

specific plan



DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT | JUNE 2016 VOLUME II

City of Duarte General Plan Supplemental EIR for the Town Center Specific Plan

Supplemental Environmental Impact Report

SCH 2015101082 June 2016

City of Duarte

This document is designed for double-sided printing to conserve natural resources

Volume II – Appendix

Appendix A Scoping Documents

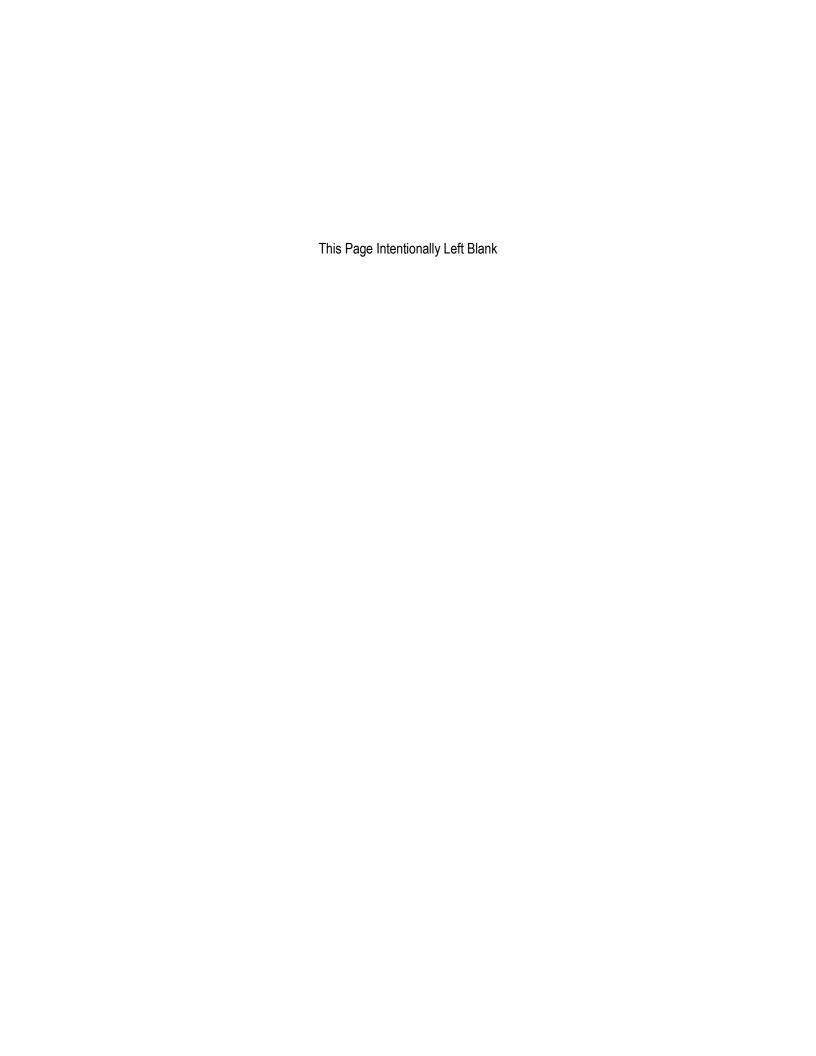
Appendix B Initial Study
Appendix C Existing Conditions Report
Appendix D Traffic Study

Appendix E CalEEMod Output Data Appendix F Noise Output Data Appendix G CNDDB Output Data

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LOS ANGELES, COUNTY CLERK

City of Duarte

1600 Huntington Drive, Duarte, CA 91010 - (626) 357-7931 - FAX (626) 358-0018

NOTICE OF PREPARATION OF DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (DSEIR) AND NOTICE OF PUBLIC SCOPING MEETING FOR THE TOWN CENTER SPECIFIC PLAN, GENERAL PLAN AMENDMENT, AND ZONE CHANGE 15-02

DATE:

October 23, 2015

TO:

Responsible Agencies, Organizations, Members of the Public and Interested Parties

FROM:

City of Duarte

Community Development Department, Planning Division

Attn: Jason Golding, Senior Planner

1600 Huntington Drive Duarte, CA 91010

SUBJECT:

Notice of Preparation of a Supplement to the General Plan Environmental Impact

Report and Public Scoping Meeting for the Town Center Specific Plan (Specific Plan -

General Plan Amendment and Zone Change 15-02)

NOTICE OF PREPARATION REVIEW PERIOD: October 23 to November 23, 2015

NOTICE IS HEREBY GIVEN that the City of Duarte, as lead agency, has prepared an Initial Study for the Town Center Specific Plan and associated discretionary actions (project) and has determined that a General Plan Supplemental Environmental Impact Report (DSEIR) is required. Pursuant to Public Resources Code Section 21165 and the California Environmental Quality Act Guidelines (CEQA Guidelines) Section 15050, the City of Duarte is the lead agency for the project. The purpose of this notice is: 1) to serve as a Notice of Preparation (NOP) of an SEIR pursuant to the CEQA Guidelines Section 15082; 2) to advise and solicit comments and suggestions regarding the scope and content of the SEIR to be prepared for the proposed project; and 3) to provide notice of the public scoping meeting.

Scoping Meeting

The City of Duarte has begun the preparation of an SEIR for the project described below. The public and interested parties are invited to attend a Scoping Meeting to comment on environmental issues that they believe should be addressed in the SEIR.

The purpose of the meeting is to present the project and environmental topics in a public setting and provide an opportunity for the City to hear from the community and interested agencies on what potential environmental issues are important to them. The meeting will include a

presentation of the proposed project, the SEIR process, and the topics to be analyzed in the SEIR. Following the presentation, interested agencies, organizations, and members of the public will be encouraged to offer their SEIR views concerning what environmental issues should be included in the SEIR.

The Public Scoping Meeting will be held on the following date/time and location:

General Plan Supplemental SEIR for the Town Center Specific Plan - Public Scoping Meeting

Date/time: Wednesday, November 4, 2015 at 6:30 p.m.

Location: Duarte Community Center

1600 Huntington Drive Duarte, CA 91010

The scoping meeting is being held as a part of the Town Center Ad Hoc Committee's regular meeting, and public attendance is welcomed.

Project Title

General Plan Supplemental SEIR for the Town Center Specific Plan

Project Location

The project site is located in the City of Duarte, generally along Huntington Drive from west of Buena Vista Street to east of Highland Avenue, and portions of Buena Vista Street and Highland Avenue from Huntington Avenue to the I-210 in the City of Duarte, Los Angeles County, California.

Project Description

The Town Center Specific Plan identifies the long-term vision and objectives for private development and public improvement along portions of Huntington Avenue, Highland Avenue, and Buena Vista Street in the City of Duarte. The project "planning area" encompasses approximately 75 net acres and includes land use designations/zoning districts supporting mixed-use, commercial, residential, and public facility uses. The zoning districts identified in the Specific Plan include "incentive zoning" whereby increased development potential is provided only if properties meet minimum lot sizes, thus encouraging lot consolidation.

The proposed Specific Plan would allow flexibility between uses, but for the purpose of CEQA, the theoretical maximum development capacity allowed by the Specific Plan will be analyzed in the SEIR to provide a conservative estimate of potential impacts from full build-out. The City estimates that the Specific Plan will support development of up to 1,075 residential units, 703,000 square feet of commercial use, and 350 hotel rooms. The theoretical maximum build-out of the planning area is based on an analysis of existing underutilized sites that may redevelop. Specific Plan development potential estimates are subject to change as the Specific Plan is refined through the public review process.

The Town Center Specific Plan would provide new development standards and incentives for redevelopment, particularly with regard to underutilized commercial spaces and vacant properties. The Specific Plan will establish land use, transportation, infrastructure, economic development, and urban design strategies to promote well-balanced retail development, mixed-use and residential development, and active civic and public places.

Environmental Issues

Based on the Initial Study prepared for the proposed project, the City of Duarte anticipates that the following environmental topics will need to be addressed in the SEIR:

- Aesthetics
- Air Quality
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Transportation and Traffic
- Utilities and Service Systems

The SEIR will address the short and long-term effects of the Town Center Specific Plan on the environment. Mitigation measures will be proposed for impacts that are determined to be significant.

Responding to this Notice

Pursuant to Public Resources Code Section 21080.4 and CEQA Guidelines Section 15082, the Initial Study will be available for a 30-day public review beginning **October 23, 2015** and ending **November 23, 2015**. Copies of the Initial Study are available for review at:

- Duarte City Hall, 1600 Huntington Drive, Duarte, CA 91010
- Duarte Library, 1301 Buena Vista Street, Duarte, CA 91010.
- Duarte Public Safety Office, 1042 Huntington Drive, Duarte, CA 91010
- The City of Duarte website: accessduarte.com

The City of Duarte, as lead agency, requests that responsible and trustee agencies and other interested parties, including members of the public, respond in a manner consistent with Section 15082(b) of the CEQA Guidelines. All comments and responses to this notice should be submitted in writing to Craig Hensley, Community Development Director, City of Duarte, Planning Division, 1600 Huntington Drive, Duarte, CA 91010, by **November 23, 2015**. The City will also accept responses to this notice submitted via email received through the close of business on November 23, 2015.

Provide written comments no later than 5:00 PM on November 23, 2015 to:

Craig Hensley, Community Development Director
City of Duarte
1600 Huntington Drive
Duarte, CA 91010

Email: chensley@accessduarte.com

Next Steps in the Process

After the Draft SEIR has been prepared, the Draft SEIR will be available for review and comment during a 45-day public review period. Following that, a Final SEIR will be prepared that includes responses to all comments received during the public review period. Following the release of the Final SEIR, the Planning Commission will hold a public hearing on the SEIR and the proposed project. Notice of the availability of the Draft SEIR will be released at a later date, and will also be available on the City's website.

Questions

Contact Craig Hensley at (626) 357-7931 or chensley@accessduarte.com for information about the proposed project or if you have any questions regarding this notice.

town center specific plan













CONTENTS

- Purpose of Tonight's Meeting
- II. CEQA Introduction
- III. Project Description
- IV. Environmental Impact Report
- V. Comments and Questions

Purpose of the Scoping Meeting

Purpose: To determine the scope and content of the environmental information to be included in the Environmental Impact Report (EIR).

CEQA Introduction

Origins:

- 1969: President Nixon signs the National Environmental Policy Act (NEPA)
- 1970: Governor Reagan signs the California Environmental Quality Act (CEQA)

Objectives:

- Inform decision-makers and the public
- Identify environmental consequences to assist decision-making
- Identify ways to avoid or reduce significant impacts

CEQA Acronyms

- NOE: Notice of Exemption
- NOP: Notice of Preparation
- IS: Initial Study
- ND: Negative Declaration
- MND: Mitigated Negative Declaration
- NOI: Notice of Intent
- EIR: Environmental Impact Report
- NOA: Notice of Availability
- DEIR: Draft EIR
- FEIR: Final EIR
- MMRP: Mitigation, Monitoring and Reporting Program
- NOD: Notice of Determination

Draft EIR Content and Purpose

Content:

- Project description
- Impacts and mitigations
- Project alternatives that would avoid or reduce significant impacts

Purpose:

- Public disclosure of environmental consequences and considerations.
- Identification of mitigation measures and examination of alternatives to reduce or avoid potentially significant impacts.
- Planning tool to assist decision-makers in evaluating benefits/disadvantages of the proposed project.

Supplemental Environmental Impact Report

General Plan EIR certified in 2007

 Supplemental EIR (SEIR) CEQA Guidelines 15162

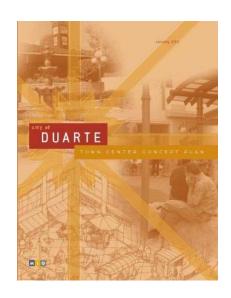
Minor additions or changes would be necessary to make the previous EIR adequately apply to the proposed project in the changed situation



The Project Description

Adoption and implementation of the Town Center Specific Plan

- Establish long-term strategies guiding the area's physical organization and development
- Development standards, policies, and programs to implement the Town Center Concept Plan





A. Sense of Place
An attractive, memorable and
welcoming Town Center



B. Vibrant
An active, dynamic experience



C. Strong

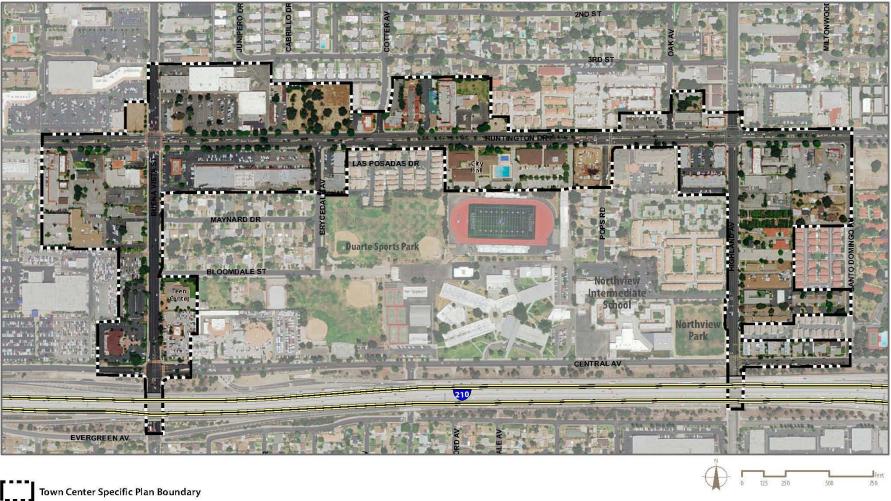
A thriving, robust economy



D. Connected

An accessible, walkable
Town Center with great linkages

Project Location

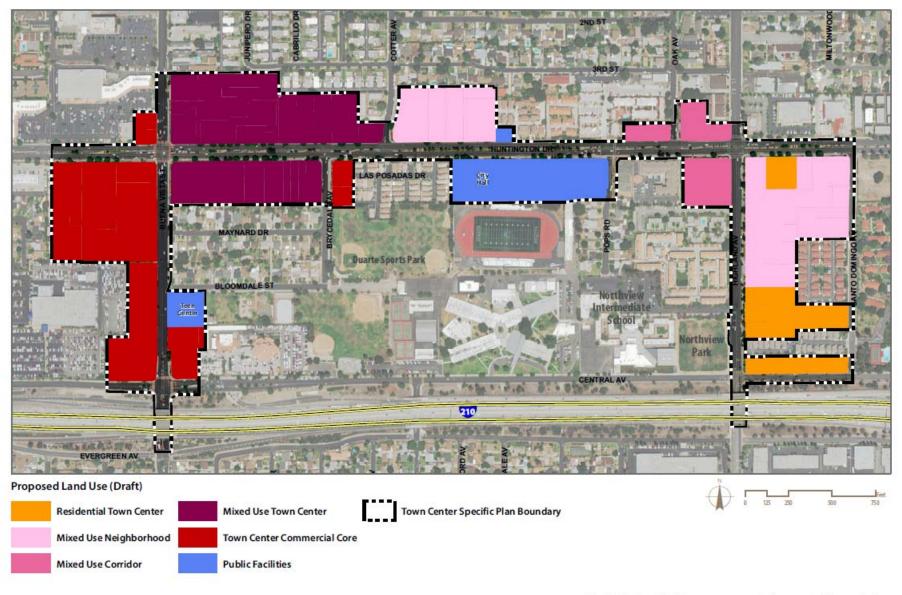


Town Center Specific Plan Boundary



http://www.migcom.com • 951-787-9222

Proposed Land Use Map



http://www.migcom.com • 951-787-9222

Exhibit 3 Proposed Land Use Plan

Town Center Project Details

- Theoretical Maximum Development Potential:
 - Up to 1,075 residential units
 - Up to 703,000 square feet of commercial uses
 - Up to 350 hotel rooms
- Incentive Zoning
 - Methods such as lot consolidation, providing mixed use, and quality design features necessary for the highest development density
- Detailed Design Guidelines
- Enhanced Mobility

Necessary Entitlements

Project Includes:

- General Plan Amendment
- Zoning Map Amendment
- Creation of new Specific Plan
- Environmental Impact Report (EIR)

Planning Commission and City Council approval

EIR Process and Schedule

Milestones	Projected Completion Dates
Scoping Process	October – November 2015
Draft EIR Distributed for Public Review & Comment (45 days)	February 2016
End of Draft EIR Public Review Period	March 2016
Responses to Comments on DEIR	April 2016
Final EIR, Mitigation Monitoring Program, Findings, Statement of Overriding Considerations	April 2016
Public Hearings/Final Certification	May 2016

Topics To Be Addressed in the Supplemental EIR

- Aesthetics
- Air Quality
- Greenhouse Gases
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Population/Housing
- Transportation/Traffic
- Utilities/Service Systems

Topics To Be Addressed in the Supplemental EIR

- Environmental Baseline: existing conditions at time of preparation
- Cumulative Impacts (project plus anticipated growth): evaluate individual Project contribution to broader impacts
- Growth Inducing Impacts: evaluate potential to cause substantial growth
- Alternatives to the Project including a No Project alternative: evaluate alternatives to the project to avoid significant unavoidable impacts
- Irreversible Long-term Environmental Changes: evaluate long-term commitment of resources

Focus of Requested Comments on Scope of the EIR:

<u>Specific</u> kinds of impacts of concern—e.g. traffic congestion at particular locations, local greenhouse gas emissions, noise or hazardous conditions from specific sources, etc.

Suggestions about specific mitigation measures to address specific environmental concerns

Public Review

A Notice of Preparation (NOP) has been circulated for 30-day review on October 23, 2015.

Written comments can be submitted through November 23, 2015 to:

Craig Hensley, Community Development Director
City of Duarte
1600 Huntington Drive
Duarte, CA 91010-2592
(626) 357-7931
CHensley@accessduarte.com

town center specific plan













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TOWN CENTER SPECIFIC PLAN EIR SCOPING MEETING

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Affiliation (Resident, Business Owner, Agency, etc.)	705	Asthac	Architect	BANKER	pesteart	78US/NESS	F	EDC	FDC	EDC	AFSINGA-
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TOWN CENTER SPECIFIC PLAN EIR SCOPING MEETING

	Contact (Email/Phone)	NOTIFYARUN @ GMAIL.					
	Mailing Address	RESIDENT 1140 USHALM.					
	Affiliation (Resident, Business Owner, Agency, etc.)	RESIDENT					
Daakte	Print Name	ARUN MATHUR					

November 4, 2015

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City of Irwindale Community Development Department Attn: Gus Romo 16102 Arrow Highway, 2nd Floor Irwindale, CA 91706

City of Bradbury Attn: Planning Department 600 Winston Avenue Bradbury, CA 91008

County of Los Angeles Dept. of Regional Planning 320 West Temple St., 13th Floor Los Angeles, CA 90012

City of Hope Attn: John Haupt 1500 Duarte Road Duarte, CA 91010

Duarte Unified School District 1620 Huntington Drive Duarte, CA 91010

LA County Flood Control District/ Dept. of Public Works 900 South Fremont Ave., 2nd Floor Alhambra, CA 91803-1331

Foothill Transit Attn: CEQA Review 100 S. Vincent Avenue, Suite 200 West Covina, CA 91790-2944

US Fish and Wildlife Service 6010 Hidden Valley Road Carlsbad, CA 92009

California Dept. of Fish & Wildlife 3883 Ruffin Road San Diego, CA 92123

US Army Corps. Of Engineers 911 Wilshire Blvd., #1525 Los Angeles, CA 90017 City of Monrovia Attn: Planning Department 415 South Ivy Avenue Monrovia, CA 91016

City of Baldwin Park Attn: Planning Division 14403 Pacific Avenue Baldwin Park, CA 91706

Southern California Association of Governments Environmental Planning 818 W. 7th Street. 12th Floor Los Angeles, CA 90017

SCAQMD Attn: CEQA Section 21865 E. Copley Drive Diamond Bar, CA 91765-4182

Los Angeles County Fire Department Fire Prevention Division 5823 Rickenbacker Drive Commerce, CA 90040-3027

California American Water Company Los Angeles Division 8657 Grand Avenue Rosemead, CA 91770-1221

Los Angeles County Metropolitan Transportation Authority 1 Gateway Plaza Los Angeles, CA 90012

[To be delivered]
County of Los Angeles
Registrar-Recorder/County Clerk
12400 Imperial Highway
Norwalk, CA 90650

California Energy Commission 1516 9th St., 300 Sacramento, CA 95814-5512

Metropolitan Water District Lands & Right of Way 700 N. Alameda St. #1-304 Los Angeles, CA 90012-2944 City of Azusa Attn: Planning Division 213 E. Foothill Blvd. Azusa, CA 91702

City of El Monte Attn: Planning Division City Hall West 11333 Valley Boulevard El Monte, CA 91731-3293

[send FedEx]
State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 222
Sacramento, CA 95814

Southern California Gas Company Attn: Environmental Affairs 555 West Fifth Street Los Angeles, CA 90013

Southern California Edison Real Properties Group 2131 Walnut Grove Ave. Rosemead, CA 91770

Los Angeles County Sanitation Districts Attn: Ruth Frazen 1955 Workman Mill Road Whittier, CA 90601

Los Angeles RWQCB 320 West Fourth Street, Suite 200 Los Angeles, CA 90013

Caltrans District 7
IGR/CEQA Branch
100 S Main Street MS16 12th Floor
Los Angeles CA 90012

California Air Resources Board 1001 "I" Street Sacramento, CA 95814

County of Los Angeles Department of Public Health Attn: CEQA Review 5050 Commerce Drive Baldwin Park, CA 91706 LA County Sheriff Attn: CEQA Review 4700 Ramona Blvd. Monterey Park, CA 91754-2169 Native American Heritage Commission 1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691

Native American Tribes below to be sent separately under SB 18 and AB 52 Process

Ti'At Society/Inter – Tribal Council of Pimu Cindi M. Alvitre, Chairwoman-Manisar 3094 Mace Avenue, Apt. B Gabrielino Costa Mesa, CA 92626

Gabrieleno/Tongva San Gabriel Band of Mission Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA 91778

Gabrieleno/Tongva San Gabriel Band of Mission Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA 91778

LA City/County Native Americans Indian Comm. Ron Andrade, Director 3175 West 6th Street Room 403 Los Angeles, CA 90020 Gabrielino Tongva Indian of California Tribal Council Robert F. Dorame, Tribal Chair/Cult. Res. P.O. Box 490 Bellflower, CA 90086

Gabrielino – Tongva Tribe Linda Candelaria, Co-Chairperson P.O. Box 180 Bonsall, CA 92003

Andrew Salas, Chairman Gabrieleño Band of Mission Indians Kizh Nation P.O. Box 393 Covina, CA 91723

Gabrielino Tongva Nation Attn: Sam Dunlap Gabrielino Tongva P.O. Box 86908 Los Angeles, CA 90086 Gabrielino – Tongva Tribe Bernie Acuna, Co-Chairperson P.O. Box 180 Bonsall, CA 92003

Gabrieleno Band of Mission Indians Andrew Salas, Chairperson P.O. Box 393 Covina, CA 91723

Joseph Ontiveros Cultural Resources Director Soboba Band of Luiseño Indians P.O. Box 478 San Jacinto, CA 92581

DEPARTMENT OF TRANSPORTATION

DISTRICT 7-OFFICE OF TRANSPORTATION PLANNING 100 S. MAIN STREET, MS 16 LOS ANGELES, CA 90012 PHONE (213) 897-9140 FAX (213) 897-1337 www.dol.ca.gov



November 20, 2015

Mr. Craig Hensley City of Duarte 1600 Huntington Drive Duarte, CA 91010

> RE: Town Center Specific Plan Vic. LA-210/PM R34.347-R35.257 SCH # 2015101082 IGR/CEQA No. 151051AL-NOP

Dear Mr. Hensley:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The Town Center Specific Plan identifies the long-term vision and objectives for private development and public improvement and along portions of Huntington Avenue, Highland Avenue, and Buena Vista Street in the City of Duarte. The Specific Plan will establish land use, transportation, infrastructure, economic development, and urban design strategies to promote well-balanced retail development, mixed-use and residential development, and active civic and public places. The Specific Plan area encompasses approximately 75 acres. It is estimated that the Specific Plan would support development of 1,075 residential units, 703,000 square feet of commercial use, and 350 hotel rooms.

To assist in evaluating the impacts of this project on State transportation facilities, a traffic study should be prepared prior to preparing the Draft Environmental Impact Report (DEIR). Please refer the project's traffic consultant to Caltrans' traffic study guide Website:

http://www.dot.ca.gov/hq/tpp/offices/ocp/igr ceqa files/tisguide.pdf

Listed below are some elements of what is generally expected in the traffic study:

 Presentations of assumptions and methods used to develop trip generation, trip distribution, choice of travel mode, and assignments of trips to I-605 and I-210 and all off ramps at the project vicinity including but not limit to I-210 eastbound/westbound on/offramps to/from Buena Vista St. and I-210 eastbound/westbound on/off-ramps to/from Mountain Avenue. The traffic consultant should work with Caltrans to identify and confirm off-ramp study locations prior to the preparation of the traffic study. The traffic study should also analyze the storage for left-turn pocket at on/off-ramps, if any.

The capacity of the off-ramp should be calculated by the actual length of the off-ramp between the terminuses to the gore point (30 feet per car preferred) with some safety factor or referenced to Highway Design Manual at 23' point (Figure 504.2A Single Lane Freeway Entrance) or any other justified methods approved in advance by Caltrans. The existing queue length should be calculated from the traffic counts and the percent of truck assignments (data from Caltrans) to the ramp with a passenger car equivalent factor of 3.0 (worst case scenario). The analyzed result may need to be calibrated with actual signal timing when necessary. It is also recommended that the City determine whether the existing, existing plus project, and project-related plus cumulative traffic are expected to cause long queues on the on and off-ramps.

- 2. Project travel modeling should be consistent with other regional and local modeling forecasts and travel data. Caltrans uses the indices to verify the results and any differences or inconsistencies must be thoroughly explained. Please submit modeling assumptions for Caltrans review and comment.
- 3. Trip generation rates for the project should be based on the nationally recognized recommendations contained in "Trip Generation" manual, 9th edition, published by the Institute of Transportation Engineers (ITE).
- 4. Analysis of ADT, AM and PM peak-hour volumes for both the existing and future conditions in the affected area with and without project. Utilization of transit lines and vehicles, and of all facilities, should be realistically estimated. Future conditions should include build-out of all projects and any plan-horizon years.
- 5. Include all appropriate traffic volumes. The analysis should include existing traffic, traffic generated by the project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the project and developments.
- 6. A discussion of mitigation measures appropriate to alleviate anticipated traffic impacts should also be included. Any mitigation involving transit or Transportation Demand Management (TDM) should be justified and the results conservatively estimated.
- 7. A fair share contribution toward pre-established or future improvements on the State Highway System is considered acceptable mitigation. (Please see Appendix "B" of the Guide for more information).

Mr. Craig Hensley November 20, 2015 Page 3

We look forward to reviewing the traffic study and expect to receive a copy from the State Clearinghouse when the DEIR is completed. Should you wish to expedite the review process or receive early feedback from Caltrans please feel free to send a copy of the DEIR directly to our office.

Caltrans is committed in working with the City to solve traffic congestion on the State facilities. We would like to invite the City for a formal Scoping Meeting before a traffic study is prepared. If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 151051AL.

Sincerely,

DIANNA WATSON IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

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SOUTHERN CALHORNIA ASSOCIATION OF GOVERNMENTS

Main Office

818 West 7th Street 12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

Officers

President Cheryl Viegas-Walker, El Centro

First Vice President Michele Martinez, Santa Ana

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Executive/Administration Committee Chair

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Policy Committee Chairs

Community, Economic and Human Development Bill Jahn, Big Bear Lake

Energy & Environment Deborah Robertson, Rialto

Transportation
Alan Wapner, San Bernardino
Associated Governments

November 23, 2015

Mr. Craig Hensley, Community Development Director City of Duarte 1600 Huntington Drive Duarte, California 91010

Phone: (626) 357-7931

E-mail: chensley@accessduarte.com

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Town Center Specific Plan [SCAG NO. IGR8656]

Dear Mr. Hensley,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Town Center Specific Plan ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Town Center Specific Plan in Los Angeles County. The proposed project encompasses approximately 75 net acres and will support development of up to 1,075 residential units, 703,000 square feet (sf) of commercial use, and 350 hotel rooms.

When available, please send environmental documentation to SCAG's office in Los Angeles or by email to sunl@scag.ca.gov providing, at a minimum, the full public comment period for review. If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Lijin Sun, Esq., Senior Regional Planner, at (213) 236-1882 or sunl@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang

Program Manager II, Land Use and Environmental Planning

¹ SB 375 amends CEQA to add Chapter 4.2 Implementation of the Sustainable Communities Strategy, which allows for certain CEQA streamlining for projects consistent with the RTP/SCS. Lead agencies (including local jurisdictions) maintain the discretion and will be sofely responsible for determining "consistency" of any future project with the SCS. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a finding of consistency under SB 375 for purposes of CEQA streamlining.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TOWN CENTER SPECIFIC PLAN [SCAG NO. IGR8656]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS.

2012 RTP/SCS GOALS

The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012. The 2012 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see http://rtpscs.scag.ca.gov). The goals included in the 2012 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2012 RTP/SCS are the following:

	SCAG 2012 RTP/SCS GOALS
RTP/SCS G1:	Align the plan investments and policies with improving regional economic development and competitiveness
RTP/SCS G2:	Maximize mobility and accessibility for all people and goods in the region
RTP/SCS G3:	Ensure travel safety and reliability for all people and goods in the region
RTP/SCS G4:	Preserve and ensure a sustainable regional transportation system
RTP/SCS G5:	Maximize the productivity of our transportation system
RTP/SCS G6:	Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)
RTP/SCS G7:	Actively encourage and create incentives for energy efficiency, where possible
RTP/SCS G8:	Encourage land use and growth patterns that facilitate transit and non-motorized transportation
RTP/SCS G9:	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format. Suggested format is as follows:

	SCAG 2012 RTP/SCS GOALS	
5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Goal	Analysis
RTP/SCS G1:	Align the plan investments and policies with improving regional economic development and competitiveness	Consistent: Statement as to why; Not-Consistent: Statement as to why;
		Or
		Not Applicable: Statement as to why; DEIR page number reference
RTP/SCS G2:	Maximize mobility and accessibility for all people and goods in the region	Consistent: Statement as to why; Not-Consistent: Statement as to why;
		Or .
		Not Applicable: Statement as to why; DEIR page number reference
etc.		etc.

RTP/SCS STRATEGIES

To achieve the goals of the 2012 RTP/SCS, a wide range of strategies are included in SCS Chapter (starting on page 152) of the RTP/SCS focusing on four key areas: 1) Land Use Actions and Strategies; 2) Transportation Network Actions and Strategies; 3) Transportation Demand Management (TDM) Actions and Strategies and; 4) Transportation System Management (TSM) Actions and Strategies. If applicable to the proposed project, please refer to these strategies as guidance for considering the proposed project within the context of regional goals and policies. To access a listing of the strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (Tables 4.3 – 4.7, beginning on page 152).

REGIONAL GROWTH FORECASTS

At the time of this letter, the most recently adopted SCAG forecasts, at the jurisdictional level, consists of the 2020 and 2035 RTP/SCS population, household and employment forecasts. To view them, please visit http://scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf. The forecasts for the region and applicable jurisdictions are below.

Adopted SCAG Region Wide Forecasts Adopted City of Duarte Forecasts						
101, 103, 100, 100, 100, 100, 100, 100,	Year 2020	Year 2035	Year 2020	Year 2035		
Population	19,663,000	22,091,000	25,200	27,200		
Households	6,458,000	7,325,000	7,400	7,900		
Employment	8,414,000	9,441,000	7,000	7,300		

MITIGATION

SCAG staff recommends that you review the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance, as appropriate. See Chapter 6 (beginning on page 143) at: http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf

As referenced in Chapter 6, a comprehensive list of example mitigation measures that may be considered as appropriate is included in Appendix G: Examples of Measures that Could Reduce Impacts from Planning, Development and Transportation Projects. Appendix G can be accessed at: http://rtpscs.scaq.ca.gov/Documents/peir/2012/final/2012fPEIR AppendixG ExampleMeasures.pdf



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400 Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998 Telephone: (562) 699-7411, FAX: (562) 699-5422 www.lacsd.org

GRACE ROBINSON HYDE Chief Engineer and General Manager

November 23, 2015

Ref File No.: 3494920

Ms. Silvia A. Hurtado, City Planner City of Duarte 1600 Huntington Drive Duarte, CA 91010-2592

Dear Ms. Hurtado:

Comment Letter for Town Center Specific Plan

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on October 23, 2015. The proposed project site is located within the jurisdictional boundaries of District No. 22. We offer the following comments regarding sewerage service:

- 1. The Districts own, operate, and maintain the large trunk sewers that form the backbone of the regional wastewater conveyance system. Local collector and/or lateral sewer lines are the responsibility of the jurisdiction in which they are located. As such, the Districts cannot comment on any deficiencies in the sewerage system in the City of Duarte (City) within the project site except to state that presently no deficiencies exist in Districts' facilities that serve the City. For information on deficiencies in the City sewerage system, please contact the City Department of Public Works and/or the Los Angeles County Department of Public Works.
- The Districts should review individual developments within the project site in order to determine
 whether or not sufficient trunk sewer capacity exists to serve each project and if Districts'
 facilities will be affected by the project.
- 3. The wastewater generated within the project site is treated at the San Jose Creek Water Reclamation Plant (WRP) located adjacent to the City of Industry, which has a design capacity of 100 million gallons per day (mgd) and currently processes an average flow of 69.4 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to and treated at the Joint Water Pollution Control Plant in the City of Carson.
- 4. The expected average wastewater flow from the proposed project as described in the Notice of Preparation as up to 1,075 residential units, 703,000 square feet of commercial use, and 350 hotel rooms, is 481,850 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

DOC: #3525660.D22



- 5. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. In determining the impact to the Sewerage System and applicable connection fees, the Districts' Chief Engineer will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.
- 6. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza

Customer Service Specialist Facilities Planning Department

AR:ar



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE LOS ANGELES, CALIFORNIA 90063-3294 RECEIVED

NOV 18 205

CITY OF DUARTE

DARYL L. OSBY FIRE CHIEF FORESTER & FIRE WARDEN

November 13, 2015

Craig Hensley, Community Development Director City of Duarte Planning Division 1600 Huntington Drive Duarte, CA 91010

Dear Mr. Hensley:

NOTICE OF PREPARATION OF DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, "GENERAL PLAN SUPPLEMENTAL SEIR FOR THE TOWN CENTER SPECIFIC PLAN," IDENTIFIES THE LONG-TERM VISION AND OBJECTIVES FOR PRIVATE DEVELOPMENT AND PUBLIC IMPROVEMENT, ENCOMPASSES APPROXIMATELY 75 NET ACRES AND INCLUDES LAND USE DESIGNATION/ZONING DISTRICTS SUPPORTING MIXED-USE, COMMERCIAL, RESIDENTIAL, AND PUBLIC FACILITY USES, DUARTE, (FFER #201500188)

The Notice of Preparation of Draft Supplemental Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. We have no comments at this time.

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

Craig Hensley, Community Development Director November 13, 2015
Page 2

LAND DEVELOPMENT UNIT:

GENERAL REQUIREMENTS:

- 1. The proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues.
- The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.
- 3. Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.
- 4. Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.
- 5. When involved with subdivision in a city contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.
- 6. Fire Department requirements for access, fire flows and hydrants are addressed during the building permit stage.
- 7. Approved Automatic Sprinkler Systems in new buildings and structures shall be provided in locations described in Sections 903.2.1 through 903.2.12 of the County of Los Angeles Fire Code.

WATER SYSTEMS REQUIREMENTS:

8. The development may require fire flows up to 8,000 gallons per minute at 20 pounds per square inch residual pressure for up to a four-hour duration. Final fire flows will be based on the size of buildings, its relationship to other structures, property lines, and types of construction used.

- 9. Fire hydrant spacing shall be based on fire flow requirements, as outlined in the 2014 County of Los Angeles Fire Code Appendix III-BB. Additional hydrants will be required if hydrant spacing exceeds specified distances.
- 10. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:
 - a) No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
 - b) No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.
 - c) Additional hydrants will be required if hydrant spacing exceeds specified distances.
 - d) When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.
 - e) A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.

ACCESS REQUIRMENTS:

- 11. The 28 feet in width shall be increased to:
 - a) 34 feet in width when parallel parking is allowed on one side of the access way.
 - b) 36 feet in width when parallel parking is allowed on both sides of the access way.
 - c) Any access way less than 34 feet in width shall be labeled "Fire Lane" on the final recording map, and final building plans.
 - d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING/FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

Craig Hensley, Community Development Director November 13, 2015 Page 4

- 12. For buildings higher than 30 feet Provide a minimum unobstructed width of 28 feet, exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance "clear to sky" Fire Department vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building when the height of the building above the lowest level of the Fire Department vehicular access road is more than 30 feet high, or the building is more than three stories. The access roadway shall be located a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official. Fire Code 503.1.1 and 503.2.2 Cross hatch the Fire Department vehicular access on the site plan and clearly depict the required width.
- 13. For buildings under 30 feet in height Provide a minimum unobstructed width of 26 feet, exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance "clear to sky" Fire Department vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building. Fire Code 503.1.1 and 503.2.2

ACCESS FOR SINGLE FAMILY DWELLINGS:

- 14. Streets or driveways within the development shall be provided with the following:
 - a) Provide 36 feet in width on all streets where parking is allowed on both sides.
 - b) Provide 34 feet in width on cul-de-sacs up to 700 feet in length. This allows parking on both sides of the street.
 - c) Provide 36 feet in width on cul-de-sacs from 701 to 1,000 feet in length. This allows parking on both sides of the street.
 - d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road.

Craig Hensley, Community Development Director November 13, 2015 Page 5

- 15. The County of Los Angeles Fire Department, Land Development Unit's comments are only general requirements. Specific fire and life safety requirements will be addressed at the building and fire plan check phase. There may be additional requirements during this time.
- 16. The statutory responsibilities of the County of Los Angeles Fire Department, Land Development Unit, are the review of, and comment on all projects within the unincorporated areas of the County of Los Angeles. Our emphasis is on the availability of sufficient water supplies for firefighting operations and local/regional access issues. However, we review all projects for issues that may have a significant impact on the County of Los Angeles Fire Department. We are responsible for the review of all projects within contract cities (cities that contract with the County of Los Angeles Fire Department for fire protection services). We are responsible for all County facilities, located within non-contract cities. The County of Los Angeles Fire Department, Land Development Unit, may also comment on conditions that may be imposed on a project by the Fire Prevention Division, which may create a potentially significant impact to the environment.
- 17. The County of Los Angeles Fire Department, Land Development Unit, appreciates the opportunity to comment on this project. Should any questions arise regarding the above comments, please contact the County of Los Angeles Fire Department, Land Development Unit Inspector, Claudia Soiza, at (323) 890-4243.

FORESTRY DIVISION - OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed in the Draft Supplemental Impact Report.

HEALTH HAZARDOUS MATERIALS DIVISION:

1 The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department has no comment or objection to the project at this time.

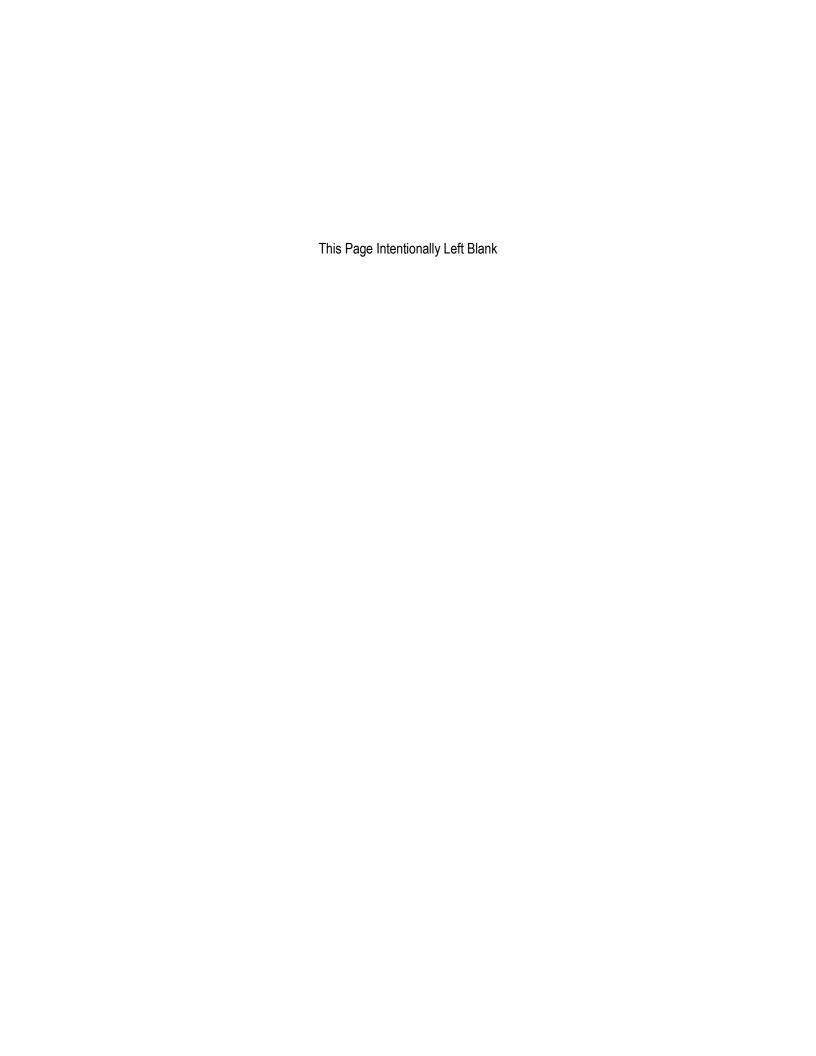
Craig Hensley, Community Development Director November 13, 2015 Page 6

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION PREVENTION SERVICES BUREAU

KTJ:jl



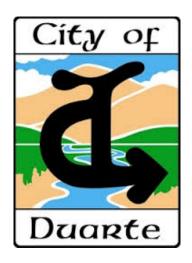
Town Center Specific Plan Initial Study
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Initial Study

Town Center Specific Plan and Associated General Plan Amendment and Zone Change (General Plan Supplemental EIR)

Lead Agency
City of Duarte
Planning Division
1600 Huntington Drive
Duarte, California 91010



Consultant to the City MIG, Inc. 537 S. Raymond Avenue Pasadena, CA 91101

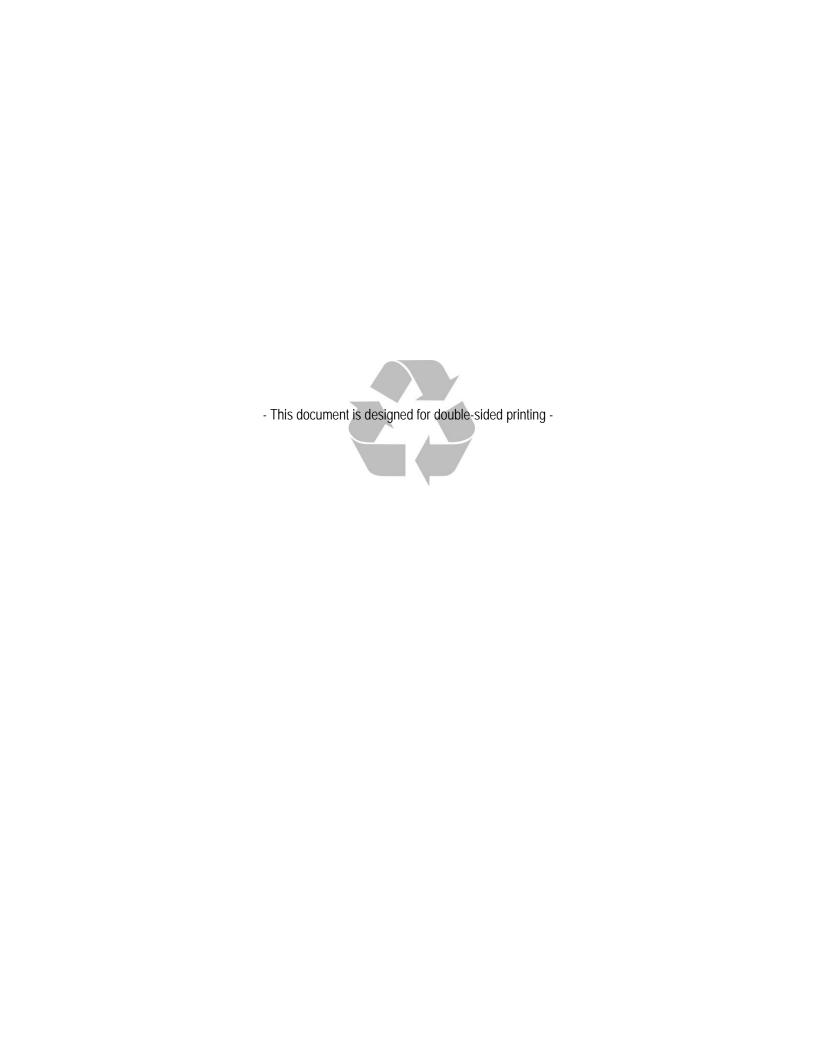


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Appendix A:

Appendix A: California Natural Diversity Database (CNDDB) Map and Data

ii City of Duarte

The City of Duarte (Lead Agency) is preparing a Specific Plan to guide the long-term growth and development of the Town Center, located along an approximately one-mile stretch of Huntington Drive from west of Buena Vista Avenue to east of Highland Avenue and portions of Buena Vista Street and Highland Avenue from Huntington Drive to Interstate 201 (I-210). Adoption of the Specific Plan, together with the associated General Plan Amendment and zone change, constitute a project that is subject to review under the California Environmental Quality Act (CEQA) 1970 (Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.).

This Initial Study has been prepared to identify potentially significant impacts related to the implementation of the proposed project. This report has been prepared to comply with Section 15063 of the State CEQA Guidelines, which sets forth the required contents of an Initial Study. These include:

- A description of the project, including the location of the project (Section 2)
- Identification of the environmental setting (Section 2.10)
- Identification of environmental effects by use of a checklist, matrix, or other methods, provided that entries on the checklist or other form are briefly explained to indicate that there is some evidence to support the entries (Section 4)
- Discussion of ways to mitigate significant effects identified, if any (Section 4)
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls (Section 4.10)
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study (Section 5)

Purpose of CEQA

The body of state law known as CEQA was originally enacted in 1970 and has been amended a number of times since. The legislative intent of these regulations is established in Section 21000 of the California Public Resources Code, as follows:

The Legislature finds and declares as follows:

- a) The maintenance of a quality environment for the people of this state now and in the future is a matter of statewide concern.
- b) It is necessary to provide a high-quality environment that at all times is healthful and pleasing to the senses and intellect of man.
- c) There is a need to understand the relationship between the maintenance of high-quality ecological systems and the general welfare of the people of the state, including their enjoyment of the natural resources of the state.
- d) The capacity of the environment is limited, and it is the intent of the Legislature that the government of the State takes immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached.
- e) Every citizen has a responsibility to contribute to the preservation and enhancement of the environment.
- f) The interrelationship of policies and practices in the management of natural resources and waste disposal requires systematic and concerted efforts by public and private interests to enhance environmental quality and to control environmental pollution.
- g) It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian.

The Legislature further finds and declares that it is the policy of the State to:

- h) Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.
- i) Take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise.
- j) Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history.
- k) Ensure that the long-term protection of the environment, consistent with the provision of a decent home and suitable living environment for every Californian, shall be the quiding criterion in public decisions.
- Create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations.
- m) Require governmental agencies at all levels to develop standards and procedures necessary to protect environmental quality.
- n) Require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment.

A concise statement of legislative policy, with respect to public agency consideration of projects for some form of approval, is found in Section 21002 of the Public Resources Code, quoted below:

The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

Supplement to an EIR

Section 15163 et al of the CEQA Guidelines describes preparing a supplement to an EIR as a streamlining tool as follows:

- (a) The Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR, and
 - (1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
 - (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.
- (b) The Supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- (c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
- (d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- (e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

The results of the analysis in this Initial Study will be used to inform the preparation of a Supplement to the General Plan EIR (SEIR) analyzing potential impacts resulting from the adoption and implementation of the Town Center Specific Plan Area. Environmental impacts will be screened from further analysis in the EIR where impacts resulting from the proposed Town Center Specific Plan are consistent with General Plan EIR findings. The EIR may be used by the Lead Agency to minimize or eliminate the need for future environmental review of development projects within the Specific Plan area to

2 City of Duarte

the extent possible at the programmatic level. The necessity for future environmental review will be determined on a project-by-project basis considering the size of the project, the proposed use, and a development proposal's consistency with the analysis provided in the SEIR. Note that minimizing or eliminating the need for future environmental review is in context of CEQA only and does not preclude the potential need for technical reports or consistency analysis in the future.

Public Comments

The City invites comments from all agencies and individuals regarding the information contained in this Initial Study. Such comments should explain any perceived deficiencies in the assessment of impacts, identify the information that is purportedly lacking in the Initial Study, or indicate where the information may be found. All comments on the Initial Study shall be submitted to:

Craig Hensley, Community Development Director City of Duarte 1600 Huntington Drive Duarte, CA 91010

Email: chensley@accessduarte.com

Following a 30-day period of circulation and review of the Initial Study, all comments will be considered by the City of Duarte prior to adoption.

Availability of Materials

All materials related to the preparation of this Initial Study are available for public review. To request an appointment to review these materials, please contact:

Craig Hensley, Community Development Director City of Duarte 1600 Huntington Drive Duarte, CA 91010

Email: chensley@accessduarte.com

(626)357-7931

Project Title

Town Center Specific Plan

Lead Agency Name and Address

City of Duarte Planning Division 1600 Huntington Drive Duarte, California 91010

Project Location

The project "planning area" is located generally along Huntington Drive from west of Buena Vista Street to east of Highland Avenue and portions of Buena Vista Street and Highland Avenue from Huntington Avenue to I-210 in the City of Duarte, Los Angeles County, California (see Exhibit 1, Regional Context and Vicinity Map). Huntington Drive at the Civic Center is the approximate central point of the plan area, located at Latitude 34° 8' 22" North, Longitude 117° 58' 19" West.

Project Sponsor's Name and Address

City of Duarte Planning Division 1600 Huntington Drive Duarte, California 91010

General Plan Land Use Designations

The planning area is designated for mixed use, commercial, administrative professional, multi-family residential, public/quasi-public, and open space uses, as identified in the 2007 General Plan.

Zoning Districts

Properties within the Town Center Specific Plan area are zoned for commercial, residential, public facilities, and open space. The majority of properties within the Specific Plan area are zoned for commercial uses. Residential uses are generally concentrated in the eastern portion of the planning area.

Background

Adopted by the City Council in 2003, the Duarte Town Center Concept Plan envisioned a community-oriented, walkable, mixed-use activity center in the heart of Duarte. In 2012, the City convened a Town Center Ad Hoc Committee to review the 2003 Town Center Concept vision. The Ad Hoc Committee reaffirmed the original vision and recommended that the City Council authorize development of a specific plan to implement that vision. The specific plan would encourage and promote mixed-use development and set forth a plan for streetscape improvements in the area.

The Town Center Concept Plan originally identified an approximately one-mile stretch of Huntington Drive, along with the portion of Buena Vista Street from Huntington Drive south to I-210, as Duarte's town center. Given the anticipated opening of the Metro Gold Line Station (light rail) in early 2016, the Town Center concept has been expanded to also

include Highland Avenue in this new planning effort, to foster enhanced mobility options to and from the Gold Line station area, and to promote additional transit-oriented development opportunities.

Project Characteristics

The Town Center Specific Plan identifies the long-term vision and objectives for private development and public improvement along portions of Huntington Avenue, Highland Avenue, and Buena Vista Street in the City of Duarte (see Exhibit 2, Planning Area). The project "planning area" encompasses approximately 75 net acres and includes land use designations/zoning districts supporting mixed-use, commercial, residential, and public facility uses. The zoning districts identified in the Specific Plan include "incentive zoning," whereby increased development potential is provided only if properties meet minimum lot sizes, which will require lot consolidation.

The proposed Specific Plan would allow flexibility between uses, but for the purpose of CEQA, the theoretical maximum development capacity allowed by the Specific Plan will be analyzed in the EIR to provide a conservative estimate of potential impacts from full build-out. It is estimated the Specific Plan will support development of 1,075 residential units, 703,000 square feet of commercial use, and 350 hotel rooms. The theoretical maximum build-out of the planning area is based on an analysis of existing underutilized sites that may redevelop. Specific Plan development potential estimates are subject to change as the Specific Plan is refined through the public review process.

The Town Center Specific Plan would provide new development standards and incentives for redevelopment, particularly with regard to underutilized commercial spaces and vacant properties. The Specific Plan will establish land use, transportation, infrastructure, economic development, and urban design strategies to promote well-balanced retail development, mixed-use and residential development, and active civic and public places.

Vision Elements and Strategies

The Town Center Specific Plan includes four Vision Elements that build on the existing character of the City of Duarte while setting the course for a creation of a dynamic, interconnected Downtown of people, places, and activities. Key strategies are identified to implement and realize the Vision Elements.

Vision Element A: Sense of Place

- Strategy A1. Town Center Identify, Brand, and Gateways Develop an enhanced identify for the Town Center, where Huntington Drive is re-imagined as the heart of the City. Welcome people through formal gateways that announce and celebrate the Duarte Town Center.
- Strategy A2. Plazas and Gathering Spaces Create a range of accessible open space types at different scales to provide opportunities for community gathering, activities and economic development.
 - Encourage the establishment of a new plaza to build identify and foster social gathering at the key intersection of Huntington and Buena Vista.
 - Utilize public realm improvement to capture small spaces for "parklets," increase the tree canopy, and soften the pedestrian experience.
 - Leverage private development to activate ground-floor frontages with space for outdoor restaurant seating and linear parkways and greenways.
- Strategy A3. Balance of Historic Roots and Modern Style Celebrate local history and landmarks throughout the Town Center area, while embracing a new vision for the Town Center that is built on great design, environmental sustainability and activated spaces.

Vision Element B: Vibrant

Strategy B1. Dynamic Mix of Uses - Form a range of land uses to create a built environment that fosters social interaction and activity for community members and visitors.

- Strategy B2. Active Ground Floor and Outdoor Dining Encourage active ground floors and outdoor dining through pedestrian-oriented development.
- Strategy B3. Property Maintenance and Enhancements Create an attractive Town Center area through the enhancement and ongoing maintenance of existing properties.

Vision Element C: Strong

- Strategy C1. Residential and Mixed Use Development Ensure that commercial development is supported by a strong residential base.
- Strategy C2. Restaurant Row Create a restaurant row within a core area of the Duarte Town Center.
- Strategy C3. Incentive Zoning Develop zoning mechanisms to encourage lot consolidation and catalytic development in appropriate locations.

Vision Element D: Connected

- Strategy D1. People-Oriented Streets A safe, comfortable and well-designed environment that accommodates all users and promotes active living.
- Strategy D2. Improved Access to Transit and Designations Provide accessible and convenient transit that helps to enhance mobility throughout the Town Center.
- Strategy D3. Parking Solutions Develop parking policies that incentivize new development while meeting parking needs.

Duarte Town Center Land Use Designations

Land use designations provide focus on where specific uses are allowed and policies will be applied. See Exhibit 3 (Proposed Land Use Plan).

Residential Town Center

The Residential Town Center designation provides for medium-density housing (up to 30 units/acre), with an emphasis on walkable urban form with access to commercial centers and transit. Allowable residential formats include apartments, townhomes, duplexes, and small-lot single-family developments, generally two stories in height. Assisted living and nursing care homes are also allowed.

Mixed Use Neighborhood

The Mixed Use Neighborhood designation allows for diverse commercial, retail, and service-oriented businesses. Where required lot sizes are met (0.75 acres, 1.5 acres, and 4 acres, depending on location), multi-family residential uses are permitted (30 units/acre), and the inclusion of commercial uses is generally encouraged, with lot consolidation and a density incentive of up to 40 units/acre. In any development that contains residential, the inclusion of commercial uses is required at key intersections, regardless of allowable density. On lots smaller than 1.5 acres, uses are limited to retail and commercial at a floor-area ratio (FAR) of 0.5.

Development is primarily envisioned as three stories, but could be allowed up to four stories as appropriate. This designation's combination of retail, services, and housing will allow more people to live and work in the Duarte Town Center.

Mixed Use Corridor

The Mixed Use Corridor designation allows for commercial and retail uses (maximum FAR 1.5), hotel, and higher density residential uses (up to 40 units/acre), permissible only if the lot size is equal to 1.5 acres or greater. A commercial component is required along major corridors. Development is generally allowed up to four stories. On lots smaller than 1.5 acres, uses are limited to retail and commercial at an FAR of 0.5.

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Mixed Use Town Center

The Mixed Use Town Center designation will create a distinctive sense of place at the Buena Vista and Huntington Drive intersection. This designation allows for a compatible mix of commercial and retail uses (maximum FAR 1.5) and higher density residential uses (up to 50 units/acre), permissible only if the lot size is equal to 1.5 acres or greater. On lots smaller than 1.5 acres, uses are limited to retail and commercial at an FAR of 0.5. Development is generally allowed up to four stories. A commercial component is required along Huntington Drive and at primary intersections.

Town Center Commercial Core

The Town Center Commercial Core designation provides for a diverse mix of commercial uses, including retail and services, office, research and development, hotels (west of Buena Vista only), restaurants, and other similar business activities. Building design will emphasize walkability and access to transit. Incentives will be developed to encourage façade enhancement and renovation/rehabilitation of existing sub-par properties for near-term improvements. Maximum FAR is limited to 2.0 on lots that consolidate to equal at least 1.5 acres. On lots smaller than 1.5 acres, uses are limited to retail and commercial at an FAR of 0.5.

Public Facilities

The Public Facilities designation encompasses government, civic, cultural, and infrastructure uses and activities that contribute to and support community needs. Office and commercial uses are also allowed. The maximum FAR is 0.75.

Surrounding Land Uses

The planning area is primarily surrounded by multi-family and single-family residential development. The Duarte Sports Park and Duarte High School are located south of the planning area.

Environmental Setting

The City of Duarte is located in the San Gabriel Valley, approximately 21 miles northeast of the City of Los Angeles. The City lies at the base of the San Gabriel Mountains and is bordered by the city of Irwindale to the south, city of Monrovia to the west, the city of Bradbury and Angeles National Forest to the north, and city of Azusa to the east. Two major freeways provide regional access: Interstate 210 (I-210) and Interstate 605 (I-605). I-210 runs east-west traversing the southern portion of the City, and I-605, which runs north-south, terminates at I-210 in Duarte.

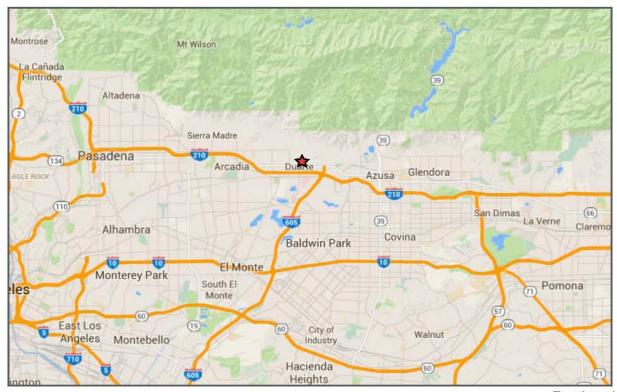
The planning area is generally occupied by commercial uses on the eastern and western sides of the area, government uses in the center, and residential uses intermixed along the corridors. Commercial uses make up approximately 50 percent, office uses represent six percent, and residential uses make up approximately 15 percent of the planning area under existing conditions. Government/institutional uses represent 20 percent, and the remaining eight percent is vacant.

Required Approvals

- Specific Plan
- General Plan Amendment
- Zoning Code Amendment

Other Public Agency Whose Approval Is Required

None



Regional



Vicinity





Exhibit 2 Planning Area

General Plan Supplemental EIR for the Town Center Specific Plan

Town Center Specific Plan Boundary

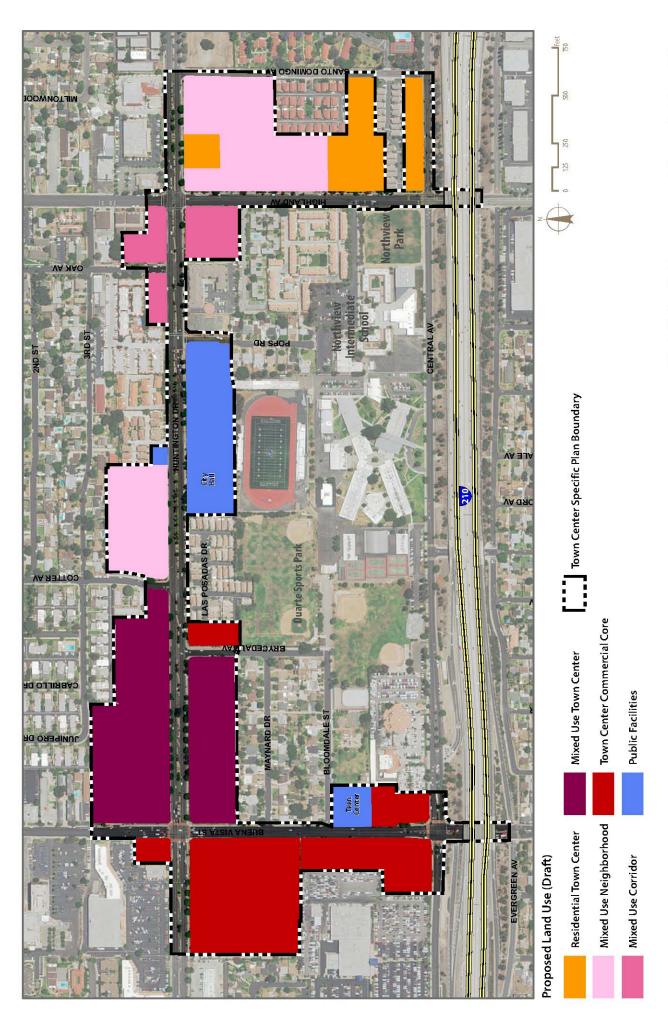


Exhibit 3 Proposed Land Use Plan

General Plan Supplemental EIR for the Town Center Specific Plan City of Duarte, California

Environmental Factors Potentially AffectedThe environmental factors checked below would be potentially affected by this project, involving at least one impact that is a 'Potentially Significant Impact' as indicated by the checklist on the following pages.

\boxtimes	Aesthetics		Agriculture Resources		Air Quality	
	Biological Resources		Cultural Resources		Geology /Soils	
	Greenhouse Gas Emissions		Hazards & Hazardous Materi	ials 🖂	Hydrology / Water Quality	
\boxtimes	Land Use / Planning		Mineral Resources		Noise	
\boxtimes	Population / Housing		Public Services		Recreation	
	Transportation/Traffic		Utilities / Service Systems		Mandatory Findings of Significance	
Deter	mination					
	I find that the proposed project DECLARATION will be prepare		D NOT have a significant effe	ct on the er	nvironment, and a NEGATIVE	
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.					
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.					
	I find that the proposed project MAY have a 'potentially significant impact' or 'potentially significant unless mitigated' impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.					
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.					
Name: Craig Hensley, Community Development Director			Director	Date		



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4 EVALUATION OF ENVIRONMENTAL IMPACTS

4.1 Aesthetics

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Have a substantial adverse effect on a scenic vista?				
B)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway?				
C)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
D)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

A) No Impact. According to the General Plan Environmental Impact Report (EIR), the San Gabriel Mountains are located at the northern portion of the City, including approximately 2,331 acres of open space within the City. The Angeles National Forest and additional wilderness area is a visual asset and natural recreational resource for residents. Views of the San Gabriel Mountains from within the planning area are intermittently obstructed by existing development but generally prevalent from all vantage points. Existing development within the planning area is generally one to two stories in height.

The proposed Specific Plan would permit development up to five stories in height and support higher-intensity, mixed-use development. Redevelopment within the planning area pursuant to the development standards of the Specific Plan would result in increased height and mass in the planning area and therefore would result in increased obstruction of views of the San Gabriel Mountains from within and outside of the planning area. The Page 4.3-6 of the General Plan EIR states that the City recognizes the importance of its image through the development of public spaces, building design, and site planning. Any mix of use or increase in density is regulated by the General Plan, Zoning Code and reviewed by the City's Architectural Review Board. Potentially significant impacts could occur if these visual changes degrade the character and/or quality of development within the planning area. According to the General Plan EIR, implementation and adherence to General Plan policies and design review by the Architectural Review Board would reduce visual quality impacts to a less than significant level.² Therefore, implementation of the proposed Specific Plan would be consistent with the General Plan EIR. Pursuant to the analysis provided in the General Plan EIR under which this discussion is a supplement to, less than significant impact to views or scenic vistas would occur. No further analysis of impacts to views or scenic vistas will be required for development proposed within the Town Center Specific Plan area.

B) No Impact. A scenic resource is defined as an isolated source of aesthetic value such as an old oak tree, a unique rock formation, or a historical structure visible from a scenic highway. The planning area is urbanized and generally developed with urban uses. No site within the planning area contains any scenic resources that could be impacted by development supported by the Specific Plan. No scenic highways exist within or outside of the planning area. As determined by the General Plan EIR, no impact to any scenic resources could occur.³

No further analysis of impacts to scenic resources will be required for development proposed within the Town Center Specific Plan area.

C) No Impact. Within the planning area, the majority of commercial development is single story and of fair building quality, with a variety of façades including stucco, stone, tile, and concrete. Ceramic roof tiles are a common feature of many commercial buildings. Newer commercial and residential developments use stone as an accent material along their façades. The residential areas within and adjacent to the planning area are characterized by one-story single-family residences and a variety of two-story multi-family units.

The proposed Specific Plan includes development standards and design quidelines to guide long-term development within the planning area. Redevelopment of properties within the planning area subject to the design guidelines of the Specific Plan would result in changes to the visual character of the planning area. The General Plan EIR states that the City recognizes the importance of its image through the development of public spaces, building design, and site planning.⁴ The Specific Plan establishes land use, transportation, infrastructure, economic development, and urban design strategies and would promote well-balanced retail development, mixed-use and residential development, and active civic and public spaces. Any mix of use or increase in density would be regulated by the General Plan, Zoning Code, and review by the City's Architectural Review Board. Potentially significant impacts could occur if these visual changes degrade the character and/or quality of development within the planning area. According to the General Plan EIR, implementation and adherence to General Plan policies and design review by the Architectural Review Board would reduce visual quality impacts to a less than significant level.⁵ Therefore, implementation of the proposed Specific Plan would be consistent with the General Plan EIR. Pursuant to the analysis provided in the General Plan EIR under which this discussion is a supplement to, no impact to visual character or quality would occur. No further analysis of impacts to visual character or quality will be required for development proposed within the Town Center Specific Plan area.

D) Potentially Significant Impact. Long-term development within the planning area would result in new light sources including the potential for pedestrian lighting, electric signs, security lighting, parking lot lighting, and street lights. However, as discussed in the General Plan EIR, the City is primarily built out.⁶ No development would incrementally contribute to the existing built environment as the majority of light and glare sources are currently in place.⁷ Development within the planning area would be subject to review and approval of the Architectural Review Board, which would ensure that all zoning code standards and ordinances are met. Development within the planning area would be subject to Duarte Municipal Code Section 19.50.070 (Outdoor Lighting) to ensure that lighting does not impact adjacent properties. Exterior lighting is required to be shielded or recessed so that direct glare and reflections are confined to the maximum extent feasible and the minimum use of exterior lighting to illuminate only the areas that require it is required. This would ensure that development within the planning area is adequately illuminating on-site uses for security purposes without impacting adjacent properties. Impacts to day and night views from lighting would be less than significant with implementation of existing regulations. No further analysis of impacts related to lighting will be required for development proposed within the Town Center Specific Plan area.

Glare is defined as light that enters the eye but is not helpful to sight. Glare is generated during the daytime from reflective surfaces such as glass or polished metals. Halos (rings of light around a light source) occur at night. In relationship to development, glare can be generated from projects using reflective building materials. The proposed Specific Plan includes development standards for building construction within the planning area. Potentially significant impacts related to glare could occur if building materials or techniques are permitted that could generate glare. Glare can impact people by scattering light in the eye and inducing temporary blindness. In extreme cases glare can also cause surficial heating at the terminus of the reflected ray. Potential impacts related to glare will be evaluated in an EIR.

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Exhibit 4 Photo Location Map

General Plan Supplemental EIR for the Town Center Specific Plan





(1)





3







6

MIG





8





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(12)

MIG

4.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
B)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
C)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?				
D)	Result in loss of forest land or conversion of forest land to non-forest use?				
E)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				

A-E) **No Impact**. The planning area is completely urbanized and void of any agricultural uses or native open space. No farmland of any importance, Williamson Act contracts, or timberland exists within the planning area.⁸ 9 No impacts to any of these resources could occur. No further analysis of impacts to agricultural or forestry will be required for development proposed within the Town Center Specific Plan area.

4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Conflict with or obstruct implementation of the applicable air quality plan?				
B)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
C)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
D)	Expose sensitive receptors to substantial pollutant concentrations?				
E)	Create objectionable odors affecting a substantial number of people?				

- A-C) Potentially Significant Impact. The proposed Specific Plan would support long-term redevelopment within the planning area with higher-intensity development and uses. Pollutant emissions would be generated from area and mobile sources within the planning area. Depending on the nature of growth anticipated in the planning area and ability for the proposed Specific Plan to accommodate such growth, conflicts with the assumptions used in the 2012 Air Quality Management Plan (AQMP) may occur and result in cumulatively considerable air quality impacts. Long-term development within the Specific Plan area would result in constriction and operational emissions that could exceed daily thresholds established by the South Coast Air Quality Management District (SCAQMD) for assessing regional and local impacts. Potentially significant impacts related to criteria pollutant emissions will be evaluated in an EIR.
- D) Potentially Significant Impact. The proposed Specific Plan does not include uses that could result in substantial emissions of toxic air contaminants (TACs), such as warehouses, heavy industrial, or manufacturing facilities; therefore, no impacts to sensitive receptors due to TAC emissions would occur as result of adoption of the proposed Specific Plan, and no further analysis of such impacts for future development within the planning area will be required.

