category from the IBC database expected to be reduced was multiplied by the appropriate quantity being reduced for industrial and office land uses. To calculate traffic for various land uses within the IBC, the most conservative peak hour trip rate was utilized, which is the AM peak hour trip rate for industrial land uses and the PM peak hour trip rate for all other land uses. For industrial land uses the AM peak hour trip rate was utilized, for all other land use categories the PM peak hour trip rate was utilized. By reducing the quantities of the non-residential land uses to accommodate the increased number of residential units under the Vision Plan, the proposed project is trip neutral...

Page 5.13-21, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP.

This section describes the current state of the existing land uses and circulation system within the study area. The City of Irvine's traffic model, the Irvine Transportation Analysis Model (ITAM) $\frac{8.1}{8.4}$ was applied to forecast future traffic conditions for the study area...



Page 5.13-42, Section 5.13, Transportation and Traffic, Table 5.13-11, Study Area Committed Roadway Improvements. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP.

Table 5.13-11 Study Area Committed Intersection Improvements				
Funding Status	of 1992 IB	C Intersection Improvements - March 200	8	
Stage		I ocation	Improvements	Status [1]
Stage I				
oluger	49	Red Hill & Main	3rd EBT: 3rd WBT	Complete
	78	MacArthur & Main	4th SBT: 3rd EBT: Free WBR	Complete
	79	MacArthur & I-405 NB Ramp	Free 2nd NBR: 4th SBT: 4th NBT: Free 2nd	Complete
	80	MacArthur & I-405 SB	2nd SBL · 4th SBT · 4th NBT	Complete
	82	MacArthur & Michelson	4th SBT: 4th NBT: NBR: WBT	Complete
	84	MacArthur & Campus	4th SBT: 3rd FBT: 3rd WBT	Complete
	138	Jamboree & Alton	3rd WBT· 4th NBT· 4th SBT	Complete
	141	Jamboree & Main	4th SBT: 4th NBT: 3rd WBT: 3rd FBT	Complete
	143	Jamboree & I-405 NB Ramp	3rd NBT & 4th SBT	Complete
	144	Jamboree & I-405 SB	4th SBT: 3rd & 4th NBT	Complete
	145	Jamboree & Michelson	4th SBT: 4th NBT	Complete
	188	Harvard & Michelson	2nd FBI	Complete
	42	Red Hill & Dver/Barranca	2 nd WBL: 4 th FBT: 4 th WBT	Fully Funded ¹
	47	Red Hill & MacArthur	3 rd WBT· 3 rd FBT	Fully Funded ¹
	47	Red Hill & MacArthur	4th WBT: 4th FBT	Not Funded
	82	MacArthur & Michelson	2nd NBL	Not Funded
	84	MacArthur & Campus	FBR	Not Funded
	143	Jamboree & L-405 NB Ramp	4 th NBT	Not Funded
	145	Jamboree & Michelson	FBR	Not Funded
	188	Harvard & Michelson	Free SBR	Not Funded
Stage II	100			not r undou
	133	Jamboree & ICD	Grade Separation	Complete
	138	Jamboree & Alton	2 nd NBL; 2 nd SBL; 3 rd EBT	Complete
	150	MacArthur & Jamboree	NBR; 2 nd NBL	Complete
	42	Red Hill & Dyer/Barranca	4 th SBT; 4 th NBT; 2 nd EBL	Fully Funded
	47	Red Hill & MacArthur	3rd SBT; 3rd NBT; 2 nd NBL	Fully Funded
	47	Red Hill & MacArthur	4 th NBT	Not Funded
	49	Red Hill & Main	3rd & 4th SBT; 3rd NBT; Free NBR	Not Funded
	78	MacArthur & Main	Replace 1 WBT (VLD) with 3rd WBL (VLD)	Not Funded
	136	Jamboree & Barranca	Grade Separation	Not Funded
	138	Jamboree & Alton	5 th NBT; 5 th SBT	Not Funded
	184	Harvard & Barranca	WBR; 2 nd SBL; 2 nd NBL	Not Funded
	186	Harvard & Main	Free SBR	Not Funded
Stage III		•		
	234	Culver & Michelson	2 nd NBL; SBR; WBR	Complete
	47	Red Hill & MacArthur	Replace 1 SBT (VLD) with 3 rd SBL (VLD); Replace 1 EBT (VLD) with 3rd EBL (VLD)	Not Funded
	97	Von Karman & Barranca	Free NBR; 2 nd WBL; 4 th WBT; 4 th EBT	Not Funded
	136	Jamboree & Barranca	Free EBR	Not Funded
	141	Jamboree & Main	4 th EBT	Not Funded
Tustin Legacy				
	49	Red Hill & Main	Free SBR	Committed
	102	Von Karman & Michelson	2 nd EBL	Committed

Table 5.13-11						
	Study Area Committed Intersection Improvements					
Funding Status of	of 1992 IB	C Intersection Improvements - March	2008			
Stage	ID	Location	Improvements	Status [1]		
	138	Jamboree & Alton	5 th NBT	Committed		
	185	Harvard & Alton	2 nd NBL	Committed		
	227	Culver & Warner	2 nd EBL	Committed		
Notes: [1] Status as	s of March	2008				
1 The two full	y funded in	nprovements at Red Hill & MacArthur and	Red Hill & Dyer/Barranca (both funded in part by the	he 1992 IBC Fees) will be		
constructed	by 2015 a	nd are assumed to be in-place in the 2015	interim year analysis.			
Legend:		EE	3L = Eastbound Left			
EBT = Eastbound	Through La	ine W	BR = Westbound Right			
WBT = Westbound Through Lane WBL = Westbound Left						
NBT = Northbound Through Lane NBL = Northbound Left						
EBR = Eastbound Right VLD = Variable Lane Deployment						
SBR = Southbound Right NBR = Northbound Right						
SBT = Southbound Through Lane						

Page 5.13-43, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

... This theoretical scenario provides an early glimpse of potential impacts associated with implementation of the proposed project. The impacts are considered theoretical because it is impossible for the entire project to be constructed instantly, without requisite circulation system improvements as new projects are built. Although this is not a feasible scenario for the IBC Vision, as the project cannot be implemented immediately, it provides a basis for evaluation of potential project impacts.

Page 5.13-66, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

Figures 5.13-20 and 5.13-21 graphically depict the ADT Traffic Volumes and deficient segment LOS, respectively, for the 2015 Cumulative Baseline No Project scenario. The analysis indicates that twelve eleven segments are deficient under the 2015 Cumulative Baseline No Project daily conditions, with 10 of the segments in the City of Irvine. As noted above, LOS E indicates a deficient segment for all arterial segments outside Planning Area (PA) 36 within the City of Irvine. It should be noted that daily V/C ratio analysis arterial segments in Costa Mesa, Newport Beach, and Tustin are not evaluated further and any deficiencies are addressed at the intersections. PA 36 segments are considered deficient at LOS F. Deficient segments under daily Year 2015 Cumulative Baseline No Project conditions include:

1585 Newport Avenue from Valencia Avenue to Edinger Avenue (Tustin)*

*Deficient locations under daily conditions-no further analysis required.)



Page 5.13-69, Section 5.13, Transportation and Traffic, Figure 5.13-21. 2015 Cumulative Baseline No Project Daily Arterial Deficiencies. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin. The Revised figure is included as Appendix E to this FEIR.

Figure 5.13-21 2015 Cumulative Baseline No Project Daily Arterial Deficiencies

Page 5.13-89, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

Deficient segments under daily Year 2015 Cumulative With Project conditions include the following:

1585 Newport Avenue from Valencia Avenue to Edinger Avenue (Tustin)

Page 5.13-89, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

... This is likely due to the redistribution of trips within the IBC study area under the With Project conditions, with a greater amount of residential dwelling units, and <u>the assumption of a corresponding</u> a reduction in commercial, office, and industrial square footage to allow for the increased residential uses, consistent with the methodology of the Vision Plan land use. For deficient intersections or intersections that become deficient with the Proposed Project within the City of Irvine where the ICU value increases by 0.02 over the No Project conditions that intersection experiences a significant project impact...

Page 5.13-93, Section 5.13, Transportation and Traffic, Figure 5.13-30. 2015 Cumulative With Project Daily Arterial Deficiencies. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin. The Revised figure is included as Appendix E to this FEIR.

Figure 5.13-21 2015 Cumulative With Project Daily Arterial Deficiencies

Page 5.13-105, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Manatt, Phelps & Phillips LLP.

As part of the IBC Vision plan, the 2,522 2,035 residential units currently in process would be expected to be completed by 2015, with the exception of 776 approved units at Park Place anticipated to be built after 2015; the remaining 3,950 units plus the 776 approved units at Park Place and associated density bonus units included as part of the Vision Plan are expected to be completed by project buildout or the Post-2030 timeframe. Please refer to Appendix N for a complete discussion of these scenarios.