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. ¹⁰ CO hotspots have the potential to violate state and federal CO standards at intersections, even if the broader Basin is in attainment for federal and state levels. The proposed Specific Plan supports long-term redevelopment of the planning area that would result in an increase in traffic in the project vicinity that could result in or contribute substantially to CO hotspots in the project vicinity. Potentially significant impacts related to CO hotspots will be evaluated in an EIR.

E) **No Impact.** According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.).¹¹ The proposed Specific Plan would not support any of these types of uses. No impact could occur, and no analysis of impacts related to odors will be required for future development within the planning area.

4.4 Biological Resources

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
В)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				
C)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
D)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
E)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
F)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

A) **No Impact.** The planning area is completely urbanized and lacks any native habitat. The California Natural Diversity Database (CNDDB) was consulted to determine the potential for occurrence of sensitive species within or in vicinity of the planning area (see Appendix A, CNDDB Map and Data). The result identified an area of Riversidian Alluvial Fan Sage Scrub located within the Santa Fe Flood Control Basin and San Gabriel

River. According to the CNDDB database, no occurrence of sensitive species has been identified within the planning area. Considering the lack of habitat supporting sensitive species in the planning area, no impacts will occur, and no further analysis of impacts to sensitive species or their habitat will be required for future development within the planning area.

- B-D) **No Impact**. No riparian habitat, wetlands, wildlife corridors, or wildlife nurseries exist within the planning area that could be impacted by long-term development supported by the proposed Specific Plan.¹³ No impacts related to these environmental issues could occur, and no further analysis regarding these issues will be required for future development within the planning area.
- E-F) **No Impact.** No local or regional plans or policies are in place protecting biological resources. No habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) apply to the planning area. ¹⁴ No impact could occur, and further analysis of consistency with these types of plans will not be required for future development within the planning area.

4.5 Cultural Resources

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?			\boxtimes	
В)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				
C)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			\boxtimes	
D)	Disturb any human remains, including those interred outside of formal cemeteries?				\boxtimes

A-C) Less Than Significant Impact. Historical resources typically become of concern when a structure is 50 years or older. Considering the age of development within the planning area, many structures are 50 years or older. Potentially significant impacts could occur if a structure meeting the definition of a historical resource pursuant to CEQA is damaged or destroyed during redevelopment within the planning area. As discussed in the General Plan EIR, no historical resources within the City were listed on the California Historical Landmarks for Los Angeles County, National Register of Historic Places, and National Historical Landmarks. Eight historical buildings were listed on the California Historic Resources Inventory. Future development will be subject to policies of the General Plan Historic Preservation Element. General Plan policies encourage the protection of historical resources and the training of City staff related to the development and application of historic preservation. As determined by the General Plan EIR, implementation of General Plan policies and implementation measures would reduce potential impacts to documented and undocumented historical resources and structures to less than significant levels. No further analysis of impacts to historical resources will be required for future development within the planning area.

Archaeological resources are buried cultural resources from historic or pre-historic eras. Paleontological resources are buried fossil remains. Surficial and near-surface archeological and paleontological resources in the planning area would have been destroyed or recovered as a result of past development and redevelopment; therefore, it is unlikely that resources are located in these locations under existing development. However, some archaeological resources may have been left in place, which is the preferred treatment pursuant to CEQA. Furthermore, the proposed Specific Plan supports high-intensity development that could include multiple-story subsurface parking, resulting in the disturbance of soils at depths not previously disturbed by existing or past development. Future development could result in impacts to such archaeological resources if not treated properly. In the event that archaeological resources are discovered during excavation and grading activities of future development, General Plan EIR Mitigation Measure CR-1 requires that the contractor stop work and retain a qualified archaeologist to evaluate the significance of the finding and appropriate course of action. CEQA Guidelines Section 15064.5 and state codes and regulations of the Native American Heritage Commission shall be followed. As determined by the General Plan EIR, implementation of General Plan policies and implementation measures would reduce potential impacts to undocumented archaeological and cultural resources to less than significant levels.¹⁷ No further analysis of impacts to archaeological and cultural resources will be required for future development within the planning area.

No Impact. No cemeteries exist within the planning area. Considering the planning area is developed, surficial and near-surface human remains would have been destroyed or recovered as a result of past development and redevelopment; therefore, it is unlikely that human are located in these locations under existing development. In the unlikely event that human remains are uncovered, future proponents of development within the planning area and the City would be required to comply with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code, including halting construction activities until a County Coroner can evaluate the discovery and potentially consult with a Native American Representative if the remains are of Native American Origin. Impacts to buried human remains would be less than significant with implementation of existing regulations. In addition, Mitigation Measure CR-2 of the General Plan EIR requires compliance with state law and Section 5.97.98 of the Public Resources Code. No further analysis of impacts to buried human remains will be required for future development within the planning area.

4.6 Geology and Soils

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			\boxtimes	
ii)	Strong seismic ground shaking?			\boxtimes	
iii)	Seismic-related ground failure, including liquefaction?				
iv)	Landslides?				\boxtimes
B)	Result in substantial soil erosion or the loss of topsoil?				
C)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
D)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?				
E)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

A) Less than Significant Impact. No Alquist-Priolo Earthquake Fault Zones are located within the planning area. However, the General Plan EIR indicates that portions of the Sierra Madre Fault pass through various portions of the City. Segments that pose the greatest threat to the city include the Upper Duarte Fault, the Duarte Fault, and Fault "D," all of which pass through the urbanized and wilderness/hillside areas. Other faults that have the potential to affect the City include the Raymond Hill Fault, San Andreas Fault, and Puente Hills Fault. However, according to the California Geological Survey Azusa Quadrangle, the planning area is not located within any of these fault zones. ¹⁸

The planning area is subject to strong ground shaking due to seismic events generally prevalent throughout California. Liquefaction is defined as the loss of soil strength during ground shaking. The planning area is not subject to liquefaction or subject to landslides because the area is flat and urbanized.¹⁹

Chapter 16.04 (Building Laws) of the City of Duarte Municipal Code formally adopted the Los Angeles County-amended 2013 California Building Code (CBC). The CBC requires adequate design of structures to prevent collapse during seismic events. Seismic hazards can be mitigated through a variety of solutions including soil excavation and replacement, use of piles, post-tensioned foundations, and other geotechnical and structural options. Future development within the planning area would be subject to building and safety review and approval pursuant to the CBC; potential seismic hazards would require correction through standard foundation and/or structural design. Impacts related to seismic hazards will be less than significant with implementation of existing regulations and analysis of impacts related to seismic hazards pursuant to CEQA will not be required for future development within the planning area. This does not relieve future project proponents from adhering to General Plan policies that acknowledge safety concerns due to seismic activity and that would minimize potential seismic hazards within the Planning Area. Consistent with the General Plan EIR, impacts related to strong seismic groundshaking, liquefaction, and landslides would be less than significant with implementation of General Plan policies and adherence to current CBC guidelines. Future project proponents would be required to submit geotechnical analysis with recommended design measures.

- B) Less than Significant Impact. Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms. Large areas underlain by native topsoil are unlikely to occur in the planning area because most of the planning area is expected to be underlain by fill soils associated with existing and past development. Future development within the planning area would be subject to SCAQMD Rule 403 (Fugitive Dust) to prevent loss of any soil located within the planning area due to wind. Water erosion would be prevented through the City's standard erosion control practices required pursuant to the California Building Code such as silt fencing or sandbags. Impacts related to loss of topsoil would be less than significant with implementation of existing regulations, and analysis of impacts related to loss of topsoil will not be required for future development within the planning area.
- C) Less than Significant Impact. As discussed in Section 4.6.A, impacts related to seismic and geotechnical issues are subject to the requirements of the CBC to prevent structural failure. Impacts related to geology and soils would be less than significant with implementation of existing regulations, and analysis of impacts related to geology and soils pursuant to CEQA will not be required for future development within the planning area. Future project proponents would be required to submit geotechnical analysis with recommended design measures.
- D) Less than Significant Impact. The planning area is completed urbanized, and any expansive soils that were underlying the planning area have likely been removed in place of fill materials used for past and existing development. Should expansive soils be present in the planning area, they would be required to be addressed prior to construction through removal, watering and compression, foundation design, or other recommendation provided by the project civil/geotechnical engineer pursuant to the requirements of the CBC. Impacts related to expansive soils would be less than significant with implementation of existing regulations and analysis of impacts related to expansive soils pursuant to CEQA will not be required for future development within the planning area. Future project proponents would be required to submit geotechnical analysis with recommended design measures.
- E) **No Impact**. No development within the planning area would require septic systems because there is a fully functional sewer system serving the planning area. No impact could occur, and impacts related to septic systems will not be required for future development within the planning area.

4.7 Greenhouse Gas Emissions

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
B)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

A–B) **Potentially Significant Impact**. The proposed Specific Plan supports long-term development of high-intensity uses within the planning area that would generate greenhouse gas (GHG) emissions from energy demand, mobile, water demand, wastewater generation, and solid waste generation sources. GHG emissions could contribute considerably to the cumulative impacts of climate change. Potential impacts related to GHG emissions and efforts to reduce GHG emissions will be evaluated in an EIR.

4.8 Hazards and Hazardous Materials

1.01	idzards dria ridzardods iviatoriais	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
В)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	
C)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
D)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
E)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
F)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
G)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
H)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

A-C) Less than Significant Impact. During construction of future development within the planning area, some level of transport, use, and disposal of hazardous materials and wastes would occur typical of construction projects. This would typically include fuels and lubricants for construction machinery and coating materials (e.g. paints) and asbestos. Routine construction control measures and best management practices for hazardous materials storage, application, waste disposal, accident prevention and clean-up would be as required by state and

federal regulations would be implemented to ensure that construction activities do not unduly expose people or the environment within or outside of the planning area to significant hazard.

Asbestos. Activities associated with the demolition of the existing structures in the planning area that were constructed in the 1950s and 1960s may pose a hazard with regard to asbestos containing materials (ACM). ACM were used on a widespread basis in building construction prior to and into the 1980s. Asbestos generally does not pose a threat when it remains intact. When asbestos is disturbed and becomes airborne, such as during demolition activities, significant impacts to human health could occur. Construction workers completing demolition activities, as well as surrounding uses, have the potential to be exposed to airborne asbestos emissions due to the potential presence of ACM. SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities, including the removal and disturbance of ACM.²¹ This rule is generally designed to protect uses and persons adjacent to demolition or renovation activity from exposure to asbestos emissions. Rule 1403 requires surveys of any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable ACM. Rule 1403 also establishes notification procedures, removal procedures, handling operations, and warning label requirements, including HEPA filtration, the *glovebag* method, wetting, and some methods of dry removal that must be implemented when disturbing appreciable amounts of ACM (more than 100 square feet of surface area).

Lead-Based Paints. Exposure of construction workers to lead-based paint during demolition activities is also of concern, similar to exposure to asbestos. Specific testing is required to determine if paint or other materials used in the construction of buildings within the planning area contains significant levels of lead. Exposure of surrounding land uses to lead from demolition activities is generally not a concern because demolition activities do not result in appreciable emissions of lead. The primary emitters of lead are industrial processes. Improper disposal of lead-based paint can contaminate soil and subsurface groundwater in and under landfills not properly equipped to handle hazardous levels of this material. If lead-based paint exists in structure proposed for future demolition within the planning area, 8 CCR Section 1532.1 (California Construction Safety Orders for Lead) is applicable requiring exposure assessment and compliance measures to keep worker exposure below actionable levels. Future demolition within the planning area would also be subject to Title 22 requirements for the disposal of solid waste contaminated with excessive levels of lead.

The proposed Specific Plan does not support uses that would result in substantial use, transport, and/or disposal of hazardous materials or wastes typically associated with industrial uses. Operation of future commercial and residential uses within the planning area as supported by the proposed Specific Plan would result in the use of widely used hazardous materials common to these types of uses to include paints and other solvents, cleaners, and pesticides. The remnants of these and other products are disposed of as household hazardous waste (HHW) that includes used dead batteries, electronic wastes, and other wastes that are prohibited or discouraged from being disposed of at local landfills. Regular operation and cleaning of future uses would not result in significant impacts involving use, storage, transport or disposal of hazardous wastes and substances. Use of common household hazardous materials and their disposal does not present a substantial health risk to the community.

Based on the preceding analysis of future construction and operational activities within the planning area, impacts associated with the routine transport, use of hazardous materials or wastes would be less than significant with implementation of existing regulations, and analysis of impacts related to hazardous materials will not be required for future development within the planning area.

D) Potentially Significant Impact. No property within the planning area is identified on the *Cortese List* that includes hazardous waste and substance sites listed by the Department of Toxic Substances Control (DTSC), leaking underground storage tank (LUST) sites as listed by the State Water Resources Control Board (SWRCB), hazardous solid waste disposal sites as listed by the SWRCB, Cease and Desist Order (CDO) or a Cleanup and Abatement Order (CAO) sites as issued by the SWRCB, or hazardous waste facilities subject to

corrective action by the DTSC. ²² ²³ ²⁴ ²⁵ ²⁶ Five leaking underground storage tank sites have been documented within the planning area. Although four of these cases have been closed by the Regional Water Quality Control Board (RWQCB), the potential remains for some contamination to be exposed during redevelopment activities. In the event of such exposure, potentially significant impacts dependent on the type of contaminant, level of contamination, location of the contaminant, and potential risk of exposure. Risk of upset due to contaminated sites will be evaluated in the EIR.

- E-F) **No Impact**. The planning area is not within the influence area of any public airport or private airstrip. No impact could occur, and analysis of impacts related to airport hazards will not be required for future development within the planning area.
- G) **No Impact**. The proposed Specific Plan includes no road closures or other feature that could physically impact rescue and evacuation efforts within or surrounding the planning area. No impact could occur, and analysis of impacts related to conflicts with emergency responses and evacuation will not be required for future development within the planning area.
- H) **No Impact**. The planning area is not located in an area susceptible to wildland fires.^{27 28} No impact could occur, and analysis of impacts related to wildland fires will not be required for future development within the planning area.

4.9 Hydrology and Water Quality

	<i>y</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Violate any water quality standards or waste discharge requirements?				
B)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
C)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
D)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
E)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
F)	Otherwise substantially degrade water quality?				
G)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
H)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
l)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
J)	Inundation by seiche, tsunami, or mudflow?				\boxtimes

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
K)	Potentially impact storm water runoff from construction activities?				
L)	Potentially impact storm water runoff from post construction activities?			\boxtimes	
M)	Result in a potential for discharge of storm water pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling, or storage, delivery areas, loading docks or other outdoor work areas?				
N)	Result in the potential for discharge of storm water to affect the beneficial uses of the receiving waters?				
O)	Create the potential for significant changes in the flow velocity for volume of storm water runoff to cause environmental harm?				
P)	Create significant increase in erosion of the project site or surrounding area?				

A, F, K-N)

Less than Significant Impact. Future development within the planning area would be subject to the provisions of the National Pollution Discharge Elimination System (NPDES) to protect downstream water quality pursuant to the federal Clean Water Act (CWA). Discharges into stormwater drains or channels from construction sites of one acre or larger are regulated by the General Permit for Storm Water Discharges Associated with Construction Activity (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ) issued by the State Water Quality Control Board. The General Permit was issued pursuant to National Pollutant Discharge Elimination System (NPDES) regulations of the Environmental Protection Agency (EPA), as authorized by the Clean Water Act. Compliance with the General Permit involves developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) specifying best management practices (BMPs) that a project will use to minimize pollution of stormwater. The SWPPP BMPs would follow the guidelines set forth by the SWRCB. Proponents of future projects within the planning area would be required to comply with NPDES permit requirements through the preparation and implementation of a SWPPP for construction activities.

The City implements NPDES requirements through Municipal Code Chapter 6.15 (Stormwater and Urban Runoff Pollution Control). Impacts to water quality of receiving waters due to construction activities, including but not limited to the potential for discharge of pollutants from areas of material storage, vehicle or equipment fueling and maintenance, waste handling, delivery areas, and other outdoor areas, would be less than significant with implementation of existing regulations. Analysis of impacts to water quality due to construction activities will not be required for future development within the planning area.

Operationally, the proponents of future development and uses would be required to prepare a water quality management plan (WQMP) to implement measures as outlined by the Los Angeles RWQCB in the Los Angeles Countywide Standard Urban Stormwater Management Plan (SUSMP). The SUSMP typically includes, but is not limited to: 1) guidance, operation and maintenance for all source control, site design, and treatment control

BMPs; and 2) operation and maintenance activities, which include maximizing canopy interception and water conservation, landscape planning, roof runoff controls, efficient irrigation, storm drain system signage, trash storage areas and litter control, employee training/education program, protect slopes and channels, common area catch basin inspection, energy dissipaters, pervious concrete/alternative materials, and storm filter filtration systems. Standard conditions of the WQMP will also include providing a thorough description of operation and maintenance activities, and providing a schedule of the frequency of operation and maintenance for each BMP. As required by the General Plan Open Space and Conservation Element, future developments would comply with NPDES/SUSMP requirements.²⁹ The potential impacts to water quality of receiving waters resulting from operation of future development within the planning area would be less than significant with implementation of existing regulations. Analysis of impacts to water quality due to operational activities will not be required for future development within the planning area.

- B) Potentially Significant Impact. The proposed Specific Plan supports high-intensity development within the planning area that would accommodate an increase in growth beyond that contemplated in the 2007 General Plan. Although the City embarked on a Town Center Concept Plan to foster an historic town center and central gathering spot in 2003, this growth could result in a substantial increase in the use of groundwater resources that could ultimately result in the lowering of the water table, thereby impacting operation of existing wells. Impacts to groundwater levels and well operations will be evaluated in the EIR.
- C-D,O-P)No Impact. The planning area is completely urbanized and has a fully functional storm drain system. The drainage pattern of properties within the planning area have been engineered through past and present development to avoid on- or off-site erosion and flooding; all properties convey storm water to the existing storm drain system. Future redevelopment within the planning area would be subject to entitlement and building permit requirements, including grading and drainage plans that identify on-site drainage design and the provisions for drainage and/or conveyance to off-site facilities. Chapter 6.15 (Stormwater and Urban Runoff Pollution Control) outlines existing City standards, guidelines, and criteria for specific discharges, connections, and/or best management practices (BMPs) for new development. In addition, as required by General Plan EIR Mitigation Measure HYD-1, preparation of a drainage/grading plan for approval by the Duarte Public Works department is required for individual development projects.³⁰ In addition, General Plan EIR Mitigation Measure HYD-2 requires that parkway drains or similar devices required by the draining plan be constructed prior to issuance of building permits. Implementation of existing requirements and General Plan EIR mitigation measures would ensure that on- and off-site erosion, flooding, and increases in flow velocity do not occur and analysis of impacts related to on- and off-site erosion, flooding, and flow velocity will not be required for future development within the planning area.
- No Impact. The planning area is fully urbanized and generally constructed with impervious surfaces. Future redevelopment within the planning area would result in development that could increase impervious surfaces and result in additional stormwater runoff to local and regional storm drain and flood control facilities. Pursuant to NPDES requirements and current focus on Low Impact Development (LID) standards, no increase in stormwater runoff from any development within the planning area would be permitted. Any calculated increase in stormwater runoff, as identified in the project WQMP, would be required to be absorbed and/or retained on site; therefore, no increase in stormwater runoff could occur, and storm drain capacity would not be impacted. Analysis of impacts related to storm drain capacity will not be required for future development within the planning area.
- G-H) **No Impact.** A one-percent annual chance for flooding is defined as the 100-year flood.³¹ The planning area is in an area designated as Zone X by the Federal Flood Management Agency, an area that is determined to be outside the 0.2% annual chance floodplain and is not located within a 100-year flood zone.³² No impact to housing or flood elevation levels could occur. Analysis of impacts related to flood hazards will not be required for future development within the planning area.

- Less than Significant Impact. According to the General Plan EIR, the City is subject to dam inundation in the event that the three major dams in the upper watershed of the San Gabriel River were to fail. ³³ If a dam were to fail, flood waters would reach Duarte in 20 to 40 minutes. Based on the analysis in the General Plan EIR, potential impacts related to dam inundation are unlikely and were determined to be less than significant because new development would primarily consist of infill development, which would not increase the hazards of dam inundation. ³⁴ The National Dam Safety Act authorized programs to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. The program requires regular inspection of dams to reduce the risks associated with dam facilities. In addition, General Plan Safety Element policies which address precautionary measures in high risk areas; cooperation with federal, state, and county agencies; and land use design would decrease impacts related to dam inundation. Based on the analysis documented in the General Plan EIR, implementation of General Plan policies, and regulatory requirements for dam safety, potential impacts related to dam inundation would be less than significant. ³⁵ Analysis of impacts related to dam and levee inundation will not be required for future development within the planning area.
- J) No Impact. The planning area is not subject to seiche, tsunami, or mudflow because conditions that could result in these hazards do not exist within or in vicinity of the planning area.³⁶ No impact could occur and analysis of impacts related to seiche, tsunami, or mudflow will not be required for future development within the planning area.

4.10 Land Use and Planning

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Physically divide an established community?				
B)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	\boxtimes			
C)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				

- A) **No Impact**. The Specific Plan does not propose any land use or zoning changes that could result in the long-term division of any district or neighborhood in Duarte. Rather, the Specific Plan looks to create a unified downtown area. No impact could occur. Analysis of impacts related to division of communities will not be required for future development within the planning area.
- B) Potentially Significant Impact. The proposed Specific Plan would include new goals and development standards for long-term redevelopment of the planning area. The potential exists for the provisions of the Specific Plan to conflict with the policies of the existing General Plan that were identified as mitigating in the General Plan EIR. Potential impacts related to conflicts with mitigating policies will be evaluated in an EIR.
- C) **No Impact**. No Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) are in effect within the planning area. No impact could occur, and further analysis of consistency with these types of plans will not be required for future development within the planning area.

4.11 Mineral Resources

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
В)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

A-B) **No Impact**. The planning area is not located in an area with known mineral resource deposits.³⁷ As identified in the General Plan and certified General Plan EIR, the City is completely urbanized. Any opportunity for extraction of underlying mineral resources has been lost due to urbanization. The General Plan does not identify any locally important mineral resources within the City. No impact to state, regional, or local mineral resources could occur. Analysis of impacts to these resources will not be required for future development within the planning area.

4.12 Noise

Would the project result in:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	\boxtimes			
В)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
C)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	\boxtimes			
D)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	\boxtimes			
E)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
F)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

- A-D) Potentially Significant Impact. Construction activities and operation of development within the planning area would generate temporary, periodic, and permanent sources of noise and vibration. Periodic noise would be generated from common urban sources such as delivery loading and unloading, landscape maintenance, and special events. Permanent increase in ambient noise would result from incremental increase in traffic volumes, as redevelopment within the planning area could result in more intense development. Increases in noise levels could result in exceedance of General Plan and/or Municipal Code noise standards. Potential impacts will be evaluated further in an EIR.
- E-F) **No Impact**. The planning area is not within the noise contours of any public airport or private airstrip.³⁸ No impact could occur, and analysis of impacts related to airport noise will not be required for future development within the planning area.

4.13 Population and Housing

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
В)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
C)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

- A) Potentially Significant Impact. The proposed Specific Plan is designed specifically to provide a long-term strategy for revitalizing and increasing the development potential of central Duarte. The Specific Plan will establish land use, transportation, infrastructure, economic development, and urban design strategies to promote well-balanced retail development, mixed-use, and residential development and active civic and public spaces. This could result in previously unanticipated and unplanned for growth in the planning area. Potential impacts related to substantial growth will be evaluated in an EIR.
- B-C) **No Impact**. The proposed Specific Plan includes no physical changes to the planning area and does not include any provisions that would remove housing in the planning area. The proposed Specific Plan is designed to guide the natural recycling and redevelopment of the planning area, and provides opportunities for additional housing to develop within the planning area. Where existing residential uses are located, they would be permitted to remain and would not be rezoned to a non-residential use. The proposed Specific Plan supports housing over the long-term and includes land use categories for residential, mixed-use, and commercial development. No impact could occur and analysis of impacts related to displacement of housing or people will not be required for future development within the planning area.

4.14 Public Services

A) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?				
Police protection?				
Schools?			\boxtimes	
Parks?			\boxtimes	
Other public facilities?				

A) Less than Significant Impact. The planning area is within the existing service areas of the Los Angeles County Fire Department, the Los Angeles County Sheriff, the Duarte Unified School District, and the County of Los Angeles Public Library. 39 Because the planning area is within the existing service area of applicable public services, service areas would not need to be expanded to serve the planning area. Fire, police, and library services are funded through taxes and would be incrementally funded as new development occurs within the planning area. Schools are funded through development impact fees (DIF) pursuant to the Leroy F. Green School Facilities Act and are paid prior to issuance of building permits. Facilities would be expanded or renovated incrementally as growth in the planning area and greater service area increases. Construction of public facilities would be subject to standard environmental review processes to determine if potentially significant impacts would occur and appropriate mitigation incorporated, as necessary, pursuant to CEQA. As determined in the General Plan EIR, impacts would be less than significant with implementation of existing regulations. 40 Analysis of potential impacts related to the construction of public facilities due to incremental growth within the planning area will not be required for future development within the planning area.

4.15 Recreation

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
В)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

- A) Less than Significant Impact. Long-term redevelopment within the planning area would result in new residential units, resulting in the incremental need for local and regional park facilities. As discussed in the General Plan EIR, the City of Duarte maintains 55.21 acres of parkland and recreational facilities and exceeds the minimum acreage based on a recommendation of one acre of open space per 1,000 residents. In addition, as recognized in the General Plan EIR, the City is essentially built out. Therefore, potential to acquire and develop additional parkland is limited. Additionally, future residential development within the planning area would be subject to the payment of fees for parks and recreational facilities. As allowed under the Quimby Act, Duarte Municipal Code Section 18.20.041 requires all subdiviers to dedicate land, pay in lieu fees, or both as a condition of approving a subdivision map. With implementation of the Municipal Code and policies and corresponding implementation measures in the General Plan, impacts on parks and recreational facilities within the City would be less than significant. The proposed Specific Plan is consistent with the analysis in the General Plan EIR and would result in less than significant impacts related to the accelerated deterioration of parks and recreation facilities with implementation of existing regulations. Analysis of potential impacts related to the accelerated deterioration of parks and recreation facilities with in the planning area.
- B) Less than Significant Impact. The proposed Specific Plan does not include the development or operation of park or recreation facilities. Should a future development project within the Planning Area include the construction of a park or recreation facility, independent environmental analysis for the construction and operation of such facilities would be required. Adoption of the Specific Plan would result in a less than significant impact.

4.16 Transportation and Traffic

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	\boxtimes			
B)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	\boxtimes			
C)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
D)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	\boxtimes			
E)	Result in inadequate emergency access?				
F)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	\boxtimes			

- A-B) **Potentially Significant Impact**. Long-term growth within the Specific Plan area would result in increased trip generation that could potentially impact the performance of local and regional intersections and freeway ramps. A traffic impact analysis would be prepared to evaluate the potential impacts of the proposed Specific Plan on local and regional roadways. Potential impacts will be evaluated in an EIR.
 - C) No Impact. The project is not located within the imaginary surfaces or influence area of any airport where height restriction are in place to avoid obstruction of air traffic routes. The project would accommodate growth in the planning area, and a portion of that growth would utilize air travel in the future. Air travel trip generation is a regional, nation, and international concern and cannot be significantly impacted by local plans for growth and development management. No impact to air traffic patterns would occur, and analysis of potential impacts related to air traffic will not be required for future development within the planning area.

- D) Potentially Significant Impact. The Specific Plan proposes modifications to roadways in order to enhance all forms of mobility and create a sense of place. Such modifications may include changes to existing traffic and parking lanes to allow for bike lanes, mid-block signalized crosswalks and bulbouts, and other pedestrian and transit amenities. Roadway changes may occur along Huntington Drive, Highland Avenue, and Buena Vista Street. The potential for these new features and incompatible uses to result in hazardous traffic conditions will be evaluated in an EIR.
- E) Less than Significant Impact. Future development within the planning area would be subject to fire code requirements and Fire Department review and approval to ensure adequate emergency access. Adequate emergency access is provided in the forms of primary and secondary ingress and egress, adequate driveway width and slope to accommodate emergency vehicles, fire hydrant placement, and/or access requirements for gated facilities. The proposed Specific Plan includes no development standards that would interfere with implementation of emergency access requirements. Impacts would be less than significant; analysis of potential impacts related to emergency access will not be required for future development within the planning area.
- F) **Potentially Significant Impact**. The proposed Specific Plan includes development standards, design guidelines, and streetscape improvements designed to promote pedestrian mobility and alternative transportation modes in the planning areas. The potential impacts and/or benefits of these features as related to consistency with local and regional transportation plans and policies will be evaluated in an EIR.

4.17 Utilities and Service Systems

Would the project:

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
В)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	\boxtimes			
C)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
D)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	\boxtimes			
E)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	\boxtimes			
F)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
G)	Comply with federal, state, and local statutes and regulations related to solid waste?				

- A-B, E) **Potentially Significant Impact**. The proposed Specific Plan would support growth in the planning area that could result in an increase in water demand and wastewater discharges. These increases could overwhelm current and/or future facilities, resulting in the need for new construction and or expansion of conveyance facilities and changes in associated permits. Potential impacts to water and wastewater facilities will be evaluated in an EIR.
 - C) No Impact. As discussed in Section 4.9.E, the planning area is fully urbanized and generally constructed with impervious surfaces. Future redevelopment of the planning area would result in development that could increase impervious surfaces and result in additional stormwater runoff to local and regional storm drain and flood control facilities. Pursuant to NPDES requirements and current focus on LID standards, no increase in stormwater runoff from any development within the planning area would be permitted. Any calculated increase in stormwater runoff would be required to be absorbed and/or retained on individual project sites; therefore, no

- increase in stormwater runoff could occur, and storm drain capacity would not be impacted. Analysis of impacts related to storm drain capacity will not be required for future development within the planning area.
- D) Potentially Significant Impact. The proposed Specific Plan would result in an increase in water demand in the planning area that may not have been contemplated in the local water districts' Urban Water Management Plans (UWMPs) and thus could require acquisition of new or expanded supplies. The need for additional water supplies will be evaluated in an EIR.
- F-G) Less than Significant Impact. According to the General Plan EIR, solid waste within the City is disposed of at the Arvin Sanitary Landfill, Bradley Landfill West and West Extension, Chiquita Canyon Sanitary Landfill, Frank R. Bowerman Sanitary Landfill, Puente Hills Landfill, and Scholl Canyon Sanitary Landfill. A According to the California Department of Resources Recycling and Recovery (CalREcycle), annual and lifetime capacity in Los Angeles County is sufficient to meet long-term demand. Annual disposal in the County is limited to approximately 14.7 million tons. Landfill estimates between 2015 and 2025 are estimated at 7.1 million tons and 7.5 million tons, respectively. This is approximately half of the annual allowable disposal amount; therefore, there is sufficient annual disposal capacity to serve the uses resulting from the long-term development of the planning area. By 2025, remaining capacity in landfills throughout the County is approximately 32 million tons; therefore, sufficient lifetime capacity exists to serve the uses resulting from the long-term development of the planning area. All uses within the planning area would be subject to applicable local and state regulations related to solid waste disposal and recycling, and no portion of the proposed Specific Plan would conflict with implementation of such regulations. Impacts would be less than significant; analysis of impacts related to solid waste will not be required for future development within the planning area.

4.18 Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
В)	Does the project have impacts that are individually limited, but cumulatively considerable?				
C)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

- A) Potentially Significant Impact. The proposed Specific Plan could result in significant impacts related to glare, local and regional emissions of criteria pollutants, greenhouse gas emissions, and groundwater levels. The proposed Specific Plan would have no impact on any biological resources. The proposed Specific Plan would have less than significant impacts on historical, cultural, and/or paleontological resources. Based on the preceding analysis of potential impacts in the responses to items 4.1 through 4.17, evidence is presented that this project could degrade the quality of the environment. The City hereby finds that impacts related to degradation of the environment are potentially significant, and an SEIR will be prepared.
- B) Potentially Significant Impact. Cumulative impacts can result from the interactions of environmental changes resulting from one proposed project with changes resulting from other past, present, and future projects that affect the same resources, utilities and infrastructure systems, public services, transportation network elements, air basin, watershed, or other physical conditions. Such impacts can be short term and temporary, usually consisting of overlapping construction impacts, as well as long term, due to the permanent land use changes involved in the project. Based on the preceding analysis in Sections 4.1 through 4.17, the proposed Specific Plan has the potential to contribute considerably to short- and long-term cumulative impacts at local, regional, and global contexts. The City hereby finds that cumulative impacts are potentially significant, and an SEIR will be prepared.
- C) Potentially Significant Impact. The analysis documented in Section 4.1 through 4.17 identify potential direct and indirect impacts to human beings related to air quality, greenhouse gas emissions, and noise. The City hereby finds that direct and indirect impacts to human beings are potentially significant, and an SEIR will be prepared.



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- Olivia Chan, Associate Analyst

Persons and Organizations Consulted

None

Citations

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- ⁷ City of Duarte. Duarte General Plan Update Final Environmental Impact Report, Page 4.3-9. August 2007
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- ⁴² City of Duarte. Duarte General Plan Update Final Environmental Impact Report, Page 4.17-10. August 2007
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Occurrence Report

California Department of Fish and Wildlife





Key Quad:Baldwin Park (3411718)Element Code:CTT32720CAOccurrence Number:1Occurrence Last Updated:1998-07-13

Scientific Name: Riversidian Alluvial Fan Sage Scrub Common Name: Riversidian Alluvial Fan Sage Scrub

Listing Status: Federal: None Rare Plant Rank:

State: None Other Lists:

State: S1.1

G1

General Habitat: Micro Habitat:

 Last Survey Date:
 1985-09-23

 Owner/Manager:
 LAX COUNTY, PVT

 Trend:
 Unknown

Presence: Presumed Extant

riesence. Fiesumed Extant

SANTA FE FLOOD CONTROL BASIN, SAN GABRIEL RIVER, WEST OF AZUSA, EAST OF MONROVIA.

Detailed Location:

CNDDB Element Ranks:

Last Date Observed:

Ecological:

Location:

ERIOGONUM FASCICULATUM W/ SEVERAL CO-DOMINANT SPP. 3 VEG ZONES REFLECT TIME SINCE LAST FLOOD DISTURBANCE. BOUNDARY FORM 1978 AIR PHOTOS.

Occurrence Type:

Natural/Native occurrence

Threats:

FRAGMENTED BY GRAVEL MINES, SPREADING GROUNDS.

Global:

1985-09-23

General:

PART IS COUNTY PARK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

 PLSS:
 T01S, R10W, Sec. 05 (S)
 Accuracy:
 specific area
 Area (acres):
 395

 UTM:
 Zone-11 N3775864 E412234
 Latitude/Longitude:
 34.11994 / -117.95170
 Elevation (feet):
 500

County Summary: Quad Summary:

Los Angeles Baldwin Park (3411718), Azusa (3411728)

Sources:

HAN80U0002 HANES, T. & D. JENSEN - REPORT OF MEETING WITH TED HANES ON ALLUVIAL FAN COASTAL SAGE, CNERIDIUM STANDS,

COMAROSTAPHYLIS & XYLOCOCCUS, TECATE CYPRESS, KNOBCONE PINE, ENGELMANN OAK, AND REDSHANK.. 1980-10-28

HOL85F0036 HOLLAND, R.F. - FIELD SURVEY FORM FOR RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB (NC32720) 1985-02-12

MOO85F0001 MOONEY, M. & L. LAPRE - FIELD SURVEY FORM FOR SANTA FE FLOOD CONTROL BASIN (RIVERSIDIAN ALLUVIAL FAN SAGE

SCRUB - NC32720.001) 1985-09-23

SMI80A0001 SMITH, R.L. - ALLUVIAL SCRUB VEGETATION OF THE SAN GABRIEL RIVER FLOOD PLAIN, CA. MADRONO 27(3) 126-38. 1980-07-

XX



Occurrence Report

California Department of Fish and Wildlife





Key Quad: Azusa (3411728) **Element Code:** CTT32720CA **Occurrence Number:** 13 Occurrence Last Updated: 1997-04-11

Scientific Name: Riversidian Alluvial Fan Sage Scrub **Common Name:** Riversidian Alluvial Fan Sage Scrub

Rare Plant Rank: **Listing Status:** Federal: None

Other Lists: State: None

State: S1.1

G1

Global:

General Habitat: Micro Habitat:

Last Date Observed: 1935-XX-XX Occurrence Type: Natural/Native occurrence

Last Survey Date: 1978-09-19 Occurrence Rank: None Owner/Manager: **UNKNOWN** Trend: Unknown

Presence: Extirpated

CNDDB Element Ranks:

SAWPIT WASH, FROM NEAR CONFLUENCE WITH RUBY CANYON DOWNSTREAM TO VICINITY OF HUNTING DRIVE.

Detailed Location:

Ecological:

Location:

OPEN STAND OF QUERCUS AGRIFOLIA OVER ARTEMISIA CALIFORNICA, LEPIDOSPARTUM & RHUS LAURINA ACCORDING TO WIESLANDER SURVEY.

Threats:

EXTIRPATED BY URBANIZATION.

General:

SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T01N, R11W, Sec. 24 (S) Area (acres): 220 Accuracy: specific area Zone-11 N3779726 E409159 Latitude/Longitude: Elevation (feet): 800 UTM: 34.15451 / -117.98545

County Summary: Quad Summary:

Azusa (3411728) Los Angeles

Sources:

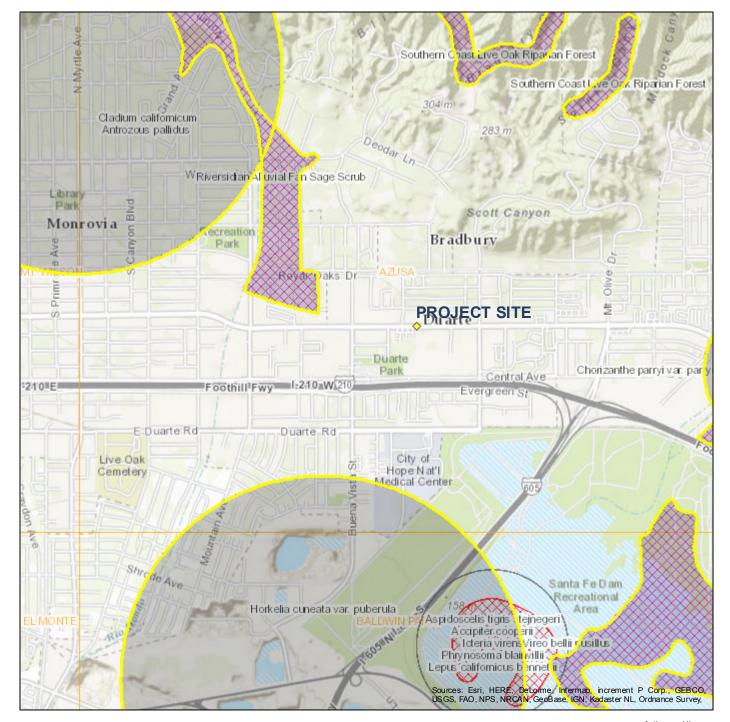
HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728,

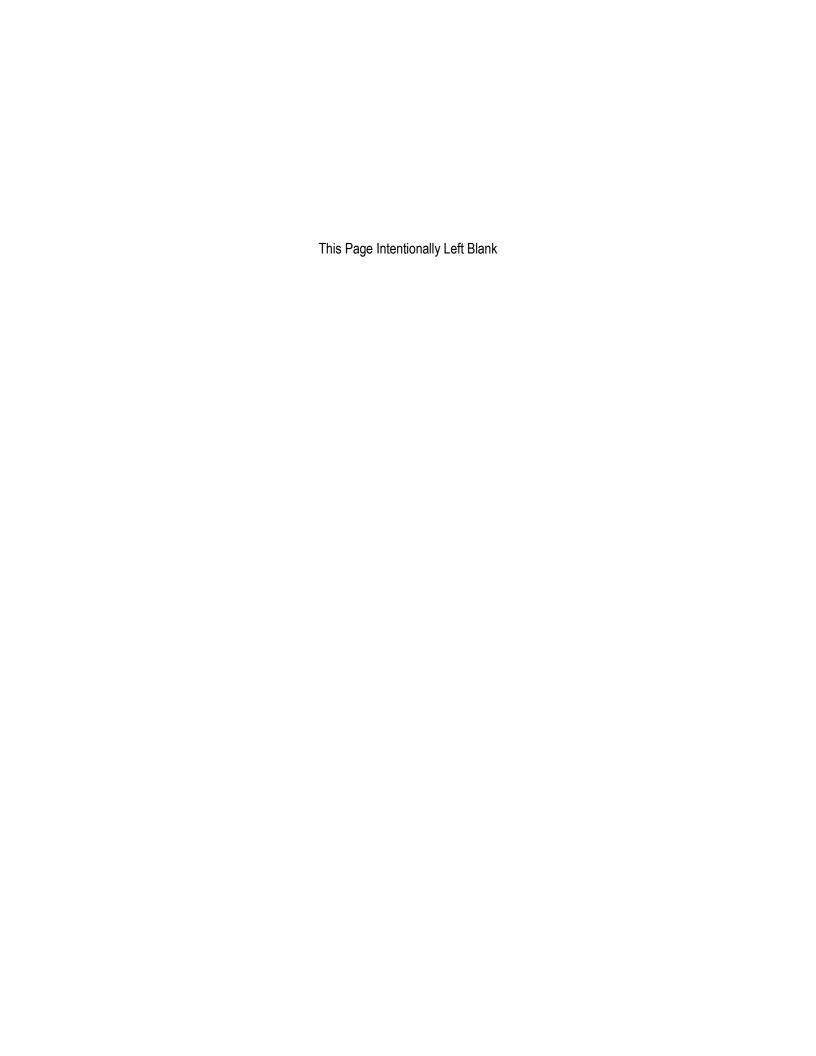
3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX

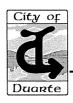
USF35M0003 U.S. FOREST SERVICE - "WIESLANDER" VEG MAPS FOR LOS ANGELES COUNTY 1935-XX-XX

Map of Project Area









PROJECT INFORMATION PACKET

I. INTRODUCTION

Pursuant to Section 15082 of the *CEQA Guidelines*, the City of Duarte has distributed this Notice of Preparation/Project Information Packet for the Duarte General Plan Update and Program EIR. The General Plan Update involves a process of revising the City's existing 1989 General Plan.

The City's existing General Plan consists of the following State mandated and optional elements:

- Safety Element;
- Open Space and Conservation Elements;
- Noise Element;
- Land Use Element;
- Historic Preservation Element;
- Economic Development Element; and
- Circulation.

Within the last several years, the City updated its Housing Element, which included a separate hearing process as well as a separate environmental document for the Housing Element. The Housing Element and the associated environmental document were adopted by the City Council in August 2004.

The sections that follow describe the City's location in the region, summarize the General Plan Update document and list the issue areas to be evaluated through a Program EIR, which will be prepared in accordance with Section 15168 of the CEQA Guidelines.

II. REGIONAL LOCATION

The City of Duarte is located in the eastern portion of the San Gabriel Valley, approximately 21 miles northeast of the City of Los Angeles in the County of Los Angeles. The City is situated at the base of the San Gabriel Mountains and is bordered by the City of Irwindale to the south, City of Monrovia to the west, the community of Bradbury and the Angeles National Forest to the north, and the City of Azusa to the east. Two major freeways provide regional access: Interstate 210 (I-210) and Interstate 605 (I-605). I-210 runs east-west traversing the southern portion of the City, and I-605, which runs north-south, terminates at the I-210 in the City of Duarte. Refer to Exhibit 1, Regional Location.

III. GENERAL PLAN UPDATE PROJECT DESCRIPTION

The General Plan Update is a comprehensive update of the 1989 General Plan. Major components of the General Plan Update include:

- 1. Update of existing conditions, with year 2005/2006 serving as the baseline year.
- 2. Update of General Plan development projections to the year 2020. Projections for population, employment, residential and non-residential development have been updated for the year 2020.
- 3. Additions, deletions or modifications to the 1989 General Plan goals and policies.
- 4. Amendment of the remaining General Plan Elements to reflect items 1, 2, and 3, above.



Projected Land Use Growth

The City of Duarte is approximately 98 percent built out, and as such, the General Plan Update will focus on preserving residential neighborhoods, guiding the remaining development and redevelopment opportunities, and encouraging the revitalization of selected areas.

Table 1 provides a summary of the anticipated development conditions in 2020. In total, these efforts are anticipated to result in following scenario in 2020:

- 7,729 dwelling units;
- 32,670 square feet of neighborhood commercial;
- 1,938,420 square feet of general commercial;
- 87,120 square feet of administrative professional commercial;
- 5,096,520 square feet of hospital;
- 980,100 square feet of hospital-related research and development;
- 1,154,340 square feet of industrial;
- 333,561 square feet of planned community and areas use;
- 165,000 square feet of City Center Mixed Use Area;
- 100,000 square feet of Gold Line Station Area Development;
- 667 acres for public and quasi-public uses; and
- 2,370 acres for open space uses.

Collectively, these numbers represent a total of 7,729 dwelling units and 9,887,731 square feet of non-residential development. A population of 25,507 is anticipated in 2020.

In addition to the General Plan 2020 estimates, the City has developed estimates for growth over existing conditions, which are listed below. The anticipated growth in residential, commercial, and industrial uses over year 2005/2006 conditions is:

- 726 dwelling units; and
- 658,744 square feet of non-residential development.



Table 1
General Plan Land Use in 2020

Land Use Designation	2020 Acres	2020 DU/SF
Residential Use Classification		
Very Low Density	120	300 DU
Low Density	647	3,382 DU
Medium Density	90	1,350 DU
High Density	52	1,196 DU
Commercial Use Classification		
Neighborhood	3	32,670 SF
General	89	1,938,420 SF
Administrative Professional	4	87,120 SF
Hospital Use Classification		
Hospital	78	5,096,520 SF
R&D	15	980,100 SF
Industrial Use Classification		
Industrial	53	1,154,340 SF
Public/Quasi-Public Use Classification		
Public School	80	-
City-Owned Facilities	12	_
County-Owned Facilities	2	-
Utility Easements	95	
Streets/Freeways	478	-
Open Space Use Classification		
Parks	39	_
Wilderness Area	422	_
National Forest	1,909	_
Specific Plan Areas Classification		
Housing Element		312 DU
Planned Community and Areas ¹	131	716 DU
		333,561 SF
City Center Mixed Use Area	11	165 DU
		165,000 SF
Gold Line Station Area Development	20	120 DU
		100,000 SF
TOTAL	4,350	7,729 DU
		9,887,731 SF
2020 Increases Over Existing Conditions		+726 DU
		+658,744 SF

^{1.} The Planned Community and Areas designation refers to projects already approved. These are either residential or commercial projects, and are not mixed use developments. As a result, they are counted in the respective residential or commercial land use category.



Safety Element

The Safety Element is intended to reduce the potential risk of death, injuries, property damage, and the economic and social dislocation resulting from hazards such as fires, floods, earthquakes, landslides, and other hazards. It serves as a guide for the City government and other general public in understanding the hazards facing the City and how impacts due to these hazards can be reduced.

Open Space and Conservation Elements

The Open Space and Conservation Elements include a description of the lands and waterways that are unimproved and are to be devoted to natural and/or recreational uses. These Elements provide a description of existing and planned recreational lands and facilities.

Noise Element

The Noise Element describes the existing noise environment within the City and its relationship with Federal, State, and City noise regulations. This Element also provides a framework to limit noise exposure within the City that considers both the existing and future noise environments and the compatibility of land uses.

Land Use Element

The Land Use Element serves as a long-range planning guide for development within the City. It provides the City with an indication of the location and extent of development to be allowed over the next 15 years. The Land Use Element also identifies the goals and policies that will guide development. This Element contains a Land Use Diagram, which serves as the visual tool to assist with the implementation of the guidelines that are established in this and other sections of the General Plan.

Housing Element

The Housing Element provides programs and policies that assist our community, region and state in meeting the goal of providing housing affordable to all socioeconomic segments of the population. The Element addresses citywide housing and population demographics, regional fair-share housing allocations, and implementation strategies to assist the City in providing a full range of housing opportunities.

Historic Preservation Element

The Historic Preservation Element is intended to help fuse preservation and protection of historic resources into long-term planning goals. Through the broad goals outlined in this Element, it provides continuity and guides the actions of City departments and commissions in preserving and protecting Duarte's resources that reflect the City's past.

Economic Development Element

The Economic Development Element is intended to enhance the economic character of the City and the community, and assure that the City is able to continue to provide high quality services. In addition, this Element helps assure the community to provide a balanced economy by taking advantage of its economic assets.

Circulation Element

The Circulation Element provides programs and policies to establish a roadway system that adequately accommodates future growth consistent with the Land Use Element. The Circulation Plan seeks to provide for a safe, convenient and efficient transportation system allowing for the movement of people and goods throughout the City and the region.



IV. EIR PROJECT DESCRIPTION

The Draft Program EIR shall evaluate potential environmental impacts resulting from the following revisions to the City's General Plan, including but not limited to:

- Update of the City's land use database.
- Update of the City's traffic model.
- Revision to the General Plan noise and air quality databases upon the new traffic model runs.
- Revisions to diagrams, figures, text, charts and tables to reflect updated data/information.
- Deletion of redundant and/or completed goals, policies or programs.
- Addition of new goals and policies established for the General Plan Update.

The Duarte General Plan was last comprehensively updated in 1989. The General Plan Update supersedes the 1989 General Plan and is based upon the community's vision for Duarte and expresses the community's long-term goals. The current update includes revisions to the Safety, Open Space and Conservation, Noise, Land Use, Historic Preservation, Economic Development, and Circulation.

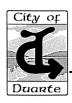
The goal of the Update is not to make dramatic changes to the City's existing land use diagram, but rather to quantify remaining development in a way that can be correlated to existing uses and conditions, while at the same time capitalizing on future development and/or redevelopment potential. Refer to Exhibit 2, General Plan Land Use Diagram.

IV. POTENTIAL ENVIRONMENTAL EFFECTS

The EIR will focus on the following environmental issues:

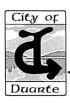
- Aesthetics:
- Air Quality:
- Cultural Resources;
- Geology/Soils;
- Hazards and Hazardous Materials;
- Hydrology/Water Quality;
- Land Use and Planning;
- Noise:
- Population/Housing;
- Public Services;
- Recreation:
- Transportation/Traffic; and
- Utilities/Service Systems.

Due to the decision to prepare an Environmental Impact Report (EIR), an Initial Study was not prepared. This option is permitted under Section 15063(a) of the *CEQA Guidelines*, which states that if the Lead Agency determines an EIR will be required for a project, the Lead Agency may skip further initial review and begin work on the EIR. However, an Environmental Checklist is attached to show the areas being considered within the EIR.

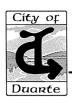


CEQA GUIDELINES - APPENDIX G INITIAL STUDY CHECKLIST

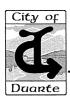
			Potentially	Potentially Significant	Less Than	
			Significant Impact	Unless Mitigated	Significant Impact	No Impact
1.	AE	STHETICS. Would the project:				
	a.	Have a substantial adverse effect on a scenic vista?	✓			
	b.	Substantially damage scenic resources, including, but not				
		limited to, trees, rock outcroppings, and historic buildings				✓
		within a state scenic highway?			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	C.	Substantially degrade the existing visual character or	✓			
		quality of the site and its surroundings?				
	d.	Create a new source of substantial light or glare which	✓			
		would adversely affect day or nighttime views in the area?				
2.		RICULTURE RESOURCES. In determining whether important				
		rironmental effects, lead agencies may refer to the California A				
		del (1997) prepared by the California Department of Conserv	ation as an c	optionai mod	ei to use in a	ssessing
		pacts on agriculture and farmland. Would the project:		<u> </u>		
	a.	Convert Prime Farmland, Unique Farmland, or Farmland				
		of Statewide Importance (Farmland), as shown on the				./
		maps prepared pursuant to the Farmland Mapping and				v
		Monitoring Program of the California Resources Agency,				
		to non-agricultural use?				
	b.	Conflict with existing zoning for agricultural use, or a				✓
		Williamson act contract?				
	C.	Involve other changes in the existing environment which,				/
		due to their location or nature, could result in conversion				'
	A 1 F	of Farmland, to non-agricultural use?	bod butboo	nnliaahla airi	u olitu mana	L
3.		R QUALITY. Where available, the significance criteria establis				
		pollution control district may be relied upon to make the follow	wing aeternii □	Tialions, vvc	ula ine proje	Cl.
	a.	Conflict with or obstruct implementation of the applicable	✓			
	1.	air quality plan?				
	b.	Violate any air quality standard or contribute substantially	✓			
		to an existing or projected air quality violation?				
	C.	Result in a cumulatively considerable net increase of any				
		criteria pollutant for which the project region is non-	√			
		attainment under an applicable federal or state ambient	V			
		air quality standard (including releasing emissions which				
		exceed quantitative thresholds for ozone precursors)?				
	d.	Expose sensitive receptors to substantial pollutant	✓			
		concentrations?				
	e.	Create objectionable odors affecting a substantial number of people?			✓	
ı		OLDBOOME /	1	1	1	t .



			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
4.	BIC	LOGICAL RESOURCES. Would the project:				
	a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	✓			
	b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	√			
	C.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
	d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	✓			
	e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
	f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
5.	CU	LTURAL RESOURCES. Would the project:				
	a.	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	✓	·		
	b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	√			
	C.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	✓			
	d.	Disturb any human remains, including those interred outside of formal cemeteries?	✓			



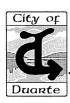
			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
6.	GE	DLOGY AND SOILS. Would the project:				
	а.	Expose people or structures to potential substantial				
		adverse effects, including the risk of loss, injury, or death				
		involving:				
		Rupture of a known earthquake fault, as delineated				
		on the most recent Alquist-Priolo Earthquake Fault				✓
		Zoning Map issued by the State Geologist for the				
		area or based on other substantial evidence of a				1
		known fault? Refer to Division of Mines and Geology				
		Special Publication 42.				
		Strong seismic ground shaking?	√			
		Seismic-related ground failure, including	,			
		liquefaction?	✓			
		4) Landslides?	√			
	b.	Result in substantial soil erosion or the loss of topsoil?	√			
-	C.	Be located on a geologic unit or soil that is unstable, or				
	0.	that would become unstable as a result of the project, and				
		potentially result in on-or off-site landslide, lateral	√			
ļ		spreading, subsidence, liquefaction or collapse?				
	d.	Be located on expansive soil, as defined in Table 18-1-B				
	۵.	of the Uniform Building Code (1994), creating substantial	✓			
		risks to life or property?				
	е.	Have soils incapable of adequately supporting the use of				
	٠.	septic tanks or alternative waste water disposal systems				/
		where sewers are not available for the disposal of waste				•
		water?				
7.	HA	ZARDS AND HAZARDOUS MATERIALS. Would the project	t:			
	a.	Create a significant hazard to the public or the				
		environment through the routine transport, use, or	✓			
		disposal of hazardous materials?				
	b.	Create a significant hazard to the public or the				
		environment through reasonably foreseeable upset and	 			
		accident conditions involving the release of hazardous	•			
		materials into the environment?				
	C.	Emit hazardous emissions or handle hazardous or acutely				
		hazardous materials, substances, or waste within one-	✓			
L		quarter mile of an existing or proposed school?				
	d.	Be located on a site which is included on a list of				
		hazardous materials sites compiled pursuant to				
		Government Code Section 65962.5 and, as a result,				✓
		would it create a significant hazard to the public or the				
		environment?				



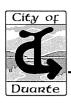
			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
	e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				√
	f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
	g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	✓			
	h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	✓			
8.		DROLOGY AND WATER QUALITY. Would the project:	T	T	T	
	a.	Violate any water quality standards or waste discharge requirements?	✓			
	b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	✓			
	C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	✓			
	d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	✓			
	e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	√			
	f.	Otherwise substantially degrade water quality?	✓			
	g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
	h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓



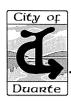
			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
i.		Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	✓			
j.		Inundation by seiche, tsunami, or mudflow?				✓
k.		Potentially impact storm water runoff from construction activities?	✓			
I.		Potentially impact storm water runoff from post construction activities.	✓			
m	n.	Result in a potential for discharge of storm water pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling, or storage, delivery areas, loading docks or other outdoor work areas?	✓			
	۱.	Result in the potential for discharge of storm water to affect the beneficial uses of the receiving waters?	√			
0).	Create the potential for significant changes in the flow velocity for volume of storm water runoff to cause environmental harm?	√			
p).	Create significant increases in erosion of the project site or surrounding areas?	✓			
9. L	_AI	ND USE AND PLANNING. Would the project:				т
a	a.	Physically divide an established community?				✓
k	b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	√			
(C.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓
10. ľ	MIN	NERAL RESOURCES. Would the project:				
	a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
	b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓
11.	NO	NSE. Would the project result in:				
	a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	√			
	b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	✓			



			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
	C.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	✓			
	d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	✓			
	e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				√
	f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓
12.	PO	PULATION AND HOUSING. Would the project:	1	I	T	
	a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	✓			
	b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
	C.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓
13.	PU	BLIC SERVICES.	T	1	I	Ι
	a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
		1) Fire protection?	✓			
		2) Police protection?	✓			
		3) Schools?	✓			
		4) Parks?	✓			
		5) Other public facilities?	✓			
14.	RE	CREATION.		T	T	Т
	a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	✓			



Potentially Significant **Potentially** Less Than Significant Significant Unless No Impact Mitigated Impact Impact Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? 15. TRANSPORTATION/TRAFFIC. Would the project: a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? b. Exceed, either individually or cumulatively, a level of ✓ service standard established by the county congestion management agency for designated roads or highways? Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? Substantially increase hazards due to a design feature ✓ (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Result in inadequate emergency access? Result in inadequate parking capacity? f. Conflict with adopted policies, plans, or programs ✓ supporting alternative transportation (e.g., bus turnouts, bicycle racks)? 16. UTILITIES AND SERVICE SYSTEMS. Would the project: Exceed wastewater treatment requirements of the ✓ applicable Regional Water Quality Control Board? Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?



			Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
	g.	Comply with federal, state, and local statutes and regulations related to solid waste?	✓			
17.	MA	NDATORY FINDINGS OF SIGNIFICANCE.				
	a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	✓			
	b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	✓			
	C.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	✓			





NOT TO SCALE



INITIAL STUDY DUARTE GENERAL PLAN UPDATE EIR



Source: City of Duarte, June 2006.

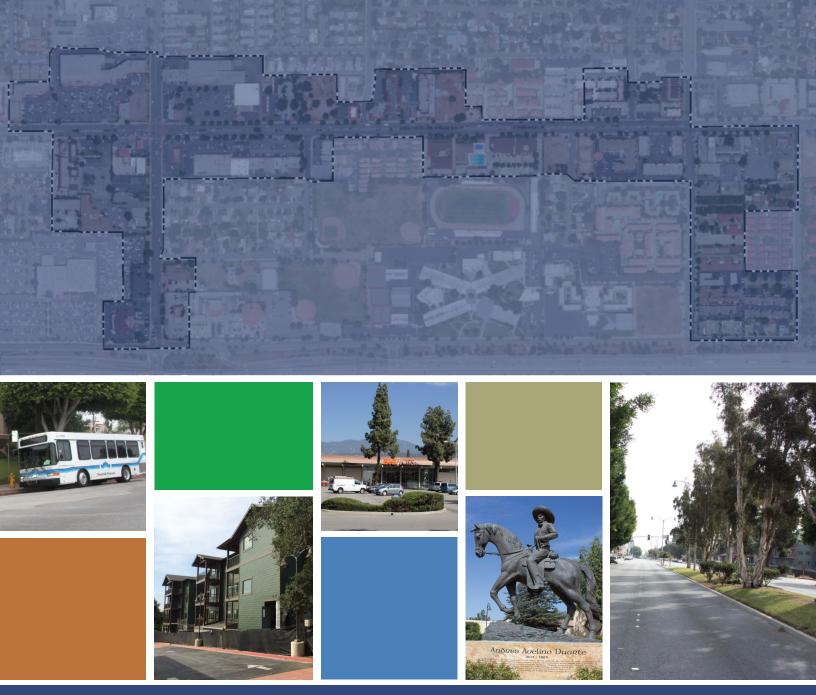
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INITIAL STUDY DUARTE GENERAL PLAN UPDATE EIR

General Plan Land Use Map





CITY OF DUARTE

Town Center Specific Plan

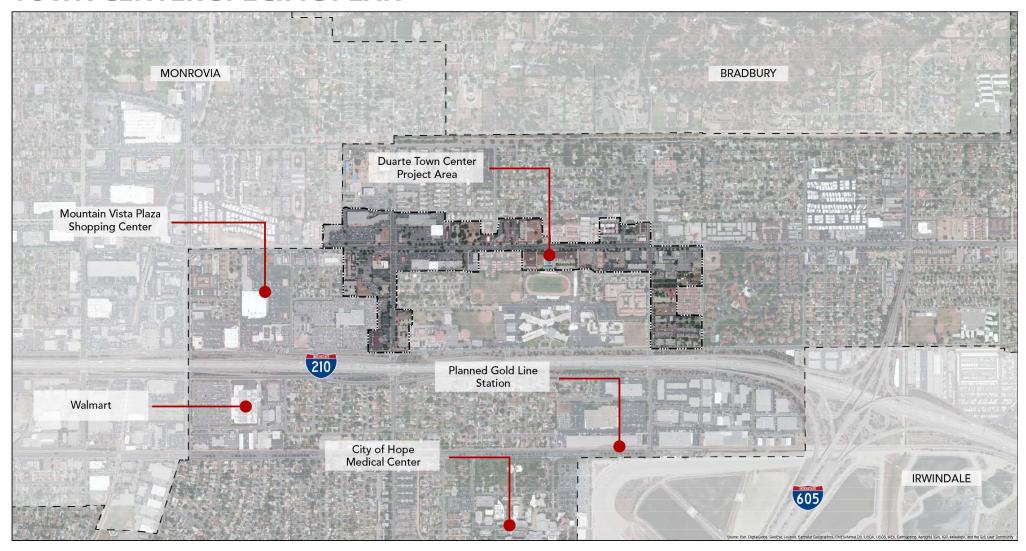
EXISTING CONDITIONS REPORT

SEPTEMBER 2015



City of Duarte

TOWN CENTER SPECIFIC PLAN





Town Center Specific Plan Boundary City Boundary Line

June 2015 Source: City of Duarte Map Prepared by: MIG, Inc.



Figure 1.1 REGIONAL CONTEXT

1 INTRODUCTION AND BACKGROUND

This report provides an overview of the existing conditions, issues and opportunities present within Duarte's Town Center area. This information will be used during the planning process as a foundation for shaping strategies for strengthening and enhancing the Town Center. Specifically, this report discusses the existing conditions and potential opportunities related to land use, community design, mobility and infrastructure in the Town Center area. A market analysis depicting existing economic conditions will be provided under separate cover.

This introductory section provides a brief overview of the purpose of developing a specific plan for the Town Center. It details the legal context for preparation of the plan and the planning process that is currently underway. The regional context and specific boundaries for the Study Area are presented in Section 2: Land Use.

1.1 HISTORY AND CONTEXT

The city of Duarte is located within a **beautiful foothill setting and is home to an array of assets and amenities**. From its tree-lined streets and world-class hospitals to its rich historic past, Duarte is a unique community that evokes a sense of pride in its residents. However, in many ways Duarte lacks a "sense of place." It has no historic town center or central gathering spot. It lacks a place where pedestrians can comfortably shop or stroll along storefronts, relax with friends in a plaza, or come together for community events. As a result, over 12 years ago, the City embarked on a Town Center Concept Plan, to foster just such a place. Adopted by City Council in 2003, the Town Center Concept plan envisioned a community-oriented, walkable, mixed-use activity center in the heart of Duarte.

In 2012, the City convened a Town Center Ad Hoc Committee to review the 2003 Town Center Concept Plan vision. The Ad Hoc Committee reaffirmed the original Vision and recommended that the City Council authorize development of a specific plan to implement that Vision. The specific plan would encourage and promote mixed-use development and set forth a plan for streetscape improvements in the area.

The Town Center Concept Plan originally identified an approximately one-mile stretch of Huntington Drive, along with the portion of Buena Vista Street from Huntington Drive south to the I-210 freeway, as Duarte's core town center, to be fostered and enhanced. Given the anticipated opening of the Duarte Metro Gold Line Station in early 2016, the Town Center concept has been expanded to also include Highland Avenue in this new planning effort, to foster enhanced mobility options to and from the Gold Line station area, as well as to promote additional transit-oriented development opportunities.

1.2 PURPOSE

The Duarte Town Center Specific Plan provides a long-term strategy for revitalizing and increasing the development potential of central Duarte. This includes the Huntington Drive, Buena Vista Street and Highland Avenue corridors, particularly with regards to its underutilized commercial spaces and certain vacant properties. The Town Center area has the potential to become an iconic and attractive area for residential, shopping and entertainment, with improved access to destinations and an inviting environment for bicycle and pedestrian activity. The specific plan will establish land use, transportation, infrastructure, economic development

and urban design strategies that seek to attract investment into the Town Center and promote well-balanced retail development, mixed-use and residential development and active civic and public spaces. This will all contribute towards a more unified aesthetic and greater sense of place within the Town Center.

Impact of Adoption

Once adopted, the Town Center Specific Plan will guide all new development in the Planning Area. New development projects will be required to follow the policies, programs and guidelines set forth in the Specific Plan. Existing developments will not be directly affected unless the occupants or owners choose to expand or change their structures, grounds or uses.

Any environmental impacts, such as noise, traffic and school enrollment, that could result from the Town Specific Plan implementation will be anticipated and analyzed in the State-mandated environmental review before the Specific Plan is adopted.

1.3 LEGAL CONTEXT

A specific plan is one of the many policy and regulatory tools used by local governments as a complement to a general plan. Specific plans implement a city or county's general plan through the development of **policies**, **programs and regulations** for a localized area and in greater detail.

A specific plan can focus on broad policy concepts or detailed development regulations, but it must address:

- Land Use;
- Transportation and Circulation;
- Utilities and Infrastructure;
- Development Standards; and
- Implementation and Financing.

Since specific plans are mechanisms for executing the goals and policies of a community's general plan, State law requires that specific plans can only be adopted or amended if they are consistent with the area's adopted general plan. The authority for preparation and adoption of specific plans is set forth in the California Government Code, Sections 65450 through 65457.

1.4 PLANNING PROCESS

To prepare the Town Center Specific Plan, the City of Duarte is leading the process in partnership with a multi-disciplinary consultant team, led by urban planners and designers MIG, Inc. This process expected to lead to an adopted plan in early 2016.

The first phase of work will focus on **background analysis**, drawing from studies and information already available and supplementing this work with additional field observations, research and analysis to fully understand the existing conditions in the Planning Area. The next phases consist of **creation of the plan framework and specific plan development**, followed by public review, environmental analysis and adoption.

To help guide the process as the plan develops, a Duarte Town Center Ad Hoc Committee (DTCAHC) will serve in an advisory role to make recommendations. The general public will also be invited to participate in community workshops, surveys and public hearings pertaining to the project.

2 LAND USE

To enhance economic vitality, foster walkability and build on existing assets to create a true destination for Duarte residents, the Duarte Town Center Specific Plan will set forth uniform development standards that leverage recent investments along the corridor and maximize potential for future improvements. To help formulate the land use plan that will provide the basis for proposed changes, this section of the report documents baseline conditions for land uses in the Town Center Specific Plan area. In this section, key issues relevant to the area today are identified, providing a context for examining development constraints and opportunities for land use changes. The information presented in this report will be used to help formulate strategies for a specific plan that reflects current trends, development patterns and community preferences.

2.1 INTRODUCTION

Duarte is and will remain a desirable place to live and do business. Residents are proud to call Duarte home and seek to enhance their home town with a sense of place—a community focal point and gathering place to represent the town's heart.

The city has never had a traditional downtown or city center area. Commercial development in the city has been focused on Huntington Drive and areas north of Interstate 210 (I-210, Foothill Freeway), west of Buena Vista Street. The existence of a variety of civic uses, close proximity to schools and the performing art center and function of Huntington Drive as Duarte's primary commercial corridor make this area of Duarte the ideal place to create a town center. The Town Center Specific Plan is the next step in creating a community-oriented, walkable, mixed-use activity center in the heart of Duarte.

Regional Location

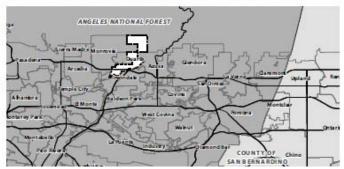
Duarte is located at the base of the San Gabriel Mountains, approximately 21 miles northeast of Los Angeles. The city borders Monrovia to the west, Bradbury to the north, Azusa to the east and Irwindale to the south. Additionally, the San Gabriel River and Santa Fe Flood Control Basin abut Duarte to the east and south.

Project Study Area

Located in the western portion of the city, north of I-210, the Town Center Specific Plan area generally encompasses properties fronting on Huntington Drive, Buena Vista Street and Highland Avenue (see Figure 2.1). On the west side, the Specific Plan area is bounded by city limits north of Huntington Drive and includes parcels west of Buena Vista Street. On the east side, the Town Center Specific Plan area is bounded by Highland Avenue north of Huntington Drive and Santo Domingo Avenue south of Huntington Drive. Between Buena Vista Street and Highland Avenue, the Specific Plan area spans one to two parcels north and south of Huntington Drive. West of Buena Vista Street and east of Highland Avenue, the Specific Plan area spans south to Central Avenue, which is located adjacent to I-210. The Specific Plan area covers 0.13 square miles (86 acres) or just less than two percent of the city's total area of 6.8 square miles. Regional access to the Town Center Specific Plan area is provided by I-210 and I-605 (San Gabriel River Freeway) as well as the Metro Gold Line with access from the soon-to-open (early 2016) Duarte station near the corner of Highland Avenue and Duarte Road.

TOWN CENTER SPECIFIC PLAN





Page 2-2 | Existing Conditions | Land Use



September 2015 Source: City of Duarte Map Prepared by: M IG, Inc.

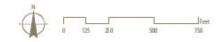


Figure 2.1 STUDY AREA MAP

2.2 LAND USE PLANNING EFFORTS

Existing land use and development plans provide a starting point for the analysis of existing land uses within the Town Center Specific Plan area. Several recent and current land use planning efforts have helped shape development patterns within the area. Two planning efforts, the Duarte Town Center Concept Plan (2003) and Town Center Ad Hoc Committee Report (2013), have previously considered the potential of the Town Center Area and have established recommendations and a vision for the area. It is also important to consider larger planning frameworks including the General Plan land use policy and the Duarte Development Code, which has prescribed use and development standards for existing buildings in the study area.

City of Duarte General Plan (2005-2020)

Any land use approach for the Town Center Specific Plan must be consistent with the primary goals of Duarte's General Plan, which was adopted in 2007 (the Housing Element was last updated in 2014). The General Plan provides a citywide approach to planning for future development and includes eight elements: Safety, Open Space and Conservation, Noise, Land Use, Housing, Historic Preservation and Public Safety. The General Plan identifies a set of goals, objectives and policies related to each of the elements. The goals, objectives and policies laid out in the Duarte General Plan that relate to potential land use decisions in the Town Center Specific Plan area include the following:

Open Space and Conservation Element

Conservation Goal 3: To protect Duarte's environment through proper consideration of the environmental implications of new development in the city.

Air Quality Goal 1: Create land use policies that address the relationship between land use and air quality to protect public health and minimize impacts on existing land use patterns and future land use developments.

Objective 1.1: Through land use plans, provide heightened consideration of policies and strategies to minimize exposure of sensitive receptors and sites (e.g. schools, hospitals and residences) to health risks related to air pollution.

Policy AQ 1.1.2: Promote and support mixed-use land patterns that allow the integration of retail, office, institutional and residential uses.

Policy AQ 1.2.1: Establish a Mixed-Use Zoning District that offers incentives for mixed-use developments.

Noise Element

Noise Goal 3: To establish land uses which are compatible with noise levels within the community.

Objective 1.3: Land use planning decisions directly relate to potential noise impacts. Therefore, careful consideration of noise impacts should be a part of all land use decisions.

Land Use Element

Land Use Goal 1: Maintain a balanced community consisting of various residential housing types and densities, commercial activities, industrial development, mixed use where appropriate and open space.

Objective 1.1: Improve on Duarte's balance of uses.

Policy LU 1.1.7: Expand regional economic development along the I–210 corridor beyond current uses.

Land Use Goal 2: Develop compatible and harmonious land uses by providing a mix of uses consistent with projected future social, environmental and economic conditions.

Objective 2.1: Assure that future development complements surrounding areas.

Policy LU 2.1.1: New infill residential development should be compatible in design, bulk and height with existing nearby residential development as referenced in Duarte's Architectural Design Guidelines.

Policy: LU 2.1.2: Permitted uses along Huntington Drive should accurately reflect economic market conditions and incompatible uses and activities should be eliminated.

Land Use Goal 3: Provide unique areas to better serve the needs of Duarte residents and businesses.

Objective 3.1: Improve the land use mix in selected areas so that it generates synergies and convenience to patrons and residents.

Policy LU 3.1.1: Develop Specific Plan areas which will provide the flexibility needed to make these places unique.

Policy LU 3.1.2: Develop a flexible specific and strategic plan for the commercial area along the Huntington Drive and Buena Vista axis capturing traffic off the I–210 freeway.

Housing Element (2014-2021)

Housing Element Goal 5: Provide adequate housing sites through appropriate land use, zoning and specific plan designations to accommodate Duarte's share of regional housing needs.

Policy 5.1.1: Provide site opportunities for development of housing that responds to diverse community needs in terms of housing type, cost and location, emphasizing locations near services and transit that promote walkability.

Policy 5.1.3: Promote the efficient use of land by encouraging commercial and residential uses on the same property in both horizontal and vertical mixed-use configurations.

2014 General Plan Housing Element Housing Sites Inventory

State law requires that a community provide an adequate number of sites to allow for and facilitate production of the city's regional share of housing (Regional Housing Needs Assessment or RHNA). To determine whether the city has sufficient land to accommodate its share of regional housing needs for all income groups, Duarte must identify "adequate sites"

with appropriate zoning and development standards. Compliance with this requirement is measured by the jurisdiction's ability to provide adequate land to accommodate the RHNA. Several vacant properties located on the north side of Huntington Drive just west of Cotter Avenue are included in the sites inventory and are owned by the Duarte Housing Authority. The properties are zoned for commercial use, but are intended to be part of a larger mixed use project with this portion being high density residential. As discussed in more detail under *Pending Projects* below, as of June 2015 a project has been proposed on this site to include 150 new residential units.

Duarte Development Code

The Development Code, which represents the combined zoning and subdivision regulating documents for the city, is the principal implementation tool for a General Plan. State law requires that Development Codes be consistent with the General Plan. The Duarte Development Code establishes specific regulations for the use and development of land in zoning districts within the Duarte city limits.

Duarte Town Center Concept Plan (2003)

Adopted by City Council in 2003, the Town Center Concept plan was created by a Council-appointed task force charged with establishing a vision for future development of the Town Center. The Concept Plan envisioned a community-oriented, walkable, mixed-use activity center in the heart of Duarte. An emphasis was placed on creating an economically feasible concept that could develop over time. The task force identified the following action steps to catalyze development in the area:

- 1. Form an on-going Town Center implementation action team
- 2. Initiate zoning code changes to allow for mixed-use development
- 3. Create an economic development strategy
- 4. Research and promote city sites for mixed-use development
- 5. Invest in public improvements

The Vision for the Town Center provided the foundation for the Town Center Concept Plan. In 2012 the Town Center Ad Hoc Committee reviewed the 2003 Town Center Concept Plan vision and recommended the vision be reinstated. The Vision is presented below.

Duarte Town Center Ad Hoc Committee Report (2013)

In 2012, the City convened the Town Center Ad Hoc Committee and charged the Committee with considering the potential of the Town Center Area and preparing recommendations to the City Council on a vision. The Town Center Ad Hoc Committee reviewed the 2003 Town Center Concept Plan vision and recommended the vision be reinstated. The vision statement is as follows:

Duarte's Town Center is an attractive mixed-use activity center that offers a "sense of place" or focal point for the community. The mix of uses includes retail stores, restaurants, housing, civic buildings and central public plazas with open space. These central spaces and the uses around them serve as Duarte's civic

and cultural hub - an active, dynamic social gathering space for the entire city. The Town Center is one of the many districts that comprise the city, linking other activity areas throughout the community.

Duarte's Town Center is family-oriented and pedestrian-friendly, inviting people to stroll along storefronts, dine outdoors at a café, relax with friends on a lawn or bench, enjoy public art and come together for community events. This Town Center provides amenities for people of all ethnicities, ages, orientations and income levels, reflecting and celebrating the diversity of our city's residents.

Duarte's Town Center is economically strong and diverse. It preserves and enhances the city's existing locally owned businesses while attracting some larger, more regionally oriented anchor commercial uses. New stores and services in the Town Center improve the city's retail tax base while complementing - rather than competing with - established businesses in other parts of town and neighboring cities. Duarte's economic position is also bolstered by its proximity to major transportation corridors, including Huntington Drive/Route 66, I-210, I-605 and the Gold Line.

Duarte's Town Center has a distinctive design that draws upon the city's history while looking forward to modern architectural styles. Influential themes such as Route 66 imagery help to create a truly unique, innovative and vibrant Town Center for residents to enjoy long into the future.

To fully implement the Town Center vision, the Town Center Ad Hoc Committee recommended that the City Council approve the development of a specific plan that follows the vision and development principles set forth in the 2003 Town Center Concept Plan. The Town Center Specific Plan would encourage and promote mixed use development and set forth a plan for streetscape improvements in the area. The Ad Hoc Committee would play an advisory role in the development of the Plan.

Neighboring Specific Plans

Prior to adoption of a new Development Code in 2010, inflexible development regulations led to the adoption of a number specific plans throughout the community. The new Development Code incorporated a Planned Development Permit and related administrative process, which allows projects to deviate from standards while still achieving zoning objectives. Without the Planned Development mechanism, a specific plan was required to provide the necessary flexibility from zoning regulations.

Three adopted specific plans are located within the Town Center Specific Plan area and several are located adjacent to its boundary (see Figure 2.1). To avoid future land use conflicts, the Town Center Specific Plan must take into consideration the actual and future land uses in these areas. Furthermore, each specific plan that exists within the proposed Town Center Specific Plan boundaries must be rescinded so that the plan provides clear regulating direction.

Specific Plans within the Proposed Town Center Boundaries

Huntington/Buena Vista Specific Plan. Adopted in 1989 and located within the northwest corner of the Town Center Specific Plan area (north of Huntington Drive and west of Buena Vista Street), the Huntington/Buena Vista Specific Plan was established to guide development of the 6.8 acre commercial site. The area is currently developed with the Ralph's Shopping Center.

Ralph's, which has served as the city's neighborhood grocery for many years, has indicated its intent to close its doors this July.

Andres Duarte Terrace Specific Plan. Adopted in 2003, the Andres Duarte Terrace Specific Plan area is located on the south side of Huntington Drive between Pops Road and Highland Avenue. The Andres Duarte Terrace is an 80-unit affordable senior housing development with a 55-year affordability covenant that extends to 2061.

Citrus Collection at Duarte II. The Citrus Collection at Duarte II is located within the southeast area of the Town Center Specific Plan, north of Central Avenue between Highland and Santo Domingo Avenues. Although the Citrus Collection Specific Plan was not formally adopted, preliminary development standards were set in place in 1999. The Specific Plan area has been developed with 22 detached, single family homes.

Specific Plans Proximate to Proposed Town Center Boundaries

Duarte Gardens Specific Plan. The Duarte Gardens Specific Plan area is located just outside the Town Center Specific Plan boundary on the north side of Huntington Drive between Cotter and Oak Avenues. Adopted in 2006, the Duarte Gardens Specific Plan was intended to facilitate development of seventeen single family homes on 1.5 acres of land. The site is fully developed.

Huntington/Highland Specific Plan. The Huntington/Highland Specific Plan is located just outside the Town Center Specific Plan boundary at the northeast corner of Huntington Drive and Highland Avenue. Adopted in 1982, the Specific Plan was intended to guide development of office and commercial uses on the site. Following adoption of the Specific Plan, the site was fully developed with office and commercial uses.

Westminster Gardens Specific Plan. The Westminster Gardens Specific Plan area is home to the 32-acre Westminster Gardens continuing-care retirement community that includes independent living, assisted living and memory care, all on one campus. The Westminster Gardens Specific Plan is located just beyond the eastern boundary of the Town Center Specific Plan area.

Las Posadas (Town Center Villas) Specific Plan. Adopted in 1996, the Las Posadas Specific Plan was crafted to facilitate development of single family homes on a 1.89-acre site. Located just outside the Town Center Specific Plan boundary on the south side of Huntington Drive (east of Brycedale Avenue), Las Posadas Specific Plan is fully developed with 46 detached, single-family homes.

The Rose Gardens at Santa Teresita Specific Plan. The Rose Gardens at Santa Teresita Specific Plan was adopted in 2011 to guide expansion of the Santa Teresita hospital with a nearly 300,000-square-foot project intended primarily for assisted living. The site will be developed with a mix of skilled nursing facilities, including assisted and independent living units while retaining integral uses and buildings already located within the project area. The project site is approximately 12 acres. The project increases the number of beds from the existing 169 to 360. Part of the Specific Plan is located in Monrovia.

Duarte Station Specific Plan. While not located in the immediate vicinity of the Town Center Specific Plan, the Duarte Station Specific Plan, adopted in 2013, will impact development in the area as it will provide significant additional development capacity and expanded regional transit access. The new Duarte Gold Line station, scheduled to open for service in 2015/2016, will be located south of I-210 at the northwest corner of Duarte Road and Highland Avenue. The extension of the Gold Line and establishment of the Duarte station will create opportunities to

invest in the area adjacent to the station by allowing new uses besides what is permitted under the area's previous manufacturing zoning. The Duarte Station Specific Plan will guide development of a vibrant, mixed-use transit-oriented development proposed in the current 19-acre industrial area immediately adjacent to the future station. The plan provides for up to 475 residential units, 400,000 square feet of office, 12,000 of commercial space and 250 hotel rooms in the 19-acre planning area.

City of Duarte Economic Development Strategy

The Economic Development Strategy, adopted in 2011, is intended to guide the City's economic development from 2011 to 2015. Los Angeles County Economic Development Commission (LAEDC) was contracted by the City to develop the document, which provided an overview of the city's demographic conditions and set out objectives and tasks under five major goals to bolster Duarte's economic future. The goals established in the Economic Development Strategy include:

- Prepare an Educated Workforce Connect schools to communities by linking local community organizations, non-profits, businesses and corporate leaders with schools through formal partnerships; help address existing and projected future workforce gaps by facilitating more opportunities for public-private collaboration between individual businesses, community colleges and universities.
- Create a Business-Friendly Environment To further improve, the city needs to retain
 and expand the existing job base while proactively attracting new businesses, industries,
 jobs and investment; and leverage the research and development activities to the City of
 Hope for the commercialization of research, technology and similar opportunities.
- Enhance Duarte's Quality of Life Ensure public safety, improve mobility and reduce traffic congestion, encourage transit-oriented development, promote healthy living, encourage and expand cultural and artistic amenities available to the public and revitalize low income communities.
- Implement Smart Land Use Ensure that the prime industrial area adjacent to City of Hope between Duarte Road and the I-210 Freeway is protected from encroachment by incompatible uses. Encourage the creation of an incubator for medical research technology and similar uses tied to the City of Hope. Develop a specific plan for the development of a city center/town center at Huntington Drive and Buena Vista Street.
- Build 21st Century Infrastructure Expand community-wide programs promoting wastereduction, recycling, composting, water conservation and other green strategies. Develop a ridership program to connect the planned Metro Gold Line station to local employers.

Pending Projects

Table 2.1 and Figure 2.2 show pending and current projects in the Town Center Specific Plan vicinity.

Table 2.1: Pending Development Projects - May 2015

Map Legend	land Development Follows		
(Figure 2.2)	Approved/ Proposed Use	Status	Address
P1	Rose Gardens at Santa Teresita: The site will be developed with a mix of skilled nursing facilities, including assisted, skilled nursing and independent living units while retaining integral uses and buildings already located within the project area. The project site is approximately 12 acres. The project increases the number of beds from the existing 169 to 360 and increases the existing square footage by 195,015 square feet to 487,350 square feet.	Entitled – Not Constructed	819 Buena Vista Street
P2	Andres Duarte Terrace Phase II: 43 unit affordable senior housing development. Construction completion anticipated summer 2015.	Entitled – Under Construction	1700 Huntington Drive
P3	Medical Office Building: The proposed project is a 3-building Medical Office Complex.	Under Review	1230 Huntington Drive
P4	Starbucks Coffee Shop: The project includes a retail coffee shop and drive through. The 1,850 square foot location will fill a key corner location in the city and replace the existing Starbucks in the Huntington-Buena Vista Shopping Center.	Entitled – Construction scheduled for early fall 2015	1263 Huntington Drive
P5	Former Mike's Food Center: The property owner is currently in the process of marketing the location to small grocery uses with the intent of making interior and facade improvements when a new tenant is chosen.	Proposed	1322 Huntington Drive
P6	New Residential Development: The proposed project includes 150 1-, 2- and 3-bedroom apartment units in a 4-story building.	Under Review	1415, 1423, 1435 Huntington Drive
N/A	Duarte Gold Line Light Rail: Construction of 1.5 miles of two-light rail tracks and light-rail station platform. Various traffic, pedestrian, bicycle and bus improvements along the alignment and near the station area. Project completion anticipated 2015/early 2016.	Entitled – Under Construction	Station: northwest corner of Duarte Road and Highland Avenue. Rail ROW: north of Duarte Rd. from west to east city boundary line. Parking lot and streetscape

Source: City of Duarte, 2015

Building Permit Data

Figure 2.2 also shows the location of building permits issued in the Town Center Specific Plan vicinity in the last five years. As shown on Figure 2.2, most building permits issued in the area are for improvements such as interior remodels and accessibility (Americans with Disabilities Act, ADA) improvements. The location of the building permits for improvements are clustered at the Big Lots and Mike's Food Shopping centers on both sides of Huntington Drive between Buena Vista Street and Brycedale Avenue. In the last five years, two building permits for property additions were issued within the Specific Plan area. The most significant addition was the expansion and remodel of the Grace Fellowship Church, located on the north side of Huntington Drive, midblock between Cotter and Oak Avenues.

TOWN CENTER SPECIFIC PLAN



June 2015 Source: City of Duarte Map Prepared by: MVG, Inc.

BUILDING PERMIT ACTIVITY AND PENDING PROJECTS

Existing Land Use Pattern

The Town Center Specific Plan area is made up of 151 unique parcels spanning 68 acres (not including street rights-of-way). The Town Center Specific Plan area is generally occupied by commercial uses on the eastern and western sides of the area, government uses in the center and residential uses intermixed along the corridors.

Commercial uses are distributed throughout the planning area but are concentrated in the western half of the Specific Plan area. Except for businesses with direct access to the I-210 freeway, Duarte businesses tend to be smaller establishments serving a local market. Due to its location near the I-210, commercial uses in the Town Center Specific Plan area are primarily composed of commercial centers (Table 2.2), including both small-scale strip commercial centers and larger commercial shopping centers. The largest centers are located at the corner of Huntington Drive and Buena Vista Street, which serves as an anchor and focal point for the Special Plan area. Commercial developments make up more than half (51 percent) of land uses in the Specific Plan area

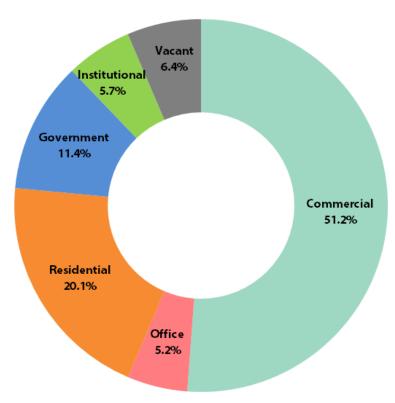


Figure 2.3: EXISTING LAND USE DISTRIBUTION

(including their respective off-street parking facilities). Commercial center uses account for 31 percent of commercial use acreage. Stand alone commercial uses and restaurants/taverns account for 6.8 and 5.9 percent of land uses, respectively.

Just over 20 percent of land uses are residential and are concentrated in the eastern portion of the Specific Plan area, east of Oaks Avenue and Pops Road. Residential land uses are split almost evenly between multi-family and single family units. While lower density, single-family homes remain the dominant housing type citywide (totaling 77 percent of the city's housing stock in 2010) residential uses in the Specific Plan area are predominantly higher density, ranging from apartment homes to attached townhomes. The single family uses also tend to be higher density than elsewhere in the city, in the form of small lot developments such as the homes developed at the Citrus Collection Specific Plan area at the south end of Highland Avenue. Included in the residential land uses are also two senior housing developments: the Huntington Oaks Village and the Andres Duarte Terrace. Phase II of the Andres Duarte Terrace is currently under construction (2015).

Office uses make up just over five percent of land uses and are generally clustered around the Buena Vista Street and Highland Avenue intersections with Huntington Drive. Office uses are characterized by medium to small office buildings with surface parking areas.

A variety of civic uses are located along the central portion of Huntington Drive, as well as along Buena Vista Street. Civic uses make up over 11 percent of the area's total land uses. These uses include the Civic Center (including City Hall and the Fitness Center with its 25-yard competition pool), Public Library, U.S. Postal Service Office, the City of Duarte Teen Center and Duarte Plaza. Private institutional uses such as churches and nursing homes make up an additional 5.7 percent of land uses.

Vacant parcels make up less than four percent of the area's land use, most of which is intended for commercial use. The largest vacant area is located on the north side of Huntington Drive, midblock between Buena Vista Street and Cotter Avenue. These properties are owned by the Duarte Housing Authority; a proposed project at this site could include 150 new residential units.

Figure 2.3 and Table 2.2 show the allocation and distribution of existing land use in the Specific Plan area. Figure 2.4 maps the existing land uses throughout the plan area.

Table 2.2: Existing Land Use (2015)

General Land Use Category	Detailed Land Use	Acres	Percent of Total
Commercial		35.0	51.2%
	Auto Repair	1.3	1.9%
	Auto Sales	2.2	3.2%
	Restaurant/Tavern	4.1	5.9%
	Hotel/Motel	1.4	2.1%
	Commercial Center	21.4	31.2%
	General Commercial	4.6	6.8%
Office		3.6	5.2%
Residential		13.8	20.1%
	Single Family Residential	6.3	9.2%
	Multi-Family Residential	7.5	10.9%
Government		7.8	11.4%
Institutional		3.9	5.7%
	Churches	2.3	3.3%
	Nursing Homes	1.6	2.4%
Vacant		4.4	6.4%
Total		68.4	100.0%



Phase II of Andres Duarte Terrace is currently under construction



Existing uses, such as this commercial center, contain ample surface parking



Civic uses are a visible component and amenity within the Town Center area



Existing office uses are predominately medical office.

ER SPECIFIC PLAN



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Map Prepared by: MG, Inc.

Development Characteristics

Building Age

The average year for development of all properties in the plan area is 1970. The two larger shopping centers (the Big Lots and Mike's Food Centers located on either side of Huntington Drive, just east of Buena Vista Street) have sections of the centers that were built between the 1950s and 1970s. The Ralph's Shopping Center (located within the Buena Vista Specific Plan) is newer by comparison, with a development date of 1991. Among residential uses, older buildings are found in the area south of Huntington Drive and east of Highland Avenue. In contrast, residential uses in the Duarte Terrace and Citrus Collection Specific Plans are newer, having been developed in 2005 and 2000 respectively. See Figure 2.5 for a graphic representation of building age along the corridors.

Lot Size and Building Heights

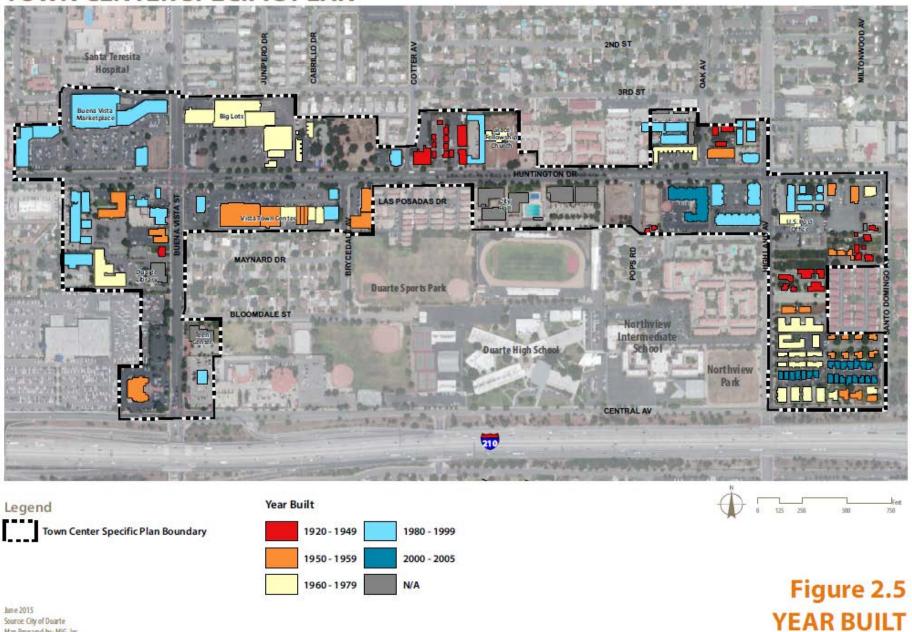
In general, lot size and building heights are closely tied to land uses. For example, commercial properties tend to have much larger lot sizes than residential uses. The largest lots in the area (over 40,000 square feet in size) are generally found along Huntington Drive and Buena Vista Street and are generally occupied by commercial uses. Most residential lots in the Specific Plan area range in size from 20,000 to 40,000 square feet (see Figure 2.6).

Building height in the area is closely associated with lot size and zoning. Many of the tallest buildings in the area (over 35 feet tall) are located on the lots that are greater than 40,000 square feet in size. Most of the taller buildings are also located on commercial properties with the exception of two residential uses (Andres Duarte Terrace and the Huntington Oaks Village), both of which are located on Huntington Drive just west of Oak Drive. The tallest building in the Specific Plan area is the Ralph's grocery store; with the façade reaching 47 feet in height (see Figure 2.7).

Parking Areas

Due to the prevalence of medium to large commercial uses in the Specific Plan area, a significant amount of land is dedicated to off-street parking, in the form of surface parking lots. Figure 2.8 shows areas dedicated to off-street parking and areas where on-street parking is allowed. Street parking is allowed along the majority of Huntington Drive and portions of Buena Vista Street and Highland Avenue within the Plan area. These roads experience a high level of drive-through regional traffic. On-street parking is also available along the smaller side streets that intersect with Huntington Drive.

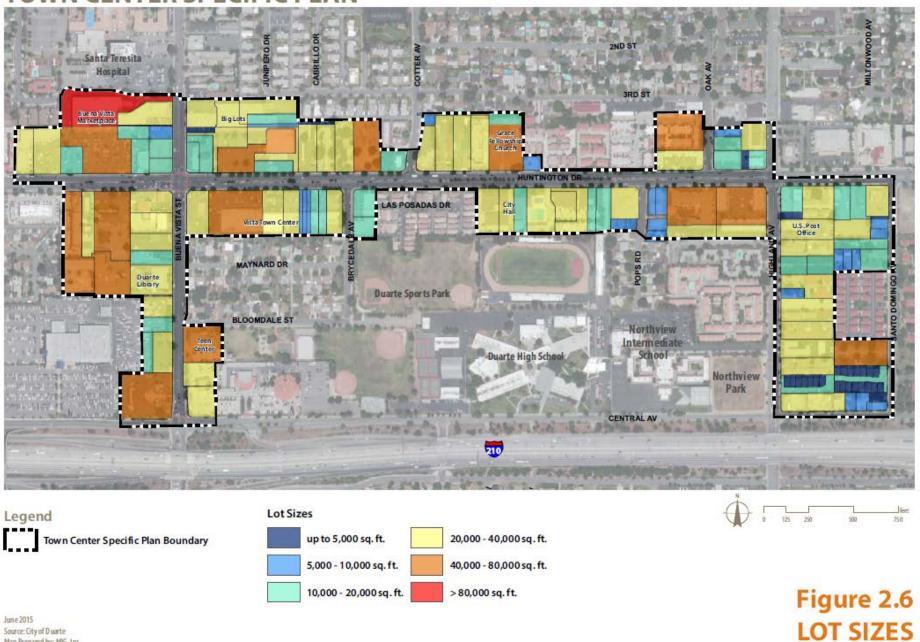
NTER SPECIFIC PLAN



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Map Prepared by: MIG, Inc.

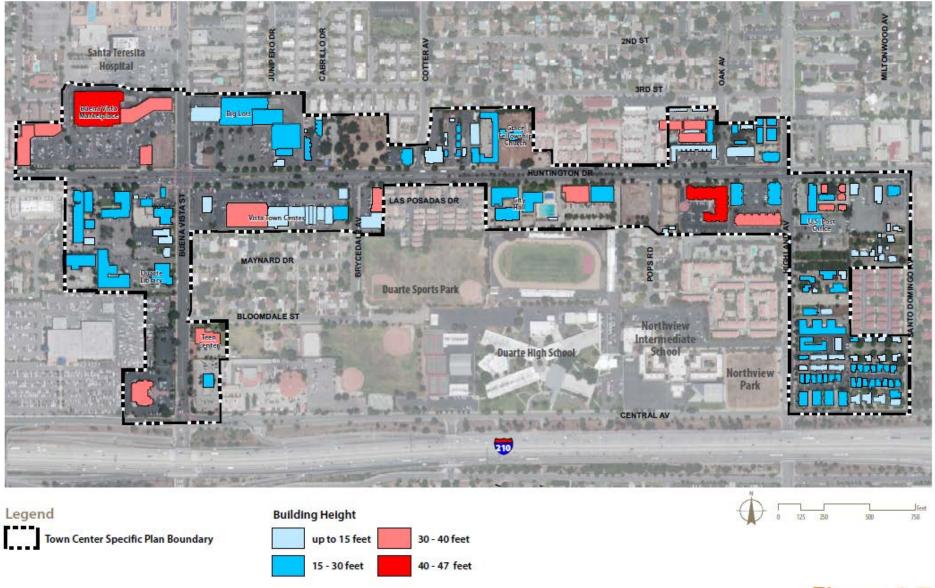
ENTER SPECIFIC PLAN



Source: City of Duarte Map Prepared by: MIG, Inc.

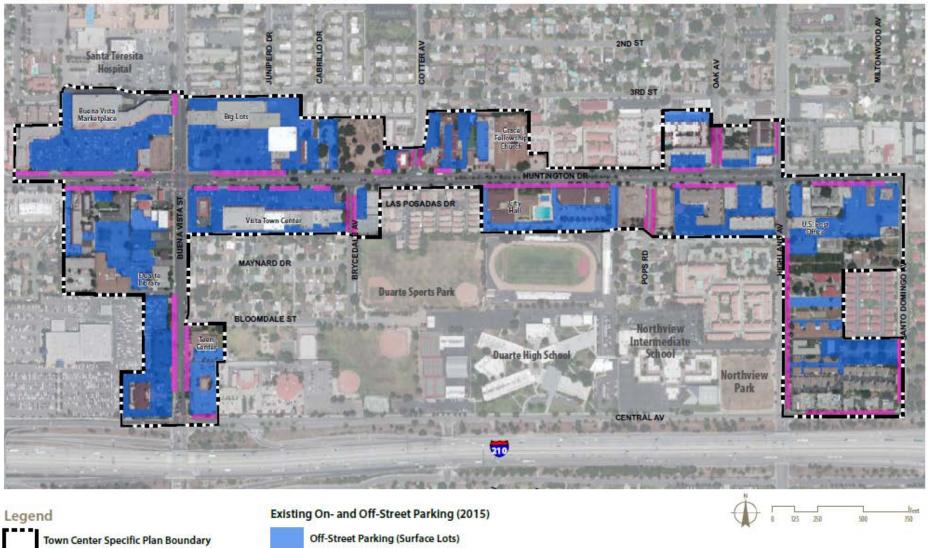
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TOWN CENTER SPECIFIC PLAN



June 2015 Source: City of Duarte Map Prepared by: MIG, Inc. Figure 2.7 BUILDING HEIGHT

ER SPECIFIC PLAN



On-Street Parking Allowed

Figure 2.8

EXISTING ON- AND OFF-STREET PARKING

June 2015 Source: City of Duarte Map Prepared by: MIG, Inc.

Underutilized Land

At its June 2012 meeting, the Town Center Ad Hoc Committee selected properties that it identified as underutilized or that it felt warranted major aesthetic improvements in the coming years. The Committee used the following definition to generate the underutilized properties list:

An underutilized property is, generally, a property that can be developed with more density including additional square frontage, more stories, increased lot coverage and has buildings that may be in a good or deteriorated state. It may also be a property where the aesthetic qualities of the building are not at a standard acceptable to the community.

The creation of an underutilized property inventory was meant to build consensus on how much change was appropriate in the future. Table 2.3 lists the underutilized properties identified by the Ad Hoc committee. Figure 2.9 shows that identified underutilized properties are located mostly along Huntington Drive with clusters of underutilized properties at the Buena Vista Street and Highland Avenue intersection.

Table 2.3: Underutilized Properties (2013)

Figure 2.9 Map Legend	Address	Property Description	Notes		
1	1434 Buena Vista Street	Performance Nissan	Corner parcel should be developed, balance of property car sales.		
2	1427 Buena Vista Street	Old Spaghetti Factory	Parking north of Building should be assembled wit east frontage Car Max parking area and developed		
3	1131 Central Avenue	Car Max			
4	1235 Buena Vista Street	Office	Should be assembled to create larger development piece.		
5	1227 Buena Vista Street	Office	Should be assembled to create larger development piece.		
6	1219 Buena Vista Street	Office	Should be assembled to create larger development piece.		
7	1200 Huntington Drive	Duarte Inn	Poorly maintained. Should be assembled to create larger development piece.		
8	1202-1210 Huntington Drive	Commercial Center	Poorly maintained. Should be assembled to create larger development piece.		
9	1212 Huntington Drive	Pollo Loco	Poorly maintained. Should be assembled to create larger development piece.		
10	1214 Huntington Drive	Apartments	Should be assembled to create larger development piece.		
11	1220 Huntington Drive	Monrovia Convalescent Hospital	Poorly maintained. Should be assembled to create larger development piece.		
12	1230 Huntington Drive	Office	Should be assembled to create larger development piece.		
13	1302-1420 Huntington Drive	Mike's Food Center and Carl's Jr.	Poorly maintained. In need of complete renovation or redevelopment.		
14	1303 Huntington Drive	Liquor Store	Poorly maintained. Should be removed for more appropriate development with positive corner focus.		
15	1307-1355 Huntington Drive	Big Lot's Center	Poorly maintained. In need of complete renovation or redevelopment.		

Figure 2.9 Map Legend	Address	Property Description	Notes
16	1409 Huntington Drive	Romo Automotive	Should be assembled to create larger development piece.
17	1423-1437 Huntington Drive	Vacant	Should be assembled to create larger development piece.
18	1475 Huntington Drive	One West Bank	Building in good shape. Could be developed at higher density.
19	1430-1440 Huntington Drive	Bank of America and offices	Could be developed at higher density or with more up-to-date building.
20	1501 Huntington Drive	Ranchero	Could be developed at higher density or with more up-to-date building.
21	1515 Huntington Drive	Rancho Inn Motel	Poorly maintained. In need of complete renovation or redevelopment. Could be assembled to create larger development piece.
22	1521 Huntington Drive	Village Restaurant	Poorly maintained. In need of complete renovation or redevelopment. Could be assembled to create larger development piece.
23	1533 Huntington Drive	Days Inn	Could be developed at higher density or with more up-to-date building.
24	1701-1723 Huntington Drive	Auto Repair and Sushi Restaurant	Poorly maintained. Property in need of redevelopment and should be developed at higher density or with more up-to-date building.
25	1735-1745 Huntington Drive	Commercial Center	Poorly maintained. Property in need of redevelopment and should be developed at higher density or with more up-to-date building.
26	1118-1122 Oak Avenue	Multi-Family Residential	Poorly maintained. In need of complete redevelopment. Could be developed with adjacent Huntington Drive pieces at higher density.
27	1755 Huntington Drive	Office Building	Could be developed at higher density or with more up-to-date building.
28	1115-1139 Highland Avenue	Apartments	Not poorly maintained. Could be assembled with Huntington Drive and Oak Avenue properties for higher density development.
29	1750-1764 Huntington Drive	Office Building	Could be developed at higher density or with more up-to-date building.

Source: Town Center Ad Hoc Committee Final Report, 2013

TOWN CENTER SPECIFIC PLAN



Legend

Town Center Specific Plan Boundary

Underutilized Properties (2013) as Identified by the Ad Hoc Committee

See Table 2.3 for map legend and corresponding details

June 2015 Source: City of DuarteTown Center Ad Hoc Committee (2013) Map Prepared by: MIG, Inc.



Land Use Designations

General Plan Designations

The General Plan applies a land use designation to each property in the city and provides a general description of allowable land uses for within each land use designation. The General Plan is implemented by the more detailed and specific Development Code. The Duarte General Plan Land Use Element (adopted in 2007) assigns 10 land use designations to the properties within the Plan area, as shown in Figure 2.10.

- The Neighborhood Commercial designation is intended to provide neighborhood retail, service and office uses for businesses serving the daily needs of nearby residential areas, while preventing significant adverse effects on adjoining residential properties. In the Town Center Specific Plan area, only a small commercial center located at the southeast corner of Huntington Drive and Brycedale Avenue is designated for Neighborhood Commercial.
- The General Commercial designation is intended to provide for sites to meet the shopping needs of the entire community and provide sites for regional commercial activity along the I-210 freeway corridor. A large portion of the properties in the Specific Plan are designated General Commercial.
- The Civic Center Mixed Use Area was established to create a unique area within the center of the community as a gathering spot where Duarte residents and business owners can come together to live, socialize and shop. The designation is applied to the Big Lots and Mike's Food Shopping Centers located on Huntington Drive, east of Buena Vista Street. Implementation of this designation is expected to include a specific plan to provide flexibility in allowing vertical and/or horizontal mixed high density and commercial uses. As identified in the General Plan, the specific plan must also provide unique parking standards, sufficient residential densities, housing types and appropriate pedestrian-friendly design to provide the needed synergy to make this project work economically and visually in the short and long term.
- The Administrative/Professional designation is considered the most restrictive of the commercial land use designations. Allowable include general offices, medical offices, clinics and general research facilities. The properties located near the corner of Huntington Drive and Buena Vista are designated Administrative/Professional.
- The Low Density Residential land use designation is the predominant residential land use designation within Duarte, but is applied to only one property in the Town Center Specific Plan area. The designation allows for one to six units per acre. One property just south of the Andres Duarte Terrace development (on the east side of Pops Road) is designated Low Density Residential.
- The Medium Density Residential designation allows for residential development of detached or attached single and multi-family dwellings with densities ranging from seven to 21 units per acre. Medium density residential uses are concentrated on the east end of the Specific Plan area. Specifically, most of the properties east of Highland Avenue are designated Medium Density Residential.
- The High Density Residential designation allows multi-family developments, including apartments, condominiums and attached townhomes at a density of 21 to 28 units per acre. Parcels designated for high density residential use are generally concentrated around Huntington Drive and in the southern end of the city along Buena Vista Street. In the

Specific Plan area, the properties developed with the Huntington Oaks Village and Andres Duarte Terrace Phase II development (both located on Huntington Drive between Pops Road and Oaks Avenue) are designated High Density Residential.

- Over 50 percent of Duarte's land area is designated **Open Space**, mostly due to a large portion of Angeles National Forest within the city boundaries. Within the Specific Plan area, only the 0.19 acre Duarte Plaza, a small outdoor plaza, is designated Open Space.
- Several public facilities in the Specific Plan area are designated as Public/Quasi Public. Located on Huntington Drive, the Duarte Civic Center is home to City Hall, a senior center, a community fitness center and pool and a Duarte Unified School District Education Center. On Buena Vista Street, the teen center and public library are also designated Public/Quasi-Public.

Zoning Districts

The Duarte Development Code (DDC) promotes the public health, safety and general welfare and implements the policies of the General Plan. The DDC establishes land use districts (zones) designated to promote the orderly growth of the community. In addition to regulating use of property, the DDC also provides standards such as building setbacks, maximum allowable height of structures and lot area.

Properties within the Town Center Specific Plan are zoned for a variety of uses ranging from commercial to open space (Figure 2.11). More than half (56 percent) of properties in the Specific Plan area are zoned for commercial uses. Residential and Specific Plan zoning accounts for 18 and 16 percent of the area's zoning, respectively. Development standards for the following zoning districts are presented in Table 2.4, at the end of this section.

- The Commercial Professional (C-P) zone provides locations appropriate for administrative and professional offices, with limited accessory retail and service uses.
- The Commercial General (C-G) zone provides locations for a wide variety of commercial enterprises and intended to serve local and regional needs.
- The Commercial Freeway (C-F) zone provides locations along I-210 for large, auto-oriented and regional-serving retail commercial developments that benefit from the increased exposure and regional traffic afforded by a freeway-adjacent location and where development standards can be tailored to attract and maintain such regionally oriented uses.
- The Single Family Residential (R-1) provides for the development and preservation of residential subdivisions consisting of detached residences and accessory uses compatible with the residential use of the zone.
- The Multiple Family Residential (R-3) zone is intended to accommodate residential development generally characterized by single structures or a collection of cohesive structures that house individual and/or multiple units, with common open space areas and amenities.
- The Multiple Family Residential (R-4) zone is intended to accommodate higher-density, multi-story residential development, with a focus on providing an intensity and function at locations within easy walking distance to transit, recreation and community facilities and commercial services.

- The Public Facilities (PF) zone provides for areas at suitable locations for facilities intended to provide supportive government functions to the population, including community centers, cultural institutions, government facilities, libraries, public utilities and public schools.
- The Open Space (O) zone is used for areas necessary to maintain and protect open spaces for the purposes of recreation, natural resource protection and enhancement, hazards management, utility corridors and the protection of prehistoric places, features and objects.
- The Specific Plan (SP) zone is applied to any property or group of properties lying within the bounds of a specific plan that has been adopted by resolution or ordinance of the Council. The specific plan is a tool designed to provide flexibility, innovative use of land resources and development, a variety of housing and other development types and an effective and safe method of pedestrian and vehicular circulation. Each specific plan establishes comprehensive site design and architectural standards; standards for parking and signage may also be provided. There are three specific plans located within the boundaries of the Town Center Specific Plan: the Buena Vista Specific Plan, The Andres Duarte Terrace Specific Plan and the Citrus Collection at Duarte II Specific Plan. Detailed description of these specific plans is provided earlier in this report.

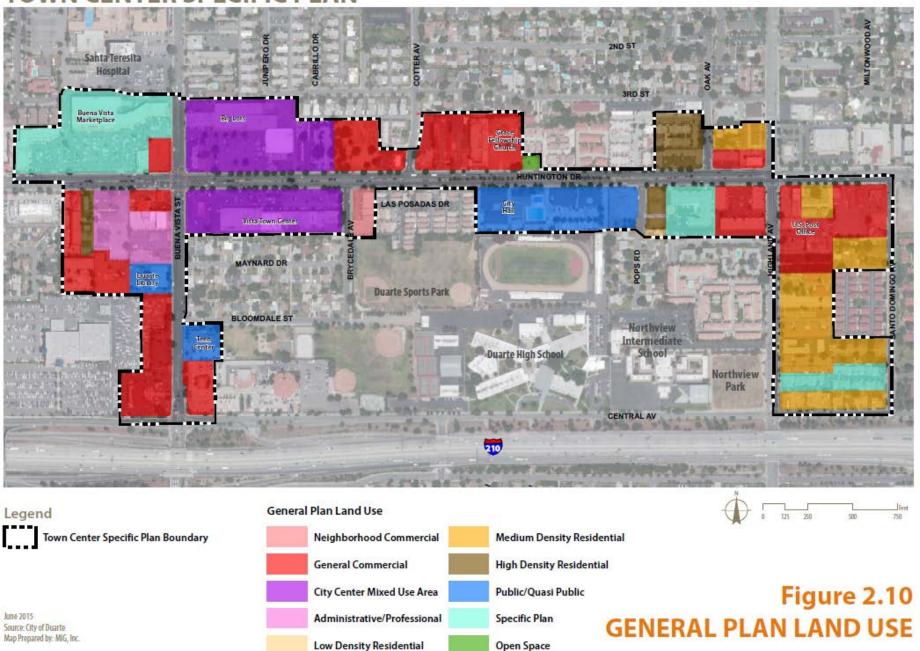
Once adopted, the Town Center Specific Plan zoning will replace the existing zoning for each parcel within the area boundaries.

Development Standards

The City's Development Code describes development standards and allowable uses citywide. Development standards for zones currently applied to properties in the Town Center Specific Plan area are presented in Table 2.4 and include setbacks, lot area, site coverage, landscaping and open area requirements, height limits and parking standards.

The City allows some variation from the application of its parking standards. The Development Code provides reduced parking standards for senior housing of one space per one bedroom unit and has approved further reductions in parking and other standards through the specific plan process.

TOWN CENTER SPECIFIC PLAN



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TOWN CENTER SPECIFIC PLAN



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Table 2.4: Development Standards

Zone	Min. Lot Area (sq. ft.)	Max. Height	Density (units/acre)	Setbacks		Max. Lot Coverage	Min. Parking	Open Space	
				Front	Side	Rear			
Commercial Professional (C-P)	10,000	50′	N/A	15′	0'/20' (abutting residential/non-	15′	0.5 FAR	1 aposs/200 or # 1	N/A
Commercial General (C-G)	10,000	50′	N/A	15′	residential)	15′	0.5 FAR	1 space/200 sq. ft. – 1 space/500 sq. ft. depending on commercial/office type; hotel/motels – 1 space/room + 1 space/3 employees	N/A
Commercial Freeway (C-F)	40,000	60′	N/A	15′	0'/25' (abutting residential/non-residential)	15'/20' (abutting alley/ residential)	0.5 FAR		N/A
Single Family Residential (R-1)	6,500	35' or 2 stories	6.7 du/ac (1 du/6,500 sf.)	20′	5'	10-20′	35-40%	2 spaces/unit (0-4 bedrooms); 3 spaces/unit (5+ bedrooms)	N/A
Multiple Family Residential (R-3)	9,000	40' or 3 stories	21 du/ac (1 du/2,074 sf.)	30′	5′	20-25′	50%	2 spaces/unit + 2 - spaces/4 units; senior	Private: ground floor – 100 sq. ft./unit; upper floors – 200
Multiple Family Residential (R-4) zone	10,000	50' or 4 stories	28 du/ac (1 du/1,556sf.)	30′	5′	20-25′	60%	housing: 1 space/1- bedroom unit, 2 spaces/2- bedroom unit.	sq. ft./unit Common:200 sq. ft./unit
Public Facilities (PF)	10,000	75′	N/A	10′	0'/15' (abutting residential/non-residential)	5'/15' (abutting alley/ residential)	None	Assembly/meeting facility: 1 space/5 fixed seats or 1 space/ 100 sq. ft. of floor area;	N/A
Open Space (O)	N/A	75′	N/A	20'	10'/20'/30' (abutting non- residential/ residential/side street)	45'	N/A	N/A	N/A
Specific Plan (SP)	Each specific plan establishes unique comprehensive development standards.								

Source: Duarte Development Code, 2015

2.4 KEY FINDINGS AND PRELIMINARY RECOMMENDATIONS

- New development exhibits a much more positive appearance than some existing buildings and uses that have been neglected over time. Specific Plan measures should ensure that development contributes positively to the visual and functional character of the area and identify catalyst mixed-use sites that create identifiable focal points in the plan area.
- Existing uses provide a variety of amenities, but still leave visitors and residents looking for a more cohesive place to visit and linger. The Specific Plan will identify opportunity sites to encourage activity centers, parking facilities and desired outdoor urban amenities for residents, workers and visitors. The Huntington Drive/Buena Vista Street intersection will be a critical component of the plan, with potential for development of mixed-use retail buildings, restaurants or cafés and other uses that create a destination feel for residents and visitors.
- In order to encourage economic development, development standards should emphasize flexibility, creativity and innovation. The Specific Plan development standards should allow for higher intensity development and mixed uses, while also reacting to community tolerance for height and density. For specific land uses or areas that required a higher level of flexibility to attract desired uses, general parameters related to character and scale by land use, sub-area, or zone should be included with a very basic set of development standards.
- In addition to buildings and uses, the public realm provides the foundation for how one experiences the Town Center. The Specific Plan must encourage the provision of public amenities that support a pedestrian friendly environment and establish setback requirements that create a comfortable pedestrian setting. Outdoor public/quasi-public space should be encouraged in private developments to create gathering spots for the community.
- To augment existing uses, the Specific Plan should encourage the development of **retail** stores, services and office uses that attract people to the area throughout the day. In addition, mixed-use housing units along Huntington Drive can provide a built-in market for the new retail uses while helping to keep the street active after businesses close in the evening.
- Surface parking lots currently abound within the district. The Specific Plan will establish standards that limit the proliferation of surface lots and parking structures within the plan boundary. Surface parking lots should be minimized in size and located behind buildings, away from the street whenever possible.

3 COMMUNITY DESIGN

3.1 PURPOSE

This section of the Existing Conditions report addresses the **overall physical patterns and characteristics** of the Town Center Specific Plan area. It analyzes a range of elements that shape both private and public realms within the Specific Plan area, and also describes the relationships between them. The intent is to provide an overall physical framework in which key urban design assets, issues and opportunities are identified and can be highlighted for future preservation, improvement or transformation in the Town Center Specific Plan.

3.2 AREA DESIGN CHARACTER

Assessing Built Form and Urban Design

Well-designed streets, destinations and neighborhoods ensure attractive, usable, durable and adaptable places. The term "built form" refers to the physical form and shape of a city's buildings. Within a particular place, there is often a recognizable cycle of building development that contributes to its underlying character. At the building level, "built form" is used to describe what a building looks like and what its shape is on the ground, how tall it is, how much of its parcel it takes up, how far it is set back from the sidewalk and street, whether there is a parking lot in the front or back of the building, how many windows and doors are visible from the street and the building's architectural style. Understanding these architectural and site layout characteristics helps to reveal the context of a place, and starts to explain why some buildings may feel more welcoming than others, or have more successful retail in them. Well-designed buildings promote urban vitality, with more people on the streets, in an active, vibrant environment.

Built form also refers to how buildings, streets, landscaping and other features are woven together at the block, parcel and corridor level. Variations in building design, block, parcel and street patterns create very different environments. Blocks can be large or small, parcels uniform or irregular in shape and size, streets can be wide or narrow, and city roadway networks can be laid out in a grid or oriented towards central thoroughfares surrounded by a more curvilinear or irregular pattern. Understanding these patterns helps to establish the existing and desired experience of the Duarte Town Center.

Study Area

The Duarte Town Center plan area is characterized by a broad spectrum of commercial and residential land uses, development characters, block patterns, parcel patterns and building types, which together constitute the area's built form (Figure 3.1).

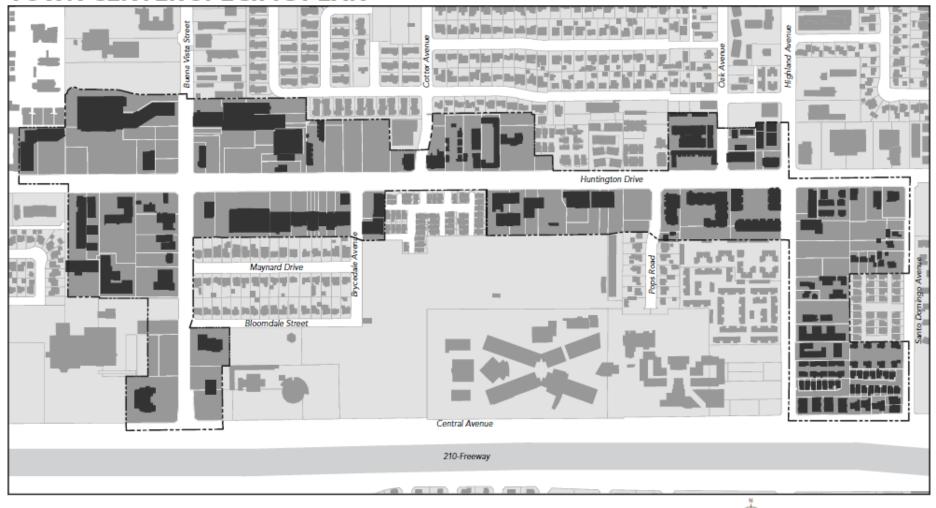
As described in Section 2 (Land Use), the planning area for the Duarte Town Center Specific Plan is bounded by Santo Domingo Avenue to the east, the edges of retail just before Bradbury Avenue to the west and the edges of retail to the north and south. The edges between one area and another are often not clearly defined and fail to reinforce a sense of a cohesive identity. Duarte Town Center's built form in regard to its block, street and parcel patterns has been temporally shaped in response to changes in land uses, including new uses coming in and existing uses moving to other areas, public and private decisions, environmental constraints and evolving design trends. The streets and blocks have also been shaped by incoming uses, key travel routes, housing trends, patterns of neighboring communities and parcel availability, amalgamations and subdivisions.

In general, Duarte Town Center's existing built form is often characterized by the auto-oriented "strip" commercial establishments along Huntington Drive and portions of Buena Vista Street. The strip commercial areas are surrounded by single- and multi-family suburban development. Each predominate built form feature in these areas supports the use of the car and subordinates all other types of mobility, such as walking, transit and biking. The majority of resources and services within the Specific Plan area are oriented towards the car and are virtually inaccessible to non-car users. The width of the streets like Huntington Drive, Buena Vista Street and Highland Avenue encourages high traffic speeds, with very few options for pedestrians to cross midblock. This street design allows for efficient vehicle travel but makes bicycle and pedestrian circulation challenging. Block sizes are generally very large with limited options for pedestrian circulation, even amongst shorter blocks. Parcel sizes vary considerably throughout the Specific Plan area. The building pattern in the residential areas is typical of suburban single-family and multi-family neighborhoods, contrasted by an irregular pattern of commercial buildings often with large gaps between buildings and a large portion of space devoted to surface parking.

Block Pattern

The Town Center block pattern is organized in an irregular grid network typical of suburban developments and strip corridors (see Figure 3.2). The space between the blocks defines the public space network through a hierarchy of streets that give shape to the corridor or place. The block pattern includes wider arterial streets such as Buena Vista Street and Highland Avenue that extend in a north-south direction and connect with the main street in the Town Center, Huntington Drive. Other local streets and cul-de-sacs that run north-south offer few connections and limited permeability. Streets that run east-west, parallel with Huntington Drive, also generally provide limited connectivity and traverse short distances in the immediate vicinity. Other east-west streets that extend longer distances include Royal Oaks Drive to the north (a residential thoroughfare) and Central Avenue to the south (a service drive running adjacent to the 210 freeway). Huntington Drive intersects with seven other streets in the project area, but only two (Highland Avenue and Buena Vista Street) are through-streets; all other connections result in "T" intersections. The area between Buena Vista Street and Highland Avenue is particularly disconnected with very few intersecting streets, highlighting the need for better connectivity. The block pattern creates discontinuous routes along Brycedale Avenue and Pops Road (which ends in a cul-de-sac) severing north-south connectivity.

TOWN CENTER SPECIFIC PLAN



Legend

Specific Plan Area

Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc.



Blocks throughout the Town Center area are not organized homogeneously or with regularity but rather are characterized by long-block streets, discouraging pedestrian movement. Connectivity and continuity are further limited by a lack of through streets and cul-de-sacs. For an area to be walkable, block lengths should generally not exceed approximately 300 feet. Blocks greater than 600 feet create long distances that discourage pedestrian movement and essentially create an incubator for the use of the car as a dominant mode of transportation. There is only one block along Huntington Drive (the block between Highland Avenue and west to Oak Avenue) that is scaled for walkability at 300 feet. In general, block sizes along Huntington Drive range from 600 to 1,200 feet, which feels very long from the pedestrian's perspective and thus encourages the use of the car at the expense of pedestrian activity.

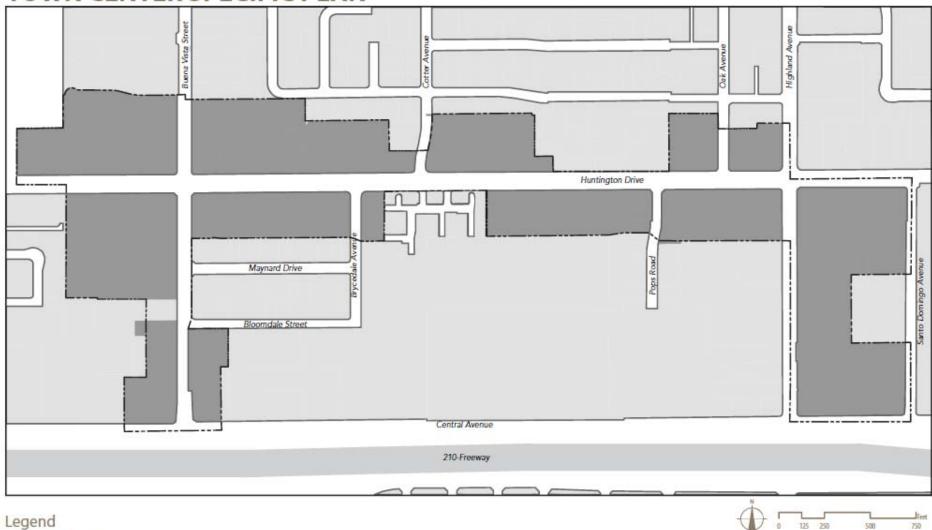
Parcel Pattern

The Town Center has two main contrasting parcel patterns (see Figure 3.3). Along the primary corridors, parcels vary widely in size from as small as 20 by 250 feet to as large as 620 by 215 feet. Parcel depth along the southern side of Huntington Drive is generally uniform at 250 feet. The majority of parcels that front Huntington Drive between Buena Vista Street and Highland Avenue abut residential lots to the rear. Outside of the project area, to the south, is a very large parcel that contains Duarte High School and Sports Park and then the I-210 freeway beyond, effectively limiting the options for pathways for connectivity to the south to just Buena Vista Street and Highland Avenue. The residential areas abutting the Specific Plan area generally follow a parcel pattern structured in a homogeneous and coarse-grained manner. A typical parcel in this area is 75 by 100 feet. Some larger residential parcels exist along Huntington Drive and are occupied by multi-family residential and senior housing.

Building Pattern

The existing building pattern (Figure 3.4) reveals the incongruity between the denser residential single- and multi-family housing areas and the less dense commercial areas along Huntington Drive, Buena Vista Street and Highland Avenue. Most residential buildings follow rectilinear alignments in response to the rectilinear city grid. Residential buildings are freestanding, physically separated from adjoining buildings, but with limited space around them. They closely follow the street configuration. Commercial uses, also physically separated from adjoining buildings, have larger footprints with a significant amount of space around them dedicated to surface parking. The popularity of freestanding buildings over the traditional dense urban fabric with buildings flush to the street is the result of the age of buildings (the vast majority of buildings in the district were built after 1950, in an automobile-oriented era), the street's function as Historic Route 66, cheaper costs associated with singular buildings and diverse real estate interests of developers. The building pattern of commercial uses within the Specific Plan area has created an amorphous space with a series of auto-oriented, unrelated, small complexes of buildings surrounded by streets and large swaths of surface parking. The vast majority of "white space" depicted in Figure 3.4 is either vacant land or parking lots.

TOWN CENTER SPECIFIC PLAN



Specific Plan Area

Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc.

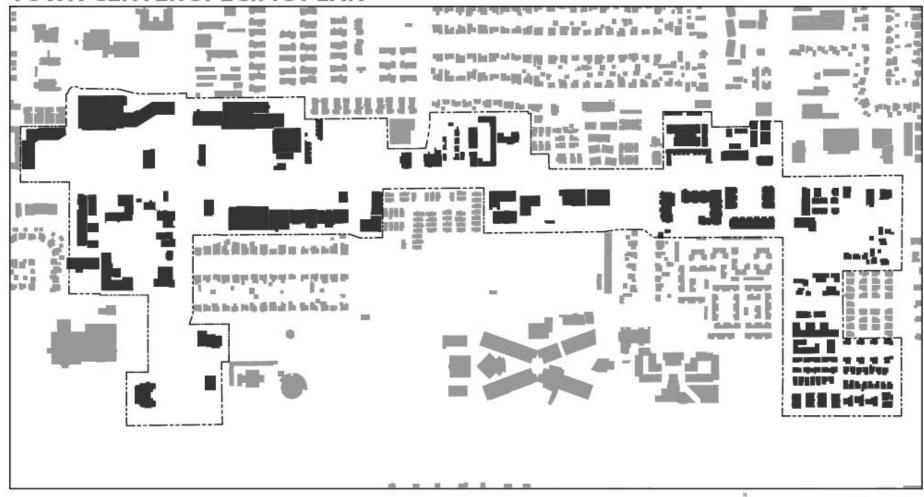
Figure 3.2 **BLOCK PATTERN**

TOWN CENTER SPECIFIC PLAN



Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc. Figure 3.3 PARCEL PATTERN

TOWN CENTER SPECIFIC PLAN



Legend

Specific Plan Area

Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc.



Figure 3.4 BUILDING PATTERN

Street Wall

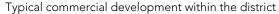
The street definition lacks spatial cohesion due to an extremely discontinuous building edge. The building pattern has evolved to accommodate fast-moving vehicular traffic and surface parking lots. This is evident in the numerous curb cuts along the sidewalk and irregular, broken building pattern interspersed with parking lots which effectively eliminate the urban fabric of a "street wall." "Street wall" defines a condition where buildings consistently line or front onto the edge of a street, which is best achieved where buildings have consistent setbacks built out to the sidewalk. Figure 3.5 shows the existing conditions along Huntington Drive, with large gaps in the street wall. The figure also shows a comparative example, Main Street in downtown Alhambra, which exhibits some similar gaps in its street wall, but overall is much more complete, as seen by the relative lack of red. A fragmented building pattern has a profound impact on the streetscape and pedestrian environment contributing to isolation and separation resulting in a negative pedestrian experience.

Development Character

Within the project area, most commercial development is single story and of fair building quality with a variety of façades including stucco, stone, tile and concrete. Ceramic roof tiles can be seen as a common feature shared by many commercial buildings. Newer commercial and residential developments use stone as an accent material along their facades. Some newer and remodeled structures are built to a higher standard of quality than other development.

The residential areas within and adjacent to the Town Center area are characterized by one-story single-family residences and a variety of two-story multi-family apartments and townhomes. The residential development tends to have Spanish roofs and stucco facades with varying degrees of quality but mostly in fair condition.



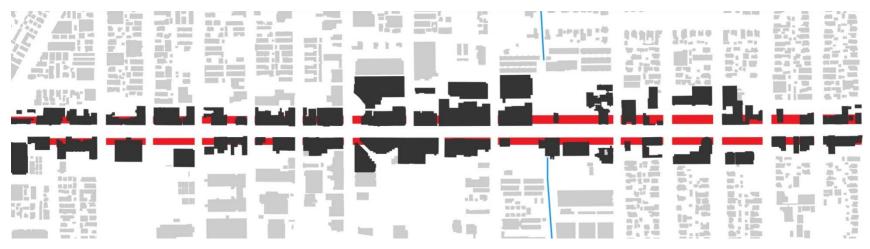




An example of senior housing located in the district



Huntington Drive



Comparison, Main Street, Alhambra, CA

Figure 3.5 **EXISTING STREET WALL GAPS**



Gaps in the street wall deter pedestrian activity



This blank wall does not support active street life



Blank surface parking lots detract from the street



Pedestrian-scale development with outdoor seating such as this is rare



The use of stone as a façade accent material is common in newer buildings



Signage reflects an eclectic mix of styles



The Ralph's Center is newer and higher quality than other strip commercial



New residential development incorporates craftsman style

3.3 VIEWS, GATEWAYS AND LANDMARKS

As people pass through or visit places, they experience their surroundings by observing not only the buildings and streets, but also the larger views, gateways into the area and particular landmarks. Each of these experience points is important to a community's overall sense of place and is described in more detail in this section.

Views

Duarte's location in the San Gabriel Valley provides views to the scenic San Gabriel mountain ranges to the north. The mountains provide an attractive natural frame to the city, as well as an element of uniqueness that contributes to the area's sense of identity. The mountains also provide a constant resource for physical orientation and direction. Views of the mountains can be seen throughout the project area.

In addition to mountain views, smaller experiences and features create micro-views that contribute to a sense of place. For example, the median on Huntington Drive often provides a beautiful view of large trees that provides relief from its more urban surroundings.

Within the district, however, views vary considerably. The quality of the view varies where there is no median and where street planting is sparse and trees are small. Conversely, there are multiple places similar to the City Hall area along Huntington Drive where views can be lovely and special, and begin to create a sense of cared-for street where one would want to live and shop along. These places are currently few, but provide strong clues for how to improve the streetscape.

Gateways

Gateways are public visual or ceremonial entryways that often form your first impression of an area. Improving and adding gateways into the city at strategic points in the district can reinforce the Town Center's unique identity and sense of place by announcing a threshold or a passage into a particular locale, and by creating a sense of arrival. Despite the existence of many unique neighborhoods and destinations in the city, opportunities for gateways within the Town Center area have not been fully realized.

Existing gateway signs installed in the medians provide context as well as beauty. In addition to these signs, Duarte has installed a semi-permanent banner sign on Buena Vista Street at the entry from Central Avenue and north of the 210 freeway. The flexibility of a banner sign is noted; however, it is typically intended exclusively for vehicles. Gateways can be improved for pedestrians and vehicles to experience the district, especially at the key entrance points of both Highland Avenue and Buena Vista Street and the I-210 freeway and the key intersection of Buena Vista Street and Huntington Drive. In particular, improvements to the freeway underpass at Highland Avenue could facilitate pedestrian and bicycle movement north from the Duarte Gold Line Station (discussed in more detail in Section 4: Mobility and Street Design). On Buena Vista, a gateway feature could be located further north, to reflect the more vehicle-oriented nature of that street.



The majestic San Gabriel Mountains dominate the view on northbound streets



Existing gateway signage is distinctive



Street trees in parkways and medians provide critical green views and shade



A stronger point of entry is needed in particular locations

Landmarks

Duarte Town Center's major landmarks are another key element to establishing orientation within the area as well as a sense of identity and place. Landmarks are external points of reference to an observer and are generally unique or memorable in context. Landmarks vary widely in scale; some larger landmarks, such as towers, spires and hills are typically seen from many angles and from distances. Other smaller landmarks are primarily local in orientation – such as sculptures, signs and trees – and are visible only in specific areas or from certain approaches. Landmarks can provide design direction and inspiration for new developments, anchor a particular area with strong iconic design and contribute to the design structure of a place. The Town Center area contains only a few unique landmarks as discussed below.

Duarte Clock Tower

The Duarte Clock Tower is located on the same parcel as the Teen Center, on the corner of Buena Vista Street and Bloomdale at Duarte Park. The tower can be seen from over 1,000 feet away at the corner of Buena Vista Street and Huntington Drive, making it an easily identifiable and powerful local landmark.

Duarte LED Monument Sign

Duarte's LED monument sign is located at the center of the project area, in front of City Hall, on the southern side of Huntington drive between Monterey Court and Pops Road. The sign is bordered by stone and displays the latest community events and information.

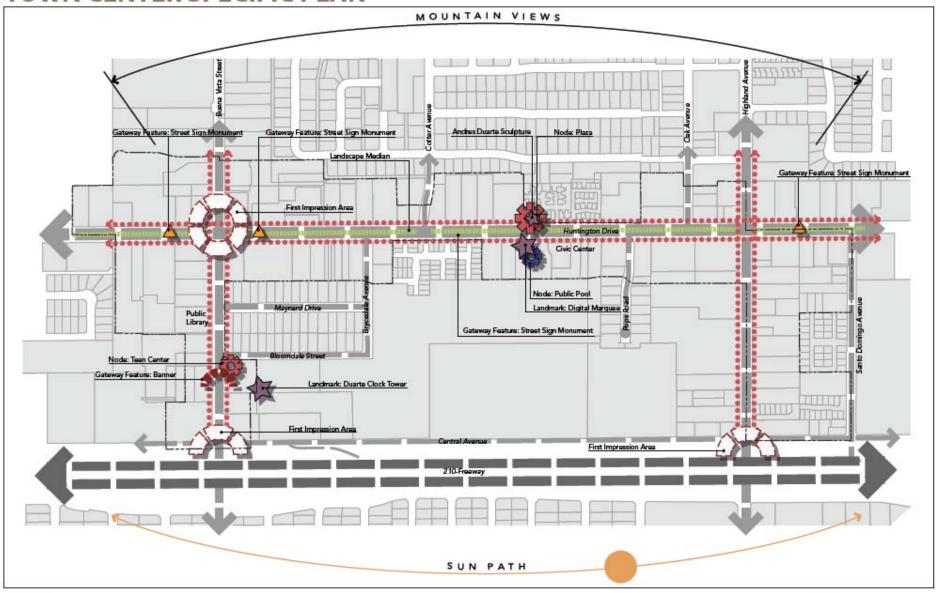
Andres Avelino Duarte Sculpture

Located across the street from City Hall is an iconic statue of Andres Duarte, the recipient of a 7,000-acre Mexican land grant in 1841, then known as the Rancho Azusa de Duarte. The land grant comprised what is now Duarte and portions of Arcadia, Monrovia, Irwindale, Azusa and Baldwin Park. The statue is situated in a local plaza and signifies a historic figure of the city's past.

Historic Route 66 Signage

Historic Route 66 follows Huntington Drive through Duarte. Signs line the corridor to signify this historic and famous road, which when opened in 1926 was the first road to link the main streets of small-town American from Chicago to Los Angeles.

TOWN CENTER SPECIFIC PLAN



Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc.

Figure 3.6 VIEWS, GATEWAYS AND LANDMARKS



City of Duarte LED monument sign at City Hall



Historic Route 66 Signage



Andres Avelino Duarte Iconic Statue



Duarte Clock Tower at Duarte Park

- Buildings are typically oriented inward, away from thoroughfares, keeping pedestrians away from cars and motorists away from curbside distractions.
- Duarte Town Center's built form is characterized by auto-oriented "strip commercial" corridors along Huntington Drive and portions of Buena Vista Street and Highland Avenue. Each of the elements that comprise the built form supports the use of the car and subordinates other types of mobility (Figure 3.1: Figure Ground).
- Block sizes are generally very large with limited options for pedestrian circulation, even amongst shorter blocks (Figure 3.2: Existing Block Pattern).
- Within the project area, parcels vary widely in size from as small as 20 by 250 feet to as large as 620 by 215 feet. Parcel depth along the southern side of Huntington Drive is generally uniform at 250 feet from the curb edge. The majority of parcels which front Huntington Drive in-between Buena Vista Street and Highland Avenue are adjacent to residential lots at their rear (Figure 3.3: Existing Parcel Pattern).
- The building pattern in the residential areas is typical of a suburban single-family neighborhood, contrasted by an irregular pattern of commercial buildings often with large gaps between buildings and a large portion of space devoted to surface parking (Figure 3.4: Existing Building Pattern).
- The building pattern has evolved to accommodate **fast-moving vehicular traffic and need for parking**. This is evident in the numerous curb cuts along the sidewalk and irregular, broken building pattern interspersed with parking lots which effectively eliminate the urban fabric of the "street wall." Figure 3.5 shows these large gaps in the street wall. Figure 3.5 shows a comparative example at the same scale, Main Street in downtown Alhambra, which exhibits some similar gaps in its street wall, but overall is much more complete, as seen by the relative lack of red.
- Duarte's location in the San Gabriel Valley provides **views to the scenic San Gabriel mountain ranges** that can be stunning. The mountains not only provide an attractive natural frame to the city, but also provide an element of uniqueness and contribute to the area's unique identity and sense of place.
- Existing gateway features are installed in the median of Huntington Drive and help indicate **public visual or ceremonial entryways**. Improving and adding gateways into the city along Buena Vista Street, Huntington Drive, or Highland Avenue (Figure 3.6) can reinforce the city's unique identity and sense of place by announcing a threshold or a passage into a special place and by creating a sense of arrival.
- Key landmarks within the project area include the clock tower at the Teen Center, City Hall and the marquee sign, the Andres Avelino Duarte Plaza and Historic Route 66 Signage, alerting travelers and visitors to the area's historic roots. These landmarks provide inspiration for future design elements, as there is a limited amount of community gathering places, few vibrant public spaces and few strong landmarks that serve as iconic elements and provide a unique identity for the Town Center area. These elements are needed to make the Town Center a memorable place.