Page 5.13-107, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

The analysis indicates that the following segments are deficient under the Post-2030 No Project daily conditions, including two segments in Costa Mesa, 12 in Irvine, one in Newport Beach, one in Santa Ana, and two one in Tustin. As noted above, LOS E indicates a deficient segment for all arterial segments outside Planning Area (PA) 36

within the City of Irvine. PA 36 segments are considered deficient at LOS F. Deficient segments under daily Post-2030 Cumulative Baseline No Project conditions include the following:

•

• 1585 Newport Avenue from Valencia Avenue to Edinger Avenue (Tustin)

Page 5.13-111, Section 5.13, Transportation and Traffic, Figure 5.13-36. Post-2030 Cumulative Baseline No Project Daily Arterial Deficiencies. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin. The Revised figure is included as Appendix E to this FEIR.

Figure 5.13-21 Post-2030 Cumulative Baseline No Project Daily Arterial Deficiencies

Page 5.13-133, Section 5.13, Transportation and Traffic, Figure 5.13-45. Post-2030 Cumulative With Project Daily Arterial Deficiencies. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin. The Revised figure is included as Appendix E to this FEIR.

Figure 5.13-21 Post-203 Cumulative With Project Daily Arterial Deficiencies

Page 5.13-135, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

The analysis indicates that several segments are deficient under the Post-2030 Cumulative With Project daily conditions including two segments located within Costa Mesa, 15 of the segments in Irvine, one segment each in Newport Beach and Santa Ana, and two <u>one</u> segments in Tustin. Compared to the No Project scenario, there are three additional segments that are deficient under daily conditions within the City of Irvine. As noted above, LOS E indicates a deficient segment for arterial segments outside Planning Area (PA) 36 within the City of Irvine. PA 36 (IBC area) segments are considered deficient at LOS F. Deficient segments under Post-2030 Cumulative With Project conditions include the following:

• ..

• 1585—Newport Avenue from Valencia Avenue to Edinger Avenue (Tustin)

Page 5.13-147, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

The Post-2030 With Project (MPAH Network) impact analysis evaluates the proposed IBC Vision With Project scenario with the specific unfunded circulation system improvements identified in the 1992 IBC Rezone EIR assumed in the network. This buildout alternative was prepared to identify whether there were differences in resulting impacts when compared to the IBC Vision Plan network (constrained network) that removed specific unfunded improvements identified in the 1992 IBC Rezone EIR and to help determine if these improvements are necessary under buildout conditions or should be removed from the City's General Plan. The intent of the MPAH alternative buildout scenario analysis is two-fold: 1) to provide a reasonable sensitivity analysis that provides Irvine and adjacent jurisdictions with the information necessary to downgrade or upgrade facilities under General Plan buildout conditions using reasonable and accepted methodologies for impact identification and mitigation (such as Irvine's Traffic Impact Analysis Guidelines and adjacent jurisdictions' adopted methodologies); and 2) to begin the County MPAH Amendment process for downgrading MPAH arterials, which may require preparation of a



<u>Cooperative Study with OCTA, Irvine, and affected jurisdictions.</u> The following improvements are included in the MPAH Network:

Page 5.13-148 through 5.13-149, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

There are 20 deficient segments under the Post-2030 With Project (MPAH Network) daily conditions, two segments located within Costa Mesa, 16 of the segments in Irvine, one segment in Newport Beach, and <u>one no segments</u> in Tustin. As noted above, LOS E indicates a deficient segment for arterial segments outside Planning Area (PA) 36 within the City of Irvine. PA 36 segments are deficient at LOS F. Deficient segments under the Post-2030 With Project (MPAH Network) conditions include the following:

1585 Newport Avenue from Valencia Avenue to Edinger Avenue (Tustin)

Page 5.13-153, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from the Orange County Transportation Authority.

... The IBC Vision Plan traffic study has determined that 6 lanes are unnecessary for both of these roadway segments under buildout conditions. Thus, the City of Irvine will initiate an MPAH Amendment by entering into a cooperative study with the Orange County Transportation Authority (OCTA) to determine the feasibility of downgrading both Alton Parkway and Von Karman Avenue. Once this study is complete, both agencies can move forward with amendments to the General Plan and MPAH to downgrade both Alton Parkway between Red Hill Avenue and Jamboree Road as well as Von Karman Avenue between Barranca Parkway and Michelson Drive. Once the Study is complete, in order for the City of Irvine to maintain eligibility for Measure M funding, prior to amending the City's General Plan to downgrade both Alton Parkway between Red Hill Avenue and Jamboree Road and Von Karman Avenue between Barranca Parkway and Michelson Drive, the City and OCTA will work to prepare amendments to the County MPAH to be approved by the OCTA Board of Directors. If the MPAH is approved by the OCTA Board, the City can move forward with downgrading the arterial segments.

Page 5.13-157, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from the Orange County Transportation Authority.

MacArthur Boulevard between Main Street and SR-55 cannot be mitigated to below a level of significance without changing the MPAH road classification upgrading the segment from a Major Arterial (six lanes) to a Principal Arterial (eight lanes). The classification would not need to be upgraded in the MPAH, as the MPAH designations represent a minimum standard which jurisdictions, such as Irvine or Santa Ana, may build upon. Reclassification would provide one additional lane in each direction and potentially would require an amendment to the City of Santa Ana General Plan. This forecast deficiency constitutes a project related significant impact according to the City of Santa Ana's performance criteria. The City of Irvine is responsible for a fair-share for this improvement for the Post-2030 future scenario.

Page 5.13-161, Section 5.13, Transportation and Traffic, Figure 5.13-50. IBC Vision Study Intersection Improvement Locations. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin. The Revised figure is included as Appendix E to this FEIR.

Figure 5.13-21 Post-203 Cumulative With Project Daily Arterial Deficiencies

Page 5.13-163, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Remy, Thomas, Moose and Manley, LLP, and the City of Tustin.

5.14.6.1 Summary of Mitigation Program

In summary, one arterial segment and 21 intersections are forecast to operate at a deficient LOS under 2015 and Post-2030 conditions. <u>Mitigation measures are proposed for all project-related impacts identified in the interim year</u> 2015 analysis regardless of whether the location is impacted in the build-out condition. Of the 21 deficient intersections, a project impact is forecast for 15 of the deficient intersections. The arterial segment deficiency is a project related impact. Additionally, a number of freeway mainline segments and ramps are forecast to operate at a deficient LOS. As a general rule, mitigation measures for arterials or intersections begin with identification of any measures that might have been recommended as part of other traffic studies in the area. These mitigation measures are then applied to determine whether they result in roadway segment or intersection operation within acceptable thresholds.

Page 5.13-170, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from the Caltrans.

• Intersection #232: Culver Drive and I-405 Northbound Ramps

This intersection is deficient under Post-2030 conditions with a project related significant impact. The extremely high volume and high right turn adjustment on the westbound right turn movement has contributed to the ICU deficiency in the PM peak hour and necessitated the recommendation of restriping the westbound approach of this intersection to one left turn lane, one and two right turn lanes, and a shared left right turn lane. Implementation of this improvement results in acceptable operations in both the AM and PM peak hours under the Post-2030 scenario and appears to be physically feasible.

Page 5.13-191, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from the Orange County Transportation Authority.

... Bringing State facilities closer to residences and businesses is also not a social or legal prerogative of the City however, the regional transportation agency, OCTA has identified <u>certain</u> improvements to <u>the freeway mainline to</u> be funded by the Renewed Measure M, approved in 2007-08 by the County and participating Cities including the City of Irvine. This analysis does take into consideration improvements identified through this funding source...

Page 5.13-196, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Caltrans.

Intersection #232: Culver Drive and I-405 Northbound Ramps: Restripe the westbound approach of this intersection to one left turn lane, and two one right turn lanes, and a shared left right turn lane.

Page 5.13-196, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from the Orange County Transportation Authority.

Intersection #85: MacArthur Boulevard and Birch Street: Improve the eastbound approach to two eastbound left-turn lanes and two southbound eastbound through lanes.



Page 5.13-198, Section 5.13, Transportation and Traffic. The following minor technical revision has been made in response to comments from Manatt, Phelps & Phillips LLP.

5.13-4 Prior to adoption of the AB 1600 nexus study identified in MM 13-1, issuance of a building permit for the 12,000th unit within the IBC, the City and Caltrans shall jointly identify feasible operational and physical improvements and the associated fair-share funding contribution necessary to mitigate project-related impacts to state transportation facilities. The City shall fund said improvements on prorata "fair-share" basis in accordance with the terms and conditions of an Agreement to be prepared and agreed to by both agencies. These fair-share contributions for feasible improvements shall be included in the AB 1600 nexus study enter into a mitigation agreement with Caltrans which identifies transportation or operational improvements necessary to mitigate project related impacts to state transportation facilities.

Page 5.15-2, Section 5.15, Global Climate Change. The text of footnote 1 is being revised to clarify U.S. role in Kyoto Protocol

¹1 Kyoto Protocol: Established by the United Nations Framework Convention on Climate Change (UNFCC) and signed by more than 160 countries (including the United States, which ultimately did not ratify) stating that they commit to reduce their GHG emissions by 55 percent or engage in emissions trading.

Page 5.15-9, Section 5.15, Global Climate Change. The following minor technical revision has been made in response to the newly adopted CEQA Guidelines.

The <u>amendments to the CEQA guidelines were adopted December 30, 2009</u> are currently in the process of being updated to address global warming GHG emissions. The changes were approved by the Office of Administrative Law for inclusion in California Code of Regulations. The changes become effective March 1, 2010. Pursuant to SB 97, proposed changes to the CEQA Guidelines will be adopted on or before January 1, 2010. The Natural Resources Agency has circulated the proposed changes to the CEQA Guidelines as part of the rulemaking process. Based on the draft these adopted thresholds for GHG emissions, a significant impact relative to global climate change is considered to occur if the project would:

Page 5.15-10 through 5.15-11, Section 5.15, Global Climate Change, and Table 5.15-4, IBC Vision Plan Transportation and Nontransportation GHG Reduction Targets. The thresholds for determining significant Greenhouse Gas (GHG) emission impacts has been revised based on the newly adopted CEQA Guidelines.

While the City's proposed Climate Action establishes a city-wide goal to achieve the reduction targets of AB 32, the CEQA Guidelines (updated December 2009) requires a lead agency to evaluate the change in existing physical environmental conditions associated with the project. In accordance with CEQA Guidelines a net zero increase in GHG emissions would clearly indicate that no significant impacts would occur as Section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance (Natural Resources Agency 2009). Therefore, GHG emissions associated with the IBC Vision Plan are compared to the City's GHG reduction target of 15 percent below existing levels for transportation and nontransportation sources. The City separates emissions into these two categories because transportation emissions are indirect emissions that are regulated through federal, statewide, and regional emissions reduction programs; whereas, nontransportation sectors can be directly controlled by applicants for new projects or the City.

To achieve this target, plans, programs, or policies (PPP) and project design features (PDF) would need to achieve a 15 percent reduction attain a net zero increase in GHG emissions. If PPPs and PDFs, identified by the project do not achieve 15 percent below the IBC Vision Plan's current GHG emissions inventory, then GHG emissions impacts will be considered potentially significant in the absence of mitigation. Table 5.15-4 shows the GHG emissions reduction targets based on the existing emissions inventory for the IBC shown in Table 5.15-3. The GHG reduction target for the IBC Vision Plan area for transportation emissions is 580,974 683,499 MTons (i.e., 15 percent below current existing conditions) and the target fro for nontransportation emissions is 191,975 225,853 MTons (i.e., 15 percent below existing conditions).

Table 5.15-4 IBC Vision Plan Transportation and Nontransportation GHG Reduction Targets				
Existing CO2e Emissions GHG15 Percent below Existing ConditionsSourceReduction TargetGHG Reduction Target				
Transportation Sector	683,499 MTons	580,974 MTons		
Nontransportation Sectors	225,853 MTons	191,975 MTons		
Source: CTG 2009 MTons = metric tons				

Page 5.15-14, Section 5.15, Global Climate Change. The City has approved development of a Renewable Energy and Existing Building Retrofit Program. In addition, the City has received federal funding for this program. Therefore, the following PPP has been incorporated into the EIR.

- PPP 15-14
 Renewable Energy and Existing Buildings Retrofit Program: Pursuant to City Council Resolution

 09-52, the City has received federal funding from the U.S. Department of Energy to establish a

 Renewable Energy and Existing Retrofit Program. Retrofitting is designed to improve a building's

 energy consumption by using cost-effective measures that do not require extensive remodeling work.

 The City of Irvine is proposing to use the "whole building approach" meaning that the City will look at the following:
 - Thermal envelope (i.e. the shell insulation and air leakage)
 - Mechanical systems (i.e. HVAC and domestic hot water)
 - Appliances and lighting that may need replacing

The approach will evaluate these areas and their interaction given usage rates, building site, and climate to assess the building's overall energy efficiency and performance and to make targeted recommendations for improvement and ultimately reduce residential demand. The City of Irvine will create a financing district to help property owners finance energy efficiency improvements and renewable energy installations. The City of Irvine is forming a Property Assessed Clean Energy (PACE) District under the Mello-Roos Community Facilities Act of 1982 and its powers as a charter city. Eligible improvements may include energy efficiency, water conservation, and renewable energy improvements to privately owned buildings or property. Potential funding for initial improvements may come from various sources including American Recovery and Reinvestment Act grants, taxable bonded indebtedness, other external financing arrangements, or City funds.



Page 5.15-15-5.15-16, Section 5.15, Global Climate Change. The text of following project design features are being revised to clarify the role of the proposed zoning in establishing the IBC TMA

- PDF 15-7 **Transportation Management Association (TMA):** The City anticipates establishment of a TMA for the IBC by Spring 2010. Based on the ITAM model, establishment of the TMA for the IBC Vision Plan area would result in a reduction of 8 percent of projected VMT. The proposed zoning enables the establishment of a TMA within the IBC. <u>As described in the proposed zoning for the project, future applicants of new commercial, office, and retail development within the Irvine Business Complex area shall provide the following features to reduce project-related mobile-source air pollutant emissions:</u>
 - Preferential parking for carpools and vanpools totaling 5 percent of all spaces on site.
 - Preferential parking for alternative fuel vehicles (e.g., compressed natural gas or hydrogen) totaling 5 percent of all spaces on site.
 - Secure bicycle parking and storage facilities for employees and visitors that can accommodate 15 percent of employees on-site.
 - Commuter information boards indentifying bicycle paths and public transit routes and schedules.
- PDF 15-9 **Bicycle Improvements:** The IBC would provide linkages to the City regional bicycle trail system. Currently continuous on-street bicycle lanes exist only along Main Street. Bicycle lanes are proposed along parts of Jamboree Road, Red Hill Avenue, Von Karman Avenue, Michelson Avenue, Carlson Avenue, Barranca Parkway, and Alton Parkway. Furthermore, the sidewalk system would be shared between pedestrians and bicycles. As part of the Vision Plan, bicycle connections to the San Marco Park, adjacent to the San Diego Creek, would be improved with a new pedestrian bridge.

Also refer to PDF 13-1 and PDF 15-7, which require <u>allow for</u> the creation of a Transportation Management Association (TMA) for the IBC area.

Page 5.16-15-5.15-17, Section 5.15, Global Climate Change. The following minor technical revisions have been made to change the following requirement from Project Design Features to existing PPP's. and renumber PDF's accordingly.

PDF 15-10 PPP 15-15 **Safe Route to Schools:** The Safe Routes to School program is a federal and state grant program intended to increase the percentage of students walking or cycling to school. Funding is awarded to cities to construct engineering improvements and to start educational, encouragement, and enforcement programs. The City of Irvine has been successful in obtaining grant funding to implement a citywide program that includes walking school buses—groups of students who meet at a designated location and walk to school together, with a parent at the front and back of the group. This encourages students to walk to school and assuages parents' fears of traffic and crime safety risks that are impediments to walking alone. Based on the ITAM model, a 0.2 percent reduction in VMT is achieved through implementation of this program.

PDF 15-11 PPP 15-16**Circulation Phasing Analysis:** The amount of emissions increase exponentially as arterial travel speeds decrease. As is the case with many cities in Southern California, there are often defined congestion locations (such as the major intersections along Jamboree Road) where a majority of congestion and delay occurs. The City currently has a Circulation Phasing Analysis program in place.

They collect traffic counts at congested locations on a bi-annual basis and monitor locations every three years. The results of the analysis are used to determine future Capital Improvement Projects.

Water Conservation and Efficiency

- PDF 15-1210 Ultra-Low-Flow Fixtures: Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site are ultra-low-flow water fixtures that exceed the Uniform Plumbing Code. Examples are: 1.28 average gallons per flush high efficiency toilets, 2 gallon per minute (gpm) efficient bathroom faucets, 2.2 gpm efficient kitchen faucets, and 2.2 gpm efficient shower heads.
- PDF 15-1311 Landscaping and Irrigation Systems: Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that landscaping irrigation systems installed in the project are automated, high-efficient irrigation systems that reduce water use, such as an evapotranspiration "smart" weather-based irrigation controller, dual piping for recycled water, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. These features will make the project consistent with the intent of the California Water Conservation in Landscaping Act of 2006 (AB 1881), including provisions to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water.
- PDF 15-1412 Use of Reclaimed Water on All Master Landscaped Areas: If recycled water service is determined by IRWD to be feasible (see PPP 14-1), applicants for new developments in the Irvine Business Complex shall use reclaimed water in all master landscaped areas. This will include master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes will also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.