- Several private mini-malls provide **commercial anchors** at regular intervals throughout the project area. These uses should be encouraged to grow into more pedestrian-friendly plazas that add to and enhance the **public realm**.
- Opportunities exist to preserve and enhance the many single-family residential neighborhoods, which abut the project area on all sides. Opportunities also exist to consider changes to the character of specific areas over the life of the Specific Plan. The encouragement of new uses into the corridor in an appropriate and compatible way, such as mixed-use development or higher-intensity residential development, will be a key element of the Specific Plan.

4 MOBILITY AND STREET DESIGN

The Town Center project area contains a street network that provides **key connections within** the city and between neighborhoods for pedestrians, bicyclists, transit users and automobiles.

The current network is primarily designed to accommodate vehicular traffic but still boasts an array of multi-modal users. The three arterials that traverse the Town Center constitute major transit corridors and exhibit regular pedestrian and bicycle activity regardless of limited pedestrian and bicycle facilities. This section of the Existing Conditions Report provides an overview of the Town Center circulation pattern and existing design along Buena Vista Street, Huntington Drive, Highland Avenue, Central Avenue, and Santo Domingo Avenue.

Urban street patterns define the rhythm of a community by organizing the urban form into coherent, navigable geographic groupings. Successful urban design of streets has a significant impact on the quality and accessibility of a roadway from a user and commercial standpoint. Street form can be very diverse, from being visually dynamic or static, long or short, enclosed or open, wide or narrow, curved or straight. Additional considerations include a street's existing connections to other streets or places of interest and the sense-of-movement and horizontal flow of space as defined by the street wall. Patterns of streets have often developed over long periods of time, where new roads and freeways bisect old street patterns and fragment neighborhoods. A poorly designed street pattern can hinder mobility, create an unsafe environment for bicyclists, generate traffic for motorists, and foster an unwelcome or uninviting atmosphere for shoppers. A well-designed street pattern offers users a choice of routes through and within a neighborhood, safely accommodates all modes of transportation, provides convenient access to commercial areas for pedestrians and motorists and generates a healthy, safe and comfortable place to live.

4.1 STREET NETWORK

Duarte's road system is used as a thoroughfare for all modes of traffic to and from the City and neighboring jurisdictions. Street types are defined primarily by the streetscape character, modes of transportation carried, and speed and volume of traffic they carry and are defined in the City's General Plan. Within Duarte they include (1) arterials, (2) collector streets and (3) local streets. In addition to the street types is the regional freeway, I-210. This freeway connects Duarte regionally but also poses a significant physical barrier to the City's pedestrians and bicyclists as it divides neighborhoods. The various street typologies and the functionality help provide an understanding of multimodal circulation. Figure 4.6 shows the street network and hierarchy within the Specific Plan area.

Huntington Drive, which runs east-west, is one of five streets identified as "arterials" within the City of Duarte, as are Buena Vista Street and Highland Avenue, which run north-south at the western and eastern ends of the project area, respectively. Central Avenue is the sole collector street that borders the southern end of the project area and intersects Buena Vista Street and Highland Avenue. Buena Vista Street and Huntington Drive provide direct connections to other cities and freeways. Local streets tend not to extend throughout the city, but are contained within certain neighborhoods. This fragmented street layout can present a challenge to pedestrians and bicyclists, especially bicyclists who might prefer a quieter neighborhood street but cannot take one very far due to an impermeable street grid.

As defined in the Circulation Element of Duarte's General Plan, "the primary focus of the Circulation Element is the Duarte street and roadway network, alternative modes of travel such as bus transit, rail transit, bicycles, and pedestrians are also addressed and become more significant as congestion continues to mount in the Los Angeles basin." The City also has an objective to "Encourage and promote the use of travel modes other than the single occupancy vehicle, such as bus transit, rail transit, carpools, vanpools, bicycling, and walking." These excerpts clearly acknowledge that while the roadway network is of utmost importance, the City also supports other modes of transportation. The Town Center street network needs to safely and efficiently accommodate all users and modes of transportation. Features of successful streets contain stopping space for buses and waiting space for transit users, public gathering space in front of key neighborhood nodes, bicycle facilities and infrastructure, connections to planned transit, comfortable sidewalks and an environment that enhances Duarte's existing and future commercial areas.

The arterials like Huntington Drive (Figure 4.1) are not only a thoroughfare for vehicular traffic, but have many other functions besides moving large numbers of cars. Arterial streets in the project area feel wider to pedestrians and bicyclists due to the lack of a street wall or any sense of enclosure. Arterial streets in Duarte maintain right-of-way widths between 80 to 108 feet and function as regional, sub-regional, and intercity travel corridors. They also provide direct access to adjacent properties and intersecting streets. Outside of vehicular travel, arterial streets are well-used by pedestrians and bicyclists. While arterial streets are primarily designed for vehicular movement, the keys to transformation of streets such as Buena Vista Street (Figure 4.2), Huntington Drive, or Highland Avenue (Figure 4.3) are possible through careful attention to urban design together with thoughtful, high-quality land use development. Most important, the streets must be redesigned specifically for these uses, with pedestrians foremost in mind.

A **collector** street serves as an intermediate route that accommodates travel between local streets and arterial roadways and provides access to adjacent properties. Collector streets in Duarte maintain a right-of-way typically 60 feet wide. Central Avenue is the only collector street in the project area. Similar to the arterials, Central Avenue is primarily oriented toward the movement of vehicular traffic and has limited pedestrian accommodations. In the project area, Central Avenue forms the southern boundary to Duarte High School and Northview Intermediate School. Central Avenue runs parallel to the I-210 freeway and functions as a "service drive" to the freeway; thus it is likely to maintain much of its vehicle orientation.

A **local** street is designed to have low vehicular speeds and provide direct access to adjacent properties. Local streets in Duarte maintain a right-of-way between 50 and 60 feet. Cotter Avenue (Figure 4.4), Santo Domingo Avenue (Figure 4.5), Brycedale Avenue, Pops Road and Oak Avenue are local streets in the Specific Plan area. Within the project area, Santo Domingo Avenue maintains intermittent sidewalks in the residential neighborhood. Residential neighborhoods, schools and parks in Duarte are primarily accessed by local streets.

4.2 TRANSIT

Duarte Transit currently operates two fixed routes (Blue and Green) throughout the day and one commuter shuttle (Red) that operates on weekday mornings. Both the Blue and Green lines run

¹ Duarte General Plan; page 9-1.

² Duarte General Plan; page 9-3

along Huntington Drive through the Town Center plan area, and the Red commuter line runs south from Royal Oaks Drive along Highland Avenue. In addition, regional service is provided by Foothill Transit, with three routes (292, 494, and 187) that pass through the Town Center plan area.

In addition to bus transit, and new Gold Line light rail transit station is scheduled to open in Duarte in early 2016. The new station will be located at the northwest corner of Duarte Road and Huntington Avenue, just south of the I-210 freeway and the Town Center plan area. The City has undertaken a Transit Study to assess service improvement strategies to Duarte Transit bus service, especially in light of the new Gold Line station's 2016 opening. One key recommendation from that Study is to realign Duarte Transit's Blue Line to serve the new station, thus providing key bus access to the Town Center area.

4.3 PEDESTRIAN MOVEMENT

Pedestrian movement, as noted above, is currently constrained by limited mid-block crossings, narrow and impeded sidewalks in certain locations, and an unfriendly walking atmosphere. As discussed in more detail in Section 3 (Community Design), long block lengths within the district discourage walking.

As part of the Town Center Specific Plan, special attention should be paid to facilitate pedestrian access from the Town Center to the new Duarte Gold Line Station. To access the Town Center from the Duarte Station, under existing conditions, a pedestrian would experience gaps in the sidewalk near the station (outside the plan area), and a nondescript and somewhat imposing freeway underpass as one heads north. The sidewalk is located directly adjacent to the street along Highland, without a parkway buffer. In addition, sidewalk impediments such as light poles and electrical boxes further decrease the sidewalk width. The City received grant funding through the Active Transportation Planning Grants (2014) to complete pedestrian improvements to fill in gaps in the sidewalk south of the I-210 freeway and to provide a Class II bicycle lane to connect the station to the Class I bicycle facility located on Royal Oaks (discussed more below).

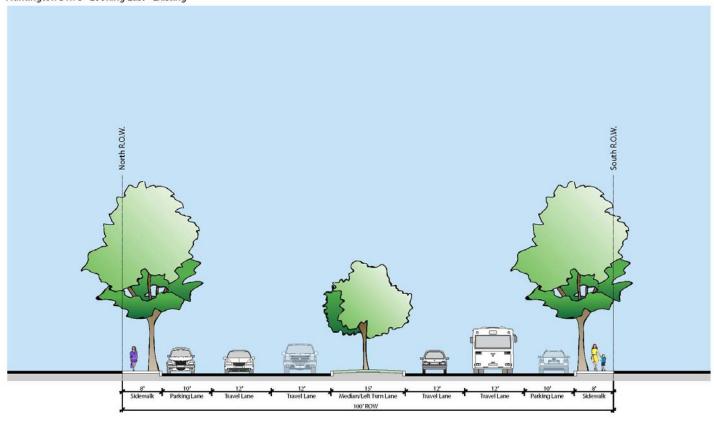
4.4 BICYCLE CIRCULATION

There is currently no bicycle infrastructure within the plan area. The majority of bicycle riders use sidewalks rather than the street for bicycle movement. North of the project area, Duarte has one of the only city-specific Class I Bicycle Paths in the San Gabriel Valley. The multi-use bike/pedestrian path runs east-west through town alongside Royal Oaks Drive, within an old trolley right-of-way.

As of July 2015, the City is undertaking a Bicycle Master Plan. The process will include a citywide online survey to assess needs and identification of recommended improvements to bicycle routes and infrastructure. The study will also asses the need for certain pedestrian crossings in critical areas. The Town Center Specific Plan team will coordinate with these other ongoing efforts to ensure consistency in recommendations.

TOWN CENTER SPECIFIC PLAN

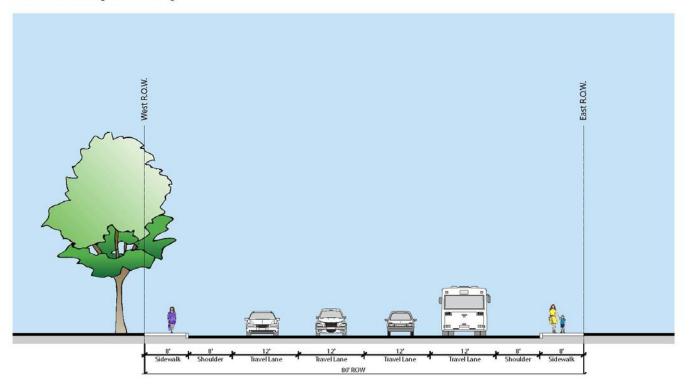
Huntington Drive - Looking East - Existing



Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc. Figure 4.1 HUNTINGTON DRIVE STREET SECTION

TOWN CENTER SPECIFIC PLAN

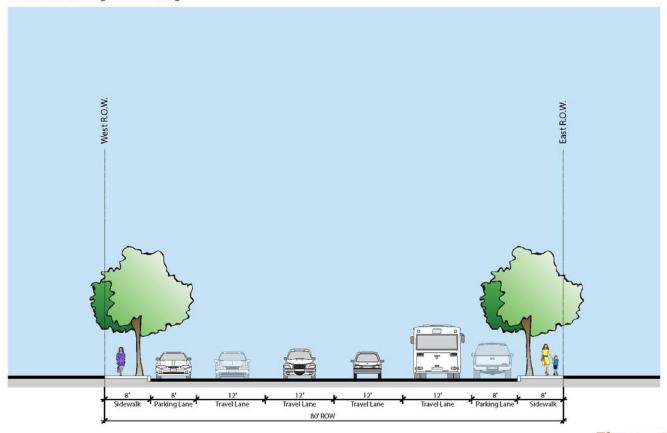
Buena Vista Street-Looking North - Existing



Date: June 2015 Source: City of Duarte, SCAG Base Map Prepared by: MIG, Inc. Figure 4.2 BUENA VISTA STREET SECTION

TOWN CENTER SPECIFIC PLAN

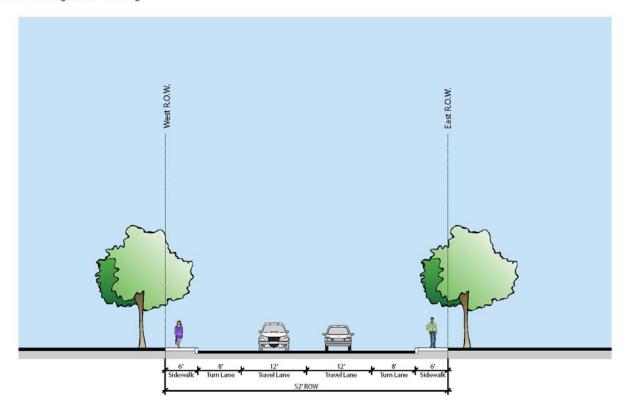
Highland Avenue - Looking North - Existing



Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc. Figure 4.3 HIGHLAND AVENUE STREET SECTION

TOWN CENTER SPECIFIC PLAN

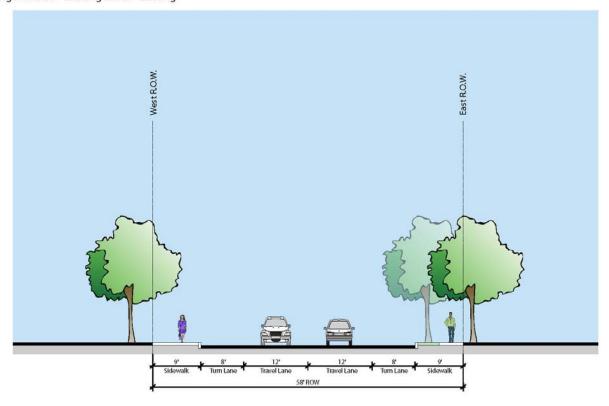
Cotter Avenue - Looking North - Existing



Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc. Figure 4.4 COTTER AVENUE STREET SECTION

TOWN CENTER SPECIFIC PLAN

Santo Domingo Avenue - Looking North - Existing



Date: June 2015 Source: City of Duarte Base Map Prepared by: MIG, Inc. Figure 4.5 SANTO DOMINGO AVENUE STREET SECTION

Base Map Prepared by: MIG, Inc.

TOWN CENTER SPECIFIC PLAN 開記 Maynard Drive Central Avenue 210-Freeway Legend Street Hierarchy 750 Specific Plan Area Freeway Arterial Date: June 2015 Collector Source: City of Duarte

Figure 4.6 EXISTING STREET HIERARCHY

Page 4-9 | Existing Conditions | Mobility and Street Design

Local



The median along Huntington provides green relief and softens the streetscape



Transit users wait for the bus without shade structure or street trees



Street trees provide a shade canopy for pedestrians



On-street parking is underutilized during most of the day



Many bicyclists prefer to use the sidewalk due to high traffic speeds



Pedestrians have few marked crossing opportunities and therefore often cross mid-block, using the median as a half-way refuge



Huntington Drive is a major transit corridor



Wide intersections are unfriendly to the pedestrian

- Vehicles dominate the rights-of-way on the major arterials within the Town Center. Not only are these roads designed primarily for cars, a large percentage of the businesses are auto-related. Accordingly, conditions for pedestrians, transit riders, and bicyclists are poor. This is true even though Buena Vista Street, Huntington Drive, and Highland Avenue are major transit corridors with both a local and a commuter bus line; even though there are already a good number of pedestrians using the sidewalks and crossing the wide intersections; and even though there is a steady stream of bicyclists, most of who are forced to ride on the sidewalk. Addressing these deficiencies to make the Duarte Town Center area a safer and more walkable and transit- and bike-friendly place will be critical to its transformation and future growth especially if the project area develops with a greater mix of uses, with more people living directly on Buena Vista Street, Huntington Drive and Highland Avenue.
- According to the General Plan, three of Duarte's five arterials run through the Specific Plan Area, specifically Huntington Drive, Buena Vista Street, and Highland Avenue. These roads are designed to accommodate regional and intercity travel while providing direct access to adjacent properties and intersecting streets. The right-ofway width accommodates long forward vision and wide visibility splays at corners. The flow of vehicle traffic along these streets is precedent to other forms of mobility.
- Huntington Drive's role as a "cut-through" route for vehicles attempting to avoid or bypass the parallel I-210 diminishes its ability to serve as a safe and pleasant gathering place, shopping area, and neighborhood street. If significant development along Huntington Drive is anticipated, the necessity of maintaining Huntington Drive as a major "cut-through" street for vehicles should be reevaluated.
- Pedestrian crossings are limited to dedicated light-controlled crossing points. Along Huntington Drive in the project area, there are only three dedicated pedestrian crossings: at Buena Vista Street, Pops Road and Highland Avenue. Due to this limitation, many pedestrians attempt mid-block crossings, which can often be unsafe. Pedestrian and bicycle connections to key destinations in adjoining neighborhoods should be established and/or enhanced to provide convenient access for all modes of travel. Sidewalks with street trees and planting strips can provide a safer and more comfortable pedestrian environment, while dedicated bicycle facilities are needed to improve safety and comfort for bicyclists already along the major arterials, and to encourage more bicyclists.
- Pedestrian and bicycle infrastructure is lacking to connect the Town Center to the forthcoming (2016) Duarte Gold Line Station. Opportunities for bicycle lanes, improvements to sidewalks, and improvements to the freeway underpass should be explored.

5 INFRASTRUCTURE

5.1 INTRODUCTION

An efficient and reliable infrastructure system is vital to any city's health, safety, livability and economic well being. Availability of infrastructure determines growth patterns, density and intensity of land use. Where insufficient infrastructure capacity exists for proposed new development, cities and service providers must identify ways to increase capacity and service to the area. Currently, the Town Center Specific Plan area is generally categorized as a commercial district with some medium to high density development up to three story buildings, especially in the eastern portion of the district. Additional development (as expected within the Town Center Specific Plan) will increase demand for infrastructure services. This section provides a review of the area's water, wastewater (sewer) and storm drainage infrastructure and services that support the Town Center Specific Plan area. Transportation infrastructure such as roadways and bicycle and pedestrian facilities are addressed in Section 4 (Mobility and Street Design).

5.2 RELATED PLANS AND PROGRAMS

State Resolution No. W-4976

In recent years, California has experienced extreme dry weather conditions due to diminished rainfall, thus causing a state-wide drought emergency. In an effort to promote water conservation efforts, Resolution No. W-4976 was adopted by the California Public Utilities Commission in February 2014, establishing procedures for water conservation to reduce consumption. Since many water utility agencies and companies secure their water supply from multiple sources, including water wholesaler sales, surface water and/or ground water, the adoption of this mandate has affected how water utility districts plan their service distribution while encountering various levels of water supply adjustments within each service area.

Urban Water Management Plans (UWMP)

Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. As required by the California Urban Water Management Planning Act (UWMP Act), all urban water suppliers with more than 3,000 connections or distributing more than 3,000 acre feet per year (afy) must complete an UWMP every five years. The UWMP Act is administered by the California Department of Water Resources (DWR), who is responsible for compiling data for statewide and regional analysis and publishing the accepted documents online for public access. The Urban Water Management Plan that is applicable to Duarte is the California American Water (Cal Water) Southern Division - Los Angeles County District Urban Water Management Plan, which was last prepared in 2010. The 2015 updated UWMP is due to the Department of Water Resources July 1, 2016. The Los Angeles Division of Cal Water consists of three Districts, which includes Duarte District, Baldwin Hills District and San Marino District. The Duarte District serves the cities of Duarte and Bradbury.

National Pollutant Discharge Elimination System (NPDES) Stormwater Program

The National Pollutant Discharge Elimination System (NPDES) Stormwater Program is a comprehensive two-phased national program for addressing non-agricultural sources of stormwater discharge adversely affecting the quality of the nation's waters. The Program uses control and monitoring measures through the NPDES permitting mechanism to prevent harmful pollutants from being washed into local bodies by stormwater runoff. The NPDES program requires the owner or operator of any facility, or any person responsible for any activity that discharges waste into rivers, lakes and oceans to obtain a NPDES permit from the Regional Water Quality Control Board, as mandated by the Clean Water Act. Duarte is within Los Angeles Regional Water Quality Control Board's (RWQCB) jurisdiction, which works in coordination with the State Water Resources Control Board (SWRCB) to administer the NPDES program to control direct stormwater discharges. The general permit requires an applicant to file public notice when they intend to discharge stormwater and prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP).

City of Duarte Stormwater and Urban Runoff Pollution Control Ordinance

The Stormwater and Urban Runoff Pollution Control Ordinance (Chapter 6.15 of the Duarte Municipal Code) is intended to enhance and protect water quality of local rivers and other bodies of water, consistent with the Federal Water Pollution Control Act (Ord. 756 § 1 (part), 2000). The Ordinance provides specific local regulations for stormwater pollution prevention and regulates non-stormwater discharge to the storm drain system; providing for the control of spillage, dumping, or disposal of materials into the storm drains system; and reduction of pollutants in stormwater and urban runoff to the maximum extent practicable.

5.3 WATER SUPPLY

Water service is provided to Duarte by California American Water which operates three Division Offices. Duarte is located under the Southern Division, which includes the Los Angeles County District. This District consists of the Baldwin Hills, Duarte and San Marino service areas.

California American Water obtains its water supply for Duarte from: 1) Upper San Gabriel Valley Municipal Water District (USGVMWD) imported water, 2) Main San Gabriel Basin (MSGB) groundwater and 3) MSGB surface water from the San Gabriel River. USGVMWD obtains its imported water supply from the Metropolitan Water District of Southern California (Metropolitan). Where demand cannot be met with groundwater allocations, supplemental water is purchased from a wholesaler for direct potable use, or untreated raw water is used as replacement water for the groundwater basin to remediate over-pumping. Table 5.1 (Duarte System Water Supplies) shows the current and projected supplies for the Duarte system. Between 2015 and 2030, Cal Water anticipates a decrease of 0.3 percent in water demand within the Duarte District to reflect water conservation measures, as the population of the District is anticipated to increase by approximately seven percent.

Table 5.1: Duarte System Water Supplies (Acre-Feet Per Year)

Source	2015	2020	2025	2030
Main San Gabriel Basin (MSGB) Groundwater	4,062	4,062	4,062	4,062
MSGB Surface Water	1,672	1,672	1,672	1,672
Upper San Gabriel Valley Municipal Water District (USGVMWD)	1,648	1,307	1,471	1,628
Total	7,382	7,041	7,205	7,362
Percent of all Cal Water Southern District	31%	31%	31%	31%

Source: California American Water. 2010 Urban Water Management Plan for the Southern Division – Los Angeles County District.

It is anticipated that Cal Water facilities currently serving the Los Angles Division, including Duarte, are adequate to meet anticipated service demands in the area.¹ Future development would be adequately served by Cal Water, assuming source and supply capacities remain consistent with current conditions, as well as future projections.

Cal Water projections for Duarte assume that most growth will result from redevelopment and higher density development. Exacerbated drought conditions, climate conditions or impacts to regional water conveyance infrastructure could quickly change these conclusions. With the advent of the mandated conservation measures outlined in the 2010 UWMP, Cal Water's supply is expected to be highly reliable through 2035.² This reliability is a result of the projected reliability of USGVMWD's reliance on Metropolitan for its imported water supplies and the planning initiatives undertaken by Metropolitan in the last several years.

The 2010 Cal Water UWMP shows "above-normal" water supply availability during average, single dry and multiple dry years for the Duarte District. Under normal conditions, Cal Water meets its customer demands with a combination of imported water, pumping groundwater from the MSGB and surface water from the San Gabriel River. According to the 2010 UWMP, USGVMWD will meet projected water demands under all anticipated hydrologic conditions in the Duarte service area. During single-dry and multiple-dry years, replacement purchases are expected to increase, with more imported water making up for the decrease in local supplies. Metropolitan, USGVMWD and the MSGB have implemented projects to ensure that imported water and groundwater demands can be met under normal, single-dry year and multiple-dry years.

The California Public Utilities Commission has approved a fee increase that will allow Cal Water to provide a \$33.1 million infrastructure upgrade to the Duarte System of the Los Angeles Division. This infrastructure upgrade would accommodate future development projects or growth that would be served by the Duarte System. Furthermore, the 2015 UWMP will take into account any increases in demand resulting from the Town Center Specific Plan development plan.

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¹ The Rose Gardens at Santa Teresita Master Plan Program Environmental Impact Report. March 2011.

² Duarte Station Duarte Station Specific Plan Environmental Impact Report. September 2013.

5.4 WASTEWATER INFRASTRUCTURE

Wastewater – commonly referred to as sewage – is the water that drains from our sinks, toilets and showers into the sewer system. The Consolidated Sewer Maintenance District (District), managed by the Los Angeles County Department of Public Works (LACDPW) Sewer Maintenance Division (SMD) provides sewage collection services for the unincorporated County areas and 37 member cities, including Duarte.

Local sewer lines within Duarte are owned by the City. The Los Angeles County Department of Public Works (LACDPW) operates and maintains Duarte's local wastewater conveyance infrastructure, which connects to the County Sanitation Districts of Los Angeles County (CSDLAC) District 22 regional trunk sewer pipelines, which lead to the San Jose Creek Water Reclamation Plant (SJCWRP), located in unincorporated Los Angeles County (adjacent to the City of Industry) and the Whittier Narrows Water Reclamation Plant (WNWRP), located in South El Monte. The San Jose Creek WRP is the largest of the District's water reclamation plants, with a capacity of 100 million gallons per day (mgd).

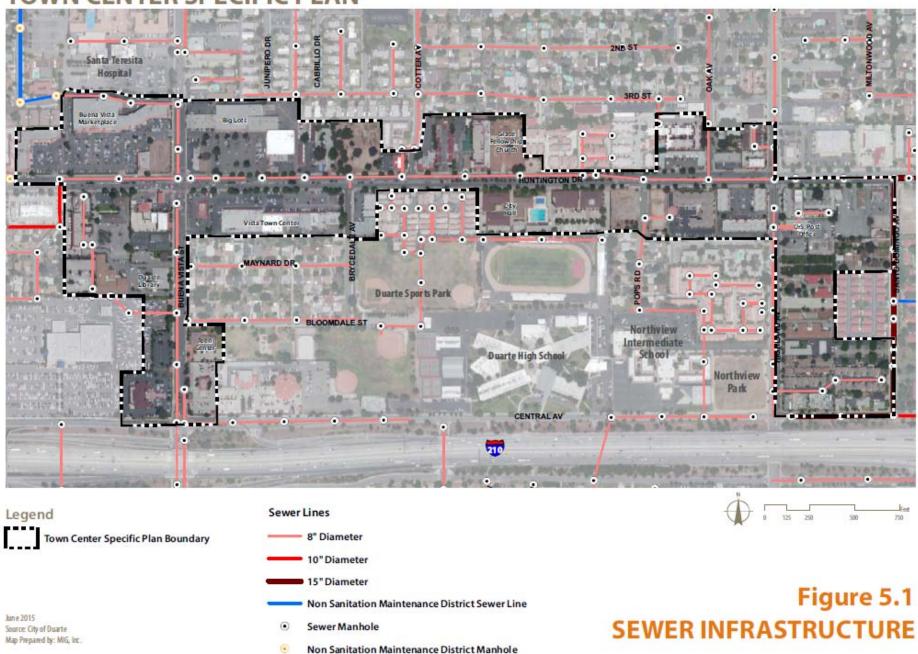
Duarte's local sewer lines and access manholes are shown in Figure 5.1. Sewer lines, which are typically eight inches in diameter, are located throughout the Specific Plan area in public street rights-of-way. Located adjacent to the western and eastern edges of the Specific Plan area are larger, 10- and 15-inch sewer lines.

The District collects and administers funds for the ongoing health of sewer infrastructure, including repairs to the sewer collection system and pump stations. The District's Condition Assessment Program follows a ten-year cycle which includes Closed Circuit Television (CCTV) inspection of the sanitary sewer lines to identify maintenance and structural issues. In 2009, LACDPW's CCTV maintenance inspection of the sewer system revealed that approximately 90.5 percent of Duarte's system was free of blockages or restrictions that would impede sewer flows.³ The remaining 9.5 percent of the inspected pipe segments within the Duarte area had a "poor" maintenance grade. Two of these segments are located in the Specific Plan area, on Huntington Drive between Oak and Cotter Avenues, which had issues associated with tree root intrusion. These segments were incorporated into LACDPW's routine cleaning schedule and corrective action taken. As part of the CCTV structural inspection, it was identified that approximately 95.3 percent of inspected pipe segments within Duarte were free of severe structural defects. The remaining 4.7 percent of the inspected pipe segments had a structural grade of "poor" or "immediate attention required." Included in these was one section located on Huntington Drive just west of Calle Mariposa and a second segment on Highland Avenue just south of 2nd Street. Both of these segments had breaks in the sewer line, but required no corrective action as the structural integrity was deemed intact.

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³ The 2009 Condition Assessment Program did not include the areas within the Specific Plan located on Buena Vista Street or on Huntington Drive west of Buena Vista Street.

TOWN CENTER SPECIFIC PLAN



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All new development is reviewed by the City of Duarte to determine if local sewer lines have sufficient capacity to accommodate effluent from new development. The City charges new developments a fee to upgrade or extend local sewer lines, which would be necessary to accommodate new developments. The LACDPW requires the satisfactory completion of capacity study by a private registered civil engineer prior to giving approval for projects that can affect the capacity of the public sewer system. All new developments are required to pay fees to mitigate local wastewater conveyance impacts.

5.5 FLOODING AND STORM DRAINAGE INFRASTRUCTURE

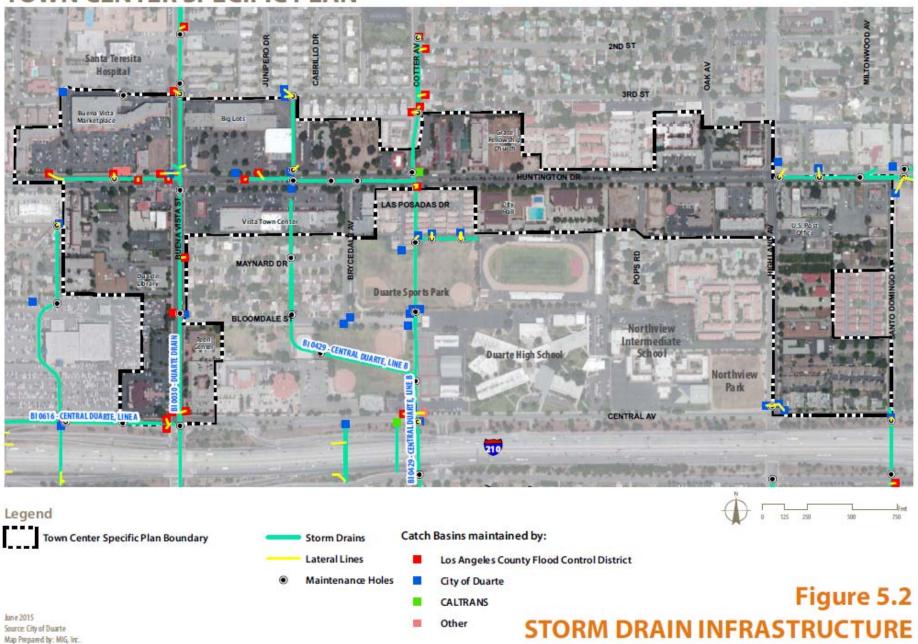
Stormwater

Stormwater refers to precipitation and irrigation runoff that collects on streets and in gutters, along with any other particles and substances that the runoff carries along with it. Considerable stormwater volumes can be generated during a significant rain storm, potentially resulting in the runoff overwhelming the local collection and conveyance infrastructure. Duarte's location at the base of the San Gabriel Mountains exposes it to the storm flows that come down the canyons. The Los Angeles County Flood Control District provides the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including 500 miles of open channel, 2,800 miles of underground storm drain and an estimated 120,000 catch basins. The District encompasses more than 3,000 square miles, 85 cities, including the City of Duarte, and approximately 2.1 million land parcels. The storm drain system represents critical infrastructure in the Specific Plan area's highly developed and impervious environment.

The drainage system in the Specific Plan area is made up of a network of reinforced concrete pipe storm drains. Storm drains are located underground, predominately in the western part of the Specific Plan area (west of Cotter Avenue) where there is higher concentration of commercial development (Figure 5.2). The eastern end of the Plan area (east of Highland Avenue), is also served by a storm drain. Storm water drainage from individual properties is facilitated by lateral lines that connect to the storm drain system. Catch basins are located throughout the Specific Plan area with a concentration around the Huntington Drive and Buena Vista intersection. The catch basins prevent clogging of storm drains by sediment and debris washed off streets and other surfaces. Most of catch basins are maintained by the Los Angeles County Flood Control District or the City of Duarte. The storm drain manholes shown on Figure 5.2 provide access to storm drain pipes for inspection and maintenance.

Stormwater quality is a significant concern in southern California, as stormwater runoff is a significant contributor to local and regional pollution and the largest source of unregulated pollution to the waterways and coastal areas of the United States. Federal, State and regional regulations require the City of Duarte to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development or significant development. The City of Duarte requires completion of a Storm Water Pollution Prevention Plan (SWPPP) prior to any construction activity on projects that would disturb more than one acre of land. The SWPPP must identify the source control and/or treatment control practices (best management practices, or BMPs) that would significantly reduce, avoid or mitigate runoff pollutants to the maximum extent practicable.

TOWN CENTER SPECIFIC PLAN



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Flooding

Flood Insurance Rate Maps (FIRMs) show the extent to which areas of a community and individual properties are at risk for flooding. These flood maps help residents and business owners make better financial decisions about protecting their property. Most of the Specific Plan area is located in Zone X on FEMA Flood Insurance Rate Map (FIRM), or areas of minimal flood hazard, which are the areas outside the Special Flood Hazard Areas and higher than the elevation of the 0.2-percent-annual-chance flood. The entire Buena Vista Street right-of-way within the Specific Plan area is located in an area of undetermined flood hazard (Zone D). In this area, there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted.

5.6 UTILITY AND SAFETY SERVICE PROVIDERS

Phone/Cable/Internet

Cable television service is provided by Charter Communications. Charter Communications also offers internet and telephone service. Telephone is also available to Duarte residents through Verizon, which also offers cable and internet services in some areas. It is anticipated that one (or both) of these providers would provide cable, internet and telephone service to the Specific Plan area.

Fire and Police

Fire protection services are provided to Duarte by the County of Los Angeles Fire Department (LACFD). LACFD is divided into 22 Battalions, each serving a territory or multiple cities in Los Angeles County. Battalion 16 provides service to Duarte, Covina, Baldwin Park and Azusa. The Battalion operates out of eight fire stations located within this service area. Fire Station #44 is located at 1105 S. Highland Avenue, in Duarte, directly adjacent to the Specific Plan area at the southwest corner of Highland Avenue and 3rd Street.

The City of Duarte General Plan includes a Safety Element, which identifies potential safety hazards, including fires, and establishes goals, objectives and policies to protect life and property from these hazards. The element provides recommendations to minimize the risk to lives and property due to fire hazards and ensures that adequate emergency response can be provided when needed. Duarte's location at the base of the San Gabriel Mountains creates an urban/wildland interface that makes the northern portions of Duarte more susceptible to wildfires. The Specific Plan area is not located adjacent to the San Gabriel Mountains or wildland areas. The General Plan identifies the Specific Plan area as located within a low fire hazard area.

Police protection services are provided to Duarte by the County of Los Angeles Sheriff's Department. The Department has a satellite station located at 1042 Huntington Drive, located less than a quarter-mile from the western edge of the Specific Plan area. The Duarte Satellite Station located at 1042 Huntington Drive is the launching center for 30 officers that provide Duarte, Bradbury and the unincorporated area west of Duarte with law enforcement services 24 hours a day. The station does not have dispatch or booking ability.

5.7 KEY FINDINGS AND PRELIMINARY RECOMMENDATIONS

- No significant deficiencies that require immediate action have been identified to the existing sewer and storm drainage systems. CalWater is planning an infrastructure upgrade to accommodate future development projects within the Duarte System. The Town Center Specific Plan will assess the demand and potential impacts for future development within the Specific Plan area, and will require the satisfactory completion of all appropriate studies prior to giving approval for projects that can affect the capacity of these public infrastructure systems.
- In order to ensure continued infrastructure capacity, the Town Center Specific Plan should require that new development within the Specific plan area fund fair-share costs associated with the provision of water, sewer and storm drain service and are consistent with City and service provider plans to complete needed improvements and funding capacity for such improvements.
- To achieve sustainability goals and mandates, the Specific Plan should encourage the use of design features, including those focusing on stormwater design, which would limit the disruption and pollution of natural water flows by managing stormwater runoff. Development standards should ensure that future projects provide landscaping areas and use pervious paving systems and subsurface retention systems that allow stormwater to infiltrate the site.





Duarte Town Center Specific Plan Traffic Study

draft report

prepared for

MIG, Inc.

prepared by

Cambridge Systematics, Inc.

May 26, 2016

draft report

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date

May 26, 2016

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1.0 Executive Summary

This traffic impact report describes the results of the existing and future transportation conditions analysis conducted as part of the Duarte Town Center Specific Plan project. As part of the analysis, 10 key intersections in the project area have been assessed to determine level of service and current and future with project operating conditions. The traffic impact analysis is necessarily programmatic in nature since the plan estimates long term land use characteristics and cannot precisely specify the location or size of specific land uses. As such, the final land use plans, building footprints, driveway locations, building size and lane use type will vary depending on market conditions over the next twenty years. Thus, the traffic forecasts represent reasonable estimates of traffic flow in the future, but they are subject to change based on the actual land use patterns and development activity that occurs over time.

The 10 study intersections are currently operating at an acceptable LOS (LOS D or better) according to City performance criteria with the exception of the stop-controlled Huntington Drive/Cotter Avenue during the AM peak hour and Huntington Drive/Mount Olive during the PM peak hour, both of which currently operate at LOS E conditions.

The project would result in the change or turnover in land uses over time and would remove some trips due to land uses that go away and add new trips due to other land uses that are developed. The net change in trips is estimated to be 315 during the AM peak hour and 916 during the PM peak hour. The ambient traffic growth rate would result in a worsening of levels of service at several of the study intersection locations. The project is a plan, and as such, the specific location of buildings, density of development on specific parcels and access locations are not known. Thus, the traffic impact study is programmatic in detail due to the project definition.

Under the Existing With Project scenario there would be one significant impact, based on City of Duarte thresholds of significant traffic impacts. Under the Future 2036 With Project scenario there would be five significantly impacted intersections. Recommendations for mitigation are provided to ensure efficient operations at the significantly impacted locations. Assuming implementation of recommended mitigation measures, the project traffic impact at the mitigated intersections is reduced to a level considered less than significant during the AM and PM peak hours for both scenarios.

Since no CMP mainline freeway monitoring location is forecast to receive 150 or more project-generated trips during either the AM peak hour or the PM peak hour, there are no freeway CMP monitoring location impacts, and similarly, there are no impacts to any CMP arterial monitoring location.

2.0 Study Area Roadways Description

The following briefly describes the key roadways within and near the study area. In addition to the I-210 freeway which runs through the City south of the study area, the streets in Duarte are classified within the General Plan Circulation System Master Plan as one of the following types of roadways:

- Principal Arterial;
- Minor Arterial;
- Collector Street; or
- Local Street.

In general, Principal Arterials are intended to serve higher volumes of traffic, including some nonlocal traffic and to have a greater capacity for vehicle throughput, while still serving adjacent land uses. Minor Arterials are similar in function, but carry less traffic and are more local serving in nature and are intended to serve mostly local intracity trips and to serve driveways along the route. Collector streets function to carry vehicles from local residential streets to the arterial system and are not designed to carry any nonlocal traffic. Local streets are intended only for access to and from abutting land uses, whether they be residential or commercial, and the traffic volumes are generally very low on local streets.

Interstate 210 (I-210) Freeway provides regional access for the project site as a six- to eight-lane freeway facility, traversing Southern California in an east-west orientation. I-210 originates on the west end near the Sylmar neighborhood of Los Angeles at I-5 and continues east to its terminus at its interchange with State Route 57 (SR-57) in the Glendora area. I-210 continues east as State Route 210 (SR-210) from Glendora to its eastern terminus in San Bernardino.

Huntington Drive is classified in the City's General Plan as a Principal Arterial and it is a four-lane divided roadway with a raised median trending in an east-west direction. The posted speed limit is 40 miles per hour on Huntington Drive within the project vicinity; on-street parking is permitted. Huntington Drive is included as a component of Historic U.S. Route 66.

Buena Vista Street is classified in the City's General Plan as a Minor Arterial and it is a four-lane undivided roadway trending in a north-south direction. The posted speed limit is 35 miles per hour on Buena Vista Street within the project vicinity; on-street parking is generally permitted except for the segment between Central Avenue and Huntington Drive, where most of the on-street parking is restricted.

Highland Avenue is classified in the City's General Plan as a Minor Arterial and it is a four-lane undivided roadway trending in a north-south direction. The posted speed limit is 35 miles per hour on Highland Avenue within the project vicinity; on-street parking is permitted.

Cotter Avenue is classified in the City's General Plan as a Collector Street and it has one lane in each direction to the north of Huntington Drive; on-street parking is permitted.

3.0 Traffic Volumes

The City of Duarte General Plan collected traffic volumes for key roadways in the City and also included traffic volume projections to the year 2020. While those projections would likely be different if developed today due to changing development patterns, they provide a general guidance to likely traffic flow in the key streets within the study area. Below is a summary of the 2007 average daily traffic (ADT) counts and projections as of the date of the General Plan as well as the General Plan 2020 projections.

As shown, the highest volume street in the study area is Huntington Drive, with nearly 24,000 vehicles per day in 2007 and a projected volume of nearly 31,000 vehicles by 2020. Daily traffic flow for key arterials in the study area is summarized below.

3.1 2007 General Plan Existing Traffic Counts

- Huntington Drive between Buena Vista Street and Highland Avenue 23,810 ADT.
- Buena Vista Street between I-210 Freeway and Huntington Drive 18,860 ADT.
- Buena Vista Street north of Huntington Drive 11,310 ADT.
- Highland Avenue between I-210 Freeway and Huntington Drive 11,480 ADT.
- Highland Avenue north of Huntington Drive 3,750 ADT.

3.2 2020 General Plan Traffic Projections

- Huntington Drive between Buena Vista Street and Highland Avenue 30,900 ADT.
- Buena Vista Street between I-210 Freeway and Huntington Drive 23,600 ADT.
- Buena Vista Street north of Huntington Drive 13,800 ADT.
- Highland Avenue between I-210 Freeway and Huntington Drive 14,600 ADT.
- Highland Avenue north of Huntington Drive 5,100 ADT.

4.0 Traffic Flow on Huntington Drive

Huntington Drive is the primary arterial facility serving the study area and nearly all future Specific Plan study area land uses. During the peak hour, the directional traffic counts along Huntington Drive are significantly unbalanced, indicating a strong directional flow that is most likely a result of commute patterns from home to work and back. For example, based on the May 2015 traffic counts (appendix includes existing traffic counts), during the AM peak hour; the predominate direction of travel on Huntington Drive is westbound with approximately 1,600 westbound vehicles per hour traveling on Huntington Drive (or about 800 vehicles per lane which is close to the capacity of the roadway). During the same AM peak hour, in the eastbound direction the volume of traffic is only around 400 vehicles. Conversely, during the PM peak hour, the eastbound flow is approximately 1,400 to 1,500 vehicles per hour on Huntington Drive within the study area, and 600 vehicles in the westbound direction. Thus, while the daily volume of traffic overall on Huntington Drive is not excessive for a Principal Arterial facility (with four through lanes), the highly peaked directional flow of traffic means that during peak hours in the peak direction much of the available capacity of the roadway being used. On Huntington Drive that results in very high westbound traffic flow in the mornings and high eastbound flow in the afternoon/evening peak periods. Also, when the I-210 freeway is congested, Huntington Drive can act as a freeway alternative and at those times Huntington Drive experiences higher traffic flow and congestion as a result of traffic diverting from the freeway.

5.0 Intersection Analysis

The intersection operations analysis estimated the current operational performance of 10 signalized and unsignalized intersections in the project study area. The study intersections analyzed are the following:

- Huntington Drive and Mountain Avenue. Signalized intersection, operated by the City of Duarte.
- Huntington Drive and Buena Vista Street. Signalized intersection, operated by the City of Duarte.
- Huntington Drive and Highland Avenue. Signalized intersection, operated by the City of Duarte.
- Huntington Drive and Mount Olive Street. Signalized intersection, operated by Caltrans.
- Central Avenue and Buena Vista Street. Signalized intersection, operated by Caltrans.
- I-210 WB On-Ramp and Buena Vista Street. Signalized intersection, operated by Caltrans.
- I-210 EB On-Ramp and Buena Vista. Signalized intersection, operated by Caltrans.
- Huntington Drive and Cotter Avenue. Unsignalized intersection.
- Central Avenue and Highland Avenue. Signalized intersection.*
- Central Avenue and I-210 WB Off-Ramp. Unsignalized intersection.
- * Note that Central and Highland intersection was controlled by stop signs at the time the traffic counts were collected, but by August 2015 a new traffic signal had been installed and was operating (the signal was in place but nonoperational at the time the counts were taken). Because the traffic signal is now installed and will continue be in place for all future scenarios, the intersection of Central Avenue and Highland Avenue is assessed as a signalized intersection under all scenarios.

Traffic counts were collected on May 2015, and covered 2 hours in the AM peak and 1 hour and 30 minutes in the PM peak. From there, the AM and PM peak hours were estimated by calculating the highest consecutive hourly traffic flows for every intersection. The count data are summarized in Table 5.1.

Table 5.1 Traffic Counts (May 2015)

AM Peak Hour Volume												
ID Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1 Huntington Ave & Mountain Ave	208	453	94	96	358	71	87	322	83	131	1249	292
2 Huntington Ave & Bella Vista S	141	228	71	47	193	80	71	271	117	88	1449	74
3 Huntington Ave & Highland Ave	85	72	183	67	143	32	28	311	78	405	1455	60
4 Huntington Ave & Mt Olivie St	715	131	212	46	342	85	60	265	194	366	1126	99
5 Central Ave & Buen Vista St	40	291	251	38	422	8	3	15	41	348	160	235
6 I210 WB On Ramp & Buena Vista	86	588	0	0	572	229	0	0	0	0	0	0
7 I210 EB On Ramp & Buena Vista	0	439	172	250	369	0	324	12	304	0	0	0
8 Huntington Ave & Cotter Ave	30	0	7	8	0	56	30	335	2	7	1593	6
9 Central Ave & Highland Ave	83	153	116	67	429	114	39	97	76	243	242	62
10 Central Ave & I210 WB Off Ramp	287	0	96	1	0	5	4	328	0	0	488	6
				PM Peak	Hour Volur	ne						
ID Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1 Huntington Ave & Mountain Ave	135	356	160	251	457	49	61	1164	240	164	488	138
2 Huntington Ave & Bella Vista S	161	242	121	168	267	73	105	1238	189	110	484	67
3 Huntington Ave & Highland Ave	100	115	281	63	55	36	22	1243	107	100	467	41
4 Huntington Ave & Mt Olivie St	242	199	697	101	290	54	80	948	602	204	399	20
5 Central Ave & Buen Vista St	62	375	191	66	533	24	5	51	126	259	75	283
6 I210 WB On Ramp & Buena Vista	279	611	0	0	645	252	0	0	0	0	0	0
7 I210 EB On Ramp & Buena Vista	0	592	358	236	416	0	304	315	92	0	0	0
8 Huntington Ave & Cotter Ave	1	0	9	8	1	41	62	1413	9	5	635	24
9 Central Ave & Highland Ave	63	366	362	42	124	58	54	221	24	55	81	29
10 Central Ave & I210 WB Off Ramp	330	5	61	5	0	19	12	296	1	0	236	1

Three different methodologies were applied to estimate the Level of Service (LOS) for the intersections, consistent with other traffic studies completed in the City of Duarte. The three methodologies are: a) the Intersection Capacity Utilization (ICU), a planning-level method that is proven to accurately estimate intersection Level of Service for planning-level studies; b) the 2000 HCM signalized intersection method, the most rigorous analytical method to estimate the operational performance of signalized intersections and is required by Caltrans at their intersections; and c) the 2000 HCM unsignalized intersection method, which is considered the state-of-the-practice for analysis of unsignalized intersections. More specifically:

- For unsignalized intersections, 2000 HCM methodology for unsignalized intersections was used.
- For signalized intersections operated by the City of Duarte, the ICU method was used.
- For signalized intersections operated by Caltrans (at the I-210 ramp junctions), the 2000 HCM signalized intersection method was used (as per Caltrans standards and guidelines).

TRAFFIX 8.0 was the software tool used to conduct the analysis.

Level of Service (LOS) is a qualitative indicator that is used to describe the prevailing operating conditions on a roadway. It is a comprehensive measure that is representative of the various levels of congestion and delay experienced by motorists. Level of Service ranges from LOS A (excellent conditions) to LOS F (extreme congestion), with LOS A through D generally considered to represent acceptable conditions in an urban area. Table 5.2 presents a description of the six levels of service and shows the relationship between LOS and volume/capacity ratios and delay for intersections.

Level of Service Descriptions Table 5.2

Signalized Intersections

Level of Service	Description	Volume/Capacity Ratio or Seconds of Delay
A	Excellent operation. Little or no congestion and delay. Turning movements are easily made and most drivers have freedom of movement in traffic. All approaches to the intersections appear quite open.	<0.60 v/c or ≤10.0 seconds of delay
В	Very good operation. Little congestion and delay. Many drivers begin to feel somewhat restricted within platoons of vehicles. Approaches to the intersections may occasionally be fully utilized and traffic queues start to form.	0.61 to 0.70 v/c 10.1 to 20.0 seconds
С	Good operation. Light congestion and minor delays. Occasional backups on critical approaches at intersections. Occasionally drivers may have to wait more than 60 seconds and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.71 to 0.80 v/c 20.1 to 35.0 seconds
D	Fair operation. Congestion and delays on critical approaches, but intersections functional. Vehicles are sometimes required to wait more than 60 seconds during short peaks and wait through more than one signal cycle. There are no long-standing traffic queues.	0.81 to 0.90 v/c 35.1 to 55.0 seconds
E	Poor operation. Severe congestion and long delays. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes. Blockage of intersections may occur.	0.91 to 1.00 v/c 55.1 to 80.0 seconds
F	Forced flow. Jammed conditions. Total breakdown of traffic flows with stop-and-go operation. Backups from downstream locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approach lanes.	>1.00 v/c >80.0 seconds

6.0 Existing Conditions Intersection Analysis Findings

Results of the intersection analysis show that the majority of the intersections analyzed operate at LOS D or better, indicating generally good traffic operation conditions throughout the study area. The exceptions are two intersections that operate at LOS E; Huntington Drive and Cotter Avenue (unsignalized) during the AM peak and Huntington Drive and Mount Olive Street (signalized) during the PM peak. The detailed results for the AM and PM peak hours are summarized below.

6.1 Existing AM Peak Hour

During the AM peak hour, all intersections but one operate at LOS D or better. The unsignalized intersection of Huntington Avenue and Cotter Avenue, located at the core of the study area, is the only intersection operating at LOS E. As this is an unsignalized location, the LOS E result is likely due to vehicles on Cotter Avenue being required to wait for acceptable gaps in traffic on Huntington Drive before proceeding through the intersection, which leads to a higher average vehicle delay. The detailed results are summarized in Tables 6.1 and 6.2 for the AM and PM peak hours, respectively. The location of the intersections and the levels of service are illustrated in Figures 6.1 and 6.2.

Table 6.1 Existing AM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.769	-	С
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.731	_	С
3	Huntington Drive and Highland Avenue	Signalized ^a	alized ^a 0.688 –		В
4	Huntington Drive and Mount Olive Street	Signalized ^b	0.768	35.4	D
5	Central Avenue and Buena Vista Street	Signalized ^b	0.434	22.6	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.288	3.6	Α
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.499	24.8	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.271	42.3	E
9	Central Avenue and Highland Avenue	Signalized ^a	0.479	_	Α
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	0.721	28.0	D

^a Analysis based on ICU.

^b Analysis based on 2000 HCM Operations.

^c Analysis based on 2000 HCM Unsignalized.

6.2 **Existing PM Peak Hour**

During the PM peak hour, all intersections but one operate at LOS D or better. The signalized intersection of Huntington Avenue and Mount Olive Street is the only intersection operating at LOS E during the PM peak. The poor operational performance of the intersection can be attributed to high traffic volumes coming from the I-210 off-ramp and conflicting with East Huntington Drive traffic.

Table 6.2 Existing PM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.844	-	D
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.722	-	С
3	Huntington Drive and Highland Avenue	Signalized ^a	0.726	-	С
4	Huntington Drive and Mount Olive Street	Signalized ^b	1.115	71.0	E
5	Central Avenue and Buena Vista Street	Signalized ^b	0.478	26.4	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.427	9.1	А
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.603	24.5	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.097	23.5	С
9	Central Avenue and Highland Avenue	Signalized ^a	0.480	-	А
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	0.67	23.2	С

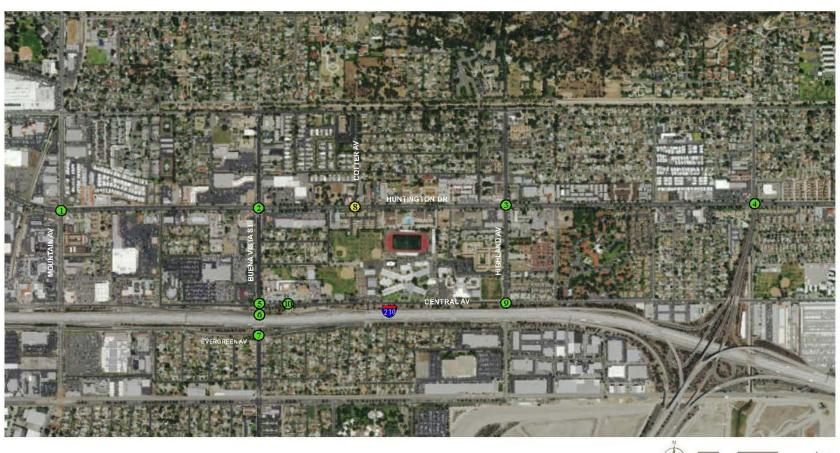
Analysis based on ICU.

^b Analysis based on 2000 HCM Operations.

Analysis based on 2000 HCM Unsignalized.

Figure 6.1 Intersection Analysis

AM Peak Hour



Legend

Intersections LOS



A-D



E



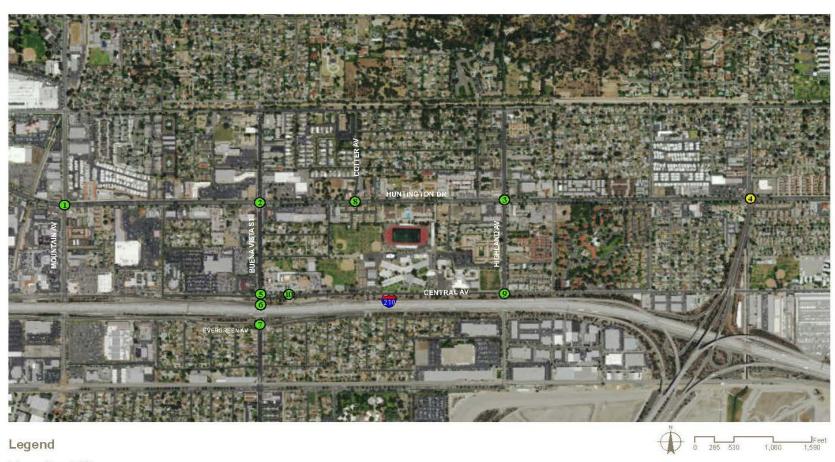
F

INTERSECTION ANALYSIS
AM PEAK HOUR

Source: City of Duarte Map prepared by Cambridge Systematics, Inc., August 2015.

Figure 6.2 Intersection Analysis

PM Peak Hour



Intersections LOS



A-D



) F

INTERSECTION ANALYSIS
PM PEAK HOUR

Source: City of Duarte Map prepared by Cambridge Systematics, Inc., August 2015.

7.0 Transit Services

Foothill Transit operates several bus routes within the study area, including Routes 187, 272 and 494 that operate along a portion of Huntington Drive. Foothill Transit Route 187 is a local bus route operating seven days a week, and the schedule changes on the weekend. This route goes west to Pasadena and east to the Montclair Transit Center. The frequency of scheduled times during peak times on weekdays is at intervals of 15 minutes. Route 272 is a local bus route operating seven days a week and the schedule changes on the weekends. This route originates in Duarte and travels southeast to The Plaza at West Covina via the Baldwin Park Metrolink. Route 494 is a commuter route, traveling west to the El Monte Station where passengers transfer to an express bus serving downtown Los Angeles via the I-10. To the east, the route terminates at the San Dimas Park and Ride. This route operates on weekdays only. Metro (Los Angeles) operates one bus route in the City which originates at the City of Hope in Duarte.

In addition, the City of Duarte has operated a free, fixed-route bus system since 1984. The buses operate Monday through Saturday, and have a current ridership of more than 24,400 per month. The Duarte Transit Green Route buses travel in a counterclockwise direction around the City, and complete the route once each hour. The Green Route's hours of operation are 5:45 a.m. to 7:15 p.m. Saturday service is provided on the Green Route from 7:45 a.m. to 6:15 p.m. The Blue route buses travel in a clockwise direction around the City, and complete the route once each hour. The route's hours of operation are 7:00 a.m. to 7:00 p.m., Monday through Friday. The green and blue routes are essentially circular, coming within a few blocks of any point in the City. During the week, the two buses travel in opposite directions, thereby allowing passengers to move either way along the route.

In addition to bus transit, a new Gold Line light rail transit station opened just south of the Specific Plan area in March 2016. The new station is located at the northwest corner of Duarte Road and Highland Avenue, just south of the I-210 freeway. The City of Duarte conducted Transit Study to assess service improvement strategies to Duarte Transit bus service, especially in light of the new Gold Line station's 2016 opening. As a result of the study, Duarte Transit realigned its routes to better serve the new station, thus providing key bus access to the Town Center area from the Metro Gold Line.

8.0 Threshold of Significance for Intersections

To determine whether the addition of project-generated trips at a signalized study intersection results in a significant impact, the following threshold of significance consistent with the Los Angeles County Congestion Management Program (CMP) (Los Angeles County Metropolitan Transportation Authority, July 2004) is applied:

 A significant traffic impact occurs when a proposed project increases traffic demand at a signalized study intersection by two percent or more of capacity (V/C > 0.02), causing or worsening LOS F (V/C > 1.00).

While the City of Duarte has not established thresholds of significance for unsignalized intersections, the following threshold of significance is assumed for this study:

 A significant traffic impact occurs at an unsignalized intersection when a proposed project increases the delay at an unsignalized intersection causing or worsening LOS E or F.

9.0 Project Trip Generation

The Duarte Town Center Specific Plan project could result in changes in land uses within the study area over time. To assess future changes in trips generated to and from the study area, the current and future projected land uses were reviewed and the changes in trips generated by the plan as compared to existing conditions has been assessed. Institute of Transportation Engineers (ITE) trip rates from the 8th edition of the ITE Trip Generation Manual were applied to the existing and planned land uses and quantities. The net change in trip generation was then determined and assessed on the roadway network and study intersections.

The study area was divided into a series of traffic analysis zones. Within each zone, the current and anticipated future land uses (due to the plan) were assessed. Trips associated with anticipated reductions and increases in each type and amount of land use were estimated for each zone using the ITE trip rates. Table 9.1 summarizes the applicable ITE trip generation rates used to calculate the number of trips forecast to be removed due to some uses going away and generated by the proposed added land uses. Rates are listed for the land uses that account for the vast majority of the future trips.

Table 9.1 ITE Trip Rates for Removed and Proposed Project Site Land Uses

	ITE		AM Peak Hou	r	PM Peak Hour				
Land Use Type	Code	In	Out	Total	In	Out	Total		
Residential									
 Single Fam. 	210	0.19	0.56	0.75	0.63	0.37	1.00		
 Multi Fam. 	221	0.10	0.36	0.46	0.38	0.20	0.58		
Hotel	310	0.31	0.22	0.53	0.31	0.29	0.60		
Retail	820	0.60	0.36	0.96	1.78	1.93	3.71		
Office	710	1.37	0.19	1.56	0.25	1.24	1.49		
Restaurant	931	0.66	0.15	0.81	5.02	2.47	7.49		

Note: Trips are per residential unit, hotel room, and thousand square feet of retail, office and restaurant.

Table 9.2 summarizes the estimated net changes in trip generation within the study area due to the changes in land use patterns that could result from the implementation of the Specific Plan. Since some land uses would be removed or changed in terms of quantity and others would be added, the net change in trips has been assessed taking into account the potential trips to be removed and trips to be added due to new/changed land uses. Appropriate adjustments for transit (nearby Gold Line Light Rail station) and pass-by trips were applied to the trip generation rates, consistent with standard practices as well as recent studies in the local vicinity. The Town Center Specific Plan will also result in many trips that stay within the study area due to the mixed use nature of the project. However, since it is not feasible to estimate the percentage of trips that may stay internal to the study area, no mixed use adjustment was applied, and this results in a reasonably conservative analysis. As shown, the project is estimated to result in a net increase in 315 trips during the AM peak hour and 916 trips during the PM peak hour.

Net Change in Trip Generation Due to Duarte Town Center Specific Plan **Table 9.2**

Land Use	Net Change in Trips AM Peak Hour	Net Change in Trips PM Peak Hour
Residential	417	524
Hotel	175	199
Retail	30	116
Office	83	79
Restaurant	72	662
Other Land Uses (civic, nursing home, church, service station)	-462	-664
Total Net Change in Trips	315	916

10.0 Scenarios Analyzed

The following scenarios have been analyzed for the Specific Plan traffic analysis, for the existing and future (20 year horizon) cases:

- Existing With Project existing traffic conditions based on current intersection traffic counts (collected during May 2015), plus the land use changes that would occur due to the project
- Future 2036 Without Project future conditions with other local and regional growth, without project land use changes
- Future 2036 With Project future conditions with other local and regional growth with land use changes and associated trips that would occur due to the project

The results of these scenarios are summarized below and in the following tables.

Table 10.1 Existing With Project AM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.778		С
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.737		С
3	Huntington Drive and Highland Avenue	Signalized ^a	0.707		С
4	Huntington Drive and Mount Olive Street	Signalized ^b	0.786	36.5	D
5	Central Avenue and Buena Vista Street	Signalized ^b	0.448	22.5	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.305	3.4	А
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.521	25.0	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.333	54.7	F
9	Central Avenue and Highland Avenue	Signalized ^a	0.487		Α
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	0.744	29.7	D

^a Analysis based on ICU.

^b Analysis based on 2000 HCM Operations.

^c Analysis based on 2000 HCM Unsignalized.

 Table 10.2
 Existing With Project PM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.899		D
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.898		D
3	Huntington Drive and Highland Avenue	Signalized ^a	0.766		С
4	Huntington Drive and Mount Olive Street	Signalized ^b	1.16	75.8	E
5	Central Avenue and Buena Vista Street	Signalized ^b	0.528	25.9	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.456	8.4	Α
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.642	25.6	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.175	34.4	D
9	Central Avenue and Highland Avenue	Signalized ^a	0.496		А
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	0.752	28.2	D

^a Analysis based on ICU.

halysis based on 2000 HCM Operations.

Analysis based on 2000 HCM Unsignalized.

 Table 10.3
 Future 2036 Without Project AM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Canacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.896	(Jeconds/Vernicle)	D D
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.851		D
3	Huntington Drive and Highland Avenue	Signalized ^a	0.802		D
4	Huntington Drive and Mount Olive Street	Signalized ^b	0.907	44.0	D
5	Central Avenue and Buena Vista Street	Signalized ^b	0.512	23.4	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.340	3.7	А
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.589	26.1	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.527	91.9	F
9	Central Avenue and Highland Avenue	Signalized ^a	0.566		А
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	1.013	69.0	F

Analysis based on ICU.
 Analysis based on 2000 HCM Operations.
 Analysis based on 2000 HCM Unsignalized.

 Table 10.4
 Future 2036 Without Project PM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.986		E
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.842		D
3	Huntington Drive and Highland Avenue	Signalized ^a	0.846		D
4	Huntington Drive and Mount Olive Street	Signalized ^b	1.316	112.5	F
5	Central Avenue and Buena Vista Street	Signalized ^b	0.564	27.7	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.504	9.7	А
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.712	26.6	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.187	35.5	Е
9	Central Avenue and Highland Avenue	Signalized ^a	0.566		А
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	0.905	46.7	E

^a Analysis based on ICU.

halysis based on 2000 HCM Operations.

Analysis based on 2000 HCM Unsignalized.

 Table 10.5
 Future 2036 With Project AM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	0.906		E
2	Huntington Drive and Buena Vista Street	Signalized ^a	0.858		D
3	Huntington Drive and Highland Avenue	Signalized ^a	0.820		D
4	Huntington Drive and Mount Olive Street	Signalized ^b	0.925	46.8	D
5	Central Avenue and Buena Vista Street	Signalized ^b	0.526	23.4	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.357	3.6	Α
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.612	26.3	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.657	134.1	F
9	Central Avenue and Highland Avenue	Signalized ^a	0.573		Α
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	1.042	75.5	F

 ^a Analysis based on ICU.
 ^b Analysis based on 2000 HCM Operations.
 ^c Analysis based on 2000 HCM Unsignalized.

 Table 10.6
 Future 2036 With Project PM Peak Hour Intersection Operations

ID	Intersection	Traffic Control	Volume/Capacity	Delay (Seconds/Vehicle)	Level of Service
1	Huntington Drive and Mountain Avenue	Signalized ^a	1.040		F
2	Huntington Drive and Buena Vista Street	Signalized ^a	1.008		F
3	Huntington Drive and Highland Avenue	Signalized ^a	0.885		D
4	Huntington Drive and Mount Olive Street	Signalized ^b	1.361	117.0	F
5	Central Avenue and Buena Vista Street	Signalized ^b	0.614	27.6	С
6	I-210 WB On-Ramp and Buena Vista Street	Signalized ^b	0.533	9.1	А
7	I-210 EB On-Ramp and Buena Vista Street	Signalized ^b	0.750	28.1	С
8	Huntington Drive and Cotter Avenue	Unsignalized ^c	0.341	69.3	F
9	Central Avenue and Highland Avenue	Signalized ^a	0.582		А
10	Central Avenue and I-210 WB Off-Ramp	Unsignalized ^c	1.003	65.5	F

^a Analysis based on ICU.

halysis based on 2000 HCM Operations.

Analysis based on 2000 HCM Unsignalized.

11.0 Impact Analysis Results – Intersection Levels of Service

Existing With Project Scenario – Existing traffic volumes (collected during May 2015) were used and the changes in trips anticipated due to the project (Table 9.2) were overlaid on top of existing conditions. The results are summarized in Tables 10.2 and 10.3 for the AM and PM peak hours, respectively. Results of the intersection analysis for the Existing With Project Scenario show that one project study intersection is projected to experience a significant impact during the AM peak hour (Huntington Drive/Cotter Avenue). This impact is primarily due to the fact that this location is unsignalized and at stop-controlled locations the delay for side street movements can increase as the major street volumes increase. In such cases, there are fewer gaps in traffic for the side street traffic to enter the major street traffic stream. At this study location, the overall intersection level of service is projected to change from LOS E to LOS F with the project traffic during the AM peak hour. During the PM peak hour, no intersections are estimated to reach LOS F.

Forecast Year 2036 Without Project Conditions Traffic Volumes – To derive forecast year 2036 without project traffic volumes (20 year horizon for the Plan), an annual growth rate of approximately 0.82 percent per year (18 percent total growth) was applied to existing traffic volumes (to account for all cumulative traffic growth and background regional traffic growth) consistent with the following documents:

- Los Angeles County Congestion Management Program (Los Angeles County Metropolitan Transportation Authority, July 2004);
- · Local City General Plan Analysis; and
- Other adopted recent traffic studies in the vicinity.

The detailed results of the 2036 without project analysis are summarized in Tables 10.4 and 10.5 for the AM and PM peak hours, respectively. Results of the intersection analysis for the Future without Project scenario show that all study locations would experience higher volume/capacity ratios and in some cases a worsening of level of service due to the background future growth that is projected to occur in 20 years. The Huntington Drive and Cotter Avenue intersection, as well as the Central and I-210 westbound off-ramp, under future conditions without project, are anticipated to reach LOS F during the AM peak hour, as well as Hunting Drive and Mount Olive Street during the PM peak hour.

Future 2036 With Project Scenario Intersection Analysis Findings – The detailed results of the Future with Project scenario are summarized in Tables 10.6 and 10.7 for the AM and PM peak hours, respectively. The Future 2036 Without Project results are then compared to the Future 2036 With Project results to estimate any possible significant impacts in the future resulting from the Plan. Results of the intersection analysis for the Future with Project scenario indicate the following:

• AM Peak hour – two significant impacts are projected during the AM peak hour; at Huntington Drive/Cotter Avenue and Central Avenue/I-210 WB off-ramp. Both of these locations are currently unsignalized. These impacts are primarily due to the fact that both locations are unsignalized and at stop-controlled locations the delay for side street traffic movements can increase as the major street volumes increase. This results in fewer gaps in traffic for the side street traffic to enter the major street, and thus greater delay for the side street stop-controlled movement. In this case, the overall intersection levels of service are projected to remain at LOS F, with the project worsening the LOS F conditions.

• PM Peak hour – five significant impacts are projected during the PM peak hour; at Huntington Drive/Mountain Avenue, Huntington Drive/Buena Vista Street, Huntington Drive/Mt. Olive Street, Huntington Drive/Cotter Avenue and Central Avenue/I-210 WB off-ramp. Due to future traffic growth to the year 2036, all five locations are projected to operate at LOS E or F before the project, with the project resulting in four of the five locations moving into LOS F and one worsening the LOS F condition.

The potential project impacts related to the impact categories are summarized below.