Solid Waste Measures

PDF 15-1513 **Material Recovery:** To reduce waste generated in the IBC and encourage recycling of solid wastes, the Orange County Integrated Waste Management Department operates material recovery facilities to recycle glass, plastic, cans, junk mail, paper, cardboard, greenwaste (e.g., grass, weeds, leaves, branches, yard trimmings, and scrap wood), and scrap metal. Future employees, residents, and customers would participate in these programs. On-site recycling facilities will be required for all commercial, retail, industrial, and multifamily residential developments.

Building

PDF 15-1614 **GreenPoint Rated Residential Buildings:** Applicants for new residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to be GreenPoint Rated. GreenPoint Rated developments must achieve a minimum of 50 total points and meet the category-specific point thresholds as specified in the current GreenPoint Rated Builder Handbook. Developments that exceed this minimum are rewarded by a higher grade on their projects. The GreenPoint Rated program is updated every three years to coincide with changes to the California Building Energy Efficiency Standards.

PDF 15-4715 **Designed to Earn the Energy Star Non-Residential Buildings:** Applicants for new nonresidential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to achieve the 'Designed to Earn the Energy Star' rating. In order achieve the 'Designed to Earn the



Energy Star' rating, the architect/design firm must demonstrate that the final estimate of the building's energy use corresponds to a rating of 75 or better using the US EPA's Energy Performance Rating from the Internet-based tool, Target Finder.

Page 5.15-19 through 5.15-20, Section 5.15, Global Climate Change, and Table 5.15-5, Post-2030 Annual GHG BAU Emissions Inventory for the Irvine Business Complex. The following text has been revised based on the net-zero increase from existing threshold for transportation and nontransportation sources. The net-zero significance threshold is based on the newly adopted CEQA Guidelines. In accordance with CEQA Guidelines a net zero increase in GHG emissions would clearly indicate that no significant impacts would occur as Section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance (Natural Resources Agency 2009).

 CO_{2e} emissions from construction and operational activities associated with the <u>existing conditions</u> and post-2030 (P2030) Proposed General Plan BAU and P2030 Proposed General Plan with Statewide and Federal PPPs and PDFs are shown in Table 5.15-5...

<i>Table 5.15-5</i>						
Post-2030 Annual GHG BA	Post-2030 Annual GHG BAU Emissions Inventory for the Irvine Business Complex					
Source	Proposed General Plan BAU (P2030)	Percent of Total Proposed General Plan P2030 BAU Inventory	Proposed General Plan P2030 with <u>Statewide and</u> <u>Federal</u> PPPs and PDFs			
Transportation Sector						
Transportation	872,087	68%	512,956 <u>6</u>15,694 1			
Transportation GHG Reductions Needed	291,113 <u>683,499</u>	—	— <u>67,805 MTons</u>			
Nontransportation Sectors						
Residential	122,788	10%	4 7,359 <u>5</u>3,832^{2, 3}			
Non-Residential	191,254	15%	97,791 <u>113,390^{3, 4}</u>			
Hotel	7,996	1%	3,988 4,641 ³			
Infrastructure	8,314	1%	7,898			
Water	5,497	0%	4,394 <u>5</u>,224³			
Solid Waste	48,953	4%	44,064 48,953 ³			
Construction	32,072	2%	32,072			
Subtotal	416,874	32%	237,566 _266,010			
Nontransportation GHG Reductions Needed	224,889 — <u>225,853</u>	_	— <u>40,157 MTons</u>			
Total CO _{2e} Inventory	1,288,961	100%	750,522 <u>881,704</u>			
TOTAL CITYWIDE REDUCTIONS NEEDED	_	_	40,157 MTons			

Source: CTG 2009

MTons = metric tons

Includes 78,494 MTons of reductions associated with the California Low Carbon Fuel Standard (PPP 15-5) and 177,900 MTons associated with the <u>Federal Corporate Average Fuel Economy (CAFE) Standards (PPP 15-6).</u>

² Includes 60, 180 MTons of residential reductions associated with the Title 24 Code Cycles: Net Zero Buildings (PPP 15-3).

3 Includes a total of 16,792 MTons of reductions associated with the California Renewable Portfolio Standard (PPP 15-4) for residential, non-residential, hotel, water, and solid waste.

Includes 73,892 MTons of non-residential reductions associated with the Title 24 Code Cycles: Net Zero Buildings (PPP 15-3).

Page 5.15-20 through 5.15-21, Section 5.15, Global Climate Change, and Table 5.15-6, GHG Reductions Associated with PPPs and PDFs. The following text has been revised based on the net-zero increase from existing threshold for transportation and nontransportation sources. The net-zero significance threshold is based on the newly adopted CEQA Guidelines. In accordance with CEQA Guidelines a net zero increase in GHG emissions would clearly indicate that no significant impacts would occur as Section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance (Natural Resources Agency 2009).

The City's GHG reduction target is 15 percent below existing levels, or no net increase in GHG emissions, for transportation and nontransportation sectors. To achieve this target, <u>Citywide PPP and PDFs would need to achieve a 15 percent reduction from existing conditions (see Table 5.15 4)</u>. Because the Proposed General Plan BAU (P2030) scenario generates 1,288,960 MTons of GHG emissions, PPPs and PDFs would need to achieve 291,113 MTons of reductions from P2030 for transportation sources and 224,899 40,157 MTons of reductions from P2030 for nontransportation sources. Federal and State strategies would achieve the City's target of a zero net increase for transportation-related GHG emissions. However, additional reductions associated with Federal and Statewide transportation strategies are not applied as offsets toward the non-transportation sources. Therefore, Citywide PPPs and PDFs would need to achieve a total of 40,157 MTons of reductions in order to meet the City's zero net increase in GHG emissions threshold for transportation and non-transportation sources combined. Table 5.15-6 below quantifies reductions associated with <u>Citywide PPPs</u> and PDFs.

As shown in this table, <u>Citywide</u> PPPs and PDFs achieve 131,182 MTons of GHG reductions and therefore would not-achieve the GHG emissions reduction target for the IBC Vision Plan area. Consequently, <u>mitigation measures</u> are required to ensure GHG emissions achieve the GHG emissions reduction target for the IBC Vision Plan. The <u>the</u> project's contribution to GHG impacts are considered <u>potentially less than</u> significant.



GHG Emissions Reductions from Proposed General Plan BAU (P2030) in Million Soft Code Transportation Citywide PPPs and PDFs PDF 15-10 Safe Route to Schools 1,747 PPP 15-9 Transportation 8,723 PDF 15-10 Safe Route Schools 1,747 PPP 15-11 Additional Fixed Route Shuttle System to Complement The / Shuttle 8,723 PDF 15-7 Transportation Management Association (TMA) ¹ 72,648 ³ PDF 15-10 Comprehensive Signal Relining and Coordination Program 8,723 PDF 15-10 Comprehensive Signal Relining and Coordination Program 8,723 PDF 15-10 Comprehensive Signal Relining and Coordination Program 8,723 PDF 15-11 California Low Carbon Fuel Standard 9,723 PDF 15-5 California Low Carbon Fuel Standard 70,073 PPP 15-5 California Low Carbon Fuel Standard 70,073 PPP 15-5 Foderal Corporate Average Fuel Economy (CAFE) Standards 117,700 Transportation Reductions from Post 2030 RAU 369,131 MTons Transportation Reductions from Post 2030 RAU 369,131 MTons Transportation Reciper		GHG Reductions Associated with PPPs of	and PDFs			
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PPP 15 1 and PPP 15 13 Solid Waste: C&D Debris Recycling and Reuse Ordinance and Waste Reduction 4,889 Subtotal Citywide PPPs and PDFs 28,444 MTons Statewide and Federal PPPs 28,444 MTons PPP 15 4 California Renewable Portfolio Standard 16,792 Title 24 Code Cycles: Net Zero Buildings 60,180 PPP 15 3 Residential 73,892 Subtotal Statewide and Federal PPPs 150,864 MTons Nontransportation Reductions from Post 2030 BAU 179,308 MTons Nontransportation Target for Post-2030 224,899 MTons Achieves Nontransportation GHG Target? Yes	PDF 15-17	Non-Residential Buildings Designed to Earn the Energy Star	16,252²			
Subtotal Citywide PPPs and PDFs 28,444 MTons Statewide and Federal PPPs	PPP 15 1 and PPP 15 13	Solid Waste: C&D Debris Recycling and Reuse Ordinance and Waste Reduction	4 ,889			
Statewide and Federal PPPs PPP 15-4 California Renewable Portfolio Standard 16,792 Title 24 Code Cycles: Net Zero Buildings 60,180 PPP 15-3 Residential 60,180 Non Residential 73,892 Subtotal Statewide and Federal PPPs Nontransportation Reductions from Post 2030 BAU 179,308 MTons Nontransportation Target for Post-2030 224,899 MTons Achieves Nontransportation GHG Target? Yes		Subtotal Citywide PPPs and PDFs	28,444 MTons			
PPP 15-4 California Renewable Portfolio Standard 16,792 Title 24 Code Cycles: Net Zero Buildings 60,180 PPP 15-3 Residential 60,180 Non Residential 73,892 Subtotal Statewide and Federal PPPs 150,864 MTons Nontransportation Reductions from Post 2030 BAU 179,308 MTons Nontransportation Target for Post-2030 224,899 MTons Achieves Nontransportation GHG Target? Yes	Statewide and	Federal PPPs				
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Non Residential 73,892 Subtotal Statewide and Federal PPPs 150,864 MTons Nontransportation Reductions from Post 2030 BAU 179,308 MTons Nontransportation Target for Post-2030 224,899 MTons Achieves Nontransportation GHG Target? Yes	PPP 15-3	Residential	60,180			
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Nontransportation Reductions from Post 2030 BAU179,308 MTonsNontransportation Target for Post-2030224,899 MTonsAchieves Nontransportation GHG Target?Yes		Subtotal Statewide and Federal PPPs	150,864 MTons			
Nontransportation Target for Post-2030 224,899 MTons Achieves Nontransportation GHG Target? Yes	Nontransportation	Reductions from Post 2030 BAU	179,308 MTons			
Achieves Nontransportation GHG Target? <u>Yes</u>	Nontransportation	Target for Post-2030	224,899 MTons			
	Achieves Nontrans	portation GHG Target?	Yes			

Table 5.15 6

Source. CTG 2009.

Notes:

+ Includes requirements for bicycle lockers and on site showers and parking spaces for carpools.4

² Does not include 2 174 MTons of reductions associated with preferred parking for car

¹ Approximately 2,174 MTons of GHG emissions reductions from preferential parking for carpools and vanpools (PDF 15-7) was included as part of the non-residential buildings strategy. Also includes 704 MTons from secure bicycle parking and storage facilities for employees and visitors (PDF 15-7).

GHG Reductions Associated with Citywide PPPs and PDFs						
<u>Citywide</u> PPP/PDF	Action	<u>GHG Emissions Reductions from in</u> <u>MTons of CO_{2e}</u>				
PDF 15-10	Safe Route to Schools	<u>1,747</u>				
PPP 15-9	Transit Service to LAX	<u>2,174</u>				
<u>PPP 15-11</u>	Additional Fixed Route Shuttle System to Complement The <i>i</i> Shuttle	<u>8,723</u>				
PDF 15-7	Transportation Management Association (TMA) ¹	<u>72,6481</u>				
PPP 15-10	Comprehensive Signal Retiming and Coordination Program	<u>8,723</u>				
PDF 15-11	Circulation Phasing Analysis	<u>8,723</u>				
PDF 15-16	Residential Buildings: GreenPoint Rated Residential Buildings	<u>7,303</u>				
PDF 15-17	Non-Residential Buildings Designed to Earn the Energy Star	<u>16,252</u> ²				
<u>PPP 15-1 and</u> <u>PPP 15-13</u>	Solid Waste: C&D Debris Recycling and Reuse Ordinance and Waste Reduction	<u>4,889</u>				
Total Citywide PPP and PDF Reductions 131,182 MTons						
GHG Reduction Target for Post 2030 40,157 MTons						
Achieves GHG	Achieves GHG Reduction Target Yes					
Source. CTG 2009.						

	<u>Table 5.15-6</u>	
GHG Reductions As	sociated with City	wide PPPs and PDF

Notes:

¹ Includes requirements for bicycle lockers and on-site showers and parking spaces for carpools.²

² Does not include 2,174 MTons of reductions associated with preferred parking for carpools and vanpools.

Page 5.15-22, Section 5.15, Global Climate Change. The following text has been revised based on the net-zero increase from existing threshold for transportation and nontransportation sources. As the Citywide PPPs and PDFs achieve the GHG net-zero target, the project would not cumulatively contribute to a cumulative impact. Mitigation Measure 15-1 is not required and since the City has approved creation of a Renewable Energy and Existing Buildings Retrofit Program, this program has been included as PPP 15-14.

As described under Impact 5.15-1, project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Therefore, impacts identified under Impact 5.15-1 are not project-specific impacts to global warming but the project's contribution to this cumulative impact. Because the project's GHG emissions were considered less than significant with incorporation of the PPPs, and PDFs, and Mitigation Measure 15-1, the project's GHG emissions and contribution to global climate change impacts are considered less than cumulatively considerable and therefore also less than significant.

Page 5.15-22, Section 5.15, Global Climate Change. The following text has been revised based on the net-zero increase from existing threshold for transportation and nontransportation sources. As the Citywide PPPs and PDFs achieve the GHG net-zero target, the project would generate a substantial increase in GHG emissions or conflict with a GHG reduction plan. Mitigation Measure 15-1 is not required and since the City has approved creation of a Renewable Energy and Existing Buildings Retrofit Program, this program has been included as PPP 15-14.

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: $\frac{5.2}{5}$ and $\frac{5.2}{7}$ $\frac{5.15-1}{5}$.



² Approximately 2,174 MTons of GHG emissions reductions from preferential parking for carpools and vanpools (PDF 15-7) was included as part of the non-residential buildings strategy. Also includes 704 MTons from secure bicycle parking and storage facilities for employees and visitors (PDF 15-7).

Without mitigation, the following impacts would be potentially significant:

Impact 5.15-1 Project-related greenhouse gas emissions could significantly contribute to global climate change impacts or conflict with the CARB Adopted Scoping Plan.

Page 5.15-22 through 5.15-23, Section 5.15, Global Climate Change. The following text has been revised based on the net-zero increase from existing threshold for transportation and nontransportation sources. Citywide PPPs and PDFs achieve the GHG net-zero target. Mitigation Measure 15-1 is not required and since the City has approved creation of a Renewable Energy and Existing Buildings Retrofit Program, this program has been included as PPP 15-14.

5.15.6 Mitigation Measures

No mitigation measures are necessary.

MM 15-1 Prior to the issuance of building permits in the IBC Vision Plan Area, the City shall establish a renewable energy and existing building retrofit program that will establish a framework for funding and implementing renewable energy projects and energy efficiency retrofits of existing buildings within the IBC Vision Plan area or the City as a whole. Applicants for new development projects within the IBC Vision Plan area shall submit evidence to the satisfaction of the Director of Community Development that the retrofits and/or renewable energy (which may include solar thermal, solar photovoltaic, wind, or other sources approved by the City) of existing buildings equates to the reduction of greenhouse gas (GHG) emissions by 32 percent of nontransportation sources. Applicants for new development projects shall first attempt to accomplish renewable energy production or energy efficiency retrofits of existing buildings within the IBC Vision Plan area. If deemed acceptable to the Director of Community Development, applicants for new development projects can implement new renewable energy production or energy efficiency retrofits of existing buildings within the City of Irvine to reduce GHG emissions. However, all renewable energy production or energy efficiency retrofits must be within the City limits.

Page 5.15-23 through 5.15-24, Section 5.15, Global Climate Change. The following text has been revised based on the net-zero increase from existing threshold for transportation and nontransportation sources. As the Citywide PPPs and PDFs achieve the GHG net-zero target, the project would generate a substantial increase in GHG emissions or conflict with a GHG reduction plan. Mitigation Measure 15-1 is not required and since the City has approved creation of a Renewable Energy and Existing Buildings Retrofit Program, this program has been included as PPP 15-14.

The City has issued a request for proposal for establishing the City's Residential Retrofit Program and Sustainable Facilities Program (commercial and municipal facilities). The Residential Retrofit Program will be designed to overcome financial barriers to making energy efficiency improvements and installing renewable energy systems at individual residents. The Sustainable Facilities Program will address ongoing operations and maintenance of commercial and municipal facilities including energy and water use, waste management, purchasing, transportation, indoor environmental quality, site management, and construction and green cleaning practices. The City is proposing to prepare these programs in 2010 so that the Residential Retrofit Program and Sustainable Facilities Program are in effect by Spring of 2011. Mitigation Measure 15-1 would ensure that applicants for new development within the IBC implement GHG emissions offsets equivalent to 32 percent of the projects nontransportation emissions at buildout. Table 5.15 7 shows GHG emissions reductions associated with the additional GHG reduction strategy.