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the
 performance of the circulation system, taking into account all modes of transportation including mass
 transit and non-motorized travel and relevant components of the circulation system, including but not
 limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
 - Result: Significant impacts at one intersection in the existing plus project scenario and five intersections in the future plus project scenario are projected. Mitigation measures would fully mitigate the project impacts with no adverse significant impacts after mitigation.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
 - Result: No anticipated impact as this plan will not generate sufficient traffic on the freeway or CMP arterial monitoring system locations to warrant CMP analysis.
- 3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
 - Result: No anticipated impact as this plan will not affect air traffic patterns.
- 4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
 - Result: No anticipated impact as this plan will not affect design features or result in a substantial increase in hazards.
- 5. Result in inadequate emergency access.
 - Result: No anticipated impact as this plan will not result in inadequate emergency access with implementation of recommended mitigation measures.
- 6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
 - Result: No anticipated impact as this plan will be in conformance with all applicable policies plans and programs regarding public transit, bicycle and pedestrian facilities.

12.0 Proposed Mitigation Measures

The project is a plan and as such the project description is limited to zoning designations and parcel size and assumed parcel coverage with no specific information on future access location/driveways. Furthermore, the specific location and density of development is not known, it is only generally prescribed by the plan as maximum allowable development. This programmatic level of detail is matched by the level of detail in the recommended mitigation measures. The mitigation recommendations are developed at a concept level, and may change based on the actual location, type and density of development that occurs over time. The actual development patterns may affect or change the actual future traffic flow, the future critical movements at intersections and the specific intersection mitigations to be implemented. The concept mitigation measures are described below:

- Huntington Drive/Cotter Avenue and Central Avenue/I-210 WB Freeway off-ramp these two locations are both currently stop sign controlled. The recommended mitigation measure is to install traffic signal controls when warranted and approved by the City Traffic Engineer and Caltrans (Caltrans approval for the Central Avenue/I-210 WB off-ramp location). Traffic conditions should be monitored over time as the Specific Plan land uses are implemented and traffic signal warrants should be periodically reviewed to determine if or when applicable warrants are met and the locations satisfy the standards for installation of a traffic signal. With installation of traffic signals, the level of service would be acceptable at both locations under Future with Project conditions (assuming maximum buildout).
- Huntington Drive/Mount Olive Street This intersection serves as the terminus of the I-605 freeway. The critical and heaviest traffic movement in 2036 is the northbound right turn, which will have a demand of over 800 vehicles per hour. This relatively large right turn movement is a result of the traffic demand exiting the freeway in the northbound direction. The recommended mitigation measure at this location is to add a fourth northbound lane, to create a dual right turn lane in addition to a left turn lane and a shared through left turn lane. With this mitigation measure, the level of service would be improved to LOS E and the significant impact would be fully mitigated.
- Huntington Drive/Buena Vista Street The critical traffic movement at this location is the southbound
 left turn, with a demand of over 200 vehicles per hour in 2036. This traffic movement feeds traffic into
 the study area. The recommended mitigation measure is to, at the appropriate time and when traffic
 volumes and conditions warrant in the future, provide double southbound left turn lanes. With this
 mitigation measure, the level of service would be improved to LOS E and the significant impact would be
 fully mitigated.
- Huntington Drive/Mountain Avenue The critical traffic movement at this location is the southbound
 left turn, with a demand of over 300 vehicles per hour in 2036. The recommended mitigation measure is
 to, at the appropriate time and when traffic volumes and conditions warrant in the future, provide double
 southbound left turn lanes. With this mitigation measure, the level of service would be improved to LOS
 E and the significant impact would be fully mitigated.

13.0 Los Angeles Congestion Management Program (CMP) Analysis

According to the Los Angeles County CMP (Los Angeles County Metropolitan Transportation Authority), proposed projects which meet the following criteria, shall be evaluated:

- All CMP arterial monitoring intersections, including monitored freeway on or off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. weekday peak hours (of adjacent street traffic).
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The Los Angeles County CMP, Appendix D, states that "CMP TIA [Traffic Impact Analysis] guidelines, particularly intersection analyses, are largely geared toward analysis of projects where land use types and design details are known. Where likely land uses are not defined (such as where project descriptions are limited to zoning designation and parcel size with no information on access location), the level of detail in the TIA may be adjusted accordingly. This may apply, for example, to some redevelopment areas and citywide general plans, or community level specific plans. In such cases, where project definition is insufficient for meaningful intersection level of service analysis, CMP arterial segment analysis may substitute for intersection analysis."

Despite the fact that no intersection analysis is required by the LA County CMP for Specific Plan projects this traffic study includes a full analysis of key study intersections in the vicinity of the plan area. Based on a review of CMP monitoring locations, there are no CMP arterial monitoring intersections that would experience 50 or more trips due to the project. There are three freeway monitoring locations in the vicinity of the project area, on I-210 to the west, I-210 to the east and I-605 to the south. None of these three CMP freeway monitoring locations would experience 150 or more project related trips in either direction during either peak hour, thus no further analysis is required.

APPENDIX

Intersection Level of Service Worksheets

City of Duarte Environmental Impact Report

Existing AM

Intersection Volume Report Base Volume Alternative

Node	Intersection		rthbo - T -			uthbo - T -			stbou - T -			estbou T -	
1	Huntington Dr	208	453	94	96	358	71	87	322	83	131	1249	292
2	Huntington Dr	141	228	71	47	193	80	71	271	117	88	1449	74
3	Huntington Dr	85	72	183	67	143	32	28	311	78	405	1455	60
4	Huntington Dr	715	131	212	46	342	85	60	265	194	366	1126	99
5	Central Ave &	40	291	251	38	422	8	3	15	41	348	160	235
6	I210 WB On Ra	86	588	0	0	572	229	0	0	0	0	0	0
7	I210 EB On Ra	0	439	172	250	369	0	324	12	304	0	0	0
8	Huntington Dr	30	0	7	8	0	56	30	335	2	7	1593	6
9	Central Ave &	83	153	116	67	429	114	39	97	76	243	242	62
10	Central Ave &	287	0	96	1	0	5	4	328	0	0	488	6

Existing AM Wed May 25, 2016 10:00:44 Page 4-1 City of Duarte

Environmental Impact Report
Existing AM

Existing AM												
	Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************											
	Intersection											
Cycle (sec): Loss Time (se			00 6			Critic Averag	e Dela	ay (se	ec/veh)	:	0.7 xxxx	кхх
Optimal Cycle			49 ******	****	****	Level *****				*****	****	C *****
Street Name:			Mounta						Hunting			
Approach: Movement:	L -		- R	L -	- Т	ound - R	L -	- T	- R	L -		- R
Control: Rights:	-	rotect Incl	ted	-	rotect Incl	ide	-	otect Incl	ed		otect Incl	ed
Min. Green: Y+R: Lanes:	0 4.0 1		0 4.0 1 0	4.0	0 4.0) 1	0 4.0 1 0	0 4.0 1 (0 4.0 0 1	0 4.0 1 (0 4.0 0 1
Volume Module	ı											
Base Vol:	208	453	94	96	358	71	87	322	83		1249	292
Growth Adj: Initial Bse:	1.00	1.00	1.00 94	1.00	1.00 358	1.00 71	1.00	1.00	1.00	1.00	1.00	1.00 292
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00 453	1.00	1.00	1.00 358	1.00 71	1.00	1.00	1.00	1.00	1.00 1249	1.00 292
PHF Volume: Reduct Vol:	208	453	0	96	358	71	0	322	83 0	0	1249	292
Reduced Vol:	208	453	94	96	358	71	87	322	83		1249	292
PCE Adj:		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj: FinalVolume:	1.00 208	453	94	96	358	71	87	322	83	1.00 131	1249	292
Saturation F	I		 :									
Sat/Lane:		1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Lanes: Final Sat.:		1.66 2650	0.34 550		1.67 2670	0.33 530		2.00 3200	1.00 1600	1.00 1600		1.00 1600
Capacity Anal	I											
Vol/Sat: Crit Moves:	0.13	0.17	0.17		0.13		****	0.10	0.05	0.08	****	0.18
					, , , , , ,							

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Existing AM Wed May 25, 2016 10:00:44 Page 5-1 City of Duarte

Environmental Impact Report Existing AM

Level Of Service Computation Report													
ICU 1						ethod (*****						*****	
Intersection	#2 Hu	nting	gton Dr	& Bue	ena V	ista St							
******	*****			****	****					*****			
Cycle (sec):		10				Critic					0.5		
Loss Time (se									ec/veh)	:	XXXX		
Optimal Cycle			14			Level						C	
			sella V			*****						*****	
Street Name: Approach:					-	ound			Hunting		st Bo	aund	
Movement:			- R			- R						- R	
Rights:		Include Include Include Include											
Min. Green:		0 0 0 0 0 0 0 0 0 0											
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1 0	1	1 0	1 (1	1 0	1	0 2	0 1	1 0	2	0 1	
Volume Module:													
Base Vol:	141		71	47	193	80	71		117		1449	74	
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:		228	71	47	193	80	71		117		1449	74	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
PHF Volume:	141	228 0	71 0	47 0	193	80	71 0	271 0	117 0		1449	74	
Reduct Vol: Reduced Vol:	0 141	228	71	47	193	0 80	71	271	117	0	1449	0 74	
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
FinalVolume:			71	47		80	71		117		1449	74	
Saturation Fl	I			1		1	1		ı	1			
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	1.53	0.47	1.00	1.41	0.59	1.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:	1600	2440	760	1600	2262	938	1600	3200	1600	1600	3200	1600	
	I		1										
Capacity Anal	_												
Vol/Sat:	0.09	0.09	0.09	0.03	0.09	0.09		0.08	0.07	0.06		0.05	
Crit Moves:	****				****		****				****		
*****	*****	****	*****	****	****	*****	****	****	*****	*****	****	*****	

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City of Duarte

Environmental Impact Report Existing AM Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ******************* Intersection #3 Huntington Dr & Highland Ave ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 39 XXXXXX ************************* Street Name: Highland Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 85 72 183 67 143 32 28 311 78 405 1455 60 Initial Bse: 85 72 183 67 143 32 28 311 78 405 1455 60 -----|----||------| Saturation Flow Module: Lanes: 1.00 1.00 1.00 0.64 1.36 1.00 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 1600 1600 1600 1021 2179 1600 1600 3200 1600 1600 3200 1600 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.05 0.05 0.11 0.04 0.07 0.02 0.02 0.10 0.05 0.25 0.45 0.04 **** **** Crit Moves:

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Level Of Service Computation Report												
						(Base						
*****	****	****	*****	*****	*****	*****	****	*****	*****	****	*****	*****
Intersection *******							****	*****	*****	****	*****	*****
Cycle (sec):		10	0.0			Critic	al Vol	l./Car	o.(X):		0.7	768
Loss Time (se	ec):		9			Averag	e Dela	ay (se	ec/veh)	:	35	5.4
Optimal Cycle	⊋:	(00 9 52			Level						D
*****	****	****	*****	****	*****	*****	****	*****	*****	****	*****	*****
Street Name:			Mt Oli	vie St	_			F	Hunting	ton Di	r	
Approach:	Noi	rth Bo	ound	Sou	ith Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	Sp.	lit Pl	nase	Sp]	lit Ph	nase	Pı	cotect	ced	Pı	rotect	ted
Rights:		Incl	ude		Inclu	ıde		Inclu	ıde		Inclu	ıde
Min. Green:	0	0	0	0	0	0 4.0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:						1 0	. 1 () 2	0 1	. 1 (0 2	
Volume Module												
	715		212	46		85	60		194		1126	99
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			212	46	342	85	60	265	194		1126	99
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	
	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
	715		212	46	342	85	60	265	194 0		1126	99
Reduct Vol: Reduced Vol:		121	0	0	242	0	0	0			1126	0
PCE Adj:	1.00		212 1.00	1 00	342	85 1.00	1 00	265 1.00			1126	99 1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			212		342	85		265			1126	99
Saturation Fl				I		ı	I		ı	1		ı
Sat/Lane:	1900	1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85		0.92	0.92		0.95	0.85		0.95	0.85
Lanes:			1.00		1.60	0.40		2.00			2.00	1.00
Final Sat.:					2805			3610			3610	1615
Capacity Anal												
				0.03	0.12	0.12	0.03	0.07	0.12	0.20	0.31	0.06
Crit Moves:	***				****		****				****	
Green/Cycle:	0.30	0.30	0.30	0.16	0.16	0.16	0.04	0.17	0.17	0.28	0.41	0.41
Volume/Cap:			0.43	0.16	0.77	0.77	0.77	0.44	0.72	0.72	0.77	0.15
Delay/Veh:		35.1	28.7		46.7	46.7	83.5	37.9			28.2	18.9
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	35.1		28.7	36.6	46.7	46.7	83.5	37.9	48.4	37.3	28.2	18.9
LOS by Move:	D	D	C	D	D	D	F	D	D	D	C	В
HCM2kAvgQ:	13	13	5	1	9	9	2	4	6	11	17	2
*****	****	****	*****	****	*****	*****	****	*****	*****	****	*****	*****
Note: Queue									*****	****	****	*****

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)												
******							****	****	*****	****	*****	:****
Intersection							****	****	*****	****	*****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle		10	0.0			Critic	al Vo	l./Car	o.(X):		0.4	134
Loss Time (se	ec):		6			Averag	e Dela	ay (se	ec/veh)	:	22	2.6
Optimal Cycle	:	:	24			Level	Of Se	rvice	:			C

Street Name: Approach:]	Buena \	7ista S	St	-	_		Centra	l Ave		_
Approach:	No	rth_Bo	ound_	Sot	uth_Bo	ound_	Ea	ast Bo	ound_	_ We	est Bo	ound_
	L - T - R L - T - R L - T - R L - T -											
Control:	P:	rotect	 ted	P1	rotect	 :ed	P1	rotect	 ted	P1	rotect	: :ed
Control: Rights:		Incl	ude		Inclu	ıde		Incl	ıde		Inclu	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	1 (0 1	1 0	1 (0 1	1 0	1 (0 C	1 0	1 (1	0 1
Volume Module												
Base Vol:												
Growth Adj:									1.00			1.00
Initial Bse:			251	38								235
User Adj: PHF Adj:	1.00	1.00	1.00								1.00	
			1.00	1.00				1.00			1.00	1.00
PHF Volume:	40	291	251	38		8	3	T 2		348		235
Reduct Vol: Reduced Vol:	40	201	251	20	422	0	0	1 5	0 41	2/10	160	225
PCE Adj:											1.00	
MLF Adj:												1.00
FinalVolume:												235
Saturation Fl				1		1	ı		ı	1		ı
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					0.95	0.95	0.95	0.89	0.89	0.95	1.00	0.85
Lanes:	1.00	1.07	0.93						0.73		1.00	1.00
Final Sat.:	1805	1804	1556	1805	3532	67	1805	453	1238	1805	1900	1615
Capacity Anal												
Vol/Sat:							0.00				0.08	0.15
Crit Moves:			0 0 0				0 01	****		****	0 =1	0 =1
Green/Cycle:											0.51	
Volume/Cap:						0.34					0.16	0.28
Delay/Veh:		23.8			23.8	23.8		46.5	46.5		13.0	14.0
User DelAdj: AdjDel/Veh:		23.8	1.00 23.8		1.00	1.00 23.8		1.00 46.5	1.00 46.5	1.00	1.00	1.00
LOS by Move:	46.3 D	23.8 C	23.8 C	49.7 D	23.8 C							14.0
HCM2kAvqQ:	1	6	6	р 1	5	C 5	E 0	D 2	D 2	В 7	В 2	В 4

Note: Queue 1												
*****									++++++	+++++		

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)												
******								****	*****	*****	****	*****
Intersection								****	*****	*****	****	*****
Cycle (sec):		10	0.0			Critic	al Vol	l./Car	o.(X):		0.2	288
Cycle (sec): Loss Time (secoptimal Cycle	ec):		3			Averag	e Dela	ay (se	ec/veh)	:	3	3.6
Optimal Cycle	≘:	1	14			Level	Of Sea	cvice	:			A

Street Name:	Buena Vista St I210 WB On Ramp North Bound South Bound East Bound West Bound											
Approach:	Nor	th Bo	ound	Soi	ath Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
	L - T - R L - T - R L - T - R L											
Control:	 Dr	otect		D1	cotect		D1	cotect			ot eat	
Control: Rights:	FI	Inali	1de	FI	Tnalı	ide	F	Inali	1de	FI	Tnalı	ide
Min. Green:	Λ	111010	0	Λ	111010	n n	Λ	111010	0	٥	111010	0
Y+R:	4 0	4 0				4 0	4 0	4 0	4 0	4 0	4 0	-
Y+R: Lanes:	1 0	2	0 0	0 () 1	1 0	0 (0	0 0	0 () ()	0 0
Volume Module							•			•		'
Base Vol:	86	588	0	0	572	229	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	588	0	0	572	229	0	0	0	0	0	0
User Adj:			1.00					1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00				1.00		1.00	1.00	1.00
PHF Volume:			0	0	572	229	0	0	0	0		0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	588									0	0
PCE Adj:			1.00						1.00			
MLF Adj:			1.00					1.00				1.00
FinalVolume:												0
Saturation F			-									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00			0.91		1.00		1.00		1.00
	1.00											0.00
Final Sat.:	1805	3610	0	. 0	2467	988	. 0	0	0	. 0	0	0
Capacity Anal												
Vol/Sat:		0.16	0.00	0.00		0.23	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:			0 00	0 00	****	0 00			0 00	0 00	0 00	0 00
Green/Cycle:								0.00		0.00		0.00
Volume/Cap:					0.29	0.29		0.00	0.00	0.00		0.00
Delay/Veh:	37.1		0.0	0.0	2.5	2.5	0.0	0.0	0.0		0.0	0.0
User DelAdj: AdjDel/Veh:	37.1		1.00		1.00	1.00 2.5	0.0	1.00	1.00	1.00	0.0	1.00
LOS by Move:		0.1	0.0	0.0	2.5 A						0.0 A	0.0
HCM2kAvqQ:	D 2	A 0	A 0	A 0	A 3	A 3	A 0	A 0	A 0	A 0	A 0	A 0
*********												-
Note: Queue 1												
++++++++++										. + + + + +		

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)												
******											****	*****
Intersection	#7 I2	210 EE	3 On Ra	I & qm.	Buena	Vista	St					
Cycle (sec): Loss Time (se Optimal Cycle	ec):		6			Averag	e Dela	av (se	c/veh)	:	24	1.8
Optimal Cycle	≘:	2	27			Level	Of Sei	rvice:	,			C
******	****	*****	*****	****	*****	*****	****	*****	*****	*****	****	*****
Street Name: Approach:		E	Buena V	ista S	St			I2	210 EB	On Ran	qn	
Approach:	No	rth Bo	und	Soi	ath Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
Movement:												
Control: Rights: Min. Green:	Pi	rotect	ed	Pı	rotect	ed	Pı	rotect	ed	Pı	rotect	ted
Rights:	0	Inclu	ıde	0	Inclu	ıde	0	Inclu	ıde	0	Inclu	ıde
Min. Green:	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	0
Y+R: Lanes:	4.0	4.0	0 1	1 (4.0	4.0	4.0	1 0	1 0	4.0	4.0	0 0
Lanes.		J <u>Z</u>	l	1	J <u>Z</u>		l		I	1		I
Volume Module	□ :		ı	ļ		I	İ		I	I		Į
Base Vol:									304			
Growth Adj:				1.00				1.00			1.00	
Initial Bse:			172	250	369	0	324	12	304		0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00		1.00				1.00	1.00	1.00	1.00
PHF Volume:	0	439	172	250					304	0	0	0
Reduct Vol: Reduced Vol:	0	0	0	0	0		0	0	0	0	0	0
				250	369							
PCE Adj:					1.00				1.00		1.00	
MLF Adj: FinalVolume:			1.00		1.00				1.00		1.00	
Finalvolume:												
Saturation Fl	•			1			1		I			I
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	0.04	0.96	0.00	0.00	0.00
Final Sat.:	0	3610				0				0		
Capacity Anal												
<pre>Vol/Sat: Crit Moves:</pre>	0.00	0.12	0.11	0.14	0.10	0.00	0.21 ****	0.20	0.20	0.00	0.00	0.00
								0 40	0 40	0 00	0 00	0 00
<pre>Green/Cycle: Volume/Cap:</pre>						0.00					0.00	0.00
Delay/Veh:			32.8		0.20	0.00		0.49 21.5	21.5	0.0	0.0	0.00
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		33.0	32.8		12.8	0.0		21.5	21.5	0.0	0.0	0.0
LOS by Move:	A. A	C	C	C	В	Α.	C C	C	C C	A. 0	Α.	Α
HCM2kAvgQ:	0	6	5	6	3	0	8	8	8	0	0	0
*****	****	*****		****		*****	****	*****	*****	****	****	*****
Note: Queue 1												
******	****	*****	*****	****	*****	*****	****	*****	*****	****	****	*****

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EXTECTING AN												
Level Of Service Computation Report												
2000 HCM Unsignalized Method (Base Volume Alternative)												
*****											****	*****
Intersection							*****	****	*****	*****	****	*****
Average Delay (sec/veh): 2.0 Worst Case Level Of Service: E[42.3] ************************************												
	Street Name: Cotter Ave Huntington Dr											
	NT	rth Bo			.+b D.	ound		ast Bo	-	_	r est Bo	
Approach: Movement:												
	L - T - R L - T - R L - T - R L - T - R											
Control: Rights:	51	cop Si Incli	_		دop S. Incl	ign	UII	contro Incl		UII	contro Incli	
_	0 (0 0			0 0	1	0 1		1 (0 2	
Lanes:											0 2	0 I
Volume Module Base Vol:	e: 30	^	7	0	^	56	30	335	2	-	1593	6
		1 00		1 00	0							
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	30	0	7	8	0	56	30	335	2		1593	6
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	30	0	7	8	0	56	30	335	2		1593	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	30	0	7	8	0	56	30	335	2	/	1593	6
Critical Gap Module:												
-			<i>c</i> 0	7 -	с г	<i>c</i> 0	1 1			1 1		
Critical Gp:		6.5 4.0	6.9 3.3	7.5 3.5		6.9 3.3			XXXXX			xxxxx
FollowUpTim:				3.3	4.0	3.3						
Capacity Mod	1											
Cnflict Vol:		2000	169	1025	2004	797	1500	35353535	xxxxx	227	35353535	xxxxx
Potent Cap.:		60	852	48	60	334			XXXXX			XXXXX
Move Cap.:	111	55	852	45	56	334			XXXXX			XXXXX
Volume/Cap:		0.00	0.01		0.00	0.17		XXXX			XXXX	
Level Of Ser	1											I
2Way95th0:			xxxxx	vvvv	~~~~	xxxxx	0.2	vvvv	xxxxx	0 0	vvvv	xxxxx
Control Del:									XXXXX			XXXXX
LOS by Move:		*	*	*	*	*	14.3 B	*	*	7.9 A		*
Movement:		_ T.TD	- RT	T.T.	_ т.тъ	- RT	_	- LTR	_ PT		- LTR	_ PT
Shared Cap.:						XXXXX			XXXXX			XXXXX
SharedOueue:			XXXXX			XXXXX						
Shrd ConDel:												
Shared LOS:	*	τ2.5 Ε	*	*	D	*	*	*	*	*	*	*
ApproachDel:		42.3			34.3			xxxxx		· ·	xxxxx	
ApproachLOS:		τ2.5 Ε			D		Λ.	*		Λ.	*	
*******	****		*****	*****		*****	*****	****	*****	*****	****	*****
Note: Oueue												
*****									****	****	****	*****

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Existing AM Thu Jun 2, 2016 09:08:53 Page 12-1 City of Duarte

Environmental Impact Report Existing AM

Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************													
Intersection													
**********							****	****	*****	*****	*****		
Cycle (sec):		1	00			Critic	al Vol	l./Car	o.(X):	0.4	479		
Loss Time (se	ec):									: xxx			
Optimal Cycle			28			Level					A		
******	****	****	*****	****	****	*****	****	****	*****	*****	*****		
Street Name:			Highla	ind Ave	=				Centra	l Ave			
Approach:	North Bound South Bound East Bound									West B	ound		
Movement:									- R				
Control:	Permitted Permitted Permitted Permitted												
Rights:	Include Include Include Include												
		0	0		0	0		0	0		0		
Y+R:		4.0		4.0			4.0			4.0 4.0	4.0		
Lanes:			1 0			1 0			0 1	1 0 0			
Volume Module		1	116	67	400	114	2.0	0.7	7.0	042 040	60		
Base Vol:	83			67			39	97 1.00	76	243 242 1.00 1.00	62 1.00		
Growth Adj: Initial Bse:	1.00		1.00 116	67	1.00	1.00 114	39	97	1.00 76	243 242	62		
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00 1.00	1.00		
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00 1.00	1.00		
PHF Volume:	83	153	116	67	429	114	39	97	76	243 242	62		
Reduct Vol:	0			0	0	0	0	0	0	0 0	0		
Reduced Vol:	83	153	116	67	429	114	39	97	76	243 242	62		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00		
FinalVolume:	83	153	116	67	429	114	39	97	76	243 242	62		
Saturation Fl	ow Mo	odule	:										
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600 1600	1600		
Adjustment:	1.00	1.00			1.00	1.00		1.00	1.00	1.00 1.00	1.00		
		0.87			1.41	0.37		0.71		1.00 0.80	0.20		
Final Sat.:					2250			1141		1600 1274	326		
Capacity Anal	_			0 04	0 10	0 10	0 00	0 00	0 05	0 15 0 10	0 10		
Vol/Sat:	0.05	0.11	0.11	0.04	0.19	0.19	0.02	0.09	0.05	0.15 0.19	0.19		
Crit Moves:		*****	*****	*****		*****	****		*****		*****		

	Existing AM												
Level Of Service Computation Report													
2000 HCM Unsignalized Method (Base Volume Alternative)													

Intersection #10 Central Ave & I210 WB Off Ramp													

	Average Delay (sec/veh): 8.9 Worst Case Level Of Service: D[28.0] ***********************************												
Street Name:		I	210 WB	Off Ra	amp				Centra	al Ave			
Approach:	Noi	rth B	ound	Sou	ath Bo	ound	Εá	ast Bo	ound		est Bo		
Movement:	L - T - R L - T - R L - T - R												
Control:	Stop Sign Stop Sign Uncontrolled Uncontrolled Include Include Include												
Rights: Lanes:			uae 1 0			0 0	0 -		0 0	0 () 1		
папеь.													
Volume Module				I I		ļ	I			1 1		I	
Base Vol:		0	96	1	0	5	4	328	0	0	488	6	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	287	0	96	1	0	5	4	328	0	0	488	6	
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00			1.00	1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	287	0	96	1	0	5	4		0	0	488	6	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	100	0	
FinalVolume: 287 0 96 1 0 5 4 328 0 0 488 6													
Critical Gap						I	1						
Critical Gp:	7.5		6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Modu													
Cnflict Vol:						247			XXXXX			XXXXX	
Potent Cap.:									xxxxx			XXXXX	
Move Cap.:	398								xxxxx			XXXXX	
Volume/Cap:					0.00				xxxx				
Level Of Serv							1						
2Way95thQ:			xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:										xxxxx			
LOS by Move:	D	*	*	*	*	*	A	*	*	*	*	*	
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	
Shared Cap.:				XXXX						XXXX			
SharedQueue:				xxxxx						xxxxx			
Shrd ConDel:				XXXXX		XXXXX				xxxxx *		XXXXX	
Shared LOS:		* 28.0		*	B 10.9	*	A					*	
ApproachDel: ApproachLOS:		28.U			10.9 B		XX	XXXXX *		XX	XXXXX *		
********	****	_		*****	_	*****	****	****	*****	*****	****	*****	
Note: Queue :	report	ced i	s the r	number	of ca	ars per	lane						

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Existing PM Wed May 25, 2016 10:01:42 Page 2-1 City of Duarte Environmental Impact Report

Existing PM

Intersection Volume Report Base Volume Alternative

		No	Northbound			uthbo	und	Εá	astbou	ınd	We	stbou	ınd
Node	Intersection	L -	L T R		L -	- T -	- R	L -	T -	R	L -	- T -	- R
1	Huntington Dr	135	356	160	251	457	49	61	1164	240	164	488	138
2	Huntington Dr	161	242	121	168	267	73	105	1238	189	110	484	67
3	Huntington Dr	100	115	281	63	55	36	22	1243	107	100	467	41
4	Huntington Dr	242	199	697	101	290	54	80	948	602	204	399	20
5	Central Ave &	62	375	191	66	533	24	5	51	126	259	75	283
6	I210 WB On Ra	279	611	0	0	645	252	0	0	0	0	0	0
7	I210 EB On Ra	0	592	358	236	416	0	304	315	92	0	0	0
8	Huntington Dr	1	0	9	8	1	41	62	1413	9	5	635	24
9	Central Ave &	63	366	362	42	124	58	54	221	24	55	81	29
10	Central Ave &	330	5	61	5	0	19	12	296	1	0	236	1

Existing PM Wed May 25, 2016 10:01:42 Page 4-1 City of Duarte

City of Duarte Environmental Impact Report												
		Existing PM	-									
	Level C	of Service Computa	tion Report									
		Length %) Method (
		**************************************	*****	*****								
		******	*****	******								
Cycle (sec):	100		al Vol./Cap.(X):	0.844								
Loss Time (sec		e Delay (sec/veh)	: xxxxxx									
Optimal Cycle:			Of Service:									

Approach: North Bound South Bound East Bound West Bound												
	L - T - R			L - T - R								
'	ol: Protected Protected Protected Protected											
Control: Rights:	Protected Include	Protected Include	Protected Include	Protected Include								
_	0 0 0	0 0 0	0 0 0	0 0 0								
	4.0 4.0 4.0			4.0 4.0 4.0								
Lanes:	1 0 1 1 0	1 0 1 1 0										
Volume Module: Base Vol:		251 457 49	61 1164 240	164 488 138								
Growth Adj: 1		1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
Initial Bse:		251 457 49	61 1164 240	164 488 138								
User Adj: 1	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
_	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
	135 356 160	251 457 49	61 1164 240	164 488 138								
Reduct Vol: Reduced Vol:	0 0 0 135 356 160	0 0 0 251 457 49	0 0 0 61 1164 240	0 0 0 164 488 138								
PCE Adj: 1		1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
-	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
		251 457 49	61 1164 240	164 488 138								
- Saturation Flo												
	1600 1600 1600	1600 1600 1600	1600 1600 1600	1600 1600 1600								
Adjustment: 1		1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00								
Lanes: 1	1.00 1.38 0.62 1.00 1.81 0.19 1.00 2.00 1.00 1.00 2.00 1.0											
Final Sat.: 1		1600 2890 310	1600 3200 1600	1600 3200 1600								
- Capacity Analy	ı											
	0.08 0.16 0.16	0.16 0.16 0.16	0.04 0.36 0.15	0.10 0.15 0.09								
Crit Moves:	***	***	***	***								

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Existing PM Wed May 25, 2016 10:01:42 Page 5-1 City of Duarte

Environmental Impact Report

Existing PM												
	Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************											
Intersection												
Cycle (sec): Loss Time (sec) Optimal Cycle	:	4	00 6 43 *****	****	****	Critic Averag Level	e Dela Of Sei	ay (se cvice:	ec/veh)	:		cxx C
Street Name: Bella Vista St Huntington Dr Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R											ound – R	
Control: Rights: Min. Green: Y+R: Lanes:	0 4.0 1	rotect Inclu 0 4.0	ted ade 0 4.0 1 0	0 4.0 1	Include 1 of 1 o	•	rotect Inclu 0 4.0	ed	0 4.0	otect Inclu 0	ted ude 0 4.0	
Volume Module Base Vol: Growth Adj: Initial Bse: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	161 1.00 161 1.00 1.00 161 0 161 1.00 1.00	242 1.00 242 1.00 1.00 242 0 242 1.00 1.00 242	121 1.00 121 1.00 1.00 121 0 121 1.00 1.00	168 1.00 168 1.00 1.00 168 0	267 1.00 267 1.00 1.00 267 0 267	73 1.00 73 1.00 1.00 73 0 73 1.00 1.00 73	1.00 105 1.00 1.00 105 0 105 1.00 1.00	1238 1.00 1238 1.00 1.00 1238 0 1238 1.00 1.00	189 1.00 189 1.00 189 0 189 1.00 189	1.00 1.00 110 0 110 1.00	484 1.00 1.00 484 0 484 1.00	67 1.00 67 1.00 1.00 67 0 67 1.00 67 1.00 67
Saturation Flow Module: Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 160												
Crit Moves: *********	****	****	*****	****	****	*****	****	****	*****	****	****	*****

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City of Duarte Environmental Impact Report

Existing PM Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ******************* Intersection #3 Huntington Dr & Highland Ave ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Loss Time (sec): 6
Optimal Cycle: 43 Average Delay (sec/veh): Level Of Service: XXXXXX ************************* Street Name: Highland Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 100 115 281 63 55 36 22 1243 107 100 467 41 Initial Bse: 100 115 281 63 55 36 22 1243 107 100 467 41 -----|----||------| Saturation Flow Module: Final Sat.: 1488 1712 1600 1600 1600 1600 1600 3200 1600 1600 3200 1600 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.06 0.07 0.18 0.04 0.03 0.02 0.01 0.39 0.07 0.06 0.15 0.03 **** **** Crit Moves: ***************************

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Existing PM Wed May 25, 2016 10:01:42 Page 7-1 Existing PM

	EXISTING FM												
Level Of Service Computation Report													
	2000					(Base		_		ve)			
*****			-			•				,	****	*****	
Intersection							****	****	*****	*****	****	******	
Logg Time (ge	ac):	Τ,	a			Averso	ar vo.	1., Caj	o.(x).	١:	7	1 0	
Ontimal Cycle	.c).	1 :	80			T.oval	Of Sea	ay (b)	:	, •	, -	F.	
<pre>Cycle (sec): 100</pre>													
Street Name:									Hunting				
Approach:												hund	
Movement:	т	- Т	- R	т	исп Do	- R	т	дос D. - Т	- R	т	- Т	- R	
	 		I	1		I	1			 			
Control:	l Spi	lit pl	hase	Sp.	lit Þì	l nase	I Di	roted	ted	II D-	rotect	red	
Rights:	DP.	Incli	nde	Sp.	Incli	1de		Incl	ude		Incli	1de	
Rights: Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	
Lanes:	1	1 0	0 1	1 (1.0	1 0	1 (1.0	0 1	1 1	1 2	0 1	
	-		I										
Volume Module				ı		1	1			1 1		1	
Base Vol:			697	101	290	54	8.0	948	602	204	399	20	
Growth Adj:					1.00			1.00			1.00	1.00	
Initial Bse:			697	101		54		948		204		20	
User Adj:			1.00		1.00			1.00			1.00		
PHF Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
PHF Volume:	242	199	697	101		54	80					20	
Reduct Vol:			0	0			0			0		0	
Reduced Vol:										204			
PCE Adj:					1.00						1.00		
MLF Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
FinalVolume:				101			80			204		20	
Saturation Fl				ı		1	1			1 1			
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:						0.93					0.95	0.85	
Lanes:						0.31					2.00		
Final Sat.:						553			1615		3610	1615	
Capacity Anal				•			•					'	
Vol/Sat:	0.12	0.12	0.43	0.06	0.10	0.10	0.04	0.26	0.37	0.11	0.11	0.01	
Crit Moves:			****			****			***	***			
Green/Cycle:	0.39	0.39	0.39	0.09	0.09	0.09	0.12	0.33	0.33	0.10	0.31	0.31	
Volume/Cap:											0.36	0.04	
Delay/Veh:			102.7			131.6			107.7			24.1	
User DelAdj:					1.00			1.00			1.00	1.00	
AdjDel/Veh:	21.5	21.5	102.7	52.6	132	131.6			107.7			24.1	
LOS by Move:	C	С	F	D	F	F	D	С	F	F	C	C	
HCM2kAvgQ:	5	5	34	4	11	11	2	14	27	12	5	0	
*****	****	****	*****	****	****	*****	****	****	****	*****	****	*****	
Note: Queue 1	report	ted i	s the r	number	of ca	ars per	lane	•					

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Level Of Service Computation Report												
2000 HCM Operations Method (Base Volume Alternative)												
Intersection #5 Central Ave & Buena Vista St												
Cycle (sec): 100												
Loss Time (sec): 6						Average Delay (sec/veh): 26.4						
Optimal Cycle: 26						Level Of Service: C						
*******		-		****	****					****	*****	-
Street Name:	Buena Vista St					Central Ave						
Approach:	No	rth Bo				ound	Ea	ast Bo		West Bound		
Movement:		- T		L - T - R			L - T - R			L - T - R		
Control:	•	rotect		Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0 0 0			0 0 0			0 0 0			0 0 0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 () 1	1 0	1 () 1	1 0	1 (0 C	1 0	1 (0 1	0 1
Volume Module	≘ :											
Base Vol:	62	375	191	66	533	24	5	51	126	259	75	283
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	375	191	66	533	24	5	51	126	259	75	283
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	375	191	66	533	24	5	51	126	259	75	283
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	375	191	66	533	24	5	51	126	259	75	283
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	62	375	191	. 66	533	24	. 5	51	126	259	75	283
	ı											
Saturation Flow Module:												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:	0.95		0.90		0.94	0.94		0.89	0.89		1.00	0.85
Lanes:		1.33	0.67		1.91	0.09		0.29	0.71		1.00	1.00
Final Sat.:		2270	1156		3434	155		489	1208	1805	1900	1615
Capacity Anal	-			0 04	0 16	0 16	0 00	0 10	0 10	0 14	0 04	0 10
Vol/Sat:	0.03	0.17	0.17	0.U4 ****	0.16	0.16	0.00	0.10	0.10	V.14 ****	0.04	0.18
Crit Moves:	0 00		0 25		0 25	0 25	0 01		0 00		0 [1	0 [1
Green/Cycle:			0.35		0.35	0.35		0.22	0.22		0.51	0.51
Volume/Cap:		0.48	0.48		0.45	0.45		0.48	0.48		0.08	0.34
Delay/Veh: User DelAdj:		26.0	26.0 1.00		25.6 1.00	25.6 1.00		35.1	35.1 1.00		12.5	14.8 1.00
AdjDel/Veh:		26.0	26.0		25.6	25.6		35.1	35.1		12.5	14.8
-	40.5 D	20.0 C	26.0 C	40.9 D	∠5.0 C	∠5.6 C	02.9 E	33.1	35.1 D	∠9.3 C	12.5 B	14.0 B
LOS by Move: HCM2kAvgO:	ر 2	7	7	2	7	7	ь 1	رر 5	ם 5	6	в 1	Б 5
*********	∠ :****	/ ****:	/ *****	∠ *****	/ * * * * * *	· ·	_		ح *****		_	-
Note: Queue	report	ed i	s the r	umber	of c							
1.00c. Queue 1	- CPOL	JUL II				TD PCT	14110	• 				

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to CAMBRIDGE SYSTEMATICS

Existing PM Wed May 25, 2016 10:01:42 Page 9-1 Existing PM

Existing PM													
Level Of Service Computation Report													
2000 HCM Operations Method (Base Volume Alternative)													

Intersection	#6 I2	210 W	B On Ra	I & qm.	Buena	Vista	St						
Cycle (sec): Loss Time (se	ac):		3			Averag	e Dela	av (se	ec/veh)	:	0.	9.1	
Optimal Cycle	·:		17			Level					-	A	
*****										****	****		
Street Name:			Buena V						210 WB				
Approach:						nund						วเมาต	
Movement:													
Control:	Pı	rotec	ted	Pı	cotect	ed	' Pi	rotect	ted	Pı	cotect	ted	
Rights:			ude			ıde			ıde		Incl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:													
Volume Module				'									
Base Vol:	279	611	0	0	645	252	0	0	0	0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:			0	0	645	252	0	0	0	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	279	611	0	0	645	252	0	0	0	0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			0	0	645	252	0	0	0	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	279	611	0		645	252		0	0	0	0	0	
Saturation Fl	Low Mo	odule	:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.95	1.00		0.91			1.00			1.00	1.00	
Lanes:				0.00	1.44	0.56	0.00	0.00	0.00	0.00	0.00	0.00	
Final Sat.:				0			0			0	0	0	
Capacity Anal													
Vol/Sat:		0.17	0.00	0.00		0.26	0.00	0.00	0.00	0.00	0.00	0.00	
	***				****								
Green/Cycle:													
Volume/Cap:			0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.00	0.00	0.00	
Delay/Veh:		0.1	0.0		10.5	10.5	0.0		0.0	0.0		0.0	
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:	24.5	0.1	0.0		10.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	
LOS by Move:	C	A	A	A	В	В	A	A	A	A	A	A	
HCM2kAvgQ:	6			0				0					
******									*****	****	****	*****	
Note: Queue 1									+++++	. + + + + + .			

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Existing PM Wed May 25, 2016 10:01:42 Page 10-1

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)													

Intersection								****	*****	****	****	*****	
Cycle (sec): Loss Time (se Optimal Cycle													
******	****	*****	·****	****	****	*****	****	****	*****	****	****	*****	
Street Name: Approach:		Е	Buena V	ista S	St			I2	210 EB	On Rar	np		
Approach:	No	rth Bo	und	Soi	ath Bo	ound	Εá	ast Bo	ound	We	est Bo	ound	
Movement:													
~													
Control:	Pi	rotect	ed	Pı	rotect	ed	Pi	rotect	ed	Pı	cotect	ted	
Control: Protected Protected Protected Protected Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0													
Min. Green:	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	
Y+R: Lanes:	4.0	4.0	0 1	1 (4.0	4.0	4.0	4.U	1 0	4.0	4.0	4.0	
Lanes.	1	J <u>Z</u>		1	J <u>Z</u>	0 0 I	l		I	1	J U	I	
Volume Module	 e:		I	I		I	I		I	I		I	
Base Vol:									92				
Growth Adj:				1.00							1.00		
Initial Bse:			358	236					92				
User Adj:	1.00	1.00		1.00	1.00				1.00		1.00		
User Adj: PHF Adj:	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:			358	236	416	0	304	315	92	0	0	0	
Reduct Vol: Reduced Vol:	0			0	0	Λ	0	0	0	0	0	0	
Reduced Vol:	0	592	358	236	416	0	304	315	92	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:					1.00				1.00		1.00		
FinalVolume:													
Saturation F													
Saturation F. Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:					0.95				0.87				
Lanes:			1.00			0.00			0.26				
Final Sat.:			1615			0							
Capacity Anal	lysis	Modul	.e:										
Vol/Sat:	0.00	0.16	0.22	0.13	0.12	0.00			0.21	0.00	0.00	0.00	
Crit Moves:			****	****			****						
Green/Cycle:						0.00			0.36		0.00		
Volume/Cap:				0.60	0.20	0.00		0.60		0.00	0.00	0.00	
Delay/Veh:		24.2	27.5	37.9		0.0		27.3	27.3	0.0	0.0	0.0	
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:		24.2	27.5	37.9	9.8	0.0		27.3	27.3	0.0	0.0	0.0	
LOS by Move:	A	C	C	D	A	A	C	C	C	A	A	A	
HCM2kAvgQ:	0	7	10	6	3	0	10	10	10	0	0	0	
Note: Queue :									*****	****	****	*****	

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Level Of Service Computation Report														
Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)														
2000 ncm onsignatized method (base volume Alternative) ************************************														
	Intersection #8 Huntington Dr & Cotter Ave													
Average Dela	y (sec	/veh):	0.9		Worst	Case :	Level	Of Ser	rvice:	C[23	3.5]		
	*****	****			****	****	*****					*****		
Street Name:				er Ave		_	_		Hunting	_				
Approach:	Movement: L - T - R L - T - R L - T - R													
~	•													
Control:		op Si	_	St	-	ign	Un	contro		Uno	contro			
Rights:		Incl			Incl		-	Incl			Incl			
Lanes:			0 0			0 0		0 1			0 2	0 1		
Volume Modul		_	_	_	-	4		1 41 0	_	_	605	0.4		
Base Vol:	1	0	9	8	1	41		1413	9	5	635	24		
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse:	1	0	9	8	1	41		1413	9	5	635	24		
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
PHF Volume:	1	0	9	8	1	41		1413	9	5	635	24		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
FinalVolume:	_ 1	0	9	8	1	41		1413	9	5	635	24		
	1													
Critical Gap														
Critical Gp:		6.5	6.9	7.5		6.9			XXXXX			XXXXX		
FollowUpTim:		4.0	3.3	3.5		3.3			XXXXX			XXXXX		
	1													
Capacity Mod														
Cnflict Vol:			711		2191	318			XXXXX			XXXXX		
Potent Cap.:		45	380	90	46	684			xxxxx			XXXXX		
Move Cap.:	40	41	380	82	42	684			xxxxx			XXXXX		
Volume/Cap:	0.03		0.02		0.02	0.06		xxxx			xxxx			
	1													
Level Of Ser							0 0			0 0				
2Way95thQ:			xxxxx			XXXXX			XXXXX			XXXXX		
Control Del:						xxxxx			xxxxx		XXXX	xxxxx		
LOS by Move:		*	*	*	*		A		*	B		*		
Movement:			- RT			- RT		- LTR			- LTR			
Shared Cap.:				XXXX		xxxxx			XXXXX			XXXXX		
SharedQueue:			xxxxx						xxxxx					
Shrd ConDel:									xxxxx	XXXXX		XXXXX		
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*		
ApproachDel:		23.5			20.8		X	XXXXX		X	XXXXX			
ApproachLOS:		C			С			*			*			
*****									****	****	****	*****		
Note: Queue :									*****	****	****	*****		

Existing PM												
Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************												
Intersection #9 Central Ave & Highland Ave												
Cycle (sec): Loss Time (sec) Optimal Cycle:	28	Averag Level	al Vol./Cap.(X): e Delay (sec/veh): Of Service: ********	XXXXXX A								
Street Name: Highland Ave Central Ave Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R												
Control: Rights: Min. Green: Y+R: 4 Lanes: 0	Permitted Include 0 0 0 0 0 0 0 1 0 1 0 1 0	Permitted Include 0 0 0 0 4.0 4.0 4.0 0 0 0 0 0 0 0 0 0 0	Permitted Include 0 0 0 4.0 4.0 4.0 0 1 0 1	Permitted Include 0 0 0 4.0 4.0 4.0								
Volume Module: Base Vol: Growth Adj: 1. Initial Bse: User Adj: 1. PHF Adj: 1. PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: 1. MLF Adj: 1. FinalVolume:	63 366 362 00 1.00 1.00 63 366 362 00 1.00 1.00 00 1.00 1.00 63 366 362 0 0 0 63 366 362 00 1.00 1.00 00 1.00 1.00 63 366 362	42 124 58 1.00 1.00 1.00 42 124 58 1.00 1.00 1.00 1.00 1.00 1.00 42 124 58 0 0 0 42 124 58 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	54 221 24 1.00 1.00 1.00 54 221 24 1.00 1.00 1.00 1.00 1.00 1.00 54 221 24 0 0 0 54 221 24 1.00 1.00 1.00 1.00 1.00 1.00 54 221 24	55 81 29 1.00 1.00 1.00 55 81 29 1.00 1.00 1.00 1.00 1.00 1.00 55 81 29 0 0 0 55 81 29 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00								
Saturation Flow Sat/Lane: 16 Adjustment: 1. Lanes: 0. Final Sat.: 2	Module: 00 1600 1600 00 1.00 1.00 16 0.93 0.91 55 1481 1464 is Module: 04 0.25 0.25	1600 1600 1600 1.00 1.00 1.00 0.37 1.11 0.52 600 1771 829 	1600 1600 1600 1.00 1.00 1.00 0.20 0.80 1.00 314 1286 1600 	1600 1600 1600 1.00 1.00 1.00 1.00 0.74 0.26 1600 1178 422 								
Control: Rights: Min. Green: Y+R: 4 Lanes: 0	Permitted Include 0	Permitted Include 0 0 0 4.0 4.0 4.0 4.0 0 1 0 1 0 42 124 58 1.00 1.00 1.00 42 124 58 1.00 1.00 1.00 1.00 42 124 58 1.00 1.00 1.00 42 124 58 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Permitted Include 0 0 0 4.0 4.0 4.0 4.0 0 1 0 0 1	Permitted Include 0 0 0 4.0 4.0 4.0 4.0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0								

Existing PM													
Tarrell Of Garrel as Garrent thin Daniel													
Level Of Service Computation Report													
2000 HCM Unsignalized Method (Base Volume Alternative)													
Intersection #10 Central Ave & I210 WB Off Ramp													
Intersection ********							-	****	*****	*****	****	*****	
Average Delay													
Street Name:		I	210 WB	Off Ra	ame				Centra	al Ave			
	No	rth Bo				ound	Ea	ast Bo			est Bo	ound	
Movement:			- R			- R			- R		- T		
Control:						ign '							
Rights:		Incl			Incl			Incl			Incl		
Lanes:	1 (0 0	1 0	0 (1!	0 0	0 3	L O	1 0	0 () 1	1 0	
Volume Module			'	1 1		'	1			1 1		1	
Base Vol:	330	5	61	5	0	19	12	296	1	0	236	1	
Growth Adj:		1.00	1.00		1.00	1.00		1.00			1.00	1.00	
Initial Bse:			61	5	0	19	12		1	0		1	
User Adj:		1.00	1.00		1.00	1.00		1.00		1.00	1.00	1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	330	5	61	5	0	19	12	296	1	0	236	1	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:		5	61	5	0	19	12	296	1	0	236	1	
									_				
Critical Gap	ı		l	l I		I	I			1 1		I	
Critical Gp:	7.5		6.9	7 5	6.5	6.9	4 1	V VVV	YYYYY	xxxxx	YYYY	YYYYY	
FollowUpTim:	3.5		3.3			3.3				XXXXX			
Capacity Modu			l	I I		ı	I			1 1		I	
Cnflict Vol:		558	149	411	558	119	237	vvvv	xxxxx	vvvv	vvvv	xxxxx	
Potent Cap.:			878						XXXXX			XXXXX	
Move Cap.:		437							XXXXX			XXXXX	
Volume/Cap:					0.00	0.02			XXXX			XXXX	
Level Of Serv						I	1						
2Way95thQ:	4.9	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:							7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:			*		*		A		*			*	
Movement:			- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	
Shared Cap.:				xxxx		xxxxx			xxxxx			xxxxx	
SharedQueue:				XXXXX		XXXXX				XXXXX			
Shrd ConDel:				XXXXX		XXXXX				XXXXX			
Shared LOS:		*			Э. О А		, , , A		*	*		*	
ApproachDel:		23.2	17		9.8			xxxx			xxxx		
ApproachLOS:		23.2 C			Э.О А		A2	*		Λ2	*		
******	****	_	*****	*****		*****	****	****	*****	*****	****	*****	
Note: Oueue													
*****									*****	*****	****	*****	

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City of Duarte Environmental Impact Report Existing + Proj AM

Intersection Volume Report Base Volume Alternative

Node	Intersection	Northbound L T R			uthbo			stbou - T -			estbou T -		
1	Huntington Dr	208	453	94	96	358	71	87	322	83	131	1249	292
2	Huntington Dr	141	228	71	47	193	80	71	271	117	88	1449	74
3	Huntington Dr	85	72	183	67	143	32	28	311	78	405	1455	60
4	Huntington Dr	715	131	212	46	342	85	60	265	194	366	1126	99
5	Central Ave &	40	291	251	38	422	8	3	15	41	348	160	235
6	I210 WB On Ra	86	588	0	0	572	229	0	0	0	0	0	0
7	I210 EB On Ra	0	439	172	250	369	0	324	12	304	0	0	0
8	Huntington Dr	30	0	7	8	0	56	30	335	2	7	1593	6
9	Central Ave &	83	153	116	67	429	114	39	97	76	243	242	62
10	Central Ave &	287	0	96	1	0	5	4	328	0	0	488	6

Intersection Volume Report Future Volume Alternative

Node	Intersection		Northbound L T R			uthbo - T -			stbou - T -			estbou T -	
1	Huntington Dr	208	453	98	100	358	71	87	344	83	137	1280	298
2	Huntington Dr	118	225	70	52	192	80	71	308	110	152	1516	83
3	Huntington Dr	96	72	183	67	143	32	28	371	87	405	1514	60
4	Huntington Dr	741	131	212	46	342	86	62	304	231	366	1154	99
5	Central Ave &	40	319	255	36	468	8	3	15	41	357	160	240
6	I210 WB On Ra	86	619	0	0	603	253	0	0	0	0	0	0
7	I210 EB On Ra	0	453	172	261	389	0	341	12	304	0	0	0
8	Huntington Dr	30	0	7	8	0	56	30	403	2	7	1680	6
9	Central Ave &	83	155	116	70	432	123	45	96	75	243	242	64
10	Central Ave &	293	0	98	1	0	5	4	330	0	0	497	6

Environmental Impact Report Existing + Proj AM												
Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)												
******											*****	
Intersection *******						****	****	*****	****	****	*****	
Cycle (sec): Loss Time (sec) Optimal Cycle	1(ec):	00 6 49			Critica Average Level	al Vol e Dela Of Sei	l./Car ay (se cvice	o.(X): ec/veh) :	:	0.5 xxxx	769 XXX C	
*****	*****	*****	*****	****	*****	****	****	*****	****	*****	*****	
Street Name:								Hunting				
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T -											ound	
Movement:	L - T	- R	L -	· T	- R	. L .	- T	- R	. L -	- T	- R	
Control:	trol: Protected Protected Protected											
Min. Green:	n. Green: 0 0 0 0 0 0 0 0											
Y+R:	4.0 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Lanes:	1 0 1	1 0	1 0) 1	1 0	1 () 2	0 1	1 () 2	0 1	
<pre>Z+R:</pre>												
Base Vol:		9.4	96	358	71	87	322	83	131	1249	292	
Growth Adj:								1.00		1.00	1.00	
Initial Bse:			96						131		292	
			1.00						1.00	1.00	1.00	
User Adj: PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:		94	96	358	71	87	322	83	131	1249	292	
Reduct Vol: Reduced Vol:	0 0	0	0	0	0 71	0	0	0	0	0	0	
Reduced Vol:	208 453	94	96	358	71	87	322	83	131	1249	292	
PCE Adj:			1.00							1.00		
MLF Adj:								1.00				
FinalVolume:	208 453	94	96	358	71	87	322	83	131	1249	292	
Saturation Fl												
Sat/Lane:			1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:					1.00					1.00	1.00	
Lanes:					0.33							
Final Sat.:	1600 2650	550	1600	2670	530	1600	3200	1600	1600	3200	1600	
Capacity Anal	lysis Modu	le:										
Vol/Sat:		0.17									0.18	
Crit Moves:		and and and an area.								****		

Existing + Proj AM													
Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)													
*****											*****		
Intersection #2 Huntington Dr & Buena Vista St **********************************													
Cycle (sec):	1	00			Critic	al Vol	l./Car	o.(X):		0.7	31		
Loss Time (se	Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx Optimal Cycle: 44 Level Of Service: C												
Optimal Cycle		44									C		
*****					*****	****					*****		
Street Name: Approach:	North B	Bella V			und	r.		Hunting			und		
Movement:													
Control:	Protec				ed		rotect		•	otect			
Rights:	Incl	ude			.de		Inclu	ıde		Inclu	ıde		
Min. Green:	0 0	0	0		0		0	0	0		0		
Y+R:	4.0 4.0 1 0 1	4.0	4.0		4.0	4.0		4.0 0 1	4.0	4.0	4.0 0 1		
Lanes:										_			
Volume Module	I	1	I		ı	1		I	1		ı		
Base Vol:	141 228	71	47	193	80	71	271	117	88	1449	74		
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:		71	47	193	80	71		117		1449	74		
User Adj:	1.00 1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		
PHF Adj: PHF Volume:	1.00 1.00 141 228	1.00 71	1.00 47	1.00	1.00	71	1.00 271	1.00 117	1.00	1.00	1.00 74		
Reduct Vol:	0 0	0	0	193	0	7 1	2/1	117	0	1449	0		
Reduced Vol:		71	47	193	80	71	-	117		1449	74		
PCE Adj:	1.00 1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00		
MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:		71	47		80	. 71		117		1449	74		
	I												
Saturation Fi	1600 1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600		
	1.00 1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		
Lanes:	1.00 1.53	0.47	1.00		0.59		2.00	1.00		2.00	1.00		
Final Sat.:	1600 2440	760	1600	2262	938	1600	3200	1600	1600	3200	1600		
	1	- 1											
Capacity Ana	-		0 00	0.00	0.06		0 00		0 0-	0 45	0.05		
Vol/Sat: Crit Moves:	0.09 0.09	0.09		0.09	0.09	0.04	0.08	0.07	0.06	0.45	0.05		
********		*****			*****		*****	*****	*****		*****		

Environmental Impact Report Existing + Proj AM												
Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************												
Intersection		_		_	_		****	****	*****	*****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	10	0 6 89			Critic Averag Level	al Vol e Dela Of Ser	L./Car ay (se cvice:	o.(X): ec/veh)	:	0.0 xxxx	588 xxx B
Street Name: Approach: Movement:	– R	Ea L -	ast Bo - T	- R	₩e L -	est Bo · T	- R					
Control:	ntrol: Permitted Permitted Protected Protected											ted
Rights: Min. Green: Y+R: Lanes:	0 4.0 0 1	4.0	0 4.0 0 1	0 4.0 0 1	0 4.0 L 1	ude 0 4.0 0 1	0 4.0 1	4.0	0 4.0 0 1	0 4.0 1 (4.0	0 4.0 0 1
Base Vol: Growth Adj: Initial Bse: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	85 1.00 85 1.00 1.00 85 0 85 1.00 1.00 85	72 1.00 72 1.00 1.00 72 0 72 1.00 1.00 72		1.00 67 1.00 1.00 67 0 67 1.00 1.00	1.00 143 1.00 1.00 143 0 143 1.00 1.00	1.00 32 1.00 1.00 32 0 32 1.00 1.00	1.00 28 1.00 1.00 28 0 28 1.00 1.00	1.00 1.00 311 0 311 1.00 1.00 311	1.00 78 1.00 1.00 78 0 78 1.00 1.00	1.00 405 1.00 1.00 405 0 405 1.00 1.00	1455 1.00 1.00 1455 0 1455 1.00 1.00 1455	1.00 60 1.00 1.00 60 0 60 1.00 1.00
	1600 1.00 1.00 1600	1600 1.00 1.00 1600	1600 1.00 1.00 1600	1.00 0.64 1021	2179	1.00 1.00 1600	1.00 1.00 1600	3200	1.00 1.00 1600	1.00 1.00 1600	1.00 2.00 3200	1.00 1.00 1600
Capacity Anal Vol/Sat: Crit Moves:												

EXISTING + Proj AM													
Level Of Service Computation Report													
2000 HCM Operations Method (Base Volume Alternative)													
******											*****	*****	
Intersection	*****	****	*****	****	****	*****							
Cycle (sec): Loss Time (sec) Optimal Cycle		10	0.0			Critic	al Vo	l./Cap	o.(X):		0.7	768	
Loss Time (se	ec):		9			Averag	e Dela	ay (se	ec/veh)	:	35	5.4	
******						*****						*****	
Street Name:			Mt Oli					I	Hunting	ton Di	2		
Approach:											est Bo		
Movement:	L -	• Т	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R	
Control:												ed	
Rights:		Incl	ıde		Inclu	ıde		Incl	ıde		Inclu		
Min. Green: Y+R:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:													
Volume Module													
	715										1126	99	
Growth Adj:			1.00		1.00	1.00		1.00			1.00		
Initial Bse:			212	46		85	60			366		99	
User Adj:			1.00		1.00	1.00		1.00			1.00		
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00		
PHF Volume:	715	131	212	46		85	60			366		99	
Reduct Vol:			0	0		0	0					0	
Reduced Vol:			212	46			60					99	
PCE Adj:			1.00		1.00	1.00		1.00			1.00		
MLF Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
FinalVolume:			212	46		85	60			366		99	
Saturation Fl				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:						1900		1900			1900		
Adjustment:			0.85		0.92			0.95			0.95	0.85	
Lanes:			1.00			0.40		2.00			2.00	1.00	
Final Sat.:					2805			3610			3610		
Capacity Anal				0 00	0 10	0 10	0 00	0 07	0 10	0 00	0 21	0 06	
Vol/Sat:		0.23	0.13	0.03	U.⊥∠ ****		0.03 ****	0.07	0.12	0.20	U.3⊥ ****	0.06	
Crit Moves:		0 20	0 20	0 16				0 17	0 17	0 00		0 41	
Green/Cycle:													
Volume/Cap:													
Delay/Veh: User DelAdj:									48.4		28.2	18.9	
AdjDel/Veh:	35.1		1.00 28.7	1.00	46.7	1.00 46.7		1.00 37.9	1.00 48.4		1.00	1.00 18.9	
_			28.7 C	30.0 D		40.7 D	83.5 F		48.4 D				
LOS by Move: HCM2kAvq0:	D 13	D 13	5	ط 1	D 9	Д 9	3	D 4	ע 7	D 11	C 17	В 2	
HCM2KAV9Q:													
Note: Queue 1													
*********									*****	****	****	*****	

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Level Of Service Computation Report														
2000 HCM Operations Method (Future Volume Alternative)														

	Intersection #5 Central Ave & Buena Vista St ************************************													
Cycle (sec):		1.0	0						o.(X):		.448			
Loss Time (se	ec):	10	6						ec/veh)		22.5			
Optimal Cycle		2	5			Level	Of Set	rvice:	:		22.3 C			
********										*****	-			
Street Name:			uena V						Centra					
Approach:						nund	Ea	ast Bo	nind	West	Bound			
Movement:			- R						- R					
Control:	Pro	tect	ed '	ı Pı	rotect	-ed	ı Pı	rotect	-ed	Prote	cted			
Rights:	T	nclu	ide						ıde		lude			
_	0		0		0	0		0	0	0				
Y+R:										4.0 4.				
Lanes:			1 0			1 0			1 0					
Volume Module			,	ı			İ		1	1	'			
Base Vol:		291	251	38	422	8	3	15	41	348 16	0 235			
Growth Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.0	0 1.00			
Initial Bse:	40	291	251	38	422	8	3	15	41	348 16	0 235			
Added Vol:	0	28	4	-2	46	0	0	0	0	9	0 5			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0 0			
Initial Fut:		319	255	36	468	8	3	15	41	357 16	0 240			
User Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.0	0 1.00			
PHF Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.0	0 1.00			
PHF Volume:	40	319	255	36	468	8	3	15	41	357 16	0 240			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0 0			
Reduced Vol:	40	319	255	36	468	8	3	15	41	357 16	0 240			
PCE Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.0	0 1.00			
MLF Adj:	1.00 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.0	0 1.00			
FinalVolume:			255	36	468	8		15	41	357 16				
Saturation F	low Mod	dule:												
Sat/Lane:	1900 1	1900	1900	1900	1900	1900	1900	1900	1900	1900 190	0 1900			
Adjustment:	0.95 0	.89	0.89	0.95	0.95	0.95	0.95	0.89	0.89	0.95 1.0	0 0.85			
	1.00 1		0.89		1.97	0.03		0.27		1.00 1.0				
Final Sat.:			1496		3539			453	1238	1805 190				
Capacity Ana														
Vol/Sat:			0.17		0.13	0.13	0.00		0.03		8 0.15			
Crit Moves:		***		****				****		****				
Green/Cycle:			0.38		0.36	0.36		0.07	0.07	0.44 0.5				
Volume/Cap:	0.36 0		0.45		0.36	0.36		0.45	0.45	0.45 0.1				
Delay/Veh:	47.1 2		23.4		23.5	23.5		46.9	46.9	19.9 13.				
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00 1.0				
AdjDel/Veh:	47.1 2		23.4		23.5	23.5		46.9	46.9	19.9 13.				
LOS by Move:	D 1	C	C 7	D	C	C	E	D	D		B B			
HCM2kAvgQ:	1	7	-	2	6 *****	6 ******	0	2	2 *****		3 4			

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Level Of Service Computation Report												
	2000 1	Lev PqO MDH								·		
*****											*****	*****
Intersection								*****	*****	****	*****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	ec): e:	100 3 14				Critic Averag Level	al Vol e Dela Of Sei	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.2	288 3.6 A
Street Name: Approach:	Nor	th Bour	nd	Soi	ith Bo	und	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L -	Т -	R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control: Rights:	Pro	otected	d	Pı	cotect	ed	Pı	rotect	ed	Pı	cotect	ed
Rights:	:	Include	е		Inclu	ıde		Inclu	ıde		Inclu	ıde
Min. Green:					0	0	0	0	0	0	0	0
Y+R: Lanes:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 () 1	1 0	0 (0 C	0 0	0 (0 0	0 0
Volume Module												
Base Vol:									0			
Growth Adj:				1.00		1.00			1.00		1.00	
Initial Bse:			0	0		229			0			
User Adj: PHF Adj:	1.00	1.00	1.00		1.00	1.00			1.00		1.00	
					1.00	1.00			1.00		1.00	
PHF Volume:			0	0	572	229	0	0	0	0		0
Reduct Vol: Reduced Vol:	0	0	0	0	- U	0	0	0	0	0	0	0
PCE Adj:				1.00	1.00	1.00		1.00	1.00		1.00	
MLF Adj: FinalVolume:			1.00			1.00			0.00			1.00
Final volume:												
Saturation F							1			1		
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:									1.00		1.00	
Lanes:									0.00		0.00	
Final Sat.:											0	0
Capacity Anal							•					
Vol/Sat:		0.16 (0.00	0.00		0.23	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****							
Green/Cycle:						0.80		0.00			0.00	
Volume/Cap:			0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.00	0.00	0.00
Delay/Veh:	37.1		0.0	0.0		2.5		0.0	0.0	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	37.1	0.1	0.0	0.0	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:	D	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	2	0	0	0	3	3	0		0	0	0	0
******									*****	*****	*****	*****
Note: Queue :									*****	****	*****	*****

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				EXIS	rug -	+ Proj	ΑM						
	Level Of Service Computation Report												
	2000					-		_		\			
*****			Operati										
Intersection	#7 I	210 EI	3 On Ra	mp & I	Buena	Vista	St						

Cycle (sec): Loss Time (sec) Optimal Cycle		10	00			Critic	al Vo.	l./Caj	p.(X):		0.4	199	
Loss Time (se	EC):		6			Averag	re Dela	ay (s	ec/veh)	:	24	1.8	
******												*****	
Street Name:			Buena V						210 EB			_	
Approach:													
Movement:													
Control:													
Rights:		Incl	ude		Incl	ıde		Incl	ude		Incl		
Min. Green: Y+R:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:													
Volume Module	: :												
Base Vol:	0	439	172	250						0	0	0	
Growth Adj:			1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Initial Bse:	0	439	172	250	369	0	324	12	304	0	0	0	
User Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	439	172	250	369	0	324				0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	439	172	250	369	0	324	12	304	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:			172		369	0	324			0	0	0	
Saturation Fl	Low Mo	odule	:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.82	0.82	0.82	1.00	1.00	1.00	
Lanes:			1.00		2.00				0.96		0.00	0.00	
Final Sat.:					3610		1549	59	1491	0	0	0	
Capacity Anal	lysis	Modu.	le:										
Vol/Sat:				0.14	0.10	0.00		0.20	0.20	0.00	0.00	0.00	
Crit Moves:		****		****			****						
Green/Cycle:	0.00	0.24	0.24	0.28	0.52	0.00	0.42	0.42	0.42	0.00	0.00	0.00	
Volume/Cap:	0.00	0.50	0.44	0.50	0.20	0.00	0.50	0.49	0.49	0.00	0.00	0.00	
Delay/Veh:	0.0	33.0	32.8	31.1	12.8	0.0	21.7	21.5	21.5	0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:		33.0	32.8		12.8	0.0	21.7	21.5	21.5	0.0	0.0	0.0	
LOS by Move:	A	С	С	С	В	A	С	С	C	A	A	A	
HCM2kAvgQ:	0	6	5	6	3	0	8	8	8	0	0	0	
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****	
Note: Queue n									+++++	. + + + + + .			

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Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)													
*****											****	*****	
Intersection *****			_				****	****	****	*****	****	*****	
Average Dela				2.0	****					rvice: *****	-		
Street Name: Cotter Ave Huntington Dr Approach: North Bound South Bound East Bound West Bound													
Movement:			- R			- R			- R		- T	- R 	
Control:		: :Op S:			top Si		Un			Unc			
Rights:	51	Incl	_	5	Incl	_	OII	Incl		0110	Incl		
Lanes:	0 (1!		0 (0 0	1	0 1		1 () 2	0 1	
Volume Module	ė:												
Base Vol:	30	0	7	8	0	56	30	335	2	7	1593	6	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	30	0	7	8	0	56	30	335	2	7	1593	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
PHF Volume:	30	0	7	8	0	56	30	335	2		1593	6	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	30	0	7	8	0	56	30	335	2	7	1593	6	
Conition 1 Com	1												
Critical Gap Critical Gp:		6.5	6.9	7.5	6.5	6.9	1 1	35353535	xxxxx	1 1	3,53,53,53,5	xxxxx	
FollowUpTim:		4.0	3.3	3.5	4.0	3.3			XXXXX			XXXXX	
				٠. ـ ـ ـ ـ ا ا	4. 0					 			
Capacity Mod				1 1			1 1			1 1		1	
Cnflict Vol:		2009	169	1835	2004	797	1599	xxxx	xxxxx	337	xxxx	xxxxx	
Potent Cap.:	141	60	852	48	60	334	415	xxxx	xxxxx	1234	xxxx	xxxxx	
Move Cap.:	111	55	852	45	56	334	415	xxxx	xxxxx	1234	xxxx	xxxxx	
Volume/Cap:	0.27	0.00	0.01	0.18	0.00	0.17	0.07	xxxx	xxxx	0.01	xxxx	XXXX	
Level Of Ser	vice N	Module	≘:										
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx			xxxxx			XXXXX	
Control Del:						XXXXX			XXXXX			XXXXX	
LOS by Move:	*	*	*	*	*	*	В	*	*	A	*	*	
Movement:			- RT			- RT		- LTR			- LTR		
Shared Cap.:			xxxxx			xxxxx			XXXXX			XXXXX	
SharedQueue:			xxxxx							xxxxx			
Shrd ConDel:	XXXXX *	42.3 E	**	xxxxx *	34.3 D	xxxxx *	xxxxx *	xxxx *	**	xxxxx *		XXXXX	
Shared LOS: ApproachDel:	*	42.3	*	*	34.3	*			*			^	
ApproachLOS:		4∠.3 E			34.3 D		X	XXXXX *		XX	XXXXX		
*********	****	_	*****	*****	_	*****	*****	* * * * * :	*****	*****		*****	
Note: Oueue													
*****									*****	*****	****	*****	

	Environmental Impact Report Existing + Proj AM												
тсп 1	 (I.oss					Computa		-		native	<u></u>		
******												*****	
Intersection *******							****	****	*****	****	****	*****	
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	10	0 0 8	***	· • • • • •	Critic Averag Level	al Vol e Dela Of Sei	l./Car ay (se cvice	o.(X): ec/veh)	:	0.4 xxxx	179 xxx A	
Street Name:									Centra				
Approach:	Nort	h Bo	und	Soi	ıth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound	
Approach: Movement:	L -	Т	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R	
Control:	Pe	ermit	ted	I	Permit	ted	I	Permit	ted	I	Permit	ted	
Rights: Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0 1	0	1 0	0 1	L 0	1 0	0 1	L O	0 1	. 1 (0	1 0	
Y+R: Lanes: Volume Module													
Volume Module	9:	1 = 2	116	67	400	114	2.0	0.7	7.0	0.40	0.40	60	
Base Vol: Growth Adi:									76 1.00			1.00	
Initial Bse:			116	67						243		62	
			1.00		1.00						1.00		
User Adj: PHF Adj:	1.00 1	.00	1.00		1.00				1.00		1.00	1.00	
PHF Volume:			116	67		114				243		62	
Reduct Vol:	0	0	0	0	0			0				0	
Reduct Vol: Reduced Vol:	83	153	116	67	429	0 114	39	97	0 76	243	242	62	
PCE Adj:	1.00 1	.00	1.00	1.00	1.00					1.00	1.00	1.00	
MLF Adj:				1.00					1.00			1.00	
FinalVolume:	83	153	116	67	429	114	39	97	76	243	242	62	
Saturation Fl													
Sat/Lane:						1600					1600		
Adjustment:						1.00					1.00	1.00	
Lanes:												0.20 326	
Final Sat.:	/55 1	.391	1055	351	ZZ5U	I	459	1141	l				
Capacity Anal	Lysis M	ſodul	e:										
Crit Moves:		,				0.19					0.19	0.10	
*******		***	*****	****	****	*****	****	****	*****	****	****	*****	

	Existing + Proj AM												
			 Level (of Serv	vice (Computa	tion I	 Report	 t				
2	2000 I					d (Base		_		ive)			
*****	****	****	*****	*****	* * * * *	*****	****	****	*****	*****	****	*****	
Intersection *******								****	*****	*****	****	*****	
Average Delay *********													

Approach: North Bound South Bound East Bound West Bound													
Movement: L - T - R L - T - R L - T - R													
Movement: L - T - R L - T - R L - T - R - T -													
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled													
Rights: Include Include Include Include													
Lanes: 1 0 0 1 0 0 0 1! 0 0 0 1 1 0 0 0 0 1 1 0													
Volume Module		0	0.6	1	0	_	4	200	0	0	400	_	
Base Vol:	287		96	1 00	1 00	5	1 00		1 00		488	6 1 00	
Growth Adj:		1.00	1.00 96	1.00	1.00	1.00 5	1.00	1.00	1.00		1.00	1.00	
Initial Bse: User Adj:		1.00	1.00	_	1.00	1.00	_	1.00	1.00		1.00	6 1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	287	0.00	96	1.00	0.10	5	1.00		0.00	0.10	488	1.00	
Reduct Vol:		0	0	0	0	0		3 <u>2</u> 6	0	0	400	0	
FinalVolume:		0	96	1	0	5	4	328	0	0	488	6	
							_						
Critical Gap				1 1		,	I			1 1		I	
Critical Gp:			6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:		4.0	3.3	3.5		3.3				xxxxx			
Capacity Modu			,									'	
Cnflict Vol:	580	830	164	663	827	247	494	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:	402	308	858	351	309	759	1080	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Move Cap.:	398	307	858	311	308	759	1080	xxxx	xxxxx	xxxx	xxxx	XXXXX	
Volume/Cap:	0.72	0.00	0.11	0.00	0.00	0.01	0.00	xxxx	XXXX	XXXX	xxxx	XXXX	
Level Of Serv													
2Way95thQ:			XXXXX							XXXX			
Control Del:										XXXXX			
LOS by Move:					*		_ A		*			*	
Movement:			- RT						- RT		- LTR		
Shared Cap.:						XXXXX				XXXX			
SharedQueue:				xxxxx						xxxxx			
Shrd ConDel:		xxxx *		xxxxx *		XXXXX			xxxxx *	xxxxx *		XXXXX	
Shared LOS:		28.0	A	*	10.9	^	A		*			^	
ApproachLOS:		∠8.U D			10.9 B		X2	XXXXX *		X2	XXXXX *		
*********	****	_	*****	*****	_	*****	****	****	*****	*****	 ****	*****	
Note: Queue :	report	ced i	s the r	number	of ca	ars per	lane						
*****			^ × × × × × ×				^ × × × × ×		^ ^ * * * * * * *			, , x x x x x x	

City of Duarte Environmental Impact Report Existing + Proj PM

Turning Movement Report Future PM

Volume Type		orthbo Thru	ound Right		outhbo Thru	ound Right		astbou Thru	und Right		estbou Thru		Total Volume
#1 Hunt	inata	on Dr	& Moii	ntain i	Δτρ								
Base	135	356	160	251	457	49	61	1164	240	164	488	138	3663
Added	0	0	18	18	0	0	0	102	0	9	54	9	210
Total	135	356	178	269	457	49	-	1266	240	173	542	147	3873
IOCAI	133	330	170	200	157	10	01	1200	210	173	312		3073
#2 Hunt	ingto	on Dr	& Bue:	na Vist	ta St								
Base	161	242	121	168	267	73	105	1238	189	110	484	67	3225
Added	3	0	150	17	1	0	0	134	6	89	77	9	486
Total	164	242	271	185	268	73		1372	195	199	561	76	3711
#3 Hunt	ingto	on Dr	& Hig	hland <i>i</i>	Ave								
Base	100	115	281	63	55	36	22	1243	107	100	467	41	2630
Added	20	0	0	0	0	0	0	127	19	0	228	0	394
Total	120	115	281	63	55	36	22	1370	126	100	695	41	3024
#4 Hunt	_												
Base	242	199	697	101	290	54	80	948	602	204	399	20	3836
Added	120	0	0	0	0	6	3	66	63	0	126	0	384
Total	362	199	697	101	290	60	83	1014	665	204	525	20	4220
"F a .	, ,		_		G .								
#5 Cent						0.4	_	- 1	106	0.50		000	0050
Base	62	375	191	66	533	24	5	51	126	259	75	283	2050
Added	0	131	13	0	83	0	0	0	0	12	0	30	269
Total	62	506	204	66	616	24	5	51	126	271	75	313	2319
#6 I210	WD (n Ban	no C D	uona W	iata (7+							
	279		а» ч 0	uena v. 0	645	252	0	0	0	0	0	0	1787
Base		611											
Added	0	144	0	0	54	41	0	0	0	0	0	0	239
Total	279	755	0	0	699	293	0	0	0	0	0	0	2026
#7 I210	ER (n Ran	nn & R	nena V	igta 9	Z+							
Base	0	592	358	236	416	0	304	315	92	0	0	0	2313
Added	0	66	0	19	35	0	78	0	0	0	0	0	198
Total	0	658	358	255	451	0	382	315	92	0	0	0	2511
IOLAI	U	036	330	255	451	U	304	313	94	U	U	U	2511
#8 Hunt	inata	on Dr	& Cot	ter Ave	e								
Base	1	0	9	8	1	41	62	1413	9	5	635	24	2208
Added	0	0	0	0	0	0	0	170	0	0	248	0	418
Total	1	0	9	8	1	41		1583	9	5	883	24	2626
10041	_	U	J	0	1	41	02	1000	9	3	003	2-1	2020
#9 Cent	ral A	Ave &	Highl	and Ave	<u>e</u>								
Base	63	366	362	42	124	58	54	221	24	55	81	29	1479
Added	0	6	0	3	3	12	20	0	0	0	0	6	50
Total	63	372	362	45	127	70	74	221	24	55	81	35	1529

City of Duarte Environmental Impact Report

	Existing + Proj PM													
Volume Type					uthbou Thru I			astbou Thru			estbou Thru		Total Volume	
#10 Ce	ntral	Ave &	I210	WB Off	Ramp									
Base	330	5	61	5	0	19	12	296	1	0	236	1	966	
Added	29	0	7	0	0	0	0	13	0	0	12	0	61	
Total	359	5	68	5	0	19	12	309	1	0	248	1	1027	

City of Duarte Environmental Impact Report Existing + Proj PM

Intersection Volume Report Base Volume Alternative

		No	rt.hbo	hau	90	uthbo	und	r.	ast.bou	nd	Wo	stbou	nd
Node	Intersection		- T -			- T -			T -			- T -	
1	Huntington Dr	135	356	160	251	457	49	61	1164	240	164	488	138
2	Huntington Dr	161	242	121	168	267	73	105	1238	189	110	484	67
3	Huntington Dr	100	115	281	63	55	36	22	1243	107	100	467	41
4	Huntington Dr	242	199	697	101	290	54	80	948	602	204	399	20
5	Central Ave &	62	375	191	66	533	24	5	51	126	259	75	283
6	I210 WB On Ra	279	611	0	0	645	252	0	0	0	0	0	0
7	I210 EB On Ra	0	592	358	236	416	0	304	315	92	0	0	0
8	Huntington Dr	1	0	9	8	1	41	62	1413	9	5	635	24
9	Central Ave &	63	366	362	42	124	58	54	221	24	55	81	29
10	Central Ave &	330	5	61	5	0	19	12	296	1	0	236	1

City of Duarte Environmental Impact Report Existing + Proj PM

Intersection Volume Report Future Volume Alternative

Node	Intersection		rthbo - T -			uthbo - T -			astbou T -			stbou - T -	
1	Huntington Dr	135	356	178	269	457	49	61	1266	240	173	542	147
2	Huntington Dr	164	242	271	185	268	73	105	1372	195	199	561	76
3	Huntington Dr	120	115	281	63	55	36	22	1370	126	100	695	41
4	Huntington Dr	362	199	697	101	290	60	83	1014	665	204	525	20
5	Central Ave &	62	506	204	66	616	24	5	51	126	271	75	313
6	I210 WB On Ra	279	755	0	0	699	293	0	0	0	0	0	0
7	I210 EB On Ra	0	658	358	255	451	0	382	315	92	0	0	0
8	Huntington Dr	1	0	9	8	1	41	62	1583	9	5	883	24
9	Central Ave &	63	372	362	45	127	70	74	221	24	55	81	35
10	Central Ave &	359	5	68	5	0	19	12	309	1	0	248	1

Environmental Impact Report

		EIIV			- Proj	_							
	Level Of Service Computation Report												
TCII '	1(Loss as				-		_		native	. I			
********											*****		
Intersection						****	* * * * * *	*****	****	*****	*****		
Cycle (sec): 100 Critical Vol./Cap.(X): 0.844 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx													
Loss Time (se	ec):	6			Averag	e Dela	ay (se	ec/veh)	:	XXXX	xxx		
Optimal Cycle		67			Level						D		
****	******				*****	****					*****		
Street Name: Approach:	North E	Mounta			ound	F:		Hunting		: est Bo	hund		
Movement:	L - T				- R			- R		. БС DC - Т			
Control:	Protec	ted	Pr	otect	ed	P	rotect	ed	Pı	rotect	ed		
Rights:		ude			ıde			ıde	_	Inclu			
Min. Green:	0 (0	0		0	0		0	0		
Y+R: Lanes:	4.0 4.0		4.0		1 0	4.0		4.0 0 1	4.0	4.0	4.0 0 1		
										_			
Volume Module	I	ı	ı			1		ı	1		ı		
Base Vol:	135 356	160	251	457	49	61	1164	240	164	488	138		
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:			251	457	49		1164	240	164	488	138		
User Adj:	1.00 1.00		1.00		1.00		1.00		1.00		1.00		
PHF Adj: PHF Volume:	1.00 1.00 135 356		1.00 251	457	1.00 49		1.00 1164	1.00 240	1.00 164	488	1.00 138		
Reduct Vol:	0 (251	457	0	0	1104	240	0	400	136		
Reduced Vol:			251	457	49		1164	240	164	-	138		
PCE Adj:			1.00		1.00		1.00			1.00	1.00		
MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:			251	457	49		1164	240	164		138		
	I												
Saturation Fi	1600 1600		1600	1600	1600	1600	1600	1600	1600	1600	1600		
	1.00 1.00		1.00		1.00		1.00	1.00		1.00	1.00		
Lanes:	1.00 1.38		1.00		0.19		2.00			2.00	1.00		
Final Sat.:	1600 2208		1600		310		3200	1600		3200			
Capacity Ana	-												
Vol/Sat:	0.08 0.16		0.16	0.16	0.16	0.04	0.36	0.15	0.10	0.15	0.09		
Crit Moves:				*****	*****	****		*****		****	*****		
											· · · · · · · · · · · · · · · · · · ·		

	Environmental Impact Report Existing + Proj PM												
TCII	1 / T ogs					 Computa ethod (native			
********												*****	
Intersection								*****	*****	****	****	*****	
Cycle (sec): 100 Critical Vol./Cap.(X): 0.722 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx Optimal Cycle: 43 Level Of Service: C ***********************************													
Street Name:								F	Hunting	ton Dr	£		
Approach:	No	rth Bo	ound	Soı	uth Bo	ound	Ea	ast Bo	ound	₩€	est Bo	ound	
Movement:						- R I							
Control:						ted							
Rights:		Incl	ıde		Incl	ıde		Inclu	ıde		Inclu	ıde	
Min. Green:				0					0			0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0 1 0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1 (0 1	1 0	1 (0 1	1 0	1 (0 2	0 1	1 () 2	0 1	
Volume Module													
Base Vol:		242	121	168	267	73	105	1238	189	110	484	67	
Growth Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
Initial Bse:			121	168		73		1238	189	110	484	67	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:			121	168	267	73		1238	189	110	484	67	
Reduct Vol:		0	0		0	0		0	0	0	0	0	
Reduced Vol:			121	168				1238		110		67	
PCE Adj:		1.00	1.00		1.00			1.00			1.00	1.00	
MLF Adj: FinalVolume:	1.00		1.00 121	1.00	1.00 267	1.00 73		1.00 1238	1.00 189	1.00	1.00	1.00 67	
Final volume:													
Saturation F				I		I	I		ı	I		I	
Sat/Lane:		1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	1.33	0.67	1.00	1.57	0.43	1.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:			1067		2513			3200			3200		
	1												
Capacity Ana	_			0 11	0 11	0 11	0 0 7	0 20	0 10	0 05	0 15	0 04	
Vol/Sat: Crit Moves:	0.10 ***	0.11	0.11	0.11	0.11 ****	0.11	0.07	0.39	0.12	0.07	0.15	0.04	
*********		****	*****	****		*****	****		*****		*****	*****	

		EIIV.		g + Proj	_								
	Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************												
Intersection	#3 Hunting	ton Dr	& Highl	and Ave									
**************************************	1.0	10			********* al Vol./Ca								
Loss Time (se	ec):	6 13		Averag	e Delay (s Of Service	ec/veh): :	xxxx	C C					
******	******	*****	******	******	*****	******	******	*****					
Street Name: Approach:	North Bo	Highlaı nund	nd Ave South	Bound	East B	Huntingt ound	on Dr West Bo	ound					
Movement:	L - T	- R	L -	T - R	L - T	- R	L - T	- R					
Control:					Protec								
Rights:	Inclu	ıde	In	clude	Incl	ude	Inclu	ıde					
Min. Green: Y+R:		0 4.0	0 4.0 4		$ \begin{array}{cccc} 0 & 0 \\ 4.0 & 4.0 \end{array} $		$ \begin{array}{cccc} 0 & 0 \\ 4.0 & 4.0 \end{array} $	0 4.0					
Lanes:	0 1 1			1 0 1	1 0 2								
Volume Module													
Base Vol: Growth Adj:	100 115 1.00 1.00	281 1.00	63 1.00 1.	55 36 00 1.00	22 1243 1.00 1.00	107 1.00	100 467 1.00 1.00	41 1.00					
Initial Bse:		281		55 36	22 1243		100 1.00	41					
User Adj: PHF Adj:	1.00 1.00 1.00 1.00	1.00	1.00 1. 1.00 1.		1.00 1.00 1.00 1.00		1.00 1.00 1.00 1.00	1.00					
	100 1.00	281		55 36	22 1243		100 1.00	41					
Reduct Vol: Reduced Vol:	0 0	0	-	0 0	0 0 22 1243	-	0 0 100 467	0					
PCE Adj:	100 115 1.00 1.00	281 1.00	1.00 1.	55 36 00 1.00	1.00 1.00		100 467 1.00 1.00	41 1.00					
MLF Adj:	1.00 1.00	1.00	1.00 1.				1.00 1.00	1.00					
FinalVolume:		281		55 36 	22 1243		100 467 	41					
Saturation Fl			1600 16	00 1600	1600 1600	1600	1600 1600	1600					
Sat/Lane: Adjustment:	1600 1600 1.00 1.00	1600 1.00	1600 16 1.00 1.		1600 1600 1.00 1.00		1600 1600 1.00 1.00	1.00					
Lanes:		1.00	1.00 1.				1.00 2.00	1.00					
Final Sat.:		1600	1600 16 		1600 3200		1600 3200 	1600					
Capacity Anal	lysis Modul 0.06 0.07		0 04 0	U3 U U3	0.01 0.39	0 07	0 06 0 15	0.03					
Crit Moves:		***	***		***		***						
*****	*******	*****	* * * * * * *	******	******	******	******	*****					

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)													
******							****	****	*****	*****	****	*****	
Intersection							****	****	****	****	****	*****	
Cycle (sec):		1	00			Critic	al Vol	l./Caj	p.(X):		1.1	115	
Loss Time (se	ec):		9			Averag	e Dela	ay (s	ec/veh):	1.115 : 71.0 E		
Optimal Cycle	<u>:</u>	1	80			Level	Of Sei	cvice	:			E	

Street Name:	Mt Olivie St Huntington Dr North Bound South Bound East Bound West Bound												
Approach:	Noi	rth B	ound	Soi	ath Bo	ound	Εá	ast B	ound	We	West Bound		
Movement:	L -	- T	- R	L -	- T	- R	. L -	- T	- R	_ L -	- T	- R	
Control:	Colit Dage Colit Dage Destarted Destarted												
Pights:	Split Phase Split Phase Protected Protected Include Include Include												
Min. Green:	Ο	11101	n n	Λ	TITCI	n n	Λ	11101	nae n	0	111010	0	
Y+R:	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0		
Y+R: Lanes:	1 1	1 0	0 1	1 () 1	1 0	1 () 2	0 1	1 () 2	0 1	
Volume Module	· :												
Base Vol:	242	199	697	101	290	54	80	948	602	204	399	20	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:			697	101	290	54	80	948	602	204	399	20	
User Adj: PHF Adj:	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	
			1.00		1.00						1.00		
PHF Volume:			697	101			80				399	20	
Reduct Vol:	0	0	0		0		0	0	0	0 204	0	0	
Reduced Vol:				101	290							20	
PCE Adj:			1.00		1.00						1.00		
MLF Adj:			1.00		1.00						1.00		
FinalVolume:							80	948	602	204	399	20	
Saturation Fl													
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.97	0.97	0.85	0.95	0.93	0.93	0.95	0.95	0.85	0.95	0.95	0.85	
Lanes:	1.10	0.90	1.00	1.00	1.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:						553					3610		
Capacity Anal				0 06	0 10	0 10	0 0 1		0 0 0	0 11	0 11	0 01	
Vol/Sat:	0.12	0.12	0.43 ****		0.10	0.10 ****	0.04	0.26	0.37 ****		0.11	0.01	
Crit Moves:	0 20	0 20			0 00		0 10	0 22			0 21	0 21	
Green/Cycle:						0.09					0.31		
Volume/Cap:			1.12 102.7	0.64		1.12 131.6		0.79			0.36	0.04 24.1	
Delay/Veh: User DelAdj:					1.00			1.00	107.7		1.00	1.00	
AdjDel/Veh:			102.7	52.6		131.6			107.7			24.1	
LOS by Move:	Z1.3	Z1.3	102.7 F	J2.0	F	F	D	33.3 C	107.7 F	143.0 F	20.5 C	Z 4 . 1 C	
HCM2kAvqQ:	5	5	34	4	11	11	3	16	30	12	5	0	
********												-	
Note: Queue	report	ted i	s the r	number	of ca	ars per	lane						
++++++++++	. + + + + .	++++	+++++	. + + + + + .			+++++	++++	+++++	+++++		++++++	

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to CAMBRIDGE SYSTEMATICS

Existing + Proj PM Thu Jun 9, 2016 12:08:19 Page 12-1

City of Duarte Environmental Impact Report Existing + Proj PM

				f Car					 -			
Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
*****											****	*****
Intersection							****	****	*****	*****	****	*****
Cycle (sec):		1.0	10			Critic	al Vol	l./Car	o.(X):		0.5	28
Loss Time (se Optimal Cycle		2	6 19			Averag Level		_		•	25	. 9 C
*****					****					*****	****	-
Street Name:		Е	uena V	ista S	St				Centra	l Ave		
Approach:				South Bound						West Bound		
Movement:			- R			- R			- R			
Control:										Pro		
Rights:			ıde			ıde			ıde		Inclu	
	0		0		0	0		0	0	0		0
Y+R:	4.0	4.0								4.0	4.0	4.0
Lanes:			1 0			1 0			1 0			
	1											
Volume Module Base Vol:		375	191	66	533	24	5	51	126	259	75	283
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00 1		1.00
Initial Bse:		375	191	66	533	24	5	51	126	259	75	283
Added Vol:		131	13	0	83	0	0	0	0	12	0	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	506	204	66	616	24	5	51	126	271	75	313
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00 1		1.00
PHF Volume:		506	204	66	616	24	5	51	126	271	75	313
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol: PCE Adj:			204	66	616	24	5	51	126	271	75	313
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00 1.00	1.00 1		1.00 1.00
FinalVolume:			204		616	24		51	126	271		313
Saturation F				1			1		,	1		1
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 1	1900	1900
Adjustment:			0.91		0.94	0.94		0.89	0.89	0.95 1		0.85
Lanes:			0.57		1.93	0.07		0.29	0.71	1.00 1		1.00
Final Sat.:			993		3454	135		489	1208	1805 1		1615
Capacity Ana												
Vol/Sat:	_		0.21	0.04	0.18	0.18	0.00	0.10	0.10	0.15	0.04	0.19
Crit Moves:		****		****				****		****		
Green/Cycle:	0.07	0.39	0.39	0.07	0.38	0.38	0.01	0.20	0.20	0.28	.47	0.47
Volume/Cap:		0.53	0.53		0.46	0.46		0.53	0.53	0.53 0		0.41
Delay/Veh:		23.9	23.9		23.3	23.3		37.5	37.5	31.2 1		17.5
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00 1		1.00
AdjDel/Veh:		23.9	23.9		23.3	23.3	70.1		37.5	31.2 1		17.5
LOS by Move: HCM2kAvqQ:	D 2	C 9	C 9	D 3	C 8	C 8	E 1	D 5	D 5	C 7	В 1	В 6
HCM2KAV9Q.										=		

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Level Of Service Computation Report													
						(Base							
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****	
Intersection				-				****	*****	****	****	*****	
Cycle (sec):		1	00			Critic	al Vol	l./Cap	o.(X):		0.4	127	
Loss Time (se	ec):		3			Average	e Dela	ay (se	ec/veh)	:	9.1		
Optimal Cycle	: :	:	17			Level	Of Sei	cvice	:			A	
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****	
Street Name:]	Buena V	ista S	St			I	210 WB	On Rar	np		
Approach:		rth B	ound			ound		ast Bo		We	est Bo	ound	
Movement:	L -		- R			- R			- R		- T		
			-										
Control:	Protected Protected Protected Protected												
Rights:		Incl			Incl			Incl			Incl	ıde	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	
Lanes:	. 1 (0 0	0 (0 0					
Volume Module							_	_					
Base Vol:	279	611	0	0	645	252	0	0	0	0	0	0	
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:	279	611	0	0	645	252	0	0	0	0	0	0	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	279	611	0	0	645	252	0	0	0	0	0	0	
Reduct Vol:	270	611	0	0	0 645	0 252	0	0	0	0	0	0	
Reduced Vol: PCE Adj:	279 1.00	611	0 1.00	1 00	1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:		611	0	0	645	252	0.00	0	0	0	0.10	0.1	
									I	1			
Saturation Fl	ı			I		I	I		I	I		1	
Sat/Lane:	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95		1.00		0.91	0.91		1.00	1.00		1.00	1.00	
Lanes:	1.00		0.00		1.44	0.56		0.00	0.00		0.00	0.00	
Final Sat.:	1805		0		2487	972	0		0	0	0	0	
Capacity Anal	lysis	Modu.	le: ˈ	•									
Vol/Sat:	0.15	0.17	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.00	0.00	0.00	
Crit Moves:	****				****								
Green/Cycle:	0.36	0.97	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.00	0.00	0.00	
Volume/Cap:	0.43	0.17	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.00	0.00	0.00	
Delay/Veh:	24.5	0.1	0.0	0.0	10.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	24.5	0.1	0.0	0.0	10.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	
LOS by Move:	C	A	A	A		В	A	A	A	A	A	A	
HCM2kAvgQ:	6	1	0	0	7	7	0	0	0	0	0	0	
******									*****	****	****	*****	
Note: Queue 1	report	ted i	s the n	umber	of ca	ars per	lane						

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Level Of Service Computation Report												
						(Base						
*****	****	****	*****	*****	****	*****	****	****	*****	****	****	*****
Intersection				-				****	*****	****	****	*****
Cycle (sec):		1	00			Critic	al Vol	l./Car	o.(X):		0.6	503
Loss Time (se	ec):		6			Averag	e Dela	ay (se	ec/veh)	: 24.5		
Optimal Cycle	∋ :		33			Level	Of Service: C					
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:]	Buena V	7ista S	St			I	210 EB	On Rar	np	
Approach:	Noi	rth B	ound	Sou	ith Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L -		- R			- R			- R		- T	
Control:	-											
Rights:		Incl	ude		Incl	ıde		Incl	ude		Incl	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 (2	0 1	1 (2	0 0	0 1	1 0	1 0	0 (0 0	0 0
Volume Module	⊋:											
Base Vol:	0	592	358	236	416	0	304	315	92	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	592	358	236	416	0	304	315	92	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	592	358	236	416	0	304	315	92	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	592	358	236	416	0	304	315	92	0	0	0
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		592	358	236	416	0	304		92	. 0	0	0
Cotumotion E												
Saturation Fl Sat/Lane:	1900		1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
Adjustment:	1.00		0.85		0.95	1.00		0.87	0.87		1.00	1.00
Lanes:	0.00		1.00		2.00	0.00		0.89	0.26		0.00	0.00
Final Sat.:			1615		3610	0.00		1469	429	0.00	0.00	0.00
												-
Capacity Anal										1		
Vol/Sat:	0.00		0.22	0 13	0.12	0.00	0 21	0.21	0.21	0 00	0.00	0.00
Crit Moves:	0.00	0.10	****	****	0.12	0.00	****	0.21	0.21	0.00	0.00	0.00
Green/Cycle:	0 00	0 37	0.37	0 22	0.58	0.00	0 36	0.36	0.36	0 00	0.00	0.00
Volume/Cap:		0.45	0.60		0.20	0.00		0.60	0.60		0.00	0.00
Delay/Veh:	0.0		27.5	37.9	9.8	0.0		27.3	27.3	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		24.2	27.5	37.9	9.8	0.0		27.3	27.3	0.0	0.0	0.0
LOS by Move:	0.0 A		27.3 C	57.5 D).0 A	0.0 A	27.3 C	27.3 C	27.3 C	0.0 A	0.0 A	0.0 A
HCM2kAvqO:	0	7	10	6	3	0	10	10	10	0	0	0
********	-									-	-	-
Note: Queue 1	report	ted i	s the r	number	of ca	ars per	lane	•				

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Existing + Proj PM													
Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ***********************************													
Intersection #8 Huntington Dr & Cotter Ave													
Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[23.5] ************************************													
Street Name:			Cotte	er Ave				Ι	Huntin	gton Di	2		
Approach:													
Movement:	L-T-R L-T-R L-T-												ı
Control:													
Rights:		Incl				ıde	011	Incl		0110	Incl		
Lanes:	0 0	1!	0 0	0 (1!	0 0	1	0 1	1 0	1 (2	0 1	
Volume Modul		_			_				_	_			
Base Vol:	1.00	1 00	9 1.00	1 00	1.00	41 1.00		1413	9 1.00	1 00	635	24 1.00	
Growth Adj: Initial Bse:		0.11	9	1.00	1.00	41		1413	1.00	1.00	635	24	
User Adj:	1.00		1.00	-	1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	1	0	9	8	1	41		1413	9	5	635	24	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	1	0	9	8	1	41		1413	9	5	635	24	
Critical Gap Critical Gp:		.e: 6.5	6.9	7.5	6.5	6.9	<i>1</i> 1	vvvv	xxxxx	1 1	vvvv	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5		3.3			XXXXX			XXXXX	
Capacity Mod	ule:												
Cnflict Vol:			711		2191	318			xxxxx				
Potent Cap.:		45	380	90	46	684			xxxxx			xxxxx	
Move Cap.: Volume/Cap:		41	380	82	42 0.02	684 0.06			XXXXX			XXXXX	
volume/cap:													l
Level Of Ser				1 1			1 1			1 1			I
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	
Control Del:						xxxxx			xxxxx			xxxxx	
LOS by Move:		*	*	*	*	*	A			В	*	*	
Movement:			- RT			- RT			- RT		- LTR		
Shared Cap.: SharedOueue:						XXXXX			XXXXX	XXXX		XXXXX	
SharedQueue:													
Shared LOS:	*	23.3 C	*	*	20.0 C	*	*		*	*		*	
ApproachDel:		23.5			20.8		X	xxxxx		XX	xxxx		
ApproachLOS: C C * *													

Note: Queue reported is the number of cars per lane. ************************************													

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Existing + Proj PM Thu Jun 2, 2016 09:18:11 Page 16-1

City of Duarte Environmental Impact Report

Environmental Impact Report Existing + Proj PM													
======================================													
			Level O	f Serv	zice (Computa	tion I	Report	t.				
ICU 1	L(Loss					-		-	e Alter	native	<u>,</u>)		
******												*****	
	Intersection #9 Central Ave & Highland Ave												
Cycle (sec):	\ .	1	00			Critic	ar vo.	L./Ca]	o.(X):	0.480 : xxxxx A			
LOSS IIME (Se	2 C).		20			Averag	e per	ay (St	• c/ veii)	: XXXXXX			

Street Name:			Highla						Centra				
				ound East Bound					at Bo	nund			
Movement:	T	- Т	- R	T	лсп D(- Т	- P	Т	лос D(- Т	- R	T	. БС DC . Т	- R	
	 			1			I			1			
Control:]	Permi	tted	ı I	Permit	tted	']	Permit	tted	' F	ermit	ted	
Rights:			ude			ıde		Incl			Incli		
Min. Green:					0	0		0				0	
						4.0			4.0			4.0	
Lanes:	0 :	1 0	1 0	0 1	L 0	1 0	0 :	L O	0 1	1 0	0	1 0	
Volume Module	Volume Module:												
Base Vol:	63	366	362	42	124	58	54	221	24	55	81	29	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:				42	124	58	54	221	24	55	81	29	
User Adj:					1.00	1.00	1.00	1.00		1.00		1.00	
		1.00			1.00	1.00		1.00		1.00		1.00	
PHF Volume:				42		58	54			55		29	
Reduct Vol:		0		-	0	0	-	0	-	0	0	0	
Reduced Vol:		366		42			54					29	
		1.00			1.00			1.00				1.00	
MLF Adj:			1.00		1.00			1.00		1.00		1.00	
FinalVolume:		366		42					24	55		29	
Saturation Fl Sat/Lane:				1.000	1600	1600	1600	1600	1600	1600	1600	1600	
		1600			1600			1600		1.00		1600 1.00	
Adjustment:					1.00					1.00			
Lanes: Final Sat.:						0.52 829				1600		422	
Capacity Anal				1			I			1			
Vol/Sat:	-			0 03	0 07	0 07	0 03	0 17	0 02	0 03	0 07	0.07	
Crit Moves:	0.01	****		****	3.07	0.07	3.03	****	0.02	****		0.07	
*******	****	****	*****	****	****	*****	****	****	*****	*****	****	*****	

Existing + Proj PM													
Level Of Service Computation Report													
2	2000 HCM Unsignalized Method (Base Volume Alternative)												
*****	****	****	*****	*****	* * * * *	*****	****	****	*****	*****	****	*****	
Intersection *******								****	*****	*****	****	*****	
Average Delay (sec/veh): 9.8 Worst Case Level Of Service: C[23.2]													
Street Name:		I	210 WB	Off Ra	amp				Centra	al Ave			
Approach:	Noi	rth B	ound	Sou	ath Bo	ound	Εá	ast Bo	ound	We	est Bo	ound	
Movement:	L - T - R L - T - R L - T - R -												
Control:	Stop Sign Stop Sign Uncontrolled Uncontrolled												
Rights:		_	ude			ude			ude		Incl		
Lanes:						0 0							
Volume Module		_		_					_			_	
Base Vol:	330	5		5		19		296			236	1	
Growth Adj:		1.00			1.00	1.00		1.00			1.00	1.00	
Initial Bse:		5	61	5	0	19		296	1		236	1	
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	330	5	61	5	0	19	12		1	0	236	1	
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:		5	61	5	0	19	12		1	0	236	1	
Critical Gap			6.9	7.5	6.5	6.9	1 1	3,53,53,53,5	xxxxx	3535353535	3,53,53,53,5	3,53,53,53,5	
Critical Gp: FollowUpTim:		4.0	3.3	3.5		3.3			XXXXX				
Capacity Modu						I	1					I	
Cnflict Vol:		558	149	411	558	119	237	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:			878						XXXXX			XXXXX	
Move Cap.:	493		878						xxxxx			xxxxx	
Volume/Cap:					0.00	0.02			xxxx			xxxx	
Level Of Serv	vice N	Modul	e:									·	
2Way95thQ:	4.9	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	25.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	D	*	*	*	*	*	A	*	*	*	*	*	
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	816	xxxx	774	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.3	xxxxx	0.1	XXXXX	0.0	XXXX	xxxxx	xxxxx	xxxx	XXXXX	
Shrd ConDel:	XXXXX	xxxx	9.8	xxxxx	9.8	XXXXX	7.7	xxxx	xxxxx	xxxxx	xxxx	XXXXX	
Shared LOS: * * A * A * A * * * * *													
ApproachDel: 23.2 9.8 xxxxxx xxxxxx													
ApproachLOS: C A * *													

Note: Queue :									*****	*****	****	*****	

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City of Duarte

Environmental Impact Report Future No Proj AM Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ************************ Intersection #1 Huntington Dr & Mountain Ave ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 88 XXXXXX 88 Street Name: Mountain Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Include 0 0 0 4.0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 208 453 94 96 358 71 87 322 83 131 1249 292 Initial Bse: 245 535 111 113 422 84 103 380 98 155 1474 345 PHF Volume: 245 535 111 113 422 84 103 380 98 155 1474 345 FinalVolume: 245 535 111 113 422 84 103 380 98 155 1474 345 Saturation Flow Module: Lanes: 1.00 1.66 0.34 1.00 1.67 0.33 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 1600 2650 550 1600 2670 530 1600 3200 1600 1600 3200 1600 -----|----|-----| Capacity Analysis Module:

City of Duarte

Environmental Impact Report Future No Proj AM

Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ************************ Intersection #2 Huntington Dr & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 69 XXXXXX ************************* Street Name: Bella Vista St Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Include 0 0 0 4.0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 141 228 71 47 193 80 71 271 117 88 1449 74 Initial Bse: 166 269 84 55 228 94 84 320 138 104 1710 87

Capacity Analysis Module:

Fut No Proj AM Mon May 23, 2016 11:04:14 Page 6-1 City of Duarte

Environmental Impact Report

Future No Proj AM											
Level Of Service Computation Report											
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)											
********	********************										
Intersection #3 Huntington Dr & Highland Ave ************************************											
Cycle (sec):	10	00			al Vol./Cap						
Loss Time (se	•	6		Averag	e Delay (se	: xxxxxx					
Optimal Cycle		56			Of Service			D			
*******				*****				*****			
Street Name:		Highlan				Hunting		-			
	North Bo				East Bo		West Bo				
Movement:	L - T				L - T		L - T				
Control: Dermitted Dermitted Protected Protected											
Control: Permitted Permitted Protected Protected Rights: Include Include Include Include											
Min. Green:	0 0	0	0 (0 0	0	0 0	0			
Y+R:	4.0 4.0	ū	4.0 4.0	-		-		4.0			
Lanes:	0 1 1						1 0 2				
Volume Module	:						•				
Base Vol:	85 72	183	67 143	3 32	28 311	78	405 1455	60			
Growth Adj:	1.18 1.18	1.18	1.18 1.18	3 1.18	1.18 1.18	1.18	1.18 1.18	1.18			
Initial Bse:	100 85	216	79 169	38	33 367	92	478 1717	71			
User Adj:	1.00 1.00	1.00	1.00 1.00		1.00 1.00	1.00	1.00 1.00	1.00			
PHF Adj:	1.00 1.00	1.00	1.00 1.00		1.00 1.00	1.00	1.00 1.00	1.00			
PHF Volume:	100 85	216	79 169		33 367	92	478 1717	71			
Reduct Vol:	0 0	0	0 (-	0 0	0	0 0	0			
Reduced Vol:	100 85	216	79 169		33 367	92	478 1717	71			
PCE Adj: MLF Adj:	1.00 1.00 1.00	1.00	1.00 1.00		1.00 1.00 1.00	1.00	1.00 1.00 1.00	1.00			
FinalVolume:	100 1.00	216	79 169		33 367	92	478 1717	71			
				I		I	1,0 1,1, 				
Saturation Fl			I		I		I	ļ			
Sat/Lane:	1600 1600	1600	1600 1600	1600	1600 1600	1600	1600 1600	1600			
Adjustment:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00			
Lanes:	1.00 1.00	1.00	0.64 1.36	5 1.00	1.00 2.00	1.00	1.00 2.00	1.00			
Final Sat.:	1600 1600	1600	1021 2179	9 1600	1600 3200	1600	1600 3200	1600			
Capacity Anal	-										
Vol/Sat:	0.06 0.05	0.13	0.05 0.08	3 0.02	0.02 0.11	0.06	0.30 0.54	0.04			
Crit Moves:	****			******		. * * * * * * * .		*****			
											

City of Duarte

Environmental Impact Report Future No Proj AM Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ************************ Intersection #4 Huntington Dr & Mt Olivie St ************************* Critical Vol./Cap.(X): Cycle (sec): 100 Average Delay (sec/veh): Level Of Service: Loss Time (sec): 9
Optimal Cycle: 106 9 44.0 ************************* Street Name: Mt Olivie St Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 715 131 212 46 342 85 60 265 194 366 1126 99 Initial Bse: 844 155 250 54 404 100 71 313 229 432 1329 117 FinalVolume: 844 155 250 54 404 100 71 313 229 432 1329 117 Saturation Flow Module: Adjustment: 0.96 0.96 0.85 0.95 0.92 0.92 0.95 0.95 0.85 0.95 0.95 0.85 Lanes: 1.69 0.31 1.00 1.00 1.60 0.40 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 3080 564 1615 1805 2805 697 1805 3610 1615 1805 3610 1615 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.27 0.27 0.15 0.03 0.14 0.14 0.04 0.09 0.14 0.24 0.37 0.07 Crit Moves: **** **** **** Green/Cycle: 0.30 0.30 0.30 0.16 0.16 0.16 0.04 0.17 0.17 0.28 0.41 0.41 Volume/Cap: 0.91 0.91 0.51 0.19 0.91 0.91 0.91 0.52 0.85 0.85 0.91 0.18 ************************ Note: Queue reported is the number of cars per lane.

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City of Duarte Environmental Impact Report Future No Proj AM

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)												
*******							****	****	*****	****	****	*****
Intersection	****	****	*****	*****	****	*****						
Cycle (sec): Loss Time (sec) Optimal Cycle		10	0.0			Critic	al Vo	l./Car	o.(X):		0.5	512
Loss Time (se	ec):		6			Averag	e Dela	ay (se	ec/veh)	:	23	3.4
Optimal Cycle	≘ ∶	2	28			Level	Of Ser	rvice	:			C
******	****	****	*****	*****	****	*****	****	****	*****	****	****	*****
Street Name: Approach:		I	Buena V	/ista S	St				Centra	l Ave		
Approach:	Noi	rth Bo	ound	Sot	ath Bo	ound	Εā	ast Bo	ound	We	est Bo	ound
Movement:												
 Control:	Protogted Protogted Protogted Protogted Protogred											
Rights:	Protected Protected Protected Protected Include Include Include Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	1 () 1	1 0	1 () 1	1 0	1 (0 0	1 0	1 () 1	0 1
Volume Module	:		,									
Base Vol:	40	291	251	38	422	8	3	15	41	348	160	235
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:			296	45	498	9	4	18	48	411	189	277
User Adj: PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
PHF Adj:	1.00	1.00			1.00			1.00		1.00	1.00	1.00
PHF Volume:	47	343	296	45		9	4	18	48			277
Reduct Vol: Reduced Vol:	0	0	0	0 45	0	0	0	0	0 48	0	0	0
PCE Adj:					1.00						1.00	
MLF Adj:			1.00		1.00						1.00	
FinalVolume:	47	343	296	45	498	9	4	18	48	411	189	277
 Saturation Fl	l Low Mo	odule	 :									
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.88	0.88	0.95	0.95	0.95	0.95	0.89	0.89	0.95	1.00	0.85
Lanes:	1.00	1.07	0.93	1.00	1.96	0.04	1.00	0.27	0.73	1.00	1.00	1.00
Final Sat.:				1805	3532	67			1238		1900	
Capacity Anal												
Vol/Sat:							0.00				0.10	0.17
Crit Moves:								****		****		
Green/Cycle:												
Volume/Cap:					0.40	0.40					0.19	
Delay/Veh:		24.8	24.8		24.5	24.5		47.9	47.9		13.2	14.5
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	47.0		24.8		24.5	24.5		47.9	47.9		13.2	14.5
LOS by Move:	D 1	C	C	D 1	C	C	E	D	D	C	В	В
HCM2kAvgQ: *******	1 ****	8 :****	8 *****	1	6 ****	6 *****	0 ****	3 ****	3 *****	9 *****	3 ****	5 *****
Note: Queue 1												
10ce. Queue 1									++++++	++++		

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City of Duarte

Environmental Impact Report Future No Proj AM

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #6 I210 WB On Ramp & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.340 Average Delay (sec/veh): Level Of Service: Loss Time (sec): 3
Optimal Cycle: 15 3.7 15 *********************** Street Name: Buena Vista St I210 WB On Ramp
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 86 588 0 0 572 229 0 0 0 0 0 Initial Bse: 101 694 0 0 675 270 0 0 0 0 0

-----|----||------| Saturation Flow Module: Lanes: 1.00 2.00 0.00 0.00 1.43 0.57 0.00 0.00 0.00 0.00 0.00 0.00 Final Sat.: 1805 3610 0 0 2467 988 0 0 0 0 0 -----||-----||-----| Capacity Analysis Module: Crit Moves: **** ****

A 0 ****** Note: Queue reported is the number of cars per lane.

AdjDel/Veh: 37.6 0.1 0.0 0.0 2.7 2.7 0.0 0.0 0.0 0.0 0.0

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Fut No Proj AM Mon May 23, 2016 11:04:14 Page 10-1 Fut No Proj AM

City of Duarte Environmental Impact Report Future No Proj AM

	Future no Proj AM												
				f Corr		Computa	tion I	Popor	 -				
	2000		Level O			-		_		\			
*****			Operati										
Intersection	#7 I	210 EI	3 On Ra	mp & I	Buena	Vista	St						

Cycle (sec): Loss Time (sec) Optimal Cycle		Τí	00			Critic	ar vo.	I./Ca]	o.(X):		0.5	589	
Loss Time (se	ec):		6			Averag	ie nerg	ay (s	ec/ven)	:	26	o.⊥	

Street Name:			Buena V						210 EB			,	
Approach:													
Movement:	ь.	- T.	- R	ь -	- T	- R	, ь.	- T.	- R	' Г.	- 'I'	- R	
Control:													
Rights:		Incli	ade		Inclu	ıde		Incl	ude		Incl		
Min. Green: Y+R:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0 (0 2	0 I	, T () 2	0 0	. 0 .	1 0	Ι 0	0 () ()	0 0	
Volume Module		400	1.00	0.50	260		201		201				
			172							0	0	0	
Growth Adj:				1.18			1.18				1.18	1.18	
Initial Bse:			203	295			382				0	0	
User Adj:			1.00		1.00	1.00		1.00			1.00		
PHF Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
PHF Volume: Reduct Vol:	0	218	203	295		0	382				0	0	
			0	0			0					0	
Reduced Vol:			203	295		0	382		359			0	
PCE Adj: MLF Adj:	1.00	1.00	1.00		1.00				1.00		1.00		
			1.00		1.00	1.00			1.00		1.00	1.00	
FinalVolume:			203		435	0	382				0	0	
Saturation Fl				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:									1900 0.82		1900		
Adjustment:				0.95	2.00				0.82		0.00	1.00	
Lanes: Final Sat.:					3610				1491			0.00	
Fillal Sat.													
Capacity Anal													
	-			0 16	0 10	0 00	0.25	0 24	0 24	0 00	0 00	0.00	
Vol/Sat: Crit Moves:	0.00	****	0.13	****	0.12	0.00	****	0.24	0.24	0.00	0.00	0.00	
					0 50	0 00		0 42	0 42	0 00	0 00	0 00	
<pre>Green/Cycle: Volume/Cap:</pre>													
										0.0			
Delay/Veh: User DelAdj:			33.9 1.00		13.1	0.0 1.00		22.9 1.00			0.0	0.0 1.00	
AdjDel/Veh:		34.5	33.9	1.00	13.1	0.0		22.9	22.9	0.0	0.0	0.0	
LOS by Move:		34.5 C	33.9 C	33.1 C	13.1		23.1 C	22.9 C	22.9 C				
HCM2kAvgQ:	A 0	8	6	8	в 4	A 0	10	10	10	A 0	A 0	A 0	
HCMZKAV9Q:													
Note: Queue 1													
Note: Queue i									+++++	. + + + + + .			

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		1	Level (of Serv	vice (Computa	ation I	Report	5			
			nsignal									
*****							*****	****	****	****	****	*****
Intersection							*****	****	*****	*****	****	*****
Average Delay			,							rvice: *****	-	_
Street Name:			Cotte	er Ave				Ι	Huntin	gton Di	r	
Approach:	Noi	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:			- R	L -	- T	- R	L -	- Т	- R	L ·	- T	- R
Control:	St	top Si	ign	St	cop Si	ign	Und	contro	olled	Und	contro	olled
Rights:		Incl	ude		Incl	ıde		Incl			Incl	
Lanes:			0 0						1 0) 2	
Volume Module												
Base Vol:	30	0	7	8	0	56	30	335	2		1593	6
Growth Adj:		1.18	1.18		1.18	1.18		1.18	1.18		1.18	1.18
Initial Bse:	35	0	8	9	0	66	35	395	2		1880	7
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	35	0	8	9	0	66	35	395	2	-	1880	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	. 35	0	8	9	0	66	35	395	2		1880	7
	1											
Critical Gap							4 7					
Critical Gp:	7.5	6.5	6.9			6.9			XXXXX			XXXXX
FollowUpTim:			3.3		4.0	3.3			xxxxx			XXXXX
Compaite Made	I											
Capacity Modu Cnflict Vol:		2271	100	2165	2265	940	1007			200		
Potent Cap.:		35	199 815	2105	2365 36	269			XXXXX			XXXXX
Move Cap.:	90 67		815	24	32	269			XXXXX			XXXXX
Volume/Cap:			0.01		0.00	0.25			XXXX		XXXX	
Level Of Serv	1			 			1 1			1 1		1
2Way95th0:			xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.6	xxxx	xxxxx			xxxxx
LOS by Move:	*	*	*	*	*	*	С	*	*	A	*	*
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	81	xxxxx	xxxx	119	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	2.3	xxxxx	xxxxx	3.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:												
Shared LOS:	*	F	*	*	F	*	*	*	*	*	*	*
ApproachDel:		91.9			76.5		XX	xxxx		x	xxxxx	
ApproachLOS:		F			F			*			*	
******	****	****	*****	*****	****	*****	*****	****	*****	****	****	*****
Note: Queue :									****	****	****	*****

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Environmental Impact Report

	Future No Proj AM													
	Level Of Service Computation Report													
ICU 1	l(Los:					ethod (-		native	<u>)</u>			
*****	****	****	*****	****	****	*****	****	****	*****	*****	****	*****		
Intersection							****	****	*****	*****	****	*****		
Cycle (sec):														
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx Optimal Cycle: 33 Level Of Service: A														
******	****	****				*****	****	****	*****	*****	****	*****		
Street Name: Highland Ave Central Ave Approach: North Bound South Bound Fast Bound West Bound														
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R														
Movement: L - T - R L - T - R L - T - R														
Control: Permitted Permitted Permitted Permitted														
Rights: Include Include Include Include														
Min. Green: 0 0 0 0 0 0 0 0 0 0														
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0														
	Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0													
Volume Module	Volume Module:													
Base Vol:	83	153	116	67	429	114	39	97	76	243	242	62		
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18		
Initial Bse:	98	181	137	79	506	135	46	114	90	287	286	73		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Volume:	98	181	137	79	506	135	46	114	90	287	286	73		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	98	181	137	79	506	135	46	114	90	287	286	73		
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00		
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00		
FinalVolume:		181	137	79	506	135 l	46		90 l	287	286	73 l		
Saturation Fl	ı													
Sat/Lane:		1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600		
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		
Lanes:	0.47	0.87	0.66	0.22	1.41	0.37	0.29	0.71	1.00	1.00	0.80	0.20		
Final Sat.:	755	1391	1055	351	2250	598	459	1141	1600	1600	1274	326		
	ı													
Capacity Anal	-													
Vol/Sat:		0.13	0.13	0.05	0.22	0.22	0.03	0.10	0.06	0.18	0.22	0.22		
Crit Moves:	****		nanana ee ee	and an electric		nanana ee ee	and an energy	****	nanana ee ee	****				
*******	****	*****	*****	****	****	*****	****	****	*****	*****	****	******		

	Future No Proj AM												
						Computa		_					
****						d (Base							
								****	****	****	****	*****	
Intersection							-	****	*****	*****	****	*****	
Average Delay			,			Worst					-	-	
Street Name:		Т:	210 WB	Off Ra	ame				Centra	al Ave			
Approach:	Not	rth Bo			-	ound	Ea	ast Bo			est Bo	ound	
Movement:			- R			- R			- R		- T		
Control:			ign			ign			olled	Uno			
Rights:	-	_	_		_	_	-			-			
Rights: Include Include Include Lanes: 1 0 0 1 0 0 0 1! 0 0 0 1 1 0 0 0 1 1 0													
Volume Module	1			1 1		,	I			1 1		ļ	
Base Vol:	287	0	96	1	0	5	4	328	0	0	488	6	
Growth Adj:		1.18	1.18		1.18	1.18		1.18	1.18		1.18	1.18	
Initial Bse:		0	113	1	0	6	5	387	0	0	576	7	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	339	0	113	1	0	6	5	387	0	0	576	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	339	0	113	1	0	6	5	387	0	0	576	7	
												· · · · · · · · · · · · · · · · · · ·	
Critical Gap	1			I I		I	I			1 1		ļ	
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3			xxxxx				
Capacity Modu	-			1 1		1	1			1 1		ı	
Cnflict Vol:	684	979	194	782	976	291	583	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:		252	822	288	253	711			xxxxx			xxxxx	
Move Cap.:	334	251	822	247	252	711			xxxxx			xxxxx	
Volume/Cap:	1.01	0.00	0.14	0.00	0.00	0.01			xxxx		xxxx	xxxx	
Level Of Serv	vice N	Module	e:	' '		'				' '			
2Way95thQ:			xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	88.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	F		*	*	*	*	А	*	*	*	*	*	
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	822	xxxx	542	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:				xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:				xxxxx					xxxxx				
Shared LOS:	*	*	В	*	В	*	А	*	*	*	*	*	
ApproachDel:		69.0			11.7		XX	xxxx		X	xxxx		
ApproachLOS:		F			В			*			*		
*****	****	****	*****	*****	* * * * *	*****	****	****	*****	*****	****	*****	
Note: Queue 1	-					-			*****	*****	****	*****	

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Fut No Proj PM Mon May 23, 2016 11:18:44 Page 4-1 City of Duarte

Environmental Impact Report

	Future No Proj PM												
ICU 1		s as (Level O Cycle L	ength	%) Me	ethod (Base V	olume	e Alter			*****	
Intersection	#1 Ht	unting	gton Dr	& Moi	ıntair	n Ave							
Cycle (sec): Loss Time (sec) Optimal Cycle	:	18	00 6 80	****	****	Averag Level	e Dela Of Sei	ay (se	o.(X): ec/veh) :	:	XXXX	KXX E	
Street Name: Approach:	Noi	rth Bo	ound	Sou	ith Bo	ound	Εá	ast Bo	ound	W∈	est Bo	ound	
Movement:			- R	L -	- T	- R	, L -	- T	- R	. L -	- Т		
		roteci	 ted	D1	otect	 -ed	D1		 -ed	D1	otect	 -ed	
Control: Rights:		Incl	ude		Incl	ıde		Incli	ıde		Incli	ıde	
Min. Green:	0	0	0			0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:						1 0			0 1				
Volume Module Base Vol:	135	256	160	251	457	49	61	1164	240	164	488	138	
Growth Adj:		1.18	1.18		1.18			1.18		1.18		1.18	
Initial Bse:			189	296	539			1374			576	163	
User Adj:			1.00		1.00			1.00			1.00	1.00	
	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	159	420	189	296	539	58	72	1374	283	194	576	163	
Reduct Vol:	0	0	0	0	0	0		0	0	0	0	0	
Reduced Vol:			189	296	539			1374		194		163	
PCE Adj:		1.00	1.00		1.00			1.00			1.00	1.00	
MLF Adj:	1.00		1.00		1.00			1.00		1.00		1.00	
FinalVolume:			189		539		72				576		
Saturation Fl							1						
		1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	1.38	0.62	1.00	1.81	0.19	1.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:						310		3200			3200		
Capacity Anal Vol/Sat:	_		0.19	n 10	n 10	0 10	0 04	0 43	Λ 1Ω	0 10	Λ 10	0.10	
Crit Moves:	0.10		0.19	****	0.19	0.19	0.04	****	0.10	****	0.10	0.10	
*******	****			****	****	*****	****	****	*****	****	****	*****	

Fut No Proj PM Mon May 23, 2016 11:18:44 Page 5-1 City of Duarte

Environmental Impact Report

	Future No Proj PM													
	Level Of Service Computation Report													
						_		_			,			
LCU .			Cycle L									******		
Intersection	#2 H	unting	gton Dr	& Bue	ena Vi	ista St								

Loss Time (sec):	ac):	Τ(Averag	aı vo. e Del:	ı./car	o.(A).	:	V . 0)42 YYY		
Optimal Cycle			56			Level				•	2121212	D		
******				****	*****					*****	****	_		
Street Name:		I	Bella V	ista S	St			I	Hunting	ton Dr	<u>.</u>			
Approach:	No	rth Bo	ound	Soi	ath Bo	ound	E	ast Bo	ound	W∈	est Bo	ound		
Movement:			- R			- R					- T			
Control:	P		ced	Pi	rotect		P:			Pr	cotect			
Rights:	_	Inclu			Inclu			Inclu			Incl			
Min. Green:		0	0	-	0	0	-	0	0	-	0	0		
Y+R: Lanes:		4.0	4.0 1 0	4.0		4.0		4.0	4.0 0 1	4.0 1 (4.0 0 1		
Lanes.						I			I					
Volume Module	l .		I	I		I	I		I	I		I		
Base Vol:	161	242	121	168	267	73	105	1238	189	110	484	67		
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18		1.18	1.18	1.18	1.18	1.18		
Initial Bse:	190	286	143	198	315	86	124	1461	223	130	571	79		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00		
PHF Volume:	190	286	143	198	315	86		1461	223	130	571	79		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:			143	198	315	86		1461	223	130	571	79		
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00		
MLF Adj: FinalVolume:		1.00	1.00 143	1.00	1.00	1.00 86		1.00 1461	1.00 223	1.00	571	1.00 79		
Final volume:						l			 			/9 		
Saturation Fl	ı			İ		I	I		ı	I		I		
Sat/Lane:		1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600		
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Lanes:	1.00	1.33	0.67	1.00	1.57	0.43	1.00	2.00	1.00	1.00	2.00	1.00		
Final Sat.:		2133	1067		2513	687		3200	1600	1600		1600		
Capacity Ana	-													
Vol/Sat:		0.13	0.13	0.12	0.13	0.13	0.08	0.46	0.14	0.08	0.18	0.05		
Crit Moves:	****													
^ ^ X X X X X X X X X X X X	· · · · · · · · · · · · · · · · · · ·			^ X X X X ;	^ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		^ X X X X	^ ~ ~ ~ ~ ~ 7		^ X X X X X				

Fut No Proj PM Mon May 23, 2016 11:18:44 Page 6-1 City of Duarte

Environmental Impact Report Future No Proj PM

	Future No Proj PM													
*************** Intersection	Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************													
******	*****								*****	****	*****			
Cycle (sec):	10	00			Critic	al Vol	l./Car	o.(X):						
Loss Time (se	ec):	6			Averag	e Dela	ay (se	ec/veh)	:	XXXX	XX			
Optimal Cycle														
*****	*****			***	*****	****				****	*****			
Street Name: Highland Ave Huntington Dr Approach: North Bound South Bound East Bound West Bound														
Approach: North Bound South Bound East Bound West Bound Movement: $L-T-R$ $L-T-R$ $L-T-R$														
Movement: L - T - R L - T - R L - T - R L - T - R - T - R														
Control:			Pe											
Rights: Min. Green:	Inclu 0 0	iae 0	0	nclu 0		0	Inclu	ide 0	0	Inclu 0	ae 0			
Y+R:	4.0 4.0				4.0				-	-	4.0			
Lanes:	0 1 1				0 1			0 1	1 0					
Volume Module	'	I	I		I	I		I	I		Į			
	100 115	281	63	55	36	22	1243	107	100	467	41			
Growth Adj:	1.18 1.18	1.18	1.18 1		1.18		1.18	1.18	1.18 1		1.18			
Initial Bse:		332	74	65	42		1467	126	118	551	48			
User Adj:	1.00 1.00	1.00	1.00 1	.00	1.00	1.00	1.00	1.00	1.00 1	L.00	1.00			
PHF Adj:	1.00 1.00	1.00	1.00 1	.00	1.00	1.00	1.00	1.00	1.00 1	L.00	1.00			
PHF Volume:	118 136	332	74	65	42	26	1467	126	118	551	48			
Reduct Vol:	0 0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	118 136	332	74	65	42	26	1467	126	118	551	48			
PCE Adj:	1.00 1.00	1.00	1.00 1	.00	1.00	1.00	1.00	1.00	1.00 1	L.00	1.00			
MLF Adj:	1.00 1.00	1.00	1.00 1	.00	1.00	1.00	1.00	1.00	1.00 1	L.00	1.00			
FinalVolume:		332	74	65	42		1467	126	118		48			
	l .													
Saturation F														
Sat/Lane:	1600 1600	1600	1600 1		1600		1600	1600	1600 1		1600			
-	1.00 1.00	1.00	1.00 1		1.00		1.00	1.00	1.00 1		1.00			
Lanes:	0.93 1.07	1.00	1.00 1		1.00		2.00	1.00	1.00 2		1.00			
Final Sat.:		1600	1600 1		1600		3200	1600	1600 3		1600			
Capacity Anal	lysis Modul	le:			'	1					ı			
Vol/Sat:	0.07 0.08			.04	0.03	0.02		0.08		0.17	0.03			
Crit Moves:		****	****				****		****					
*****	******	******	*****	****	*****	****	*****	******	*****	****	*****			

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ************************ Intersection #4 Huntington Dr & Mt Olivie St ************************* Critical Vol./Cap.(X): Cycle (sec): 100 Average Delay (sec/veh): Level Of Service: Loss Time (sec): 9
Optimal Cycle: 180 9 112.5 ************************** Street Name: Mt Olivie St Huntington Dr

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 242 199 697 101 290 54 80 948 602 204 399 Initial Bse: 286 235 822 119 342 64 94 1119 710 241 471 24 FinalVolume: 286 235 822 119 342 64 94 1119 710 241 471 24 -----|----||------| Saturation Flow Module: Adjustment: 0.97 0.97 0.85 0.95 0.93 0.93 0.95 0.95 0.85 0.95 0.95 0.85 1.10 0.90 1.00 1.00 1.69 0.31 1.00 2.00 1.00 1.00 2.00 1.00 Lanes: Final Sat.: 2029 1668 1615 1805 2970 553 1805 3610 1615 1805 3610 1615 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.14 0.14 0.51 0.07 0.12 0.12 0.05 0.31 0.44 0.13 0.13 0.01 * * * * **** **** Crit Moves: Green/Cycle: 0.39 0.39 0.39 0.09 0.09 0.09 0.12 0.33 0.33 0.10 0.31 0.31 Volume/Cap: 0.36 0.36 1.32 0.75 1.32 1.32 0.42 0.93 1.32 1.32 0.42 0.05 LOS by Move: C C F E F F D D F F C HCM2kAvgQ: 6 6 51 5 15 15 3 18 42 17 6 ****** Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report												
									ernativ			
*****							****	****	*****	****	*****	*****
Intersection							****	****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle		10	0.0			Critic	al Vo	l./Car	o.(X):		0.5	564
Loss Time (se	ec):		6			Averag	e Dela	ay (se	ec/veh)	:	27	7.7
Optimal Cycle	≘ ∶	:	31			Level	Of Se	rvice	:			C

Street Name: Approach:		I	Buena V	/ista S	St				Centra	l Ave		
Approach:	Noi	rth Bo	ound	Sou	ath Bo	ound	Εā	ast Bo	ound	We	est Bo	ound
Movement:												
	D1	rotect	 -ed	 Dı	cotect	 -ed	D ₁	rotect	 -ed	D ₁	rotect	 -ed
Control: Rights:		Incli	1de		Tncli	ide		Incli	ide	E.	Tncli	1de
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	1 () 1	1 0	1 () 1	1 0	1 (0 0	1 0	1 () 1	0 1
Volume Module	:		,									
Base Vol:	62	375	191	66	533	24	5	51	126	259	75	283
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:	73	443	225	78	629	28	6	60	149	306	89	334
User Adj: PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
					1.00	1.00		1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	443	225	78			6		149			334
Reduct Vol: Reduced Vol:	0	0	0	0 78	0	0	0	0	0 149	0	0	0
PCE Adj:			1.00		1.00						1.00	
MLF Adj:			1.00		1.00						1.00	
FinalVolume:	73	443	225	78	629	28	6	60	149	306	89	334
Saturation Fl												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.90	0.90	0.95	0.94	0.94	0.95	0.89	0.89	0.95	1.00	0.85
Lanes:	1.00	1.33	0.67	1.00	1.91	0.09	1.00	0.29	0.71	1.00	1.00	1.00
Final Sat.:	1805	2270	1156	1805	3434	155	1805	489	1208	1805	1900	1615
Capacity Anal												
Vol/Sat:							0.00				0.05	0.21
Crit Moves:										****		
<pre>Green/Cycle:</pre>												
Volume/Cap:					0.53			0.56			0.09	
Delay/Veh:		27.2	27.2	49.9		26.7		36.9	36.9		12.6	15.5
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		27.2	27.2		26.7	26.7		36.9	36.9		12.6	15.5
LOS by Move:	D	C	C	D	C	C	E	D	D	C	В	В
HCM2kAvgQ:	2	9	9	2	8	8	1	6	6	8	1	6
									*****	****	****	*****
Note: Queue										++++	+++++	

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Future No Proj PM Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #6 I210 WB On Ramp & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.504 Average Delay (sec/veh): Level Of Service: Loss Time (sec): 3
Optimal Cycle: 20 9.7 20 Street Name: Buena Vista St I210 WB On Ramp
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----|----||------| Volume Module: Base Vol: 279 611 0 0 645 252 0 0 0 0 0 Initial Bse: 329 721 0 0 761 297 0 0 0 0 0 -----|----||------| Saturation Flow Module: Lanes: 1.00 2.00 0.00 0.00 1.44 0.56 0.00 0.00 0.00 0.00 0.00 0.00 Final Sat.: 1805 3610 0 0 2487 972 0 0 0 0 0 -----||-----||-----| Capacity Analysis Module: Crit Moves: **** **** LOS by Move: C A A A B B A A A HCM2kAvgQ: 8 1 0 0 9 9 0 0 A A 0 ******

Note: Queue reported is the number of cars per lane.

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Future No Proj PM

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #7 I210 EB On Ramp & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 43 26.6 Street Name: Buena Vista St I210 EB On Ramp
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 0 592 358 236 416 0 304 315 92 0 0 Initial Bse: 0 699 422 278 491 0 359 372 109 0 0 FinalVolume: 0 699 422 278 491 0 359 372 109 0 0 Saturation Flow Module: Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.87 0.87 0.87 1.00 1.00 1.00 0.00 2.00 1.00 1.00 2.00 0.00 0.85 0.89 0.26 0.00 0.00 0.00 Lanes: Final Sat.: 0 3610 1615 1805 3610 0 1417 1469 429 0 0 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.00 0.19 0.26 0.15 0.14 0.00 0.25 0.25 0.25 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.00 0.37 0.37 0.22 0.58 0.00 0.36 0.36 0.36 0.00 0.00 0.00

Note: Queue reported is the number of cars per lane.

City of Duarte

Environmental Impact Report Future No Proj PM Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ************************ Intersection #8 Huntington Dr & Cotter Ave ************************* Average Delay (sec/veh): 1.2 Worst Case Level Of Service: E[35.5] ************************* Street Name: Cotter Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 0 2 0 1 -----||-----||-----| Volume Module: Base Vol: 1 0 9 8 1 41 62 1413 9 5 635 PHF Volume: 1 0 11 9 1 48 73 1667 11 6 749 28 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 1 0 11 9 1 48 73 1667 11 6 749 28 -----| Critical Gap Module: Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----||-----||-----| Capacity Module: Cnflict Vol: 2206 2608 839 1741 2585 375 778 xxxx xxxxx 1678 xxxx xxxxx Potent Cap.: 25 25 313 57 26 629 848 xxxx xxxxx 387 xxxx xxxxx Move Cap.: 21 22 313 51 23 629 848 xxxx xxxxx 387 xxxx xxxxx Volume/Cap: 0.06 0.00 0.03 0.19 0.05 0.08 0.09 xxxx xxxx 0.02 xxxx xxxx -----|----|-----||------| Level Of Service Module: ************************** Note: Queue reported is the number of cars per lane.