 Table 5.15-7

 Nontransportation GHG Reductions Associated with PPPs, PDFs, and Mitigation Measure

		GHG Emissions Reductions from			
		Proposed General Plan BAU (P2030) in			
PPP/PDF	Action	MTons of CO2e			
Nontransportation	1	30,618 MTons			
Citywide PPPs	and PDFs				
PDF 15-16	Residential Buildings: GreenPoint Rated Residential Buildings	7,303			
PDF 15 17	Non Residential Buildings Designed to Earn the Energy Star	16,252¹			
PPP 15-1 and PPP 15-13	Solid Waste: C&D Debris Recycling and Reuse Ordinance and Waste Reduction	4,889			
	Subtotal Citywide PPPs and PDFs	28,444 MTons			
Statewide and I	Eederal PPPs				
PPP 15-4	California Renewable Portfolio Standard	16,792			
	Title 24 Code Cycles: Net-Zero Buildings				
PPP 15-3		60,180			
	Non-Residential	73,892			
	Subtotal Statewide and Federal PPPs	150,864 MTons			
Mitigation Meas	Sure				
MM 15-1	Renewable Energy and Existing Building Retrofits ²	81,850			
	Subtotal Mitigation Measure	81,850 MTons			
Nontransportation	n Reductions from Post 2030 BAU	261,158 MTons			
Nontransportation Target for Post 2030 224,899 MTons					
Achieves Nontrans	Achieves Nontransportation GHG Target? Yes				
Source, CTG 2009.					

Notes:

Does not include 2,174 MTons of reductions associated with preferred parking for carpools and vanpools.

² The Renewable Energy and Existing Buildings Retrofit programs are an emissions offset program that will be implemented by spring of 2011. draft Climate Action Plan, there is a potential for 181,889 MTons of reductions within the entire City for residential, commercial and municipal buildings. Within the IBC Vision Plan area, the amount of reductions from the retrofit programs is 81,850 MTons; however, to achieve the 15 percent reduction from Existing Conditions for this project, only 45,591 MTons is necessary.

As shown in Table 5.15 7, the additional Mitigation Measure would substantially reduce nontransportation GHG emissions to achieve the City's 15 percent GHG reduction target. Nontransportation PPPs, PDFs, and the Mitigation Measure would result in 261,158 MTons of GHG reductions.³ Table 5.15-8 5.15-7 shows the GHG emissions inventory for the IBC Vision Plan for the following scenarios:

- Existing Conditions (2008)
- Proposed General Plan BAU (P2030)
- Proposed General Plan (P2030) with PPPs, and PDFs, and Mitigation Measure •

As shown in this Table, GHG emissions inventory at buildout with reduction would be 668,672 750,522 MTons with PPPs, and PDFs, and Mitigation Measure 15-1, which is approximately 26 17 percent lower than existing conditions. Therefore, with implementation of Mitigation Measure 15 1, impacts to global climate change are less than significant.

Table 5.15-8 5.15-7 Comparison of Annual GHG Emissions Inventory for the Irvine Business Complex					
Source	Existing Conditions (2008)	Proposed General Plan BAU (P2030)	<i>Proposed General Plan (P2030) with PPPs, PDFs, and MM</i>		
Transportation					
Transportation	683,499	872,087	512,956		

³ Excludes the 2,174 MTons of reductions associated with preferred parking for carpools and vanpools for strategy PDF 15-17, Non-Residential Buildings Designed to Earn the Energy Star.



Table						
Comparison	n of Annual GHG Emissions In	eventory for the Irvine Busin	ess Complex			
Source	Existing Conditions (2008)	Proposed General Plan BAU (P2030)	Proposed General Plan (P2030) with PPPs, PDFs, and MM			
Nontransportation						
Residential	13,957	122,788	47,359			
Non-Residential	159,742	191,254	97,791			
Hotel	6,410	7,996	3,988			
Infrastructure	7,229	8,314	7,898			
Water	3,319	5,497	4,394			
Solid Waste	35,196	48,953	44,064			
Construction	0	32,072	32,072			
Existing Building Retrofits ¹	—	_	- 81,850			
Subtotal Nontransportation	225,853	416,874	155,715 <u>237,566</u>			
Total	909,352	1,288,961	668,672 <u>750,522</u>			

Source. CTG 2009.

Notes:

PPP: plans, programs, and policies; PDF: project design features; MM: mitigation measures.

1- The Renewable Energy and Existing Buildings Retrofit programs are an emissions offset program that will be implemented by spring of 2011. Based on the draft Climate Action Plan, there is a potential for 181,889 MTons of reductions within the entire City for residential, commercial, and municipal buildings.

Page 6-2, Section 6, Significant Unavoidable Adverse Impacts. The following text has been revised based on the Airport Land Use Commission action on the project on June 17, 2010

Impact 5.8-2: Project implementation could Potentially be in conflict with an applicable adopted land use plan. [Threshold LU-2]

As described above, the proposed project was reviewed by ALUC and the City and determined to be consistent with AELUP and Caltrans health and safety standards and PDF 6-1 has been incorporated into the project. In addition, the ALUC has determined that the 2851 Alton Parkway and Martin Street Condos projects are consistent with the adopted AELUP. However, the revised project, other pending projects, and potential future projects pursuant to the IBC Vision Plan and Overlay Zoning Code have not yet been before ALUC for a determination of consistency, as ALUC typically does not conduct such reviews until the City of Irvine Planning Commission hearings are scheduled. If ALUC determines that the proposed project as revised, or potential future projects are not found to be consistent with the AELUP, and the Irvine City Council disagrees and overrides this finding by a two-thirds vote, a significant unavoidable adverse impact would result and a Statement of Overriding Considerations would be required.

Page 7-18, Chapter 7, Alternatives to the Proposed Project. The following minor technical revision has been in response to comments by the Law Offices of Robert C. Hawkins.

Although this alternative would lessen some environmental impacts, it would not avoid the significant environmental impacts to air quality, noise, or transportation/traffic. It would provide less housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would not promote the objectives of the City's long-range goals for the IBC to the same extent as the proposed project. Most of the project objectives would be met, but not to the degree of the project. In addition, this alternative reduces overall allowable development intensity within the IBC below what is currently allowed by the existing <u>General Plan</u> and would impact existing <u>entitlements development intensity values assigned to existing parcels</u>.



Page 1-11 through 1-54, Chapter 1, Executive Summary The following text has been revised in the Executive Summary based on responses to comments and changes to the EIR sections detailed above.

	Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
	Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation	
5.1 Aes	sthetics			-	
5.1 1:	Future development pursuant to the IBC Vision Plan would not substantially alter the visual character of the IBC area and its surroundings.	Less than significant	No mitigation measures are required. PDF 1.2 Applicants for new development projects in the IBC Vision Plan area that propose buildings 40 feet or higher shall conduct a shade shadow analysis prepared to the satisfaction of the Director of Community Development. The shade shadow analysis shall ensure that building envelope shall not affect more than 50 percent of a sun sensitive area (i.e., residential backyards/patios and recreational areas) for at least 50 percent for the duration of the season (i.e., three hours between 9:00 AM and 3:00 PM during winter daylight hours).	Less than significant.	
5.2 All	RQUALITY				
5.2-1:	Regional population, housing, and employment growth projections in the Irvine Business Complex were not accounted for in the air quality management plan.	Significant	PDF 2-5 Prior to issuance of building permit for any For all residential projects located within 1,000 feet of an industrial facility that emits substantial odors, including which includes but is not limited to • wastewater treatment plants • composting, greenwaste, or recycling facilities • fiberglass manufacturing facilities • painting/coating operations • coffee roasters • food processing facilities, the Project Applicant shall submit an odor assessment to the Community Development Director prior to approval of any future discretionary action that verifies that the South Coast Air Quality Management District (SCAQMD) has not received three or more verified odor complaints from any facility located within 1,000 feet of the site proposed for residential development. If the Odor Assessment identifies that the facility has received three such complaints, the applicant will be required to identify	Significant and Unavoidable	

		Table 1-2			
Summary	of Environmental Impact	s, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation		
		and demonstrate that Best Available Control Technologies for Toxics (T- BACTs) are capable of reducing potential odors to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units.			
		PDF 2-6 Applicants for new developments in the Irvine Business Complex shall require that the construction contractor utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available. The construction contractor shall be made aware of this requirement prior to the start of construction activities. Use of commercially available Tier 3 or higher off-road equipment, or:			
		 of year 2006 or newer construction equipment for engines rated equal to 175 horsepower (hp) and greater; year 2007 and newer construction equipment for engines rated equal to 100 hp but less than 175 hp; and 2008 and newer construction equipment for engines rated equal to or greater than over 50 hp horsepower. The use of such equipment shall be stated on all grading to the project site. The construction equipment list shall be the project site. The construction equipment on-site. 			
5.6 HAZARDS AND HAZARDOUS MATERIA	5.6 HAZARDS AND HAZARDOUS MATERIALS				
5.6-2: Various hazardous material sites are located within the proposed project area.	Less than significant	 PDF 6-3 As described in the proposed zoning code related to hazardous material standards, individual development sites may have existing facilities, such as <u>underground storage tanks</u> , transformers or clarifiers, that <u>contain</u> <u>hazardous materials</u> would be demolished as part of a proposed development. To mitigate any hazardous-materials-related impacts- the removal of such related to these facilities, the project applicant shall	Less than Significant		

	g		Table 1-2	
	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
	Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation
			 submit a Site Assessment prior to the City deeming the development application complete the Director of Community Development, in conjunction with the Orange County Fire Authority, shall include specific project conditions of approval as part of the discretionary review process for the proposed development. If hazardous materials are identified during the site assessment, the appropriate response/remedial measures will be implement in accordance with the directives of the Orange County Fire Authority (OCFA), Orange County Health Care Agency (OCHCA) and/or the Regional Water Quality Control Board (RWQCB), as appropriate. If soils are encountered during site development that are suspected of being impacted by hazardous materials, work will be halted and site conditions will be evaluated by a qualified environmental professional. The results of the evaluation will be submitted to OCFA, OCHCA, and/or RWQCB, and the appropriate response/remedial measures will be implemented, as directed by OCFA, OCHCA, RWQCB, or other applicable oversight agencies, until all specified requirements of the oversight agencies are satisfied and a no-further-action status is attained. PDF 6-4 As required by the proposed zoning code, applications for new residential and/or residential mixed-use development shall submit data, to the Director of Community Development, to evaluate compatibility with surrounding uses with respect to issues including but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination, heliports/helistops and John Wayne Airport compatibility. Structures that penetrate the 100:1 Notification Surface shall file a Form 7460-1 Notice of Proposed Construction or Alternation with Federal Aviation Administration. Residential land uses shall be prohibited in Safety Zone 3. PDF 6-6 Residential development shall not be permitted within a one-parcel buffer surrounding the property at 17451 Von Karma	
5.6-3: T v w	he project site is located in the icinity of John Wayne Airport and vithin the jurisdiction of an airport	Less than significant	PDF 6-1 As described in the proposed zoning for the project <u>related to</u> building height limitations, recordation of aviation easements, obstruction lighting and marking, and airport proximity disclosures and signage shall be	Less than significant

Table 1-2			
Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation
land use plan.		provided per Orange County <u>consistent with the</u> Airport Environs Land Use Plan standards for John Wayne Airport. 	
5.8 LAND USE AND PLANNING		•	1
5.8-1: The proposed project would not divide an established community.	Less than significant	PDF 8-2 As described in the proposed zoning code relating to compatibility with surrounding uses, the IBC mixed-use environment is an urbanized area, and land use compatibility issues are expected to occur. Therefore, applications for new residential and/or residential mixed-use development shall submit data, as determined by the Director of Community Development, for the City to evaluate compatibility with surrounding uses with respect to issues including, but not limited to: noise, odors, truck traffic and deliveries, hazardous materials handling/storage, air emissions, and soil/groundwater contamination. <u>Compatibility with adjacent uses shall be determined through consistency with local, state, and federal regulations including but not limited to the City of Irvine Municipal Code, South Coast Air Quality Management District, Orange County Fire Authority (OCFA), Orange County Health Care Agency (OCHC) and/or the Regional Water Quality Control Board (RWQCB),</u>	Less than significant
5.11 PUBLIC SAFETY			
5.11.1 Result in a substantial adverse physical impact associated with the provisions 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 police protection services.	Less than significant	PPP 11-4 PDF 11-3 A Click2Enter radio frequency access system shall be installed at any vehicle and pedestrian access point controlled by privacy gates within the project area (proposed Zoning Code).	

Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
asures [MM] Levi	vel of Significance After Mitigation			
1t to the proposed that will serve as AB 1600 legislation, 000 et seq, for the Zoning changes ision Plan Signi Unav. 2t left-turn lanes and If the HBC, the City and physical contribution transportation orata "fair-share" an Agreement to be share contributions 1600 nexus study identifies (to mitigate project Signi Unav.	ificant and /oidable			
identifier unit with rational a funding c to state f nts on pr ritions of a rese fair- n the AB rs which recessary rs.	identified in MM 13-1, i-unit within the IBC, the City rational and physical funding contribution to state transportation nts on pro-rata "fair-share" itions of an Agreement to be rese fair-share contributions n the AB 1600 nexus study recessary to mitigate project- bs.			

Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation	
5.15 GLOBAL CLIMATE CHANGE		•	-	
5.15-1: Project-related greenhouse gas emissions could significantly contribute to global climate change impacts or conflict with the California Air Resources Board–adopted scoping plan.	Less than significant	 PPP 15-14 Renewable Energy and Existing Buildings Retrofit Program: Pursuant to City Council Resolution 09-52, the City has received federal funding from the U.S. Department of Energy to establish a Renewable Energy and Existing Retrofit Program. Retrofitting is designed to improve a building's energy consumption by using cost-effective measures that do not require extensive remodeling work. The City of Irvine is proposing to use the "whole building approach" meaning that the City will look at the following: Thermal envelope (i.e. the shell insulation and air leakage) Mechanical systems (i.e. HVAC and domestic hot water) Appliances and lighting that may need replacing The approach will evaluate these areas and their interaction given usage rates, building site, and climate to assess the building's overall energy efficiency and performance and to make targeted recommendations for improvement and ultimately reduce residential demand. The City of Irvine will create a financing district to help property owners finance energy efficiency improvements and renewable energy installations. The City of Irvine is forming a Property Assessed Clean Energy (PACC) Divide under the Mello-Roos Community Facilities Act of 1982 and its too a charter city. Eligible improvements may include energy end a charter city. Eligible improvements may include energy of a cavater conservation, and renewable energy improvements to promote and buildings or property. Potential funding for initial improvements may come from various sources including American Recovery and Reinvestment Act grants, taxable bonded indebtedness, other external financing arrangements, or City funds. 	Less than significant	

Summary	y of Environmental Impact	s, Mitigat	Table 1-2 ion Measures and Levels of Significance After Mitigation				
Environmental Impact	Level of Significance Before Mitigation	Proj	Plans, Programs, and Polices [PPPs], iect Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation			
		PDF 15-7	Transportation Management Association (TMA): The City anticipates establishment of a TMA for the IBC by Spring 2010. Based on the ITAM model, establishment of the TMA for the IBC Vision Plan area would result in a reduction of 8 percent of projected VMT. The proposed zoning enables the establishment of a TMA within the IBC. As described in the proposed zoning for the project, future applicants of new commercial, office, and retail development within the Irvine Business Complex area shall provide the following features to reduce project-related mobile-source air pollutant emissions:				
		•	Preferential parking for carpools and vanpools totaling 5 percent of all spaces on site.				
		•	Preferential parking for alternative fuel vehicles (e.g., compressed natural gas or hydrogen) totaling 5 percent of all spaces on site.				
		•	Secure bicycle parking and storage facilities for employees and visitors that can accommodate 15 percent of employees on site.				
		·	Commuter information boards indentifying bicycle paths and public transit routes and schedules.				
		PDF 15-9	Bicycle Improvements: The IBC would provide linkages to the City regional bicycle trail system. Currently continuous on-street bicycle lanes exist only along Main Street. Bicycle lanes are proposed along parts of Jamboree Road, Red Hill Avenue, Von Karman Avenue, Michelson Avenue, Carlson Avenue, Barranca Parkway, and Alton Parkway. Furthermore, the sidewalk system would be shared between pedestrians and bicycles. As part of the Vision Plan, bicycle connections to the San Marco Park, adjacent to the San Diego Creek, would be improved with a new pedestrian bridge. Also refer to PDF 13-1 and PDF 15-7, which require allow for the creation of a Transportation Management Association (TMA) for the IBC area.				
		PDF 15-10	–PPP 15-15 Safe Route to Schools: The Safe Routes to School program is a federal and state grant program intended to increase the percentage of students walking or cycling to school. Funding is awarded to cities to construct engineering improvements and to start educational, encouragement, and enforcement programs. The City of Irvine has been				