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City of Duarte Environmental Impact Report

	Environmental impact Report Future No Proj PM													
T 077			Level O			-		_			,			
LCU -			Cycle L									*****		
Intersection														
*****							****	*****	*****	*****	****	*****		
Cycle (sec):		10	0.0			Critic	al Vo	l./Car	o.(X):		0.5	66		
Loss Time (se	ec):		00 0 33						ec/veh)		XXXX	XX		
Optimal Cycle									:			A		
*****						*****	****	*****			****	*****		
Street Name: Approach:	No	cth D	Highla	na Ave	: :+h	aund	r.	act Do	Centra		at Bo	nund		
Movement:			- R			- R			- R		T			
Control:			tted											
Rights:		Incl	ude		Inclu	ıde		Inclu	ıde		Inclu	ıde		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Y+R:			4.0						4.0					
Lanes:			1 0			1 0			0 1		0			
Volume Module														
Base Vol:		366	362	42	124	58	54	221	24	55	81	29		
Growth Adj:	1.18		1.18		1.18	1.18		1.18	1.18	1.18		1.18		
Initial Bse:		432	427	50	146	68	64		28	65	96	34		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Volume:	74	432	427	50	146	68	64	261	28	65	96	34		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:			427	50	146	68	64		28	65	96	34		
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00		1.00		
MLF Adj: FinalVolume:	1.00	432	1.00 427	50	1.00	1.00 68	64	1.00	1.00 28	1.00 65	96	1.00 34		
Saturation Fl	I			1		ı	1		1	1		ı		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600		
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		
Lanes:			0.91		1.11	0.52		0.80	1.00	1.00				
Final Sat.:			1464		1771			1286	1600	1600		422		
Capacity Anal														
Vol/Sat:	_			0.03	0 08	0.08	0 04	0.20	0.02	0.04	0 08	0.08		
Crit Moves:		****	0.27	****	0.00	0.00	0.04	****	0.02	****	3.00	0.00		
*****	****	****	*****	****	*****	*****	****	*****	*****	****	****	*****		

				Futi	are No	o Proj	PM					
						~						
						Computa						
****						d (Base						
								****	*****	*****	****	*****
Intersection								****	*****	*****	****	*****
Average Delay												
Street Name:		I	210 WB	Off Ra	amp				Centra	al Ave		
	Noi	rth Bo				ound	Ea	ast Bo			est Bo	ound
Movement:			- R			- R			- R	L -	- T	- R
Control:												
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Include Include Include												
Lanes: 1 0 0 1 0 0 0 1! 0 0 0 1 0 1 0 0 0 1 1 0												
Volume Module			'	1 1		'	1			1 1		1
Base Vol:	330	5	61	5	0	19	12	296	1	0	236	1
Growth Adj:		1.18	1.18		1.18	1.18		1.18			1.18	1.18
Initial Bse:			72	6	0	22	14		1	0		1
User Adj:		1.00	1.00	-	1.00	1.00		1.00	_	-	1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	389	6	72	6	0	22	14		1.00	0	278	1.00
Reduct Vol:	0	-	0	0	0	0	0		_	0	2,0	0
FinalVolume:			72	6	0	22	14		1	0	278	1
									_			
Critical Gap	ı					I						I
Critical Gap	7.5		6.9	7 5	6.5	6.9	1 1	vvvv	vvvvv	xxxxx	vvvv	vvvvv
FollowUpTim:			3.3			3.3				XXXXX		
							1					
Capacity Modu Cnflict Vol:		650	175	485	658	140	200					
									xxxxx			XXXXX
Potent Cap.:									xxxxx			XXXXX
Move Cap.:	431			421					xxxxx			XXXXX
Volume/Cap:					0.00				XXXX			XXXX
Level Of Serv												
2Way95thQ:				xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:										xxxxx		
LOS by Move:					*		A		*			*
Movement:			- RT	LT -	- LTR	- RT	LT -		- RT		- LTR	- RT
Shared Cap.:				xxxx						xxxx		
SharedQueue:										XXXXX		
Shrd ConDel:				XXXXX						XXXXX		
Shared LOS:		*	10.2	*		*	7.0 A		*	*		*
ApproachDel:			ם		10.2			xxxx			xxxx	
ApproachLOS:		40.7 E			В		A2	*		Λ2	*	
*******	****		*****	*****	_	*****	****	****	*****	*****	****	*****
Note: Queue												
*****									*****	*****	****	*****

City of Duarte Environmental Impact Report Future + Proj AM

Turning Movement Report Future AM

Volume Type I		rthbo Thru			uthbo Thru	ound Right		astbou Thru	und Right		estboı Thru		Total Volume
#1 Hunti	ingto	n Dr	& Mour	ntain A	ave								
Base	245	535	111	113	422	84	103	380	98	155	1474	345	4064
Added	0	0	4	4	0	0	0	22	0	6	31	6	73
Total	245	535	115	117	422	84	103	402	98	161	1505	351	4137
#2 Hunti	ingto	n Dr	& Buer	na Vist	a St								
Base	166	269	84	55	228	94	84	320	138	104	1710	87	3339
Added	-23	-3	-1	5	-1	0	0	37	-7	64	67	9	147
Total	143	266	83	60	227	94	84	357	131	168	1777	96	3486
#3 Hunti	inato	n Dr	& Hial	nland A	ve								
Base	100	85	216	79	169	38	33	367	92	478	1717	71	3444
Added	11	0	0	0	0	0	0	60	9	0	59	0	139
Total	111	85	216	79	169	38	33	427	101		1776	71	3583
II.4. TT		D	C 14+ (0744-	Q.L								
#4 Hunti	_					1.00	- - 1	212	000	420	1 2 0 0	110	1006
Base	844	155	250	54	404	100	71	313	229		1329	117	4296
Added	26	0	0	0	0	1	2	39	37	0	28	0	133
Total	870	155	250	54	404	101	73	352	266	432	1357	117	4429
#5 Centi	ral A	ve &	Buena	Vista	St								
Base	47	343	296	45	498	9	4	18	48	411	189	277	2185
Added	0	28	4	-2	46	0	0	0	0	9	0	5	90
Total	47	371	300	43	544	9	4	18	48	420	189	282	2275
#6 I210	WD O	ın Dam	n s. Di	iena Wi	ata G	2+							
Base	101	694	од » д О	aena vi	.sta 1	270	0	0	0	0	0	0	1740
Added	0	31	0	0	31	270	0	0	0	0	0	0	86
				-			0	0	0	0	0	0	
Total	101	725	0	0	706	294	U	U	U	U	U	Ü	1826
#7 I210	EB C		р & Ві		sta S	St							
Base	0	518	203	295	435	0	382	14	359	0	0	0	2207
Added	0	14	0	11	20	0	17	0	0	0	0	0	62
Total	0	532	203	306	455	0	399	14	359	0	0	0	2269
#8 Hunti	ingto	n Dr	& Cott	ter Ave	<u> </u>								
Base	35	0	8	9	0	66	35	395	2	8	1880	7	2447
Added	0	0	0	0	0	0	0	68	0	0	87	0	155
Total	35	0	8	9	0	66	35	463	2		1967	7	2602
#0 Comb-	ר ו ריי	***	ui~h].	and 7									
#9 Centi			_			125	10	111	0.0	207	286	72	2021
Base	98	181	137	79	506	135	46	114	90	287		73	2031
Added	0	2	127	3	3	9	6	-1	-1	0	0	2	23
Total	98	183	137	82	509	144	52	113	89	287	286	75	2054

City of Duarte Environmental Impact Report

				211 V		ure +	-	-	J1 0				
Volume Type								astboı Thru			estboi Thru		Total Volume
#10 G		7 6	T010	WD OF	. D				3			3	
#10 Cer				MR OII	_		_	207	0	0	F76	7	1 1 2 1
Base	339	0	113	Т	0	6	-	387	0	0	576	/	1434
Added	6	0	2	0	0	0	0	2	0	0	9	0	19
Total	345	0	115	1	0	6	5	389	0	0	585	7	1453

Future + Proj AM Tue May 24, 2016 10:53:48 Page 5-1

City of Duarte Environmental Impact Report Future + Proj AM

Intersection Volume Report Base Volume Alternative

Node	Intersection		rthbo - T -			uthbo - T -			stbou - T -			estbou T -	
1	Huntington Dr	245	535	111	113	422	84	103	380	98	155	1474	345
2	Huntington Dr	166	269	84	55	228	94	84	320	138	104	1710	87
3	Huntington Dr	100	85	216	79	169	38	33	367	92	478	1717	71
4	Huntington Dr	844	155	250	54	404	100	71	313	229	432	1329	117
5	Central Ave &	47	343	296	45	498	9	4	18	48	411	189	277
6	I210 WB On Ra	101	694	0	0	675	270	0	0	0	0	0	0
7	I210 EB On Ra	0	518	203	295	435	0	382	14	359	0	0	0
8	Huntington Dr	35	0	8	9	0	66	35	395	2	8	1880	7
9	Central Ave &	98	181	137	79	506	135	46	114	90	287	286	73
10	Central Ave &	339	0	113	1	0	6	5	387	0	0	576	7

Intersection Volume Report Future Volume Alternative

Node	Intersection		rthbo - T -			uthbo			stbou - T -			estbou T -	
1	Huntington Dr	245	535	115	117	422	84	103	402	98	161	1505	351
2	Huntington Dr	143	266	83	60	227	94	84	357	131	168	1777	96
3	Huntington Dr	111	85	216	79	169	38	33	427	101	478	1776	71
4	Huntington Dr	870	155	250	54	404	101	73	352	266	432	1357	117
5	Central Ave &	47	371	300	43	544	9	4	18	48	420	189	282
6	I210 WB On Ra	101	725	0	0	706	294	0	0	0	0	0	0
7	I210 EB On Ra	0	532	203	306	455	0	399	14	359	0	0	0
8	Huntington Dr	35	0	8	9	0	66	35	463	2	8	1967	7
9	Central Ave &	98	183	137	82	509	144	52	113	89	287	286	75
10	Central Ave &	345	0	115	1	0	6	5	389	0	0	585	7

City of Duarte Environmental Impact Report

		E	nvironm Fut		Impact Proj A		ct				
ICU 1		as Cycle		%) Me	ethod (Base V	Jolume	e Alter			
Intersection	#1 Hunt	tington	Dr & Mo	untair	n Ave						

Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	6 88			Averag Level	e Dela Of Sei	ay (se cvice	ec/veh)	:	XXXX	XXX D
*****	*****	*****	*****	****	*****	****	****	*****	*****	*****	
Street Name:		Moun				T.	I	Hunting	ton Dr	cat Do	
Approach: Movement:	INOT CI	II BOUIIG T – R	I,	ucii Bo - T	- R	E.c.	181 BO - T	- R	T	- T	– R
			-								
Control:	Prot	tected	P:	rotect	ced	Pi	rotect	ted	Pı	rotect	ed
Rights: Min. Green:	Iı	nclude		Inclu	ıde		Incl	ıde		Inclu	
V.D.	1 0	1 0 1	0 1 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	0
Lanes:	1 0	4.0 4. 1 1 0	1	1 0	1 () 2	0 1	1 () 2	0 1	
Lanes: Volume Module			-								
Base Vol:										1249	
Growth Adj: Initial Bse:				422	1.18 84	1.18	1.18		1.18	1.18	1.18 345
User Adj:				1.00						1.00	
PHF Adj:	1.00 1	.00 1.0		1.00	1.00		1.00			1.00	1.00
PHF Volume:			1 113	422	84	103	380	98	155	1474	345
Reduct Vol:		0		0	0	0	0		0		0
Reduced Vol:		535 11									345
PCE Adj:				1.00						1.00	
MLF Adj: FinalVolume:				1.00				1.00 98		1.00	1.00 345
Saturation Fl	•										'
Sat/Lane:				1600			1600			1600	1600
Adjustment:				1.00			1.00			1.00	1.00
Lanes: Final Sat.:					0.33 530					2.00	
Capacity Anal	Lysis Mo	odule:	1 1		I	1		1	1		ı
Vol/Sat:		.20 0.2	0.07						0.10	0.46	0.22
Crit Moves:		++++++	+++++	****					++++	****	

City of Duarte

Future + Proj AM			Env		-	Impact	Repor	ct						
TCU 1(Loss as Cycle Length %) Method (Base Volume Alternative)						-	-							
TCU 1(Loss as Cycle Length %) Method (Base Volume Alternative)														
Thersection #2 Huntington Dr & Buena Vista St ***********************************		I	evel 0	f Serv	vice (Computat	tion F	Report	5					
Intersection #2 Huntington Dr & Buena Vista St ***********************************														
Cycle (sec): 100							****	****	*****	*****	****	*****		
Loss Time (sec): 69							****	****	*****	*****	****	****		
Street Name: Bella Vista St	Cycle (sec):	10	0			Critica	al Vol	l./Car	o.(X):		0.8	51		
Street Name: Bella Vista St	Loss Time (se	ec):	6			Average	e Dela	ay (se	ec/veh)	:	XXXX	XX		
Street Name: Bella Vista St	Optimal Cycle	e: 6	9			Level	Of Sei	cvice	:			D		
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R R R L - T R R L - T R R L - T R R L - T R R L - T R R L - T R R L - T R R L - T R R L - T R R R L - T R R R L - T R R R L - T R R R L - T R R R L - T R R R L - T R R R L - T R R R L - T R R R R R R R R R R R R R R R R R R	******	******	*****	*****	****	*****	****	****	*****	*****	****	*****		
Movement: L - T - R Expected Protected Protected <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>														
Control: Protected Protected Protected Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Approach:										est Bo	und		
Control:														
Rights: Include Include Include Include Include Include O <td></td> <td> </td> <td> </td> <td> </td> <td></td> <td> </td> <td> </td> <td></td> <td></td> <td></td> <td></td> <td></td>														
Min. Green: 0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Pı</td><td>rotect</td><td>ted</td><td>Pr</td><td>otect</td><td>ed</td></th<>							Pı	rotect	ted	Pr	otect	ed		
Y+R:	_											ıde		
Lanes: 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 0 1 0 2 0 1 1 0 2 0 1	Min. Green:					0	0	0	0	0	0			
Volume Module: Base Vol: 141 228 71 47 193 80 71 271 117 88 1449 74 Growth Adj: 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1	Y+R:													
Volume Module: Base Vol: 141 228 71 47 193 80 71 271 117 88 1449 74 Growth Adj: 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1	Lanes: 1 0 1 1 0 1 0 1 1 0 2 0 1 1 0 2 0 1													
Base Vol: 141 228 71 47 193 80 71 271 117 88 1449 74 Growth Adj: 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1														
Growth Adj: 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1														
Initial Bse: 166 269 84 55 228 94 84 320 138 104 1710 87 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	-													
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
PHF Volume: 166 269 84 55 228 94 84 320 138 104 1710 87 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 166 269 84 55 228 94 84 320 138 104 1710 87 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	_													
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_													
Reduced Vol: 166 269 84 55 228 94 84 320 138 104 1710 87 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00											-			
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
FinalVolume: 166 269 84 55 228 94 84 320 138 104 1710 87	_													
	_													
Saturation Flow Module: Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 160														
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 160	Į.		I											
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				1.600	1.600	1.600	1.600	1.600	1.600	1.600	1600	1.600		
Lanes: 1.00 1.53 0.47 1.00 1.41 0.59 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 1600 2440 760 1600 2262 938 1600 3200 1600 1600 3200 1600														
Final Sat.: 1600 2440 760 1600 2262 938 1600 3200 1600 1600 3200 1600 	-													
Capacity Analysis Module: Vol/Sat: 0.10 0.11 0.03 0.10 0.10 0.05 0.10 0.09 0.06 0.53 0.05														
Vol/Sat: 0.10 0.11 0.11 0.03 0.10 0.10 0.05 0.10 0.09 0.06 0.53 0.05														
				0 03	0 10	0 10	0 05	0 10	0 00	0 00	0 53	0 05		
			0.11	0.03		0.10		0.10	0.09	0.06		0.05		
**************************************			*****	*****		*****		****	*****	*****		*****		

			FIIV			Proj A		בנ					
						Computa		_			,		
ICU :	1(Loss											*****	
Intersection													
*****							****	*****	*****	****	****	*****	
Cycle (sec):		10	0			Critic	al Vo	l./Car	o.(X):		0.8	302	
Loss Time (se	ec):					Averag	e Dela	ay (se	ec/veh)	:	XXXX		
Optimal Cycle			6			Level						D	
*****						*****	****					*****	
Street Name: Approach:			Highla:			ound	r.		Hunting		st Bo	nund	
Movement: L - T - R L - T - R L - T - R L - T - R													
Control:	Pe	rmit	ted '	' I	ermit	ted	. Pi	rotect	ed	Pr	otect	ed	
Rights: Include Include Include Include													
Min. Green: 0 0 0 0 0 0 0 0 0 0													
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Volume Module	I												
Base Vol:	e• 85	72	183	67	143	32	28	311	78	405	1455	60	
Growth Adj:	1.18 1		1.18		1.18	1.18		1.18	1.18	1.18		1.18	
Initial Bse:		85	216	79	169	38	33	367	92		1717	71	
User Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	100	85	216	79	169	38	33	367	92		1717	71	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:		85	216	79	169	38	33	367	92		1717	71	
PCE Adj:	1.00 1		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
MLF Adj: FinalVolume:	1.00 1	85	1.00 216	79	1.00 169	1.00	33	1.00 367	1.00 92	1.00	1717	1.00 71	
Saturation F	I		- 1	I		1	1		ı	1		1	
Sat/Lane:	1600 1	600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00 1		1.00		1.36	1.00		2.00	1.00	1.00		1.00	
Final Sat.:			1600		2179	1600		3200	1600	1600		1600	
	1												
Capacity Anal Vol/Sat:	1ysıs M 0.06 0		e: 0.13	0 05	0.08	0.02	0 02	0.11	0.06	0.30	0 E1	0.04	
Crit Moves:	0.00 0	.05	****	****	0.00	0.02	****	0.11	0.00	0.30	****	0.04	
*******	*****	***	*****	****	*****	*****	****	*****	*****	****	****	*****	

		I	Level O	f Serv	vice (Computa	ation 1	Report	5			
	2000	HCM C	perati	ons Me	ethod	(Base	Volume	e Alte	ernativ	e)		
******	****	*****	*****	****	****	*****	****	****	*****	****	*****	*****
Intersection *****							****	****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle		10	0 (Critic	cal Vo	l./Car	o.(X):		0.9	907
Loss Time (se	ec):		9			Averag	ge Dela	ay (se	ec/veh)	:	44	1.0
Optimal Cycle	e:	10)6			Level	Of Se	rvice	:			D
******	****	*****	*****	****	****	*****	****	****	*****	****	*****	*****
Street Name:			Mt Oli	vie St	t			I	Hunting	ton Di	r	
Approach: Movement:	No:	rth Bo	ound	Soi	uth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Control:	Sp	lit Ph	nase	Sp.	lit Ph	nase	P:	rotect	ted	Pi	rotect	ted
Rights: Min. Green:		Inclu	ıde		Incl	ıde		Incl	ıde		Inclu	ıde
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 .	1 0	0 1	1 () 1	1 0	1 (0 2	0 1	1 () 2	0 1
M-d-1												
Volume Module			212	10	240	0.5	C 0	265	104	266	1100	0.0
Base Vol: Growth Adj:			212		1.18			265 1.18			1.18	
Initial Bse:			250		404	1.18		313	229		1329	
			1.00		1.00	1.00		1.00			1.00	
User Adj: PHF Adj:					1.00	1.00		1.00	1.00		1.00	
PHF Volume:				54		100	71			432		
Reduct Vol:				0		0	0					
Reduced Vol:						100			229			
PCE Adj:			1.00		1.00			1.00			1.00	
MLF Adj:			1.00		1.00	1.00		1.00			1.00	
FinalVolume:				54		100						
Saturation F	low M	odule:		•					,			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96	0.96	0.85	0.95	0.92	0.92				0.95	0.95	0.85
Lanes:				1.00	1.60	0.40	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:						697		3610			3610	
Capacity Ana												
Vol/Sat:			0.15	0.03					0.14	0.24		0.07
Crit Moves:			0 00	0 16	****		****		0 15		****	0 41
Green/Cycle:												
Volume/Cap:												
Delay/Veh: User DelAdj:							118.5				36.4	19.2 1.00
AdiDel/Veh:		44.3	29.7		59.9		118.5		61.9		1.00 36.4	1.00
LOS by Move:	D	14.3 D	29.7 C	30.0 D	59.9 E	59.9 E	110.5 F	30.0 D	υ1.9 Ε	40.5 D	30.4 D	19.2 B
HCM2kAvq0:	19	19	7	2	12	12	5	5	10	15	24	2

Note: Queue :												
******									*****	****	*****	*****

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		I	Level O	f Serv	ice (Computa	tion I	Report	-			
									ernati			
******	****	****	*****	****	****	*****	****	*****	*****	*****	****	*****
Intersection *******							****	*****	*****	*****	****	:****
Cycle (sec):		10	00			Critic	al Voi	l./Car	o.(X):		0.5	526
Loss Time (se	ec):		6 28						ec/veh)		23	3.4
Optimal Cycle		2	28			Level						C
*****	****					*****	****	*****	*****	*****	****	*****
Street Name:		I	Buena V	ista S	St				Centra	l Ave		
Approach:	Noi	rth Bo	ound	Sou	ith Bo	ound	Ea	ast Bo	ound	We	st Bo	ound
Movement:			- R						- R		T	
Control:	Pı	rotect	ced	Pı	cotect	ed	P	rotect	ed	Pr	otect	ed
Rights:		Inclu	ıde		Inclu	ıde		Inclu	ıde		Inclu	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:							4.0	4.0	4.0	4.0	4.0	4.0
Lanes:						1 0			1 0		1	
Volume Module												
Base Vol:	40	291	251	38	422	8	3		41	348	160	235
Growth Adj:			1.18		1.18	1.18		1.18	1.18	1.18		1.18
Initial Bse:		343	296	45	498	9	4	18	48	411	189	277
Added Vol:	0	28	4	-2	46	0	0	0	0	9	0	5
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			300	43	544	9	4	18	48	420	189	282
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	47	371	300	43	544	9	4	18	48	420	189	282
Reduct Vol:		0	0	0	0	0	0	0	0	0	100	0
Reduced Vol:			300	43	544	9	1 00	18	48	420	189	282
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj: FinalVolume:	1.00		1.00 300	43	1.00	9		1.00	1.00 48	1.00 420	189	1.00 282
Saturation Fl												
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			0.89	0.95		0.95		0.89	0.89	0.95		0.85
-	1.00		0.89		1.97	0.03		0.27	0.73	1.00		1.00
Final Sat.:			1506		3538	61		453	1238	1805		1615
Capacity Anal	l			İ		1	į		ļ	1		1
Vol/Sat:	0.03		0.20	0.02	0.15	0.15	0.00	0.04	0.04	0.23	0.10	0.17
Crit Moves:		***		***				****		****		
Green/Cycle:	0.06	0.38	0.38	0.05	0.36	0.36	0.01	0.07	0.07	0.44	0.51	0.51
Volume/Cap:	0.42	0.53	0.53	0.53	0.42	0.42	0.34	0.53	0.53	0.53	0.19	0.34
Delay/Veh:	47.8	24.5	24.5	53.0	24.2	24.2	68.3	48.7	48.7	21.0	13.4	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
AdjDel/Veh:	47.8	24.5	24.5	53.0	24.2	24.2	68.3	48.7	48.7	21.0	13.4	14.8
LOS by Move:	D	С	C	D	C	C	E	D	D	C	В	В
HCM2kAvgQ:	1	8	8	2	7	7	0	3	3	9	3	5
*****	****	****	*****	****	****	******	****	* * * * * *	*****	*****	****	*****

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				Fuci	are +	Proj A	₹I _A I							
	Level Of Service Computation Report													
	2000					-		-	- ernativ	7 0)				
*****											****	*****		
Intersection								****	*****	*****	****	*****		
Loss Time (se	ac):	Τ,	3			Averac	re Dela	av (se	c/veh)	:	0.5	3 7		
Cycle (sec): Loss Time (sec) Optimal Cycle	=:		15			Level	Of Sei	rvice:	:		_	Δ		
*****	****	****	*****	****	****	*****	****	* * * * * *	*****	*****	****	*****		
Street Name:]	Buena \	/ista S	St			I2	210 WB	On Ram	ดเ			
Approach:											st Bo	ound		
Movement:											· Т	- R		
Control:						ted	Pı				otect	ted		
Rights:		Incl	ude		Incl	ıde			ıde		Incl	ıde		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Y+R:									4.0					
Lanes:	. 1	0 2	0 0	0 (0 1	1 0	0 (0 0	0 0	0 0	0	0 0		
Volume Module		F 0 0	0	0	F.F.O.	000	0	0	0	0	0	0		
			0						0	0				
Growth Adj:					1.18	1.18		1.18						
Initial Bse:			1 00	1 00	675	270	1 00	1 00		1 00	1.00			
User Adj: PHF Adj:			1.00		1.00	1.00		1.00		1.00				
PHF Volume:			0.00	0.10		270		0.1			0	0		
Reduct Vol:			0		0 / 5		0	0			0	0		
Reduced Vol:			0	0			0		0	0	0	0		
PCE Adj:									1.00					
MLF Adj:					1.00			1.00						
FinalVolume:			0		675	270		0			0	0		
Saturation F									'	'				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00		
Lanes:					1.43			0.00		0.00	0.00	0.00		
Final Sat.:			0	0					0		0	0		
Capacity Ana														
Vol/Sat:			0.00	0.00		0.27	0.00	0.00	0.00	0.00	0.00	0.00		
Crit Moves:					****									
Green/Cycle:									0.00					
Volume/Cap:														
Delay/Veh:		0.1	0.0	0.0		2.7		0.0	0.0	0.0		0.0		
User DelAdj: AdjDel/Veh:	37.6	0.1	1.00	0.0	1.00	1.00	0.0	1.00	0.0	1.00	0.0	1.00		
LOS by Move:	37.0 D	0.1 A	0.0 A	0.0 A		2.7 A	0.0 A	0.0 A	0.0 A	0.0 A	0.0 A	0.0 A		
HCM2kAvqQ:	3	1	0	A 0	4	4	0	0	A 0	A 0	0	A 0		
********											-			
Note: Queue														
*****									*****	*****	****	*****		

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			Level C	of Serv	/ice (Computa	tion I	Report	t			
						(Base						
******								****	*****	****	****	*****
Intersection				-				****	*****	****	****	*****
Cycle (sec):		1	00			Critic	al Vo	l./Cap	o.(X):		0.5	589
Loss Time (se	ec):		6			Averag	e Dela	ay (se	ec/veh)	:	26	5.1
Optimal Cycle			32			Level						С
******	****	****	*****	*****	****	*****	****	****	*****	****	****	*****
Street Name:		1	Buena V	7ista S	St			Ι	210 EB	On Rar	qn	
Approach:		rth B	ound			ound		ast Bo		We	est Bo	ound
Movement:	L -		- R			- R			- R		- T	
Control:	Pı	rotec	ted	Pı	rotect	ted	Pi	rotect	ted	Pı	cotect	:ed
Rights:		Incl			Incl			Incl			Incl	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0
Lanes:) 2		1 (1 0		0 (0 0
Volume Module												
Base Vol:	0	439	172	250	369	0	324	12	304	0	0	0
Growth Adj:	1.18		1.18		1.18	1.18		1.18	1.18		1.18	1.18
Initial Bse:	0	518	203	295	435	0	382	14	359	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	0	518	203	295	435	0	382	14	359	0	0	0
Reduct Vol:	0	0 E10	202	0	0 435	0	0 382	14	0 359	0	0	0
Reduced Vol: PCE Adj:	1.00	518	203	295	1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		518	203	295	435	0	382	14	359	0	0.10	0.1
						I			l	1		
Saturation Fl				I		I	I		I	I		I
Sat/Lane:	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00		0.85		0.95	1.00		0.82	0.82		1.00	1.00
Lanes:	0.00		1.00		2.00	0.00		0.04	0.96		0.00	0.00
Final Sat.:			1615		3610	0	1549	59	1491	0	0	0
Capacity Anal				1		'	1		1	1		1
Vol/Sat:	0.00		0.13	0.16	0.12	0.00	0.25	0.24	0.24	0.00	0.00	0.00
Crit Moves:		***		***			****					
Green/Cycle:	0.00	0.24	0.24	0.28	0.52	0.00	0.42	0.42	0.42	0.00	0.00	0.00
Volume/Cap:		0.59	0.52		0.23	0.00		0.57	0.57		0.00	0.00
Delay/Veh:	0.0	34.5	33.9	33.1	13.1	0.0	23.1	22.9	22.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	34.5	33.9	33.1	13.1	0.0	23.1	22.9	22.9	0.0	0.0	0.0
LOS by Move:	A	С	С	C	В	A	С	С	С	A	A	A
HCM2kAvgQ:	0	8	6	8	4	0	10	10	10	0	0	0
******	****	****	*****	*****	****	*****	****	****	*****	****	****	*****
Note: Queue 1	report	ted i	s the r	number	of ca	ars per	lane					

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Future + Proj AM ______ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ************************ Intersection #8 Huntington Dr & Cotter Ave ************************** Average Delay (sec/veh): 4.3 Worst Case Level Of Service: F[91.9] ************************* Street Name: Cotter Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 0 2 0 1 -----||-----||-----| Volume Module: Base Vol: 30 0 7 8 0 56 30 335 2 7 1593 PHF Volume: 35 0 8 9 0 66 35 395 2 8 1880 7
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 35 0 8 9 0 66 35 395 2 8 1880 7 Critical Gap Module: Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx Capacity Module: Cnflict Vol: 1424 2371 199 2165 2365 940 1887 xxxx xxxxx 398 xxxx xxxxx Potent Cap.: 98 35 815 27 36 269 322 xxxx xxxxx 1172 xxxx xxxxx Move Cap.: 67 31 815 24 32 269 322 xxxx xxxxx 1172 xxxx xxxxx Volume/Cap: 0.53 0.00 0.01 0.39 0.00 0.25 0.11 xxxx xxxx 0.01 xxxx xxxx -----|----|-----||------| Level Of Service Module: Control Del:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 17.6 xxxx xxxxx 8.1 xxxx xxxxx ApproachDel: 91.9
ApproachLOS: F ************************** Note: Queue reported is the number of cars per lane. ******************

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			Env			Impact Proj A		ct				
ICU 1		s as (Level O	ength	%) Me	ethod (Base V	Jolume	e Alter			
Intersection							*****	****	* * * * * * *	****	****	*****
******	****			****	****							
Cycle (sec): Loss Time (sec) Optimal Cycle ************************************	<u>.</u>	:	33	****	* * * * *	Averag Level	ge Dela Of Sei	ay (se		:		xxx A
Street Name:			Highla						Centra	l Ave		
Approach:				Soi	uth Bo	ound	Εá	ast Bo	ound	We		
Movement:			- R	L -	- T	- R	L -	- T	- R	L -	- T	
 Control:												
Rights:	_	Incl	ude	_	Incl	ıde	_	Incl	ıde	_	Incl	ude
Min. Green:	0	0	0	0		0						0
Y+R:	4.0	4.0	4.0 1 0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1 0	1 0	. 0 .	1 0	1 0	0 1	L O	0 1	1 (0	1 0
Volume Module		150	116	6.0	400	114	2.0	0.17	П.С	0.43	0.40	60
Base Vol: Growth Adj:		153 1.18	116 1.18		429 1.18	114 1.18		97 1.18	76 1.18	243	242	62 1.18
Initial Bse:			137	79	506	135	46		90	287		73
User Adj:			1.00		1.00	1.00		1.00			1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	98	181	137	79	506	135	46	114	90	287	286	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	181	137	79	506	135	46	114	90	287	286	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00		1.00		1.00
FinalVolume:		181	137	. 79		135		114	90		286	73
Saturation Fl		1600		1600	1600	1600	1600	1600	1600	1600	1600	1600
Sat/Lane: Adjustment:	1.00		1600 1.00		1600			1600			1.00	
Lanes:		0.87			1.41			0.71			0.80	
Final Sat.:							459				1274	
Capacity Anal				1		ı	1		ı	1		ı
Vol/Sat:	-		0.13	0.05	0.22	0.22	0.03	0.10	0.06	0.18	0.22	0.22
Crit Moves:	****				****			****		****		
******	****	****	*****	****	* * * * * *	*****	****	****	*****	****	****	*****

Future + Proj AM ______ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ******************* Intersection #10 Central Ave & I210 WB Off Ramp ************************** Average Delay (sec/veh): 21.8 Worst Case Level Of Service: F[69.0] ************************* Street Name: I210 WB Off Ramp Central Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----|----|-----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 1 0 0 1 0 0 0 1! 0 0 0 1 1 0 0 0 0 1 1 0 -----|----||------| Volume Module: Base Vol: 287 0 96 1 0 0 488 0 5 4 328 PHF Volume: 339 0 113 1 0 6 5 387 0 0 576 7 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 576 7 FinalVolume: 339 0 113 1 0 6 5 387 0 0 576 7 -----| Critical Gap Module: Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx xxxxx xxxxx xxxxx -----| Capacity Module: -----|----|-----||------| Level Of Service Module: 2Way95thQ: 11.5 xxxx xxxxx xxxx xxxx xxxx 0.0 xxxx xxxxx xxxx xxxxx xxxxx LOS by Move: F * * * * * A * * * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shrd ConDel:xxxxx xxxx 10.1 xxxxx 11.7 xxxxx 8.6 xxxx xxxxx xxxxx xxxxx xxxxx ApproachDel: 69.0 ApproachLOS: F ************************** Note: Queue reported is the number of cars per lane. ******************

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City of Duarte Environmental Impact Report Future + Proj PM

Turning Movement Report Future PM

Volume Type		rthbo Thru			uthbo Thru			astboı Thru	und Right		estbou Thru		Total Volume
#1 тт		D	C Ma	7									
#1 Hunt:	_					го	70	1274	202	104	F7.6	1.60	4200
Base	159	420	189	296	539	58		1374	283	194	576	163	4322
Added	0	0	18	18	0	0	0	102	0	9	54	9	210
Total	159	420	207	314	539	58	.72	1476	283	203	630	172	4532
#2 Hunt	ingto	on Dr	& Buer	na Vist	a St								
Base	190	286	143	198	315	86	124	1461	223	130	571	79	3805
Added	3	0	150	17	1	0	0	134	6	89	77	9	486
Total	193	286	293	215	316	86		1595	229	219	648	88	4292
		_	1										
#3 Hunt:	_		_			4.0	0.5	1 4 6 11	100	110		4.0	2102
Base	118	136	332	74	65	42		1467	126	118	551	48	3103
Added	20	0	0	0	0	0	0	127	19	0	228	0	394
Total	138	136	332	74	65	42	26	1594	145	118	779	48	3497
#4 Hunt	ingto	n Dr	& Mt (Olivie	St								
Base	286	235	822	119	342	64	94	1119	710	241	471	24	4526
Added	120	0	0	0	0	6	3	66	63	0	126	0	384
Total	406	235	822	119	342	70		1185	773	241	597	24	4910
10001	100	255	022	117	312	, 0	,	1100	,,,	2 11	357	2.	1710
#5 Cent:	ral <i>P</i>	Ave &	Buena	Vista	St								
Base	73	443	225	78	629	28	6	60	149	306	89	334	2419
Added	0	131	13	0	83	0	0	0	0	12	0	30	269
Total	73	574	238	78	712	28	6	60	149	318	89	364	2688
U.C. T.0.1.0													
#6 I210			_					•	•	•	•	•	0100
Base	329	721	0	0	761	297	0	0	0	0	0	0	2109
Added	0	144	0	0	54	41	0	0	0	0	0	0	239
Total	329	865	0	0	815	338	0	0	0	0	0	0	2348
#7 I210	EB C	n Ram	р & Ві	uena Vi	lsta S	t							
Base	0	699	422	278	491	0	359	372	109	0	0	0	2729
Added	0	66	0	19	35	0	78	0	0	0	0	0	198
Total	0	765	422	297	526	0	437	372	109	0	0	0	2927
#0 II	J	Dec	r 0-++	7									
#8 Hunt	_					4.0		1.660		_		0.0	0.605
Base	1	0	11	9	1	48		1667	11	6	749	28	2605
Added	0	0	0	0	0	0	0	170	0	0	248	0	418
Total	1	0	11	9	1	48	73	1837	11	6	997	28	3023
#9 Cent:	ral <i>P</i>	Ave &	Highla	and Ave	5								
Base	74	432	427	50	146	68	64	261	28	65	96	34	1745
Added	0	6	0	3	3	12	20	0	0	0	0	6	50
Total	74	438	427	53	149	80	84	261	28	65	96	40	1795

City of Duarte Environmental Impact Report

					Fut	ure +	Proj I	PM					
Volume Type		orthbou Thru I		Sc Left	uthbo Thru			astbo Thru			estbou Thru		Total Volume
#10 Cer Base Added Total	ntral 389 29 418	Ave & 6 0 6	I210 72 7 79	WB Off 6 0 6	Ramp 0 0 0	22 0 22	14 0 14	349 13 362	1 0 1	0 0 0	278 12 290	1 0 1	1140 61 1201

Intersection Volume Report Base Volume Alternative

		No	Northbound			Southbound			Eastbound			Westbound		
Node Intersection		L T R		L T R			L T R			L T R				
1	Huntington Dr	159	420	189	296	539	58	72	1374	283	194	576	163	
2	Huntington Dr	190	286	143	198	315	86	124	1461	223	130	571	79	
3	Huntington Dr	118	136	332	74	65	42	26	1467	126	118	551	48	
4	Huntington Dr	286	235	822	119	342	64	94	1119	710	241	471	24	
5	Central Ave &	73	443	225	78	629	28	6	60	149	306	89	334	
6	I210 WB On Ra	329	721	0	0	761	297	0	0	0	0	0	0	
7	I210 EB On Ra	0	699	422	278	491	0	359	372	109	0	0	0	
8	Huntington Dr	1	0	11	9	1	48	73	1667	11	6	749	28	
9	Central Ave &	74	432	427	50	146	68	64	261	28	65	96	34	
10	Central Ave &	389	6	72	6	0	22	14	349	1	0	278	1	

Intersection Volume Report Future Volume Alternative

		Northbound			Southbound			Eastbound			Westbound		
Node Intersection		L T R		L T R			L T R			L T R		- R	
1	Huntington Dr	159	420	207	314	539	58	72	1476	283	203	630	172
2	Huntington Dr	193	286	293	215	316	86	124	1595	229	219	648	88
3	Huntington Dr	138	136	332	74	65	42	26	1594	145	118	779	48
4	Huntington Dr	406	235	822	119	342	70	97	1185	773	241	597	24
5	Central Ave &	73	574	238	78	712	28	6	60	149	318	89	364
6	I210 WB On Ra	329	865	0	0	815	338	0	0	0	0	0	0
7	I210 EB On Ra	0	765	422	297	526	0	437	372	109	0	0	0
8	Huntington Dr	1	0	11	9	1	48	73	1837	11	6	997	28
9	Central Ave &	74	438	427	53	149	80	84	261	28	65	96	40
10	Central Ave &	418	6	79	6	0	22	14	362	1	0	290	1

City of Duarte

Environmental Impact Report Future + Proj PM												
Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ***********************************												
Intersection #1 Huntington Dr & Mountain Ave												
Cycle (sec): Loss Time (sec) Optimal Cycle	:	100 6 180			E E							
Street Name:	F	Huntington Dr										
Approach:												
				L - T - R								
Rights:								ıde	Include			
Min. Green:		0 0			0			0			0	
Y+R:		4.0				4.0			4.0			
Lanes:		1 1 0			1 0				1 0	2 () <u> </u>	
Volume Module:												
Base Vol:	135 3	356 160	251	457	49	61	1164	240	164	488	138	
Growth Adj:	1.18 1.	18 1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18 1	.18	1.18	
Initial Bse:			296	539	58		1374		194		163	
User Adj:			1.00		1.00		1.00		1.00 1		1.00	
5	1.00 1.		1.00		1.00		1.00		1.00 1		1.00	
		20 189	296	539	58		1374	283		576	163	
Reduct Vol: Reduced Vol:	0 159 4	0 0 120 189	296	0 539	0 58		0 1374	0 283	0 194 !	0 576	0 163	
PCE Adi:	1.00 1.		1.00		1.00		1.00		1.00 1		1.00	
MLF Adj:	1.00 1.		1.00		1.00		1.00	1.00	1.00 1		1.00	
FinalVolume:			296			72			194 !		163	
		·										
Saturation Fl												
Sat/Lane:	1600 16		1600		1600		1600		1600 16		1600	
Adjustment:			1.00		1.00		1.00	1.00	1.00 1		1.00	
Lanes: Final Sat.:	1.00 1.		1.00 1600		0.19 310		2.00		1.00 2 1600 32		1.00	
Fillal Sat.												
Capacity Anal			1		1	I		1	1		ı	
Vol/Sat:		19 0.19		0.19	0.19	0.04		0.18		.18	0.10	
Crit Moves:		* * *	***				****		***			
********************											****	

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City of Duarte Environmental Impact Report Future + Proj PM ______ Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ************************ Intersection #2 Huntington Dr & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 66 XXXXXX Street Name: Bella Vista St Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Include 0 0 0 4.0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 161 242 121 168 267 73 105 1238 189 110 484 67 Initial Bse: 190 286 143 198 315 86 124 1461 223 130 571 79 PHF Volume: 190 286 143 198 315 86 124 1461 223 130 571 79 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω FinalVolume: 190 286 143 198 315 86 124 1461 223 130 571 79 -----| Saturation Flow Module: Lanes: 1.00 1.33 0.67 1.00 1.57 0.43 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 1600 2133 1067 1600 2513 687 1600 3200 1600 1600 3200 1600 -----||-----||------|

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Vol/Sat: 0.12 0.13 0.13 0.12 0.13 0.13 0.08 0.46 0.14 0.08 0.18 0.05

Capacity Analysis Module:

Crit Moves: ****

City of Duarte

Environmental Impact Report Future + Proj PM													
TOIL 1	Level Of Service Computation Report												
<pre>ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ************************************</pre>													
Intersection #3 Huntington Dr & Highland Ave													

Cycle (sec):													
Loss Time (se	*	6		Average Delay (sec/veh): xxxxxx									
Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx Optimal Cycle: 67 Level Of Service: D													

Street Name:					Huntington Dr Bound East Bound West Bound								
Movement:								- R L - T					
Rights:	Inc					Inclu	ıde	Include					
Min. Green:	0	0 0		0	0			0		0	0		
Y+R:	4.0 4.		4.0			4.0			4.0				
Lanes:	0 1 1				0 1			0 1	1 0	2	0 1		
 Volume Module	l												
Base Vol:	:· 100 11!	5 281	63	55	36	22	1243	107	100	467	41		
Growth Adj:	1.18 1.18		1.18		1.18		1.18		1.18		1.18		
Initial Bse:			74	65	42		1467	126	118		48		
User Adj:	1.00 1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00 1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
	118 13	332	74	65	42		1467	126	118	551	48		
Reduct Vol:	0		0	0	0		0	0	0	0	0		
Reduced Vol:			74		42		1467		118		48		
PCE Adj:	1.00 1.0		1.00		1.00		1.00	1.00	1.00		1.00		
MLF Adj: FinalVolume:	1.00 1.0		1.00 74		1.00 42		1.00 1467	1.00 126	1.00	551	1.00 48		
											48		
Saturation Fl			I		I	I		ı	I		I		
Sat/Lane:	1600 160		1600	1600	1600	1600	1600	1600	1600	1600	1600		
Adjustment:	1.00 1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00		
Lanes:	0.93 1.0	7 1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00		
Final Sat.:				1600			3200	1600	1600		1600		
Capacity Anal	4		0 05	0 04	0 02	0 00	0 46	0 00	0 07	0 17	0 02		
Vol/Sat: Crit Moves:	0.07 0.0	3 U.Z⊥ ****	0.05 ****	0.04	0.03	0.02	U.46	0.08	0.07 ****	U.I/	0.03		
*********	*****			****	*****	****		*****		****	*****		

************************* Intersection #4 Huntington Dr & Mt Olivie St ************************* Critical Vol./Cap.(X): Cycle (sec): 100 Average Delay (sec/veh): Level Of Service: Loss Time (sec): 9
Optimal Cycle: 180 9 112.5 Street Name: Mt Olivie St Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 242 199 697 101 290 54 80 948 602 204 399 Initial Bse: 286 235 822 119 342 64 94 1119 710 241 471 24 FinalVolume: 286 235 822 119 342 64 94 1119 710 241 471 24 Saturation Flow Module: Adjustment: 0.97 0.97 0.85 0.95 0.93 0.93 0.95 0.95 0.85 0.95 0.95 0.85 1.10 0.90 1.00 1.00 1.69 0.31 1.00 2.00 1.00 1.00 2.00 1.00 Lanes: Final Sat.: 2029 1668 1615 1805 2970 553 1805 3610 1615 1805 3610 1615 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.14 0.14 0.51 0.07 0.12 0.12 0.05 0.31 0.44 0.13 0.13 0.01 * * * * **** **** Crit Moves: Green/Cycle: 0.39 0.39 0.39 0.09 0.09 0.09 0.12 0.33 0.33 0.10 0.31 0.31 Volume/Cap: 0.36 0.36 1.32 0.75 1.32 1.32 0.42 0.93 1.32 1.32 0.42 0.05 LOS by Move: C C F E F F D D F F C HCM2kAvgQ: 6 6 51 5 15 15 3 22 45 17 6 45 ****** Note: Queue reported is the number of cars per lane.

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Future + Proj PM Thu Jun 9, 2016 12:11:12 Page 12-1

City of Duarte Environmental Impact Report Future + Proj PM

		I	Level O	f Serv	ice (Computa	tion F	Report	-				
2	2000 F					Future				ve)			
*****											****	*****	
Intersection							****	****	*****	****	****	*****	
Cycle (sec):		10	00			Critic	al Vol	l./Car	o.(X):		0.6	514	
Loss Time (se	ec):		6			Critic Averag Level	e Dela	ay (se	ec/veh)	:	27	7.6	
Optimal Cycle		3	34			Level	Of Sei	rvice				C	

Street Name:		Е	Buena V	ista S	St				Centra	al Ave			
Street Name: Approach:	Nor	th Bo	ound	Sou	ith Bo	ound	Ea	ast Bo	ound	We	est Bo	ound	
Movement:	L -	- Т	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R	
Rights:	Protected Protected Protected Include Include Include Include 0 0 0 0 0 0 0 0 0 0												
Min. Green:	0 0 0 0 0 0 0 0 0 0 0 0												
			4.0	4.0	4.0					4.0	4.0	4.0	
Lanes:	1 () 1	1 0	1 () 1	4.0 1 0	1 (0 0	1 0	1 () 1	0 1	
Volume Module										•		·	
Base Vol:	62	375	191	66	533	24	5	51	126	259	75	283	
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	
Initial Bse:	73	443	225	78	629	28	6	60	149	306	89	334	
Added Vol:	0	131	13	0	83	0	0	0	0	12	0	30	
PasserByVol:			0	0	0	0	0	0	0	0	0	0	
Initial Fut:	73	574	238	78	712	28	6	60	149	318	89	364	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
-	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	73		238	78	712	28	6	60	149	318	89	364	
	0		0	0	0	0	0	0	0	0		0	
Reduced Vol:			238	78	712	28	6	60	149	318		364	
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00		1.00	
-			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
FinalVolume:				. 78			, 6		149	318		364	
Saturation F													
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:			0.91		0.94			0.89			1.00	0.85	
Lanes:			0.59	1.00	1.92			0.29				1.00	
Final Sat.:			1013		3451			489			1900	1615	
Capacity Anal	•								'	•		'	
Vol/Sat:				0.04	0.21	0.21	0.00	0.12	0.12	0.18	0.05	0.23	
Crit Moves:		****		****				****		***			
<pre>Green/Cycle:</pre>	0.07	0.38	0.38	0.07	0.38	0.38	0.01	0.20	0.20	0.29	0.48	0.48	
Volume/Cap:	0.54		0.61		0.54	0.54		0.61	0.61	0.61		0.47	
Delay/Veh:	49.2	25.8	25.8	53.9	24.8	24.8	74.7	39.8	39.8	33.1	14.2	17.9	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	49.2		25.8	53.9	24.8	24.8	74.7	39.8	39.8	33.1	14.2	17.9	
LOS by Move:	D	С	C	D	С	C	E	D	D	C	В	В	
HCM2kAvgQ:	2	10	10	3	10	10	1	7	7	8	1	7	
******	*****	****	*****	*****	****	*****	****	****	*****	*****	****	*****	

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City of Duarte Environmental Impact Report Future + Proj PM

				Futi	ıre +	Proj P	M					
		т	evel 0	of Serv	zice (Computa	 tion 1	 Report	 -			
	2000					(Base		_		e)		
*****	****	*****	*****	****	****	*****	****	****	*****	****	****	*****
Intersection								****	*****	****	****	*****
Cycle (sec):		10				Critic	al Vo	l./Car	o.(X):		0.5	504
Loss Time (se			3 20			Averag		_		:	9	9.7
Optimal Cycle						Level						A
Street Name:			·***** Buena V			*****	****		****** 210 WB			*****
Approach:						ound	E				ແຊ est Bo	nund
Movement:			- R	L -	- T	- R	L -		- R		- T	
Control:	P:	rotect	ed	Pi	rotect	ted	P:	rotect	ted	Pi	rotect	ted
Rights:		Inclu	ıde		Incl	ude		Incl	ıde		Incl	ıde
Min. Green:				0		0 4.0	0		0			0
Y+R: Lanes:			0 0			1 0	4.0	1 0	0 0	0 (4.0
Volume Module			1	ı		ı	1		1	1		ı
Base Vol:	279	611	0	0	645	252	0	0	0	0	0	0
Growth Adj:	1.18	1.18	1.18		1.18	1.18	1.18	1.18	1.18		1.18	1.18
Initial Bse:			0	0	761	297	0	0	0	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj: PHF Volume:	329	1.00 721	1.00	1.00	1.00 761	1.00 297	1.00	1.00	1.00	1.00	1.00	1.00
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:			0	0	761	297	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			0		761	297		0	0	. 0	-	0
Caturation E												
Saturation Fi			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			1.00		0.91	0.91		1.00	1.00		1.00	1.00
Lanes:		2.00	0.00		1.44			0.00	0.00		0.00	0.00
Final Sat.:			0		2487			0	0	0	0	0
	1											
Capacity Ana	-											
Vol/Sat:		0.20	0.00	0.00	0.31 ****	0.31	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves: Green/Cycle:		0 97	0 00	0 00		0.61	0 00	0.00	0.00	0 00	0.00	0.00
Volume/Cap:		0.21	0.00		0.50	0.50		0.00	0.00		0.00	0.00
Delay/Veh:	25.5		0.0		11.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	25.5	0.1	0.0	0.0	11.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:	C	A	A	A	В	В	A	A	A	A	A	A
HCM2kAvgQ:	8	1	0	0	9	9	0	0	0	0	0	0
Note: Queue										^ * * * * * *	^ ^ * * * * * *	
*********									*****	****	****	******

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Future + Proj PM

City of Duarte Environmental Impact Report Future + Proj PM

				ruci	ire +	Proj P	IvI					
			Level ()f Serv	zice (Computa	tion I	Report	 -			
	2000					(Base		-		re)		
*****											****	*****
Intersection								****	*****	****	****	*****
Cvcle (sec):		10	0.0			Critic	al Vo	l./Cai	o.(X):		0.7	712
Loss Time (se	ec):		6			Averag	e Dela	ay (s	ec/veh)	:	26	5.6
Cycle (sec): Loss Time (sec) Optimal Cycle	· ·		43			Level	Of Ser	rvice	:			С
*****	****	****	*****	*****	****	*****	****	****	*****	****	****	*****
Street Name:]	Buena V	7ista S	St			I	210 EB	On Rar	mp	
Approach:	No	rth Bo	ound	Sou	ith Bo	ound	Ea	ast B	ound	We	est Bo	ound
Movement:												
Control:						ted	P	rotec	ted	Pi	rotect	ted
Rights:		Incl	ude		Incl	ıde		Incl	ude		Incl	
Min. Green: Y+R:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 (0 2	0 1	1 () 2	0 0	. 0 :	1 0	1 0	. 0 (0 0	0 0
Volume Module						_				_	_	
			358					315		0		
Growth Adj:			1.18		1.18		1.18				1.18	1.18
Initial Bse:			422		491		359			0	0	0
User Adj:			1.00		1.00	1.00		1.00			1.00	
PHF Adj:			1.00		1.00	1.00		1.00			1.00	1.00
PHF Volume: Reduct Vol:	0	099	422 0	278 0	491	0	359 0				0	0 0
Reduced Vol:			422	278		0						0
PCE Adj:			1.00		1.00	1.00						1.00
MLF Adj:	1 00	1 00	1.00		1.00	1.00					1.00	
FinalVolume:			422		491	0		372		0		0
Saturation Fl				1			1		ı	1		ı
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.85	0.89	0.26	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	1417	1469	429	0	0	0
Capacity Anal	lysis	Modu:	le:									
Vol/Sat:	0.00	0.19			0.14	0.00		0.25	0.25	0.00	0.00	0.00
Crit Moves:			****				****					
Green/Cycle:												
Volume/Cap:	0.00	0.53	0.71	0.71	0.23	0.00				0.00	0.00	0.00
Delay/Veh:			31.1	42.3		0.0		29.9		0.0		0.0
User DelAdj:			1.00	1.00		1.00		1.00			1.00	1.00
AdjDel/Veh:		25.2	31.1		10.1	0.0		29.9	29.9	0.0	0.0	0.0
LOS by Move:	A	C	C	D	В	A	C	C	C	A	A	A
HCM2kAvgQ:	0	9	12	8	4	0	13	13	13	0	0	0
****									*****	****	****	*****
Note: Queue 1									+++++	. + + + + + .	++++	

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City of Duarte Environmental Impact Report

Future + Proj PM ______ Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ************************* Intersection #8 Huntington Dr & Cotter Ave ************************* Average Delay (sec/veh): 1.2 Worst Case Level Of Service: E[35.5] ************************ Street Name: Cotter Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 0 2 0 1 -----||-----||-----| Volume Module: Base Vol: 1 0 9 8 1 41 62 1413 9 5 635 PHF Volume: 1 0 11 9 1 48 73 1667 11 6 749 28 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 1 0 11 9 1 48 73 1667 11 6 749 28 -----| Critical Gap Module: Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx -----|----||------| Capacity Module: Cnflict Vol: 2206 2608 839 1741 2585 375 778 xxxx xxxxx 1678 xxxx xxxxx Potent Cap.: 25 25 313 57 26 629 848 xxxx xxxxx 387 xxxx xxxxx Move Cap.: 21 22 313 51 23 629 848 xxxx xxxxx 387 xxxx xxxxx Volume/Cap: 0.06 0.00 0.03 0.19 0.05 0.08 0.09 xxxx xxxx 0.02 xxxx xxxx -----|----|-----||------| Level Of Service Module: ************************* Note: Queue reported is the number of cars per lane.

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City of Duarte

	Environmental Impact Report											
					Proj Pl							
					Computa		-					
		as Cycle 1										
******						****	****	*****	*****	****	*****	
Intersection						****	****	*****	****	****	*****	
Cycle (sec):		100			Critic	al Vol	L./Caj	o.(X):		0.5	66	
Loss Time (se	ec):	0 33			Averag	e Dela	ay (se	ec/veh)	:	xxxx	XX	
Optimal Cycle	:	33			Level	Of Sei	rvice	:			A	
*****	******	*****	*****	****	*****	****	****	*****	*****	****	*****	
Street Name:			and Ave					Centra				
Approach:		n Bound	Sou	ith Bo	ound	Εá	ast Bo	ound	Wes	st Bo	und	
Movement:		T - R			- R			- R				
Control:		rmitted							Pe			
Rights:		nclude			ıde			ude			.de	
Min. Green:	0	0 0	0	0	0	0	0		0	0	0	
Y+R:		4.0 4.0										
Lanes:		0 1 0			1 0							
Volume Module												
Base Vol:	63 3		42	124	58	54			55	81	29	
Growth Adj:	1.18 1.		1.18	1.18	1.18		1.18		1.18	1.18	1.18	
Initial Bse:	74 4	432 427	50	146	68	64	261	28	65	96	34	
User Adj:	1.00 1.			1.00	1.00		1.00		1.00		1.00	
_	1.00 1.		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	74 4		50	146	68		261	28	65		34	
	0		0	0	0		0		0	0	0	
Reduced Vol:			50		68	64			65	96	34	
PCE Adj:	1.00 1.		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00 1.		1.00		1.00	1.00		1.00	1.00		1.00	
FinalVolume:						64		28	65	96	34	
Saturation Fl												
Sat/Lane:	1600 16			1600			1600		1600		1600	
Adjustment:			1.00		1.00	1.00			1.00		1.00	
Lanes:				1.11			0.80		1.00 (0.26	
Final Sat.:							1286		1600		422	
Capacity Anal	_		0 00	0 00	0 00	0 0 1	0 00	0 00	0 04		0 00	
		.29 0.29		0.08	0.08	0.04	0.20	0.02	0.04 (J.08	0.08	
Crit Moves:												

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City of Duarte Environmental Impact Report

Future + Proj PM

************************** Average Delay (sec/veh): 19.5 Worst Case Level Of Service: E[46.7] ************************ Street Name: I210 WB Off Ramp Central Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----|----|-----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Lanes: 1 0 0 1 0 0 0 1! 0 0 0 1 0 1 0 0 0 1 1 0 -----||-----||-----| Volume Module: Base Vol: 330 5 61 5 0 19 12 296 1 0 236 PHF Volume: 389 6 72 6 0 22 14 349 1 0 278 1 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 389 6 72 6 0 22 14 349 1 0 278 1 -----||-----||-----| Critical Gap Module: Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx xxxxx xxxxx xxxxx -----| Capacity Module: -----|----|-----||------| Level Of Service Module: 2Way95thQ: 9.8 xxxx xxxxx xxxx xxxx xxxx 0.0 xxxx xxxxx xxxx xxxxx xxxxx SharedQueue:xxxxx xxxx 0.3 xxxxx 0.1 xxxxx 0.0 xxxx xxxxx xxxxx xxxxx xxxxx Shrd ConDel:xxxxx xxxx 10.2 xxxxx 10.2 xxxxx 7.8 xxxx xxxxx xxxxx xxxxx xxxxx Shared LOS: * * B * B * A * * * * * * * ApproachDel: 46.7 10.2 xxxxxx ApproachLOS: E B * * * * * * *

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Future + Proj AM Wed May 25, 2016 17:55:29 Page 4-1

City of Duarte Environmental Impact Report Future + Proj AM

Turning Movement Report Future AM

Volume Type I		rthbo Thru			uthbo Thru	ound Right		astbou Thru	und Right		estboı Thru		Total Volume
#1 Hunti	ingto	n Dr	& Mour	ntain A	ave								
Base	245	535	111	113	422	84	103	380	98	155	1474	345	4064
Added	0	0	4	4	0	0	0	22	0	6	31	6	73
Total	245	535	115	117	422	84	103	402	98	161	1505	351	4137
#2 Hunti	ingto	n Dr	& Buer	na Vist	a St								
Base	166	269	84	55	228	94	84	320	138	104	1710	87	3339
Added	-23	-3	-1	5	-1	0	0	37	-7	64	67	9	147
Total	143	266	83	60	227	94	84	357	131	168	1777	96	3486
#3 Hunti	inato	n Dr	& Hial	nland A	ve								
Base	100	85	216	79	169	38	33	367	92	478	1717	71	3444
Added	11	0	0	0	0	0	0	60	9	0	59	0	139
Total	111	85	216	79	169	38	33	427	101		1776	71	3583
II.4. TT		D	C 14+ (0744-	Q.L								
#4 Hunti	_					1.00		212	000	420	1 2 0 0	110	4006
Base	844	155	250	54	404	100	71	313	229		1329	117	4296
Added	26	0	0	0	0	1	2	39	37	0	28	0	133
Total	870	155	250	54	404	101	73	352	266	432	1357	117	4429
#5 Centi	ral A	ve &	Buena	Vista	St								
Base	47	343	296	45	498	9	4	18	48	411	189	277	2185
Added	0	28	4	-2	46	0	0	0	0	9	0	5	90
Total	47	371	300	43	544	9	4	18	48	420	189	282	2275
#6 I210	WD O	ın Dam	n s. Di	iena Wi	ata G	2+							
Base	101	694	од » д О	aena vi	.sta 1	270	0	0	0	0	0	0	1740
Added	0	31	0	0	31	270	0	0	0	0	0	0	86
				-			0	0	0	0	0	0	
Total	101	725	0	0	706	294	U	U	U	U	U	Ü	1826
#7 I210	EB C		р & Ві		sta S	St							
Base	0	518	203	295	435	0	382	14	359	0	0	0	2207
Added	0	14	0	11	20	0	17	0	0	0	0	0	62
Total	0	532	203	306	455	0	399	14	359	0	0	0	2269
#8 Hunti	ingto	n Dr	& Cott	ter Ave	<u> </u>								
Base	35	0	8	9	0	66	35	395	2	8	1880	7	2447
Added	0	0	0	0	0	0	0	68	0	0	87	0	155
Total	35	0	8	9	0	66	35	463	2		1967	7	2602
#0 Comb-	ר ורט	***	ui~h].	and 7									
#9 Centi			_			125	10	111	0.0	207	286	72	2021
Base	98	181	137	79	506	135	46	114	90	287		73	2031
Added	0	2	127	3	3	9	6	-1	-1	0	0	2	23
Total	98	183	137	82	509	144	52	113	89	287	286	75	2054

Future + Proj AM Wed May 25, 2016 17:55:29 Page 4-2

City of Duarte Environmental Impact Report Future + Proj AM

					Fut	ture +	Proj A	MA					
Volume Type		orthbou Thru I			outhbo Thru	ound Right		astbo Thru			estbou Thru		Total Volume
#10 Cer Base Added Total	339 6 345	Ave & 0 0 0	1210 113 2 115	WB Off 1 0	Ramp 0 0 0	6 0 6	5 0 5	387 2 389	0 0 0	0 0 0	576 9 585	7 0 7	1434 19 1453

Future + Proj AM Wed May 25, 2016 17:55:30 Page 5-1

City of Duarte Environmental Impact Report Future + Proj AM

Intersection Volume Report Base Volume Alternative

Node	Intersection		Northbound L T R			uthbo - T -			stbou - T -			estbou T -	
1	Huntington Dr	245	535	111	113	422	84	103	380	98	155	1474	345
2	Huntington Dr	166	269	84	55	228	94	84	320	138	104	1710	87
3	Huntington Dr	100	85	216	79	169	38	33	367	92	478	1717	71
4	Huntington Dr	844	155	250	54	404	100	71	313	229	432	1329	117
5	Central Ave &	47	343	296	45	498	9	4	18	48	411	189	277
6	I210 WB On Ra	101	694	0	0	675	270	0	0	0	0	0	0
7	I210 EB On Ra	0	518	203	295	435	0	382	14	359	0	0	0
8	Huntington Dr	35	0	8	9	0	66	35	395	2	8	1880	7
9	Central Ave &	98	181	137	79	506	135	46	114	90	287	286	73
10	Central Ave &	339	0	113	1	0	6	5	387	0	0	576	7

City of Duarte Environmental Impact Report

Future + Proj AM

Intersection Volume Report Future Volume Alternative

Node	Intersection		Northbound L T R			uthbo - T -			stbou - T -			estbou T -	
1	Huntington Dr	245	535	115	117	422	84	103	402	98	161	1505	351
2	Huntington Dr	143	266	83	60	227	94	84	357	131	168	1777	96
3	Huntington Dr	111	85	216	79	169	38	33	427	101	478	1776	71
4	Huntington Dr	870	155	250	54	404	101	73	352	266	432	1357	117
5	Central Ave &	47	371	300	43	544	9	4	18	48	420	189	282
6	I210 WB On Ra	101	725	0	0	706	294	0	0	0	0	0	0
7	I210 EB On Ra	0	532	203	306	455	0	399	14	359	0	0	0
8	Huntington Dr	35	0	8	9	0	66	35	463	2	8	1967	7
9	Central Ave &	98	183	137	82	509	144	52	113	89	287	286	75
10	Central Ave &	345	0	115	1	0	6	5	389	0	0	585	7

City of Duarte Environmental Impact Report

			Env			Impact Proj A	_	rt				
TCII	 1 (I ₋ oss					 Computa ethod (native	<u></u>	
*****												*****
Intersection							****	*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle ************************************			6 88				e Dela Of Se	ay (se rvice:	ec/veh)	:		XXX D
Street Name:			Mounta			ound.			Hunting			nd
Approach: Movement:	L -	Т	– R	L -	лин Бо - Т	- R	L -	авс во - Т	- R	L -	: БС БС - Т	- R
Control:	Pr	otect	ed	P	rotect	ted	P	rotect	ed	Pr	cotect	ed
Rights:		Inclu	ıde		Incl	ıde		Inclu	ıde		Inclu	ıde
Min. Green:				0					0			0
Y+R: Lanes:	4.0	4.0	1 0	4.0	4.0	4.0 1 0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes.	1 U		l		J I	I	1	J <u> </u>		1) <u> </u>	l
Volume Module			I	I		I	I		I	I		I
Base Vol:		453	94	96	358	71	87	322	83	131	1249	292
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:	245	535	111	113	422	84	103	380	98	155	1474	345
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			111	113		84	103		98		1474	345
Reduct Vol:	0		0		0	0	0	0	0		0	0
Reduced Vol:			111	113		84	103				1474	345
PCE Adj:	1.00		1.00		1.00	1.00		1.00			1.00	1.00
MLF Adj: FinalVolume:	1.00		1.00 111		1.00	1.00 84		1.00	1.00 98		1.00 1474	1.00 345
Saturation F				1		ı	ı		ı	1		1
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.66	0.34	2.00	1.67	0.33	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:			550		2670	530		3200			3200	
	•											
Capacity Ana	-					0 1 5	0 0 -	0 10	0 0 =	0 10		0.00
Vol/Sat:	0.15	0.20	0.20	0.04	0.16	0.16	0.06	0.12	0.06	0.10	0.46	0.22
Crit Moves:		****	*****	****		*****		*****	*****	*****		*****

City of Duarte

	Environmental Impact Report Future + Proj AM											
	L	evel 0	f Serv	ice (Computa	tion F	Report	-				
ICU 1	l(Loss as C				_		_		native)		
*****	*****	*****	*****	****	*****	****	****	*****	*****	****	*****	
Intersection						****	****	*****	*****	****	*****	
Cycle (sec):	10	0			Critica	al Vol	L./Car	o.(X):		0.8	351	
Loss Time (se	ec):	6			Averag				:	xxxx	xx	
Optimal Cycle	≘: 6	9			Level						D	
*****				****	*****	****	****	*****	*****	****	*****	
Street Name:	В	ella V	ista S	St			Ι	Hunting	ton Dr			
Approach:	North Bo	und	Sou	ith Bo	ound	Εá				st Bo	ound	
Movement:	L - T				- R			- R		Т		
Control:	Protect				ed				Pr			
Rights:	Inclu	de		Incl	ıde		Incl	ıde		Inclu	ıde	
Min. Green:	0 0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1 0 1				1 0	1 () 2	0 1	1 0	2	0 1	
Volume Module	: =:											
Base Vol:	141 228	71	47	193	80	71	271	117	88	1449	74	
Growth Adj:	1.18 1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	
Initial Bse:	166 269	84	55	228	94	84	320	138	104	1710	87	
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	166 269	84	55	228	94	84	320	138	104	1710	87	
Reduct Vol:	0 0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	166 269	84	55	228	94	84	320	138	104	1710	87	
PCE Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	166 269	84	55	228	94	84	320	138	104	1710	87	
Saturation F	low Module:	•			•			•			·	
Sat/Lane:	1600 1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00 1.53	0.47	2.00	1.41	0.59	1.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:	1600 2440	760	3200	2262	938	1600	3200	1600	1600	3200	1600	
Capacity Ana	-											
Vol/Sat:	0.10 0.11	0.11	0.02		0.10		0.10	0.09	0.06		0.05	
Crit Moves:	***			***		****				***		
******	******	*****	****	****	*****	****	****	*****	*****	****	*****	

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City of Duarte Environmental Impact Report

Future + Proj AM

Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ************************* Intersection #3 Huntington Dr & Highland Ave ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 56 XXXXXX ************************* Street Name: Highland Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 85 72 183 67 143 32 28 311 78 405 1455 60 Initial Bse: 100 85 216 79 169 38 33 367 92 478 1717 71

Capacity Analysis Module:

Future + Proj AM Wed May 25, 2016 17:55:30 Page 11-1 City of Duarte

Environmental Impact Report Future + Proj AM

			Of Ser		_		-				
2(M Opera									
						*****	****	*****	****	****	*****
Intersection #4						*****	****	*****	****	****	*****
Cycle (sec):		100			Critic	cal Vol	l./Car	o.(X):		0.9	907
Loss Time (sec):	9			Averag	ge Dela	ay (se	ec/veh)	:	43	3.9
Optimal Cycle:		106			Level	Of Ser	rvice	:			D
******	*****	*****	*****	*****	*****	****	****	*****	****	*****	*****
Street Name:		Mt O	Livie S	St			I	Hunting	ton Di	r	
Approach:	North	n Bound	Sc	outh Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
		T - R			- R			- R		- T	
									•		
Control:	_	Phase	Sr		nase	Pi		ted	Pi	rotect	
Rights:		ıclude		Inclu			Inclu			Inclu	
Min. Green:	0			0	0		0	0		0	0
	4.0 4			4.0	4.0		4.0	4.0		4.0	4.0
					1 0			0 1	1 (
			-								
Volume Module:		21 01	. 40	240	0.5	C 0	265	104	266	1100	0.0
	715 1			342 3 1.18	85 1.18	1 10	265 1.18	194 1.18		1126 1.18	99 1.18
-	.18 1. 844 1			404	100	71		229		1329	117
	.00 1.			1.00	1.00		1.00	1.00		1.00	1.00
-	.00 1.			1.00	1.00		1.00	1.00		1.00	1.00
		.55 25			100	71	313	229		1329	117
Reduct Vol:	0) (0	0	0	0		0	0
		.55 25			100	71	313	229		1329	117
	.00 1.			1.00	1.00		1.00	1.00		1.00	1.00
-	.00 1.			1.00	1.00		1.00	1.00		1.00	1.00
_	844 1	.55 25	54	404	100	71	313	229	432	1329	117
			-								
Saturation Flow	w Modu	ıle:						•			•
Sat/Lane: 19	900 19	00 190	1900	1900	1900		1900	1900		1900	1900
Adjustment: 0	.96 0.	96 0.7	0.95	0.92	0.92	0.95	0.95	0.85	0.95	0.95	0.85
	.69 0.			1.60	0.40		2.00	1.00		2.00	1.00
	080 5			2805	697		3610	1615		3610	1615
Capacity Analys			-								
	.27 0.		9 0 03	0.14	0.14	0 04	0.09	0.14	0 24	0.37	0.07
	***	2. 0.0.	0.00	****	0.11	****	0.05	0.11	0.21	****	0.07
Green/Cycle: 0	.30 0.	30 0.3	0.16	0.16	0.16	0.04	0.17	0.17	0.28	0.41	0.41
-	.91 0.			0.91	0.91		0.52	0.85		0.91	0.18
-	4.3 44			59.9		118.5				36.4	19.2
User DelAdj: 1				1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh: 44	4.3 44	1.3 26.	36.8	59.9	59.9	118.5	38.8	61.9	46.5	36.4	19.2
LOS by Move:	D	D (C I	E	E	F	D	E	D	D	В
HCM2kAvgQ:	19		3 2		12	5	5	10	15	24	2
*****	*****	*****	*****	*****	*****	****	****	*****	****	*****	*****
Note: Queue rep											

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City of Duarte Environmental Impact Report Future + Proj AM

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) ************************

Intersection #6 I210 WB On Ramp & Buena Vista St *********************

Cycle (sec): 100 Critical Vol./Cap.(X): 0.340
Loss Time (sec): 3 Average Delay (sec/veh): 3.7
Optimal Cycle: 15 Level Of Service: A A

******	****	- *****	*****	****	*****	*****	****	****	*****	****	*****	*****
Street Name:		Е	Buena V	ista S	St			ΙŹ	210 WB	On Rar	an	
Approach:		rth Bo	ound	Soi	ith Bo	ound	Ea	ast Bo	ound	We	est Bo	und
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R		- T	
Control:												
Rights:		Inclu	ıde		Inclu			Incl	ıde		Inclu	ıde
Min. Green:				0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0							4.0			
Lanes:	1	0 2	0 0	0 () 1	1 0	0	0 0	0 0	0 (0 0	0 0
Volume Module												
Base Vol:				0		229		0			0	
Growth Adj:				1.18		1.18		1.18			1.18	
Initial Bse:			0	0	675	270	0	0	0	0	0	0
User Adj:				1.00		1.00		1.00			1.00	1.00
PHF Adj:				1.00		1.00		1.00			1.00	1.00
PHF Volume:	101	694		0	675	270	0	0	0	0		0
Reduct Vol:				0	0	0	0	0	0	0		0
Reduced Vol:				0		270		0		0		0
PCE Adj:				1.00		1.00		1.00			1.00	
MLF Adj:				1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:				. 0		270		0	0	-	0	0
Saturation F												
Sat/Lane:							1900				1900	
Adjustment:						0.91		1.00			1.00	1.00
						0.57	0.00				0.00	0.00
Final Sat.:						988			0		0	0
	1											
Capacity Ana						0 0 0	0 00		0 00		0 00	0 00
Vol/Sat:		0.19	0.00	0.00	0.27 ****	0.27	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:			0 00			0 00	0 00		0 00		0 00	0 00
Green/Cycle:				0.00		0.80		0.00	0.00		0.00	0.00
Volume/Cap:			0.00		0.34	0.34		0.00	0.00		0.00	0.00
Delay/Veh:			0.0	0.0	2.7	2.7	0.0	0.0		0.0		0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				0.0			0.0			0.0		0.0
LOS by Move:	D	A	A				A			A		A
HCM2kAvgQ:	3	1	0	0	4	4	0	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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City of Duarte Environmental Impact Report Future + Proj AM