		Table 1-2										
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation												
	Level of Significance	Plans, Programs, and Polices [PPPs],	Level of Significance									
Environmental Impact	Before Mitigation	Project Design Features [PDFs], and Mitigation Measures [MM]	After Mitigation									
		successful in obtaining grant funding to implement a citywide program that includes walking school buses—groups of students who meet at a designated location and walk to school together, with a parent at the front and back of the group. This encourages students to walk to school and assuages parents' fears of traffic and crime safety risks that are impediments to walking alone. Based on the ITAM model, a 0.2 percent reduction in VMT is achieved through implementation of this program.										
		PDF 15-11 PPP 15-16 Circulation Phasing Analysis: The amount of emissions increase exponentially as arterial travel speeds decrease. As is the case with many cities in Southern California, there are often defined congestion locations (such as the major intersections along Jamboree Road) where a majority of congestion and delay occurs. The City currently has a Circulation Phasing Analysis program in place. They collect traffic counts at congested locations on a bi-annual basis and monitor locations every three years. The results of the analysis are used to determine future Capital Improvement Projects.										
		Water Conservation and Efficiency										
		PDF 15- <u>1210</u> Ultra-Low-Flow Fixtures: Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site are ultra-low-flow with fixtures that exceed the Uniform Plumbing Code. Examples are: gallons per flush high efficiency toilets, 2 gallon per minu e (1, m) fficient bathroom faucets, 2.2 gpm efficient kitchen faucets, and 2.2 gpm efficient shower heads.										
		PDF 15- <u>131</u> Landscaping and Irrigation Systems: Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that landscaping irrigation systems installed in the project are automated, high-efficient irrigation systems that reduce water use, such as an evapotranspiration "smart" weather-based irrigation controller, dual piping for recycled water, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. These features will make the project consistent with the intent of the California Water Conservation in Landscaping Act of 2006 (AB 1881), including provisions										

Summary	of Environmental Impact	Table 1-2 s, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation		
Environmental Impact	Before Mitigation	Project Design Features [PDFs], and Mitigation Measures [MM] to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water. PDF 15-1412 Use of Reclaimed Water on All Master Landscaped Areas: If recycled water service is determined by IRWD to be feasible (see PPP 14-1), applicants for new developments in the Irvine Business Complex shall use reclaimed water in all master landscaped areas. This will include master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes will also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette. Solid Waste Measures PDF 15-1513 Material Recovery: To reduce waste generated in the IBC and encourage recycling of solid wastes, the Orange County Integrated Waste Management Department operates material recovery facilities to recycle glass, plastic, cans, junk mail, paper, cardboard, greenwaste (e.g., grass, weeds, leaves, branches, yard trimmings, and scrap wood), and scrap metal. Future employees, residents, and customers would participate in these programs. On-site recycling facilities will be required for all commercial, retail, industrial, and multifamily residential developments. Building PDF 15-1614 GreenPoint Rated Residential Buildings: Applicants for new residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to be GreenPoint Rated developments must achieve a minimum of 50 total points and meet the category-specific point thresholds as specified in the current GreenPoint Rated Builder Handbook. Developments that exceed this minimum ar	After Mitigation		
		Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to achieve the 'Designed to Earn the Energy Star' rating. In			

Summary o	Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation												
Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation										
		order achieve the 'Designed to Earn the Energy Star' rating, the architect/design firm must demonstrate that the final estimate of the building's energy use corresponds to a rating of 75 or better using the US EPA's Energy Performance Rating from the Internet-based tool, Target Finder.											



Summary of	Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation													
Environmental Impact	Level of Significance Before Mitigation	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance After Mitigation											
		 MM 15 1 Prior to the issuance of building permits in the IBC Vision Plan Area, the City shall establish a renewable energy and existing building retrofit program that will establish a framework for funding and implementing renewable energy projects and energy efficiency retrofits of existing buildings within the IBC Vision Plan area or the City as a whole. Applicants for new development projects within the IBC Vision Plan area shall submit evidence to the satisfaction of the Director of Community Development that the retrofits and/or renewable energy (which may include solar thermal, solar photovoltaic, wind, or other sources approved by the City) of existing buildings equates to the reduction of greenhouse gas (GHG) emissions by 32 percent of nontransportation sources. Applicants for new development projects shall first attempt to accomplish renewable energy production or energy efficiency retrofits of existing buildings within the IBC Vision Plan area. If deemed acceptable to the Director of Community Development, applicants for new development projects can implement new renewable energy production or energy efficiency retrofits of existing buildings within the City of Irvine to reduce GHG emissions. However, all renewable energy production or energy efficiency retrofits must be within the City limits.												

Page 5.13-171, Section 5.13, Transportation and Traffic, Table 5.13-23, City of Irvine Proposed Intersection Mitigation. The following minor technical change has been made to Table 5.13-23 based on discussions with Caltrans.

						City o	of Irvine	Ta Prope	ble 5.1. osed In	3-23 tersec	tion M	itigati	on							
		2015 Cumulative with Project					2015 Cumulative With Project After Mitigation				Post-2030 Cumulative With Project				Post-2030 Cumulative With Project After Mitigation					
		ctio	A	AM PM		AM		РМ		AM PM		И	AM		РМ			are		
ID	Intersection	Jurisdi	ICU	ros	ICU	ros	ICU	SOJ	ICU	SOJ	ICU	SOJ	ICU	SOJ	ICU	SOJ	ICU	ros	Mitigation Strategy	Fair-sh
232	Culver Drive at I- 405 NB Ramps	lrv	0.48	A	0.87	D					0.56	A	0.95	E	0.56 <u>0.81</u>	А <u>D</u>	0.73 <u>0.76</u>	С	Restripe WB to 1.5, 0, 1.5 <u>1, 0, 2</u>	100.0%





Page 5.13-189, Section 5.13, Transportation and Traffic, Table 5.13-29, Freeway Mainline Impacts and Fair-share. The following minor technical change has been made to Table 5.13-29 based on discussions with Caltrans.

	Table 5.13-29																			
	Freeway Mainline Project Impacts and Fair-share																			
SR-55	I-405 to MacArthur Boulevard	NB	4	8,000	8,401	1.05	F	8,327	1.04	F	8,688	1.09	F	8,586	1.07	F	287	260	*	3.3%
		SB	4	8,000	8,697	1.09	F	8,528	1.07	F	9,134	1.14	F	8,732	1.09	F	437	204	*	4.8%
	MacArthur Boulevard to Dyer	NB	5	10,000	7,551	0.76	D	9,377	0.94	E	7,858	0.79	D	9,666	0.97	E	307	290	*	3.9% <u>3.0</u> %
	Road	SB	5	10,000	9,867	0.99	Е	7,748	0.77	D	10,284	1.03	F	7,912	0.79	D	417	164	*	4.1%
	Dyer Road to Edinger Avenue	NB	6	12,000	6,771	0.56	С	11,387	0.95	E	7,128	0.59	С	11,696	0.97	E	357	310	*	5.0% 2.7%

Page 5.13-193, Section 5.13, Transportation and Traffic, Table 5.13-30, Freeway Ramp Impacts and Fair Share. The following minor technical change has been made to Table 5.13-30 based on discussions with Caltrans.

	Table 5.13-30 Freeway Ramp Project Impacts and Fair Share																			
	Culver Drive	NB Off	1	1,500	1,270	0.85	D	1,250	0.83	D	1,360	0.91	E	1,270	0.85	D	90	20	*	6.6% <u>1.8</u> %
I-405	Jamboree Road	SB Off	2	500	2,340	1.04	F	2,110	0.94	E	2,730	1.21	F	2,690	1.20	F	390	580	*	21.6%
	MacArthur	NB On	1	1,000	440	0.29	А	1,530	1.02	F	490	0.33	В	1,590	1.06	F	50	60	*	10.2% <u>3.8</u> %
	Boulevard	NB Off	1	500	1,640	1.09	F	890	0.59	С	1,770	1.18	F	920	0.61	С	130	30	*	7.3%
	Bristol Street	SB Loop On	1	1,000	1,090	0.73	D	1,490	0.99	E	1,110	0.74	D	1,610	1.07	F	20	120	*	7.5%
	Baker Street	SB On	1	1,000	510	0.57	С	1,250	1.39	F	510	0.57	С	1,290	1.43	F	0	40	*	3.1%
-55	Baker Street	NB Off	1	1,500	1,420	0.95	E	1,300	0.87	D	1,450	0.97	E	1,350	0.90	E	30	50	*	3.7% <u>1.1</u> %
SR	MacArthur Boulevard	SB On Loop	1	1,000	170	0.19	А	800	0.89	D	200	0.22	А	870	0.97	E	30	70	*	15.0% <u>8.0</u> %
	Dyer Road	NB On Direct	1	1,000	330	0.22	А	1,350	0.90	D	390	0.26	А	1,400	0.93	E	60	50	*	15.4% <u>3.6</u> %
-73	Jamboree Road	SB Off	2	500	2,619	1.16	F	2,867	1.27	F	2,727	1.21	F	2,938	1.2	3	109	71	*	4.0%
SR	Campus Drive	NB On	1	1,000	629	0.42	В	1,983	1.32	F	818	0.55	С	2,111	1.41	F	189	128	*	23.1% <u>6.1</u> %

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