		I	Level C	f Serv	vice (Computa	tion 1	Report	-			
	2000					(Base		_		re)		
*****	****	****	*****	****	****	*****	****	*****	*****	****	*****	*****
Intersection ******								*****	*****	****	*****	*****
Cycle (sec):		10	00			Critic	al Vo	l./Car	o.(X):		0.5	589
Loss Time (se	ec):		6			Averag	e Dela	ay (se	ec/veh)	:	26	5.1
Cycle (sec): Loss Time (se Optimal Cycle	e:	3	32			Level	Of Se	rvice:				C
*****	****	****	*****	****	****	*****						*****
Street Name:		I	Buena V	ista S	St			I2	210 EB	On Rar	np	
Approach: Movement:	No:	rth Bo	ound	Sot	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L	- T	- R	_ L -	- T	- R	L ·	- T	- R	L -	- T	- R
Control:	P:	rotect	ted	Pi	rotect	ted	P:	rotect	ed	Pi	rotect	ted
Rights: Min. Green:		Incl	ıde		Incl	ıde		Inclu	ıde		Incl	ıde
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1 (0 2	0 0	0 :	1 0	1 0	0 (0	0 0
Volume Module	e: ^	420	1.00	0.5.0	260	0	204	1.0	204	0	0	0
						0			304			
Growth Adj: Initial Bse:			203	1.18 295		1.18 0		1.18	1.18 359		1.18	1.18
					1.00	1.00		1.00			1.00	
User Adj: PHF Adj:	1.00	1 00	1.00		1.00			1.00	1.00		1.00	
PHF Volume:	1.00	51Q	203	295		0	382			0.00		0
Reduct Vol:				0				0				0
Reduced Vol:				295		0			359			
PCE Adj:						1.00		1.00				
MLF Adj:				1.00				1.00	1.00		1.00	
FinalVolume:			203	295			382		359			
Saturation F				1			1		ı	1		1
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	0.04	0.96	0.00	0.00	0.00
Final Sat.:	0	3610	1615			0			1491		0	0
Capacity Ana	_											
Vol/Sat:					0.12	0.00			0.24	0.00	0.00	0.00
Crit Moves:				****			****					
Green/Cycle:												
Volume/Cap:												
				33.1		0.0		22.9	22.9		0.0	0.0
User DelAdj: AdjDel/Veh:				1.00		1.00		1.00	1.00		1.00	1.00
-		34.5	33.9		13.1	0.0		22.9	22.9	0.0	0.0	0.0
LOS by Move: HCM2kAvq0:	A 0	C 8	C 6	C 8	B 4	A 0	C 10	C 10	C 10	A 0	A 0	A 0
######################################												
Note: Queue												
*******									*****	****	*****	*****

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City of Duarte

City of Duarte
Environmental Impact Report
Future + Proj AM
Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Huntington Dr & Cotter Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.679 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level Of Service: B

Street Name: Cotter Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
District Table Tab
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Volume Module:
Base Vol: 30 0 7 8 0 56 30 335 2 7 1593 6
Growth Adj: 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1
Initial Bse: 35 0 8 9 0 66 35 395 2 8 1880 7
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 35 0 8 9 0 66 35 395 2 8 1880 7
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 35 0 8 9 0 66 35 395 2 8 1880 7
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 35 0 8 9 0 66 35 395 2 8 1880 7
Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 160
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Lanes: 0.81 0.00 0.19 0.12 0.00 0.88 1.00 1.99 0.01 1.00 2.00 1.00
Final Sat.: 1297 0 303 200 0 1400 1600 3181 19 1600 3200 1600
Capacity Analysis Module:
Vol/Sat: 0.02 0.00 0.03 0.01 0.00 0.05 0.02 0.12 0.12 0.01 0.59 0.00
Crit Moves: ****

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Environmental Impact Report

			Env			Impact Proj A		ct				
ICU 1		s as C		ength	%) M∈	ethod (Base V	Jolume	e Alter			
Intersection	#10 (Centra	al Ave	& I210) WB C	off Ram	p					
**************************************	****						-		>			
Loss Time (se	e:	2	0	****		Averag Level	e Dela Of Se	ay (se	ec/veh)	:	XXXX	XXX A
Street Name:		I2	210 WB	Off Ra	amp				Centra			
Approach: Movement:			ound – R						ound – R	₩e	est Bo - T	
Movement.	- ц 	- 1 	- K 									
Control:												
Rights:		Inclu	ıde		Inclu	ıde		Inclu	ıde		Inclu	ıde
Min. Green:			0	0					0			0
Y+R: Lanes:	4.0	4.0	1 0	4.0	4.0	4.0	4.0	4.0	4.0 0 0	4.0	4.0	4.0
Lanes.									I		, <u> </u>	
Volume Module			1	ı		1	1		1	1		ı
Base Vol:	287	0	96	1	0	5	4	328	0	0	488	6
Growth Adj:					1.18	1.18		1.18			1.18	1.18
Initial Bse:			113	1	-	6	5		0	0	576	7
User Adj:			1.00		1.00	1.00		1.00			1.00	
PHF Adj:			1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume: Reduct Vol:		0	113 0	1		6 0	0	387 0	0	0	576 0	7 0
Reduct Vol:			113	1	-	6			0	0		7
PCE Adj:		-	1.00	_	1.00	1.00		1.00		-	1.00	-
-	1.00		1.00		1.00	1.00		1.00			1.00	
FinalVolume:	339	0	113		0				0	0	576	7
Saturation Fl												
Sat/Lane:	1600		1600		1600	1600		1600			1600	
Adjustment:			1.00		1.00	1.00		1.00			1.00	
Lanes: Final Sat.:			1.00 1600		0.00		0.02		0.00		1.98	
rinai Sat		-								-		
Capacity Anal				I		ı	I		I	1		ļ
Vol/Sat:	-			0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.18	0.18
Crit Moves:					****		****				****	
*****	****	*****	*****	****	*****	*****	****	****	*****	****	*****	*****

Future + Proj PM Wed May 25, 2016 17:49:23 Page 4-1

City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

Turning Movement Report Future PM

Volume Type		rthbo Thru			uthbo Thru			astboı Thru	und Right		estbou Thru		Total Volume
#1 тт		D	C Ma	7									
#1 Hunt:	_					го	70	1274	202	104	F7.6	1.60	4200
Base	159	420	189	296	539	58		1374	283	194	576	163	4322
Added	0	0	18	18	0	0	0	102	0	9	54	9	210
Total	159	420	207	314	539	58	.72	1476	283	203	630	172	4532
#2 Hunt	ingto	on Dr	& Buer	na Vist	a St								
Base	190	286	143	198	315	86	124	1461	223	130	571	79	3805
Added	3	0	150	17	1	0	0	134	6	89	77	9	486
Total	193	286	293	215	316	86		1595	229	219	648	88	4292
		_	1										
#3 Hunt:	_		_			4.0	0.5	1 4 6 11	100	110		4.0	2102
Base	118	136	332	74	65	42		1467	126	118	551	48	3103
Added	20	0	0	0	0	0	0	127	19	0	228	0	394
Total	138	136	332	74	65	42	26	1594	145	118	779	48	3497
#4 Hunt	ingto	n Dr	& Mt (Olivie	St								
Base	286	235	822	119	342	64	94	1119	710	241	471	24	4526
Added	120	0	0	0	0	6	3	66	63	0	126	0	384
Total	406	235	822	119	342	70		1185	773	241	597	24	4910
10001	100	255	022	117	312	, 0	,	1100	,,,	2 11	357	2.	1710
#5 Cent:	ral <i>P</i>	Ave &	Buena	Vista	St								
Base	73	443	225	78	629	28	6	60	149	306	89	334	2419
Added	0	131	13	0	83	0	0	0	0	12	0	30	269
Total	73	574	238	78	712	28	6	60	149	318	89	364	2688
U.C. T.0.1.0													
#6 I210			_					•	•	•	•	•	0100
Base	329	721	0	0	761	297	0	0	0	0	0	0	2109
Added	0	144	0	0	54	41	0	0	0	0	0	0	239
Total	329	865	0	0	815	338	0	0	0	0	0	0	2348
#7 I210	EB C	n Ram	р & Ві	uena Vi	lsta S	t							
Base	0	699	422	278	491	0	359	372	109	0	0	0	2729
Added	0	66	0	19	35	0	78	0	0	0	0	0	198
Total	0	765	422	297	526	0	437	372	109	0	0	0	2927
#0 II	J	Dec	r 0-++	7									
#8 Hunt	_					4.0		1.660		_		0.0	0.605
Base	1	0	11	9	1	48		1667	11	6	749	28	2605
Added	0	0	0	0	0	0	0	170	0	0	248	0	418
Total	1	0	11	9	1	48	73	1837	11	6	997	28	3023
#9 Cent:	ral <i>P</i>	Ave &	Highla	and Ave	5								
Base	74	432	427	50	146	68	64	261	28	65	96	34	1745
Added	0	6	0	3	3	12	20	0	0	0	0	6	50
Total	74	438	427	53	149	80	84	261	28	65	96	40	1795

Future + Proj PM Wed May 25, 2016 17:49:23 Page 4-2

City of Duarte Environmental Impact Report

Future + Proj PM with Mitigations Volume Northbound Southbound Eastbound Westbound Total Type Left Thru Right Left Thru Right Left Thru Right Left Thru Right Volume #10 Central Ave & I210 WB Off Ramp Base 389 6 72 6 0 22 14 349 1 0 278 1 1140
Added 29 0 7 0 0 0 0 13 0 0 12 0 61
Total 418 6 79 6 0 22 14 362 1 0 290 1 1201

City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

Intersection Volume Report Base Volume Alternative

		No	rthbo	und	So	uthbo	und	Εā	astbou	ınd	We	stbou	ınd
Node	Intersection	L -	- T -	- R	L -	- T -	- R	L -	T -	- R	L -	- T -	- R
1	Huntington Dr	159	420	189	296	539	58	72	1374	283	194	576	163
2	Huntington Dr	190	286	143	198	315	86	124	1461	223	130	571	79
3	Huntington Dr	118	136	332	74	65	42	26	1467	126	118	551	48
4	Huntington Dr	286	235	822	119	342	64	94	1119	710	241	471	24
5	Central Ave &	73	443	225	78	629	28	6	60	149	306	89	334
6	I210 WB On Ra	329	721	0	0	761	297	0	0	0	0	0	0
7	I210 EB On Ra	0	699	422	278	491	0	359	372	109	0	0	0
8	Huntington Dr	1	0	11	9	1	48	73	1667	11	6	749	28
9	Central Ave &	74	432	427	50	146	68	64	261	28	65	96	34
10	Central Ave &	389	6	72	6	0	22	14	349	1	0	278	1

Future + Proj PM Wed May 25, 2016 17:49:25 Page 6-1 City of Duarte Environmental Impact Report

Future + Proj PM with Mitigations

Intersection Volume Report Future Volume Alternative

Node	Intersection		rthbo - T -		~ ~	uthbo - T -			astbou T -			stbou - T -	
1	Huntington Dr	159	420	207	314	539	58	72	1476	283	203	630	172
2	Huntington Dr	193	286	293	215	316	86	124	1595	229	219	648	88
3	Huntington Dr	138	136	332	74	65	42	26	1594	145	118	779	48
4	Huntington Dr	406	235	822	119	342	70	97	1185	773	241	597	24
5	Central Ave &	73	574	238	78	712	28	6	60	149	318	89	364
6	I210 WB On Ra	329	865	0	0	815	338	0	0	0	0	0	0
7	I210 EB On Ra	0	765	422	297	526	0	437	372	109	0	0	0
8	Huntington Dr	1	0	11	9	1	48	73	1837	11	6	997	28
9	Central Ave &	74	438	427	53	149	80	84	261	28	65	96	40
10	Central Ave &	418	6	79	6	0	22	14	362	1	0	290	1

City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

Future + Proj PM with Mitigations ______ Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ************************* Intersection #1 Huntington Dr & Mountain Ave ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 88 XXXXXX ************************* Street Name: Mountain Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----||-----||-----| Volume Module: Base Vol: 135 356 160 251 457 49 61 1164 240 164 488 138 Initial Bse: 159 420 189 296 539 58 72 1374 283 194 576 163 FinalVolume: 159 420 189 296 539 58 72 1374 283 194 576 163 -----||-----||-----| Saturation Flow Module: Lanes: 1.00 1.38 0.62 2.00 1.81 0.19 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 1600 2208 992 3200 2890 310 1600 3200 1600 3200 1600 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.10 0.19 0.19 0.09 0.19 0.19 0.04 0.43 0.18 0.12 0.18 0.10 Crit Moves: **** **** ****

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City of Duarte Environmental Impact Report

Future + Proj PM with Mitigations ______ Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ******************* Intersection #2 Huntington Dr & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 66 XXXXXX ************************* Street Name: Bella Vista St Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 161 242 121 168 267 73 105 1238 189 110 484 67 Initial Bse: 190 286 143 198 315 86 124 1461 223 130 571 79 PHF Volume: 190 286 143 198 315 86 124 1461 223 130 571 79 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 -----| Saturation Flow Module: Lanes: 1.00 1.33 0.67 2.00 1.57 0.43 1.00 2.00 1.00 1.00 2.00 1.00 Final Sat.: 1600 2133 1067 3200 2513 687 1600 3200 1600 1600 3200 1600 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.12 0.13 0.13 0.06 0.13 0.13 0.08 0.46 0.14 0.08 0.18 0.05 Crit Moves: ****

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Crit Moves:

City of Duarte Environmental Impact Report

Future + Proj PM with Mitigations

Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ******************* Intersection #3 Huntington Dr & Highland Ave ************************* Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 6
Optimal Cycle: 67 XXXXXX ************************* Street Name: Highland Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----|----|-----||------| Volume Module: Base Vol: 100 115 281 63 55 36 22 1243 107 100 467 41 Initial Bse: 118 136 332 74 65 42 26 1467 126 118 551 48 FinalVolume: 118 136 332 74 65 42 26 1467 126 118 551 48 -----|----||------| Saturation Flow Module: Final Sat.: 1488 1712 1600 1600 1600 1600 1600 3200 1600 1600 3200 1600 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.07 0.08 0.21 0.05 0.04 0.03 0.02 0.46 0.08 0.07 0.17 0.03

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Future + Proj PM

Future + Proj PM Wed May 25, 2016 17:49:25 Page 11-1

City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

			1						 -			
	2000					Computa (Base		_		ve)		
*****	****	*****	*****	****	* * * * *	*****	****	* * * * *	*****	****	*****	*****
Intersection							****	****	*****	*****	****	*****
Cycle (sec):		10	0			Critic	al Vo	l./Car	o.(X):		1.0	74
Loss Time (se	ec):		9 80			Averag	e Dela	ay (se	ec/veh):	61	L.7
Optimal Cycle	e:	18	0			Level						E
*****	****	*****	*****	****	****	*****						*****
Street Name:			Mt Oli	vie St	t			I	Hunting	gton D	r	
Approach:	No:	rth Bo	und	Sot								
Movement:			- R			- R					- T	
Control:	Sp.	lit Ph	ıase	Sp.	lit Pl	nase	P:	rotect	ted	P	rotect	ted
Rights:								Incl				
Min. Green:									0		0	0
Y+R:						4.0						
Lanes:	1 :		0 2			1 0	1 (0 2	0 1	1 () 2	
Volume Module		100	607	101	200	г 4	0.0	0.40	600	204	200	20
Base Vol:		199	697	101		54	80		602			20 1.18
Growth Adj:		1.18	1.18		1.18	1.18		1.18	1.18		1.18	
Initial Bse:			822 1.00		342	64 1.00		1119	710	241		24 1.00
User Adj: PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:			822	119	342	64		1119	710	241		24
Reduct Vol:	200		022	119	0	0		0	710	0		0
Reduced Vol:			822	119	342	64	-	1119		241		24
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		235	822		342	64		1119	710		471	24
Saturation F	low M	odule:		'								,
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.75		0.93	0.93		0.95	0.85		0.95	0.85
Lanes:			2.00		1.69	0.31		2.00	1.00		2.00	1.00
Final Sat.:			2842		2970	553		3610	1615		3610	1615
Capacity Ana	1											
Vol/Sat:				0.07	0.12	0.12	0.05	0.31	0.44	0.13	0.13	0.01
Crit Moves:			****			****			****	***		
Green/Cycle:	0.27	0.27	0.27	0.11	0.11	0.11	0.15	0.41	0.41	0.12	0.38	0.38
Volume/Cap:			1.07	0.62	1.07	1.07	0.34	0.76	1.07	1.07	0.34	0.04
Delay/Veh:	31.6	31.6	90.9	48.5	112	112.2	38.6	27.6	86.3	125.1	22.2	19.5
User DelAdj:			1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			90.9	48.5		112.2	38.6	27.6		125.1		19.5
LOS by Move:		C	F	D	F	F	D	C	F	F	C	В
HCM2kAvgQ:	7	7	23	5	12	12	3	17	33	13	5	0
*****	****	*****	*****	****	* * * * *	*****	****	****	*****	****	****	*****
Note: Queue :									*****	*****	*****	*****

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Future + Proj PM

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City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #6 I210 WB On Ramp & Buena Vista St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.504 Average Delay (sec/veh): Level Of Service: Loss Time (sec): 3
Optimal Cycle: 20 9.7 20 Street Name: Buena Vista St I210 WB On Ramp
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----|
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 Include< -----||-----||------| Volume Module: Base Vol: 279 611 0 0 645 252 0 0 0 0 0 Initial Bse: 329 721 0 0 761 297 0 0 0 0 0 -----|----||------| Saturation Flow Module: Lanes: 1.00 2.00 0.00 0.00 1.44 0.56 0.00 0.00 0.00 0.00 0.00 0.00 Final Sat.: 1805 3610 0 0 2487 972 0 0 0 0 0 -----||-----||-----| Capacity Analysis Module: Crit Moves: **** **** LOS by Move: C A A A B B A A A A HCM2kAvgQ: 8 1 0 0 9 9 0 0 0 A ******

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Note: Queue reported is the number of cars per lane.

City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) ************************ Intersection #7 I210 EB On Ramp & Buena Vista St

********************* Cycle (sec): 100 Critical Vol./Cap.(X):
Loss Time (sec): 6 Average Delay (sec/veh):
Optimal Cycle: 43 Level Of Service: 0.712 26.6

Optimal Cycle						Level						C
Street Name: Approach:	Mo	t h Da	suena v	ISLA S) 1+h Da	aund	E-	La Dat Da	SIO FR	On Ran	up Nat Bo	nund
Movement:	T.	_ T	- P	J	יייים אלוו די	- R	Т	явс во - Т	_ P		- Т	
											- 1	- K
Control:	P:	rotect	ced			ed						
Rights:		Inclu	ıde			ıde			ıde		Inclu	
Min. Green:	0		0	0	0	0	0	0	0		0	0
Y+R:		4.0				4.0				4.0		
Lanes:			0 1			0 0			1 0		0	
Volume Module												
Base Vol:						0		315			0	
Growth Adj:			1.18		1.18	1.18		1.18	1.18	1.18		1.18
Initial Bse:			422	278	491	0	359	372	109	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	0		422	278	491	0	359	372	109	0	0	0
Reduct voi:	U		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			422	278	491	0	359			0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:			422		491	0		372	109	. 0	0	0
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900		1900		1900
Adjustment:			0.85		0.95	1.00		0.87		1.00		1.00
Lanes:		2.00	1.00		2.00	0.00		0.89	0.26	0.00		0.00
Final Sat.:			1615		3610	0		1469		0		0
Capacity Ana	1											
Vol/Sat:	_		0.26	0 15	0.14	0.00	0 25	0.25	0.25	0 00	0.00	0.00
Crit Moves:		0.17			0.11	0.00	****	0.25	0.20	0.00	0.00	0.00
Green/Cycle:					0.58	0.00	0.36	0.36	0.36	0.00	0.00	0.00
Volume/Cap:					0.23	0.00		0.71	0.71	0.00		0.00
Delay/Veh:			31.1		10.1	0.0		29.9	29.9	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			31.1		10.1	0.0		29.9	29.9	0.0	0.0	0.0
LOS by Move:	A	C	C	D	В	A	C	C	C	A	A	A
LOS by Move: HCM2kAvgQ:	0	9		8	4	0	13	13	13	0	0	0
*****					*****	*****				*****	****	*****

Note: Queue reported is the number of cars per lane.

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Crit Moves: ****

City of Duarte

Environmental Impact Report Future + Proj PM with Mitigations ______ Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ******************* Intersection #8 Huntington Dr & Cotter Ave ************************* Cycle (sec): Critical Vol./Cap.(X): 100 Loss Time (sec): 0
Optimal Cycle: 43 Average Delay (sec/veh): Level Of Service: XXXXXX ************************** Street Name: Cotter Ave Huntington Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----| Include 0 0 0 4.0 4.0 4.0 -----|----||------| Volume Module: Base Vol: 1 0 9 8 1 41 62 1413 9 5 635 24 Initial Bse: 1 0 11 9 1 48 73 1667 11 6 749 28 FinalVolume: 1 0 11 9 1 48 73 1667 11 6 749 28 Saturation Flow Module: Lanes: 0.10 0.00 0.90 0.16 0.02 0.82 1.00 1.99 0.01 1.00 2.00 1.00 Final Sat.: 160 0 1440 256 32 1312 1600 3180 20 1600 3200 1600 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.01 0.01 0.04 0.04 0.05 0.52 0.52 0.00 0.23 0.02

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City of Duarte

Environmental Impact Report

Future + Proj PM with Mitigations Level Of Service Computation Report ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative) ******************* Intersection #10 Central Ave & I210 WB Off Ramp *************************** Cycle (sec): 100 Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service: Loss Time (sec): 0
Optimal Cycle: 23 XXXXXX ************************* Street Name: I210 WB Off Ramp Central Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R -----||-----||-----|
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 Incl 0 0 0 0 4.0 4.0 -----||-----||------| Volume Module: Base Vol: 330 5 61 5 0 19 12 296 1 0 236 Initial Bse: 389 6 72 6 0 22 14 349 1 0 278 1 FinalVolume: 389 6 72 6 0 22 14 349 1 0 278 1 -----|----||------| Saturation Flow Module: Lanes: 1.00 0.08 0.92 0.21 0.00 0.79 0.08 1.91 0.01 0.00 1.99 0.01 Final Sat.: 1600 121 1479 333 0 1267 124 3065 10 0 3186 14 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.24 0.05 0.05 0.00 0.00 0.02 0.01 0.11 0.11 0.00 0.09 0.09 Crit Moves: **** **** ****

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to CAMBRIDGE SYSTEMATICS

City of Duarte Environmental Impact Report Future + Proj PM with Mitigations

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative) ************************ Intersection #9 Central Ave & Highland Ave *********************

******	****	****	****	*****							*****	*****
Street Name: Approach:			Highla		≘ ı+h B⁄	ound	F:	act Bo	Centra	l Ave We	adt Ro	und
Movement:									- R			
Control:												
Rights:		Incl	ude		Incl	ıde		Incl	ıde		Inclu	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:									0 1			
Volume Module												
Base Vol:	63	366	362	42	124	58	54	221	24	55	81	29
	1.18				1.18	1.18		1.18			1.18	1.18
Initial Bse:	74	432	427	50	146	68	64	261	28	65	96	34
User Adj:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	432	427	50	146	68	64	261	28	65	96	34
Reduct Vol:				0	0	0	0	0	0	0	0	0
Reduced Vol:	74	432	427	50	146	68	64	261	28	65	96	34
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
FinalVolume:					146		64			65		34
Saturation Fl												
Adjustment:											1.00	
Lanes:												
Final Sat.:									492			
Capacity Anal	•			1 1		ı	I		I	I		ı
Vol/Sat:		0.91	0.83	0.30	0.30	0.28	0.72	0.72	0.06	0.16	0.30	0.30
Crit Moves:	****			****			****					****
Delay/Veh:	48.3	46.8	32.1	14.0	13.6	13.0	27.6	27.6	10.2	12.9	13.8	13.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:				14.0	13.6	13.0	27.6	27.6	10.2	12.9	13.8	13.8
LOS by Move: ApproachDel:	E	E	D	В	В	В	D	D	В	В	В	В
ApproachDel:		40.2			13.5			26.2			13.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		40.2			13.5			26.2			13.5	
LOS by Appr:					В			D			В	
AllWayAvqQ:	5.4	3.6	3.6	0.4	0.4	0.4	2.1	2.1	0.1		0.4	0.4
*****									*****	****	*****	*****
Note: Oueue i	report	ted i	s the 1	number	ot ca	ars per	Lane					

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to CAMBRIDGE SYSTEMATICS

Appendix E CalEEMod Output Data



Duarte Town Center - Existing Emissions South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	291.54	1000sqft	27.59	291,536.00	0
General Office Building	91.04	1000sqft	3.57	91,043.00	0
Government (Civic Center)	82.95	1000sqft	7.77	82,954.00	0
Place of Worship	11.63	1000sqft	0.27	11,630.00	0
Congregate Care (Assisted Living)	140.00	Dwelling Unit	3.09	38,527.00	400
Hotel	119.00	Room	4.24	172,788.00	0
Apartments Low Rise	61.00	Dwelling Unit	4.81	61,000.00	174
Single Family Housing	46.00	Dwelling Unit	3.62	82,800.00	132

1.2 Other Project Characteristics

UrbanUrbanWind Speed (m/s)2.2Precipitation Freq (Days)31Climate Zone9Operational Year2016

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximate square footage and acreage based on existing land use survey

Construction Phase - Existing land uses - no construction activity

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	0.00
tblLandUse	LandUseSquareFeet	140,000.00	38,527.00
tblLandUse	LotAcreage	6.69	27.59
tblLandUse	LotAcreage	2.09	3.57
tblLandUse	LotAcreage	1.90	7.77
tblLandUse	LotAcreage	8.75	3.09
tblLandUse	LotAcreage	3.97	4.24
tblLandUse	LotAcreage	3.81	4.81
tblLandUse	LotAcreage	14.94	3.62
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	42.94	42.70

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day											lb/day						
Area	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3		
Energy	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3		
Mobile	70.2686	168.6157	714.7837	1.5799	104.9822	2.3557	107.3379	28.0477	2.1659	30.2136		138,702.9 581	138,702.95 81	5.6129		138,820.8 286		
Total	156.9571	173.2801	861.6159	1.7955	104.9822	21.5510	126.5332	28.0477	21.3582	49.4060	2,313.628 8	146,591.7 899	148,905.41 87	12.6156	0.2195	149,238.3 842		

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Area	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3
Energy	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3
Mobile	70.2686	168.6157	714.7837	1.5799	104.9822	2.3557	107.3379	28.0477	2.1659	30.2136		138,702.9 581	138,702.95 81	5.6129		138,820.8 286
Total	156.9571	173.2801	861.6159	1.7955	104.9822	21.5510	126.5332	28.0477	21.3582	49.4060	2,313.628 8	146,591.7 899	148,905.41 87	12.6156	0.2195	149,238.3 842

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Unmitigated	70.2686	168.6157	714.7837	1.5799	104.9822	2.3557	107.3379	28.0477	2.1659	30.2136		138,702.9 581	138,702.95 81	5.6129		138,820.8 286
Mitigated	70.2686	168.6157	714.7837	1.5799	104.9822	2.3557	107.3379	28.0477	2.1659	30.2136		138,702.9 581	138,702.95 81	5.6129		138,820.8 286

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	401.99	436.76	370.27	1,375,150	1,375,150
Congregate Care (Assisted Living)	383.60	308.00	341.60	1,253,411	1,253,411
General Office Building	1,004.20	215.77	89.22	2,451,079	2,451,079
Government (Civic Center)	2,316.08	0.00	0.00	5,108,817	5,108,817
Hotel	972.23	974.61	708.05	2,230,664	2,230,664
Place of Worship	105.95	120.60	426.01	327,949	327,949
Regional Shopping Center	12,448.59	14,568.05	7358.37	26,006,455	26,006,455
Single Family Housing	440.22	463.68	403.42	1,497,787	1,497,787
Total	18,072.86	17,087.48	9,696.94	40,251,312	40,251,312

4.3 Trip Type Information

		Miles			Trip %		Trip Purpose %				
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3		
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3		
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4		
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16		
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4		
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11		
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11		
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3		

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514315	0.060290	0.180146	0.139458	0.042007	0.006636	0.015782	0.029894	0.001929	0.002512	0.004343	0.000595	0.002093

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

			,													
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3
NaturalGas Unmitigated	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3

5.2 Energy by Land Use - NaturalGas

Unmitigated

<u> </u>																	
	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	2378.39	0.0257	0.2192	0.0933	1.4000e- 003		0.0177	0.0177		0.0177	0.0177		279.8110	279.8110	5.3600e- 003	5.1300e- 003	281.5139
Congregate Care (Assisted Living)	3805.13	0.0410	0.3507	0.1492	2.2400e- 003		0.0284	0.0284		0.0284	0.0284		447.6620	447.6620	8.5800e- 003	8.2100e- 003	450.3864
General Office Building	2726.3	0.0294	0.2673	0.2245	1.6000e- 003		0.0203	0.0203		0.0203	0.0203		320.7413	320.7413	6.1500e- 003	5.8800e- 003	322.6933
Government (Civic Center)	2484.07	0.0268	0.2435	0.2046	1.4600e- 003		0.0185	0.0185		0.0185	0.0185		292.2441	292.2441	5.6000e- 003	5.3600e- 003	294.0226
Hotel	11844.3	0.1277	1.1612	0.9754	6.9700e- 003		0.0883	0.0883		0.0883	0.0883		1,393.4426	1,393.442 6	0.0267	0.0256	1,401.922 9
Place of Worship	599.343	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003		70.5110	70.5110	1.3500e- 003	1.2900e- 003	70.9401
Regional Shopping Center	1357.84	0.0146	0.1331	0.1118	8.0000e- 004		0.0101	0.0101		0.0101	0.0101		159.7458	159.7458	3.0600e- 003	2.9300e- 003	160.7179
Single Family Housing	3755.73	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.0089	3,406.008 9	0.0653	0.0625	3,426.737 3

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
								Total	FIVIZ.5	FIVIZ.3	Total						
Land Use	kBTU/yr					lb/e	day							lb/d	day		
Apartments Low Rise	2.37839	0.0257	0.2192	0.0933	1.4000e- 003		0.0177	0.0177		0.0177	0.0177		279.8110	279.8110	5.3600e- 003	5.1300e- 003	281.5139
Congregate Care (Assisted Living)	3.80513	0.0410	0.3507	0.1492	2.2400e- 003		0.0284	0.0284		0.0284	0.0284		447.6620	447.6620	8.5800e- 003	8.2100e- 003	450.3864
General Office Building	2.7263	0.0294	0.2673	0.2245	1.6000e- 003		0.0203	0.0203		0.0203	0.0203		320.7413	320.7413	6.1500e- 003	5.8800e- 003	322.6933
Government (Civic Center)	2.48407	0.0268	0.2435	0.2046	1.4600e- 003		0.0185	0.0185		0.0185	0.0185		292.2441	292.2441	5.6000e- 003	5.3600e- 003	294.0226
Hotel	11.8443	0.1277	1.1612	0.9754	6.9700e- 003		0.0883	0.0883		0.0883	0.0883		1,393.4426	1,393.442 6	0.0267	0.0256	1,401.922 9
Place of Worship	0.599343	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003		70.5110	70.5110	1.3500e- 003	1.2900e- 003	70.9401
Regional Shopping Center	1.35784	0.0146	0.1331	0.1118	8.0000e- 004		0.0101	0.0101		0.0101	0.0101		159.7458	159.7458	3.0600e- 003	2.9300e- 003	160.7179
Single Family Housing	3.75573	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.0089	3,406.008 9	0.0653	0.0625	3,426.737 3

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3
Mitigated	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	4.5175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.4791					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	64.7229	1.6422	124.1525	0.1975	Till 1	18.8679	18.8679		18.8650	18.8650	2,313.628 8	4,446.000 0	6,759.6288	6.8997	0.1570	6,953.202 4
Landscaping	0.6568	0.2423	20.7242	1.0800e- 003	Time	0.1117	0.1117		0.1117	0.1117	Φ	36.8229	36.8229	0.0378	ō	37.6159
Total	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	4.5175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.4791					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	64.7229	1.6422	124.1525	0.1975		18.8679	18.8679		18.8650	18.8650	2,313.628 8	4,446.000 0	6,759.6288	6.8997	0.1570	6,953.202 4
Landscaping	0.6568	0.2423	20.7242	1.0800e- 003		0.1117	0.1117	Time	0.1117	0.1117	Φ	36.8229	36.8229	0.0378		37.6159
Total	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3

7.0 Water Detail

- 7.1 Mitigation Measures Water
- 8.0 Waste Detail
- 8.1 Mitigation Measures Waste
- 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Duarte Town Center - Existing Emissions South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	291.54	1000sqft	27.59	291,536.00	0
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Government (Civic Center)	82.95	1000sqft	7.77	82,954.00	O
Place of Worship	11.63	1000sqft	0.27	11,630.00	O
Congregate Care (Assisted Living)	140.00	Dwelling Unit	3.09	38,527.00	400
Hotel	119.00	Room	4.24	172,788.00	0
Apartments Low Rise	61.00	Dwelling Unit	4.81	61,000.00	174
Single Family Housing	46.00	Dwelling Unit	3.62	82,800.00	132

1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 31

 Climate Zone
 9
 Operational Year
 2016

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximate square footage and acreage based on existing land use survey

Construction Phase - Existing land uses - no construction activity

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	0.00
tblLandUse	LandUseSquareFeet	140,000.00	38,527.00
tblLandUse	LotAcreage	6.69	27.59
tblLandUse	LotAcreage	2.09	3.57
tblLandUse	LotAcreage	1.90	7.77
tblLandUse	LotAcreage	8.75	3.09
tblLandUse	LotAcreage	3.97	4.24
tblLandUse	LotAcreage	3.81	4.81
tblLandUse	LotAcreage	14.94	3.62
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	42.94	42.70

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818
Energy	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3
Mobile	73.1280	177.0972	716.5203	1.5008	104.9822	2.3690	107.3512	28.0477	2.1781	30.2258		131,970.2 407	131,970.24 07	5.6182		132,088.2 229
Total	159.8165	181.7616	863.3525	1.7164	104.9822	21.5643	126.5465	28.0477	21.3704	49.4182	2,313.628 8	139,859.0 726	142,172.70 14	12.6209	0.2195	142,505.7 785

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/e	day		
Area	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818
Energy	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3
Mobile	73.1280	177.0972	716.5203	1.5008	104.9822	2.3690	107.3512	28.0477	2.1781	30.2258		131,970.2 407	131,970.24 07	5.6182		132,088.2 229
Total	159.8165	181.7616	863.3525	1.7164	104.9822	21.5643	126.5465	28.0477	21.3704	49.4182	2,313.628 8	139,859.0 726	142,172.70 14	12.6209	0.2195	142,505.7 785

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Til Willigatio	ni inouo	<u> </u>	00110													
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	73.1280	177.0972	716.5203	1.5008	104.9822	2.3690	107.3512	28.0477	2.1781	30.2258		131,970.2 407	131,970.24 07	5.6182		132,088.2 229
Mitigated	73.1280	177.0972	716.5203	1.5008	104.9822	2.3690	107.3512	28.0477	2.1781	30.2258		131,970.2 407	131,970.24 07	5.6182		132,088.2 229

4.2 Trip Summary Information

	Aver	age Daily Trip R	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	401.99	436.76	370.27	1,375,150	1,375,150
Congregate Care (Assisted Living)	383.60	308.00	341.60	1,253,411	1,253,411
General Office Building	1,004.20	215.77	89.22	2,451,079	2,451,079
Government (Civic Center)	2,316.08	0.00	0.00	5,108,817	5,108,817
Hotel	972.23	974.61	708.05	2,230,664	2,230,664
Place of Worship	105.95	120.60	426.01	327,949	327,949
Regional Shopping Center	12,448.59	14,568.05	7358.37	26,006,455	26,006,455
Single Family Housing	440.22	463.68	403.42	1,497,787	1,497,787
Total	18,072.86	17,087.48	9,696.94	40,251,312	40,251,312

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514315	0.060290	0.180146	0.139458	0.042007	0.006636	0.015782	0.029894	0.001929	0.002512	0.004343	0.000595	0.002093

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
NaturalGas Mitigated	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3
NaturalGas Unmitigated	0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.008 9	3,406.0089	0.0653	0.0624	3,426.737 3

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	2378.39	0.0257	0.2192	0.0933	1.4000e- 003		0.0177	0.0177		0.0177	0.0177		279.8110	279.8110	5.3600e- 003	5.1300e- 003	281.5139
Congregate Care (Assisted Living)	3805.13	0.0410	0.3507	0.1492	2.2400e- 003		0.0284	0.0284		0.0284	0.0284		447.6620	447.6620	8.5800e- 003	8.2100e- 003	450.3864
General Office Building	2726.3	0.0294	0.2673	0.2245	1.6000e- 003		0.0203	0.0203		0.0203	0.0203		320.7413	320.7413	6.1500e- 003	5.8800e- 003	322.6933
Government (Civic Center)	2484.07	0.0268	0.2435	0.2046	1.4600e- 003		0.0185	0.0185		0.0185	0.0185		292.2441	292.2441	5.6000e- 003	5.3600e- 003	294.0226
Hotel	11844.3	0.1277	1.1612	0.9754	6.9700e- 003		0.0883	0.0883		0.0883	0.0883		1,393.4426	1,393.442 6	0.0267	0.0256	1,401.922 9
Place of Worship	599.343	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003		70.5110	70.5110	1.3500e- 003	1.2900e- 003	70.9401
Regional Shopping Center	1357.84	0.0146	0.1331	0.1118	8.0000e- 004		0.0101	0.0101		0.0101	0.0101		159.7458	159.7458	3.0600e- 003	2.9300e- 003	160.7179
Single Family Housing	3755.73	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.0089	3,406.008 9	0.0653	0.0625	3,426.737 3

<u>Mitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	2.37839	0.0257	0.2192	0.0933	1.4000e- 003		0.0177	0.0177		0.0177	0.0177		279.8110	279.8110	5.3600e- 003	5.1300e- 003	281.5139
Congregate Care (Assisted Living)	3.80513	0.0410	0.3507	0.1492	2.2400e- 003		0.0284	0.0284		0.0284	0.0284		447.6620	447.6620	8.5800e- 003	8.2100e- 003	450.3864
General Office Building	2.7263	0.0294	0.2673	0.2245	1.6000e- 003		0.0203	0.0203		0.0203	0.0203		320.7413	320.7413	6.1500e- 003	5.8800e- 003	322.6933
Government (Civic Center)	2.48407	0.0268	0.2435	0.2046	1.4600e- 003		0.0185	0.0185		0.0185	0.0185		292.2441	292.2441	5.6000e- 003	5.3600e- 003	294.0226
Hotel	11.8443	0.1277	1.1612	0.9754	6.9700e- 003		0.0883	0.0883		0.0883	0.0883		1,393.4426	1,393.442 6	0.0267	0.0256	1,401.922 9
Place of Worship	0.599343	6.4600e- 003	0.0588	0.0494	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003		70.5110	70.5110	1.3500e- 003	1.2900e- 003	70.9401
Regional Shopping Center	1.35784	0.0146	0.1331	0.1118	8.0000e- 004		0.0101	0.0101	D	0.0101	0.0101		159.7458	159.7458	3.0600e- 003	2.9300e- 003	160.7179
Single Family Housing	3.75573	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		0.3122	2.7799	1.9555	0.0170		0.2157	0.2157		0.2157	0.2157		3,406.0089	3,406.008 9	0.0653	0.0625	3,426.737 3

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3
Mitigated	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	day							lb/d	day		
Architectural Coating	4.5175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.4791					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	64.7229	1.6422	124.1525	0.1975	011111111111111111111111111111111111111	18.8679	18.8679		18.8650	18.8650	2,313.628 8	4,446.000 0	6,759.6288	6.8997	0.1570	6,953.20 4
Landscaping	0.6568	0.2423	20.7242	1.0800e- 003	0	0.1117	0.1117		0.1117	0.1117		36.8229	36.8229	0.0378		37.6159
Total	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.81 3

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	4.5175					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.4791					0.0000	0.0000	Dinimini	0.0000	0.0000			0.0000			0.0000
Hearth	64.7229	1.6422	124.1525	0.1975		18.8679	18.8679		18.8650	18.8650	2,313.628 8	4,446.000 0	6,759.6288	6.8997	0.1570	6,953.202 4
Landscaping	0.6568	0.2423	20.7242	1.0800e- 003		0.1117	0.1117		0.1117	0.1117		36.8229	36.8229	0.0378		37.6159
Total	86.3762	1.8845	144.8767	0.1986		18.9796	18.9796		18.9766	18.9766	2,313.628 8	4,482.822 9	6,796.4517	6.9375	0.1570	6,990.818 3

7.0 Water Detail

- 7.1 Mitigation Measures Water
- 8.0 Waste Detail
- 8.1 Mitigation Measures Waste
- 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
, , , , ,		•	,			• • • • • • • • • • • • • • • • • • • •

10.0 Vegetation

Duarte Town Center - Existing Emissions South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	291.54	1000sqft	27.59	291,536.00	0
General Office Building	91.04	1000sqft	3.57	91,043.00	O
Government (Civic Center)	82.95	1000sqft	7.77	82,954.00	O
Place of Worship	11.63	1000sqft	0.27	11,630.00	O
Congregate Care (Assisted Living)	140.00	Dwelling Unit	3.09	38,527.00	400
Hotel	119.00	Room	4.24	172,788.00	O
Apartments Low Rise	61.00	Dwelling Unit	4.81	61,000.00	174
Single Family Housing	46.00	Dwelling Unit	3.62	82,800.00	132

1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 31

 Climate Zone
 9
 Operational Year
 2016

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximate square footage and acreage based on existing land use survey

Construction Phase - Existing land uses - no construction activity

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	0.00
tblLandUse	LandUseSquareFeet	140,000.00	38,527.00
tblLandUse	LotAcreage	6.69	27.59
tblLandUse	LotAcreage	2.09	3.57
tblLandUse	LotAcreage	1.90	7.77
tblLandUse	LotAcreage	8.75	3.09
tblLandUse	LotAcreage	3.97	4.24
tblLandUse	LotAcreage	3.81	4.81
tblLandUse	LotAcreage	14.94	3.62
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	42.94	42.70

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	4.7230	0.0508	4.1424	2.6000e- 003		0.2498	0.2498		0.2498	0.2498	26.2361	54.5924	80.8286	0.0825	1.7800e- 003	83.1136
Energy	0.0570	0.5073	0.3569	3.1100e- 003		0.0394	0.0394		0.0394	0.0394	0.0000	3,315.395 3	3,315.3953	0.1373	0.0365	3,329.59 2
Mobile	10.2298	26.7117	106.7486	0.2246	15.2488	0.3489	15.5977	4.0801	0.3208	4.4009	0.0000	17,911.12 57	17,911.125 7	0.7528	0.0000	17,926.9 39
Waste						0.0000	0.0000		0.0000	0.0000	244.6001	0.0000	244.6001	14.4555	0.0000	548.164
Water						0.0000	0.0000		0.0000	0.0000	23.3913	415.5862	438.9774	2.4216	0.0607	508.642
Total	15.0098	27.2699	111.2479	0.2303	15.2488	0.6381	15.8869	4.0801	0.6100	4.6901	294.2274	21,696.69 96	21,990.927 0	17.8496	0.0990	22,396.4 94

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Area	4.7230	0.0508	4.1424	2.6000e- 003		0.2498	0.2498		0.2498	0.2498	26.2361	54.5924	80.8286	0.0825	1.7800e- 003	83.1136
Energy	0.0570	0.5073	0.3569	3.1100e- 003		0.0394	0.0394		0.0394	0.0394	0.0000	3,315.395 3	3,315.3953	0.1373	0.0365	3,329.595 2
Mobile	10.2298	26.7117	106.7486	0.2246	15.2488	0.3489	15.5977	4.0801	0.3208	4.4009	0.0000	17,911.12 57	17,911.125 7	0.7528	0.0000	17,926.93 39
Waste						0.0000	0.0000		0.0000	0.0000	244.6001	0.0000	244.6001	14.4555	0.0000	548.1645
Water	00		D	0		0.0000	0.0000		0.0000	0.0000	23.3913	415.5862	438.9774	2.4212	0.0606	508.6049
Total	15.0098	27.2699	111.2479	0.2303	15.2488	0.6381	15.8869	4.0801	0.6100	4.6901	294.2274	21,696.69 96	21,990.927 0	17.8492	0.0989	22,396.41 20

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Mitigated	10.2298	26.7117	106.7486	0.2246	15.2488	0.3489	15.5977	4.0801	0.3208	4.4009	0.0000	17,911.12 57	17,911.125 7	0.7528	0.0000	17,926.93 39
Unmitigated	10.2298	26.7117	106.7486	0.2246	15.2488	0.3489	15.5977	4.0801	0.3208	4.4009	0.0000	17,911.12 57	17,911.125 7	0.7528	0.0000	17,926.93 39

4.2 Trip Summary Information

	Avei	rage Daily Trip R	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	401.99	436.76	370.27	1,375,150	1,375,150
Congregate Care (Assisted Living)	383.60	308.00	341.60	1,253,411	1,253,411
General Office Building	1,004.20	215.77	89.22	2,451,079	2,451,079
Government (Civic Center)	2,316.08	0.00	0.00	5,108,817	5,108,817
Hotel	972.23	974.61	708.05	2,230,664	2,230,664
Place of Worship	105.95	120.60	426.01	327,949	327,949
Regional Shopping Center	12,448.59	14,568.05	7358.37	26,006,455	26,006,455
Single Family Housing	440.22	463.68	403.42	1,497,787	1,497,787
Total	18,072.86	17,087.48	9,696.94	40,251,312	40,251,312

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514315	0.060290	0.180146	0.139458	0.042007	0.006636	0.015782	0.029894	0.001929	0.002512	0.004343	0.000595	0.002093

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
NaturalGas Mitigated	0.0570	0.5073	0.3569	3.1100e- 003		0.0394	0.0394		0.0394	0.0394	0.0000	563.9030	563.9030	0.0108	0.0103	567.3348
NaturalGas Unmitigated	0.0570	0.5073	0.3569	3.1100e- 003	D	0.0394	0.0394		0.0394	0.0394	0.0000	563.9030	563.9030	0.0108	0.0103	567.3348
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,751.492 3	2,751.4923	0.1265	0.0262	2,762.260 4
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,751.492 3	2,751.4923	0.1265	0.0262	2,762.260 4

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					tor	ns/yr							М	/yr		
Apartments Low Rise	868114	4.6800e- 003	0.0400	0.0170	2.6000e- 004		3.2300e- 003	3.2300e- 003		3.2300e- 003	3.2300e- 003	0.0000	46.3259	46.3259	8.9000e- 004	8.5000e- 004	46.6078
Congregate Care (Assisted Living)	1.38887e+ 006	7.4900e- 003	0.0640	0.0272	4.1000e- 004		5.1700e- 003	5.1700e- 003		5.1700e- 003	5.1700e- 003	0.0000	74.1155	74.1155	1.4200e- 003	1.3600e- 003	74.5665
General Office Building	995100	5.3700e- 003	0.0488	0.0410	2.9000e- 004		3.7100e- 003	3.7100e- 003	D	3.7100e- 003	3.7100e- 003	0.0000	53.1023	53.1023	1.0200e- 003	9.7000e- 004	53.4255
Government (Civic Center)	906687	4.8900e- 003	0.0445	0.0373	2.7000e- 004		3.3800e- 003	3.3800e- 003	D	3.3800e- 003	3.3800e- 003	0.0000	48.3843	48.3843	9.3000e- 004	8.9000e- 004	48.6787
Hotel	4.32316e+ 006	0.0233	0.2119	0.1780	1.2700e- 003		0.0161	0.0161		0.0161	0.0161	0.0000	230.7001	230.7001	4.4200e- 003	4.2300e- 003	232.1041
Place of Worship	218760	1.1800e- 003	0.0107	9.0100e- 003	6.0000e- 005		8.1000e- 004	8.1000e- 004		8.1000e- 004	8.1000e- 004	0.0000	11.6739	11.6739	2.2000e- 004	2.1000e- 004	11.7449
Regional Shopping Center	495611	2.6700e- 003	0.0243	0.0204	1.5000e- 004)	1.8500e- 003	1.8500e- 003	D	1.8500e- 003	1.8500e- 003	0.0000	26.4477	26.4477	5.1000e- 004	4.8000e- 004	26.6087
Single Family Housing	1.37084e+ 006	7.3900e- 003	0.0632	0.0269	4.0000e- 004		5.1100e- 003	5.1100e- 003		5.1100e- 003	5.1100e- 003	0.0000	73.1534	73.1534	1.4000e- 003	1.3400e- 003	73.5986
Total		0.0570	0.5073	0.3569	3.1100e- 003		0.0394	0.0394		0.0394	0.0394	0.0000	563.9030	563.9030	0.0108	0.0103	567.3348

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	ns/yr							МТ	/yr		
Apartments Low Rise	868114	4.6800e- 003	0.0400	0.0170	2.6000e- 004		3.2300e- 003	3.2300e- 003		3.2300e- 003	3.2300e- 003	0.0000	46.3259	46.3259	8.9000e- 004	8.5000e- 004	46.6078

Congregate Care (Assisted Living)	1.38887e+ 006	7.4900e- 003	0.0640	0.0272	4.1000e- 004	5.1700e- 003	5.1700e- 003	5.1700e- 003	5.1700e- 003	0.0000	74.1155	74.1155	1.4200e- 003	1.3600e- 003	74.5665
General Office Building	995100	5.3700e- 003	0.0488	0.0410	2.9000e- 004	3.7100e- 003	3.7100e- 003	3.7100e- 003	3.7100e- 003	0.0000	53.1023	53.1023	1.0200e- 003	9.7000e- 004	53.4255
Government (Civic Center)	906687	4.8900e- 003	0.0445	0.0373	2.7000e- 004	3.3800e- 003	3.3800e- 003	3.3800e- 003	3.3800e- 003	0.0000	48.3843	48.3843	9.3000e- 004	8.9000e- 004	48.6787
Hotel	4.32316e+ 006	0.0233	0.2119	0.1780	1.2700e- 003	0.0161	0.0161	0.0161	0.0161	0.0000	230.7001	230.7001	4.4200e- 003	4.2300e- 003	232.1041
Place of Worship	218760	1.1800e- 003	0.0107	9.0100e- 003	6.0000e- 005	8.1000e- 004	8.1000e- 004	8.1000e- 004	8.1000e- 004	0.0000	11.6739	11.6739	2.2000e- 004	2.1000e- 004	11.7449
Regional Shopping Center	495611	2.6700e- 003	0.0243	0.0204	1.5000e- 004	1.8500e- 003	1.8500e- 003	1.8500e- 003	1.8500e- 003	0.0000	26.4477	26.4477	5.1000e- 004	4.8000e- 004	26.6087
Single Family Housing	1.37084e+ 006	7.3900e- 003	0.0632	0.0269	4.0000e- 004	5.1100e- 003	5.1100e- 003	5.1100e- 003	5.1100e- 003	0.0000	73.1534	73.1534	1.4000e- 003	1.3400e- 003	73.5986
Total		0.0570	0.5073	0.3569	3.1100e- 003	0.0394	0.0394	0.0394	0.0394	0.0000	563.9030	563.9030	0.0108	0.0103	567.3348

5.3 Energy by Land Use - Electricity

Unmitigated

<u> </u>					
	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr			T/yr	
Apartments Low Rise			003	004	
Congregate Care (Assisted Living)	495874	141.9028	6.5200e- 003	1.3500e- 003	142.4582
Building	1.32285e+ 006	378.5572	0.0174	3.6000e- 003	380.0387
Government (Civic Center)	1.20532e+ 006	344.9231	0.0159	3.2800e- 003	346.2730
Hotel	1.4687e+0 06	420.2927	0.0193	4.0000e- 003	421.9376
	140142	40.1039	1.8400e- 003	3.8000e- 004	40.2608
Regional Shopping Center	4.4226e+0 06	1,265.6020	0.0582	0.0120	1,270.555 0
Single Family Housing	335559	96.0257	4.4100e- 003	9.1000e- 004	96.4015
Total		2,751.4923	0.1265	0.0262	2,762.260 3

Mitigated

	Electricity	Total CO2	CH4	N2O	CO2e
	000				
Land Use	kWh/yr		MT	T/yr	
Apartments Low Rise			003	004	
Congregate Care (Assisted Living)	495874	141.9028	6.5200e- 003	1.3500e- 003	142.4582
General Office Building	1.32285e+ 006		0.0174		380.0387
Government (Civic Center)	1.20532e+ 006	344.9231	0.0159	3.2800e- 003	346.2730
Hotel	1.4687e+0 06	420.2927	0.0193	4.0000e- 003	421.9376
Place of Worship	140142	40.1039	1.8400e- 003	3.8000e- 004	40.2608
Regional Shopping Center	4.4226e+0 06		0.0582	0.0120	1,270.555 0
Single Family Housing	335559		4.4100e- 003		96.4015
Total		2,751.4923	0.1265	0.0262	2,762.260 3

6.0 Area Detail

6.1 Mitigation Measures Area

o. i wiitigatic	m mouo	u100711	-													
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/vr		
category						<i>5,</i> j.								,,,.		
Mitigated	4.7230	0.0508	4.1424	2.6000e- 003		0.2498	0.2498		0.2498	0.2498	26.2361	54.5924	80.8286	0.0825	1.7800e- 003	83.1136
Unmitigated	4.7230	0.0508	4.1424	2.6000e- 003	0	0.2498	0.2498		0.2498	0.2498	26.2361	54.5924	80.8286	0.0825	1.7800e- 003	83.1136

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							M	√yr		
Architectural Coating	0.8244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.8090	0.0205	1.5519	2.4700e- 003	D	0.2359	0.2359		0.2358	0.2358	26.2361	50.4168	76.6529	0.0782	1.7800e- 003	78.8480
Landscaping	0.0821	0.0303	2.5905	1.4000e- 004		0.0140	0.0140		0.0140	0.0140	0.0000	4.1757	4.1757	4.2800e- 003	0.0000	4.2656
Total	4.7230	0.0508	4.1424	2.6100e- 003		0.2498	0.2498		0.2498	0.2498	26.2361	54.5924	80.8286	0.0825	1.7800e- 003	83.1136

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.8244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0074		T			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.8090	0.0205	1.5519	2.4700e- 003	0	0.2359	0.2359		0.2358	0.2358	26.2361	50.4168	76.6529	0.0782	1.7800e- 003	78.8480
Landscaping	0.0821	0.0303	2.5905	1.4000e- 004		0.0140	0.0140		0.0140	0.0140	0.0000	4.1757	4.1757	4.2800e- 003	0.0000	4.2656
Total	4.7230	0.0508	4.1424	2.6100e- 003		0.2498	0.2498		0.2498	0.2498	26.2361	54.5924	80.8286	0.0825	1.7800e- 003	83.1136

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT.	/yr	
Unmitigated	438.9774	2.4216	0.0607	508.6422
Mitigated	438.9774	2.4212	0.0606	508.6049

7.2 Water by Land Use

Unmitigated

Ommingatou					
	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MI	Г/yr	
Apartments Low Rise	2.5056	24.0363	0.1306	003	
Congregate Care (Assisted Living)	9.12156 / 5.75055	55.1652	0.2996	7.5200e- 003	63.7872
General Office Building	9.91731				
Government (Civic Center)	16.4788 / 10.0999	98.7418	0.5413	0.0136	114.3145
Hotel	3.01865 / 0.335405	13.2721	0.0989	2.4400e- 003	16.1059
Place of Worship	0.36389 / 0.569161	3.2809	0.0120	3.1000e- 004	3.6291
Regional Shopping Center	13.2357				
Single Family Housing			0.0985	2.4700e- 003	20.9587
Total		438.9774	2.4216	0.0607	508.6422

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	Г/уг	
Apartments Low Rise	2.5056	24.0363		3.2700e- 003	
Congregate Care (Assisted Living)	9.12156 / 5.75055	55.1652	0.2996	7.5000e- 003	63.7826
General Office Building	9.91731				
Government (Civic Center)	16.4788 / 10.0999	98.7418	0.5412	0.0136	114.3061
Hotel	3.01865 / 0.335405	13.2721	0.0989	2.4400e- 003	16.1043
Place of Worship	0.569161			004	
Regional Shopping Center	21.5951 / 13.2357	129.3988	0.7092	0.0178	149.7955
Single Family Housing	2.99709 / 1.88947	18.1257		2.4700e- 003	20.9571
Total		438.9774	2.4212	0.0606	508.6049

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

Outegory/ rec	<u>4'-</u>			
	Total CO2	CH4	N2O	CO2e
		MT.	/yr	
Mitigated	244.6001	14.4555	0.0000	548.1645
Unmitigated	244.6001	14.4555	0.0000	548.1645

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Apartments Low Rise		5.6959			12.7649
Congregate Care (Assisted Living)	127.75	25.9321	1.5325	0.0000	58.1155
General Office Building	84.67	17.1872	1.0157	0.0000	38.5177
Government (Civic Center)	472.82	95.9782	5.6722	0.0000	215.0933
Hotel					
Place of Worship	66.29	13.4563	0.7952	0.0000	30.1564
Regional Shopping Center	306.12	62.1396	3.6723	0.0000	139.2588
Single Family Housing	54.12	10.9859	0.6493	0.0000	24.6200
Total		244.6001	14.4555	0.0000	548.1645

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Apartments Low Rise		5.6959	0.3366		
Congregate Care (Assisted Living)	127.75	25.9321	1.5325	0.0000	58.1155
General Office Building	84.67	17.1872	1.0157	0.0000	38.5177
Government (Civic Center)	472.82	95.9782	5.6722	0.0000	215.0933
Hotel	65.15	13.2249	0.7816	0.0000	29.6378
Place of Worship					
Regional Shopping Center	306.12	62.1396	3.6723	0.0000	139.2588
Single Family Housing	54.12	10.9859	0.6493	0.0000	24.6200
Total		244.6001	14.4555	0.0000	548.1645

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Duarte Town Center - Short Range

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	266.00	Room	8.87	386,232.00	0
Regional Shopping Center	2.60	1000sqft	0.06	2,600.00	O
Fast Food Restaurant w/o Drive Thru	1.85	1000sqft	0.04	1,850.00	0

1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 31

 Climate Zone
 9
 Operational Year
 2017

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational assumptions - no construction activity assumed

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Woodstoves - No wood-burning fireplaces

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

İ		ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
	Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Energy	0.2984	2.7126	2.2786	0.0163		0.2062	0.2062		0.2062	0.2062		3,255.121 1	3,255.1211	0.0624	0.0597	3,274.931 2
Mobile	11.1844	25.5953	108.0398	0.2530	16.7065	0.3573	17.0638	4.4638	0.3288	4.7926	₩	21,519.78 36	21,519.783 6	0.8373		21,537.36 78
Total	21.7015	28.3082	110.3465	0.2693	16.7065	0.5635	17.2701	4.4638	0.5351	4.9989		24,774.96 39	24,774.963 9	0.8999	0.0597	24,812.36 17

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Energy	0.2421	2.2005	1.8484	0.0132		0.1672	0.1672		0.1672	0.1672		2,640.628 6	2,640.6286	0.0506	0.0484	2,656.699 0
Mobile	10.7043	22.1784	95.2623	0.2122	13.9081	0.3022	14.2103	3.7161	0.2781	3.9942		18,051.55 50	18,051.555 0	0.7139		18,066.54 69
Total	21.1651	24.3792	97.1389	0.2254	13.9081	0.4695	14.3776	3.7161	0.4455	4.1615		20,692.24 28	20,692.242 8	0.7647	0.0484	20,723.30 86

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	2.47	13.88	11.97	16.28	16.75	16.68	16.75	16.75	16.75	16.75	0.00	16.48	16.48	15.03	18.88	16.48

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Unmitigated	11.1844	25.5953	108.0398	0.2530	16.7065	0.3573	17.0638	4.4638	0.3288	4.7926		21,519.78 36	21,519.783 6	0.8373		21,537.36 78
Mitigated	10.7043	22.1784	95.2623	0.2122	13.9081	0.3022	14.2103	3.7161	0.2781	3.9942		18,051.55 50	18,051.555 0	0.7139		18,066.54 69

4.2 Trip Summary Information

	Aver	age Daily Trip R	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	1,324.60	1,287.60	925.00	2,285,951	1,903,039
Hotel	2,173.22	2,178.54	1582.70	4,986,191	4,150,971
Regional Shopping Center	111.64	129.92	65.62	232,897	193,885
Total	3,609.46	3,596.06	2,573.32	7,505,039	6,247,895

4.3 Trip Type Information

		Miles			Trip %		Trip Purpose %				
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12		
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4		
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11		

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	0.2421	2.2005	1.8484	0.0132		0.1672	0.1672		0.1672	0.1672		2,640.628 6	2,640.6286	0.0506	0.0484	2,656.699 0
NaturalGas Unmitigated	0.2984	2.7126	2.2786	0.0163		0.2062	0.2062		0.2062	0.2062		3,255.121 1	3,255.1211	0.0624	0.0597	3,274.931 2

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/e	day		
Fast Food Restaurant w/o	1181.01	0.0127	0.1158	0.0973	6.9000e- 004		8.8000e- 003	8.8000e- 003		8.8000e- 003	8.8000e- 003		138.9423	138.9423	2.6600e- 003	2.5500e- 003	139.7879
Hotel	26475.4	0.2855	2.5956	2.1803	0.0156		0.1973	0.1973		0.1973	0.1973		3,114.7541	3,114.754 1	0.0597	0.0571	3,133.710 0
Regional Shopping Center	12.1096	1.3000e- 004	1.1900e- 003	1.0000e- 003	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005		1.4247	1.4247	3.0000e- 005	3.0000e- 005	1.4333
Total		0.2984	2.7126	2.2786	0.0163		0.2062	0.2062		0.2062	0.2062		3,255.1211	3,255.121 1	0.0624	0.0597	3,274.931 2

Mitigated

mitigatou																	
	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Fast Food Restaurant w/o	1.12759	0.0122	0.1106	0.0929	6.6000e- 004		8.4000e- 003	8.4000e- 003		8.4000e- 003	8.4000e- 003		132.6582	132.6582	2.5400e- 003	2.4300e- 003	133.4656
Hotel	21.3076	0.2298	2.0890	1.7548	0.0125		0.1588	0.1588		0.1588	0.1588		2,506.7820	2,506.782 0	0.0481	0.0460	2,522.037 9
Regional Shopping Center	0.0101013	1.1000e- 004	9.9000e- 004	8.3000e- 004	1.0000e- 005		8.0000e- 005	8.0000e- 005		8.0000e- 005	8.0000e- 005		1.1884	1.1884	2.0000e- 005	2.0000e- 005	1.1956
Total		0.2421	2.2005	1.8484	0.0132		0.1672	0.1672		0.1672	0.1672		2,640.6286	2,640.628 6	0.0506	0.0484	2,656.699 0

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Unmitigated	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Mitigated	10.2188	2.7000e- 004	0.0281	0.0000	0	1.0000e- 004	1.0000e- 004	D	1.0000e- 004	1.0000e- 004	D	0.0592	0.0592	1.6000e- 004		0.0627

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	lay							lb/d	day		
Architectural Coating	2.4806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.7355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7200e- 003	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004	ō	0.0592	0.0592	1.6000e- 004		0.0627
Total	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627

Mitigated

magatou																
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	day							lb/d	day		
Architectural Coating	2.4806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.7355			0	0	0.0000	0.0000	0	0.0000	0.0000	Финиципини по по по по по по по по по по по по по		0.0000			0.0000
Landscaping	2.7200e- 003	2.7000e- 004	0.0281	0.0000	0	1.0000e- 004	1.0000e- 004	0	1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Total	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet Install Low Flow Kitchen Faucet Install Low Flow Toilet Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type Number Hours/Day

10.0 Vegetation

Duarte Town Center - Short Range South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	266.00	Room	8.87	386,232.00	0
Regional Shopping Center	2.60	1000sqft	0.06	2,600.00	O
Fast Food Restaurant w/o Drive Thru	1.85	1000sqft	0.04	1,850.00	0

1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 31

 Climate Zone
 9
 Operational Year
 2017

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational assumptions - no construction activity assumed

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Woodstoves - No wood-burning fireplaces

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Energy	0.2984	2.7126	2.2786	0.0163		0.2062	0.2062		0.2062	0.2062		3,255.121 1	3,255.1211	0.0624	0.0597	3,274.931 2
Mobile	11.6393	26.8408	109.4435	0.2404	16.7065	0.3593	17.0658	4.4638	0.3307	4.7945		20,483.34 34	20,483.343 4	0.8383		20,500.94 83
Total	22.1565	29.5537	111.7502	0.2567	16.7065	0.5656	17.2721	4.4638	0.5370	5.0007		23,738.52 36	23,738.523 6	0.9009	0.0597	23,775.94 21

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Energy	0.2421	2.2005	1.8484	0.0132	D	0.1672	0.1672	0	0.1672	0.1672	D	2,640.628 6	2,640.6286	0.0506	0.0484	2,656.699 0
Mobile	11.1745	23.2233	97.9597	0.2017	13.9081	0.3042	14.2123	3.7161	0.2800	3.9961		17,183.34 79	17,183.347 9	0.7149		17,198.36 05
Total	21.6353	25.4241	99.8362	0.2149	13.9081	0.4716	14.3796	3.7161	0.4473	4.1634		19,824.03 57	19,824.035 7	0.7657	0.0484	19,855.12 21

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	2.35	13.97	10.66	16.27	16.75	16.62	16.75	16.75	16.69	16.74	0.00	16.49	16.49	15.01	18.88	16.49

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	11.6393	26.8408	109.4435	0.2404	16.7065	0.3593	17.0658	4.4638	0.3307	4.7945		20,483.34 34	20,483.343 4	0.8383		20,500.94 83
Mitigated	11.1745	23.2233	97.9597	0.2017	13.9081	0.3042	14.2123	3.7161	0.2800	3.9961		17,183.34 79	17,183.347 9	0.7149		17,198.36 05

4.2 Trip Summary Information

	Aver	age Daily Trip R	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	1,324.60	1,287.60	925.00	2,285,951	1,903,039
Hotel	2,173.22	2,178.54	1582.70	4,986,191	4,150,971
Regional Shopping Center	111.64	129.92	65.62	232,897	193,885
Total	3,609.46	3,596.06	2,573.32	7,505,039	6,247,895

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	16.60	8.40	6.90	1.50	79.50	19.00	51	37	12
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	0.2421	2.2005	1.8484	0.0132		0.1672	0.1672		0.1672	0.1672		2,640.628 6	2,640.6286	0.0506	0.0484	2,656.699
NaturalGas Unmitigated	0.2984	2.7126	2.2786	0.0163		0.2062	0.2062		0.2062	0.2062		3,255.121 1	3,255.1211	0.0624	0.0597	3,274.931 2

5.2 Energy by Land Use - NaturalGas

Unmitigated

Ommingated																	
	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Fast Food Restaurant w/o	1181.01	0.0127	0.1158	0.0973	6.9000e- 004		8.8000e- 003	8.8000e- 003		8.8000e- 003	8.8000e- 003		138.9423	138.9423	2.6600e- 003	2.5500e- 003	139.7879
Hotel	26475.4	0.2855	2.5956	2.1803	0.0156		0.1973	0.1973		0.1973	0.1973		3,114.7541	3,114.754 1	0.0597	0.0571	3,133.710 0
Regional Shopping Center	12.1096	1.3000e- 004	1.1900e- 003	1.0000e- 003	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005		1.4247	1.4247	3.0000e- 005	3.0000e- 005	1.4333
Total		0.2984	2.7126	2.2786	0.0163		0.2062	0.2062		0.2062	0.2062		3,255.1211	3,255.121 1	0.0624	0.0597	3,274.931 2

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Fast Food Restaurant w/o	1.12759	0.0122	0.1106	0.0929	6.6000e- 004		8.4000e- 003	8.4000e- 003		8.4000e- 003	8.4000e- 003		132.6582	132.6582	2.5400e- 003	2.4300e- 003	133.4656
Hotel	21.3076	0.2298	2.0890	1.7548	0.0125		0.1588	0.1588		0.1588	0.1588		2,506.7820	2,506.782 0	0.0481	0.0460	2,522.037 9
Regional Shopping Center	0.0101013	1.1000e- 004	9.9000e- 004	8.3000e- 004	1.0000e- 005		8.0000e- 005	8.0000e- 005		8.0000e- 005	8.0000e- 005		1.1884	1.1884	2.0000e- 005	2.0000e- 005	1.1956
Total		0.2421	2.2005	1.8484	0.0132		0.1672	0.1672		0.1672	0.1672		2,640.6286	2,640.628 6	0.0506	0.0484	2,656.699 0

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Unmitigated	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Mitigated	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004	D	1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004	0	0.0627

6.2 Area by SubCategory

Unmitigated

Ommergatoa																
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	lay							lb/e	day		
Architectural Coating	2.4806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.7355				Ō	0.0000	0.0000	Tillianianianianianianianianianianianianiani	0.0000	0.0000	Φ		0.0000	, , , , , , , , , , , , , , , , , , ,		0.0000
Landscaping	2.7200e- 003	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627
Total	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/e	day		
Architectural Coating	2.4806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.7355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.7200e- 003	2.7000e- 004	0.0281	0.0000	D	1.0000e- 004	1.0000e- 004	D	1.0000e- 004	1.0000e- 004	Финиципини по по по по по по по по по по по по по	0.0592	0.0592	1.6000e- 004		0.0627
Total	10.2188	2.7000e- 004	0.0281	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0592	0.0592	1.6000e- 004		0.0627

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type Number Hours/Day Days/Year Horse Power Load Factor Fuel Type

10.0 Vegetation

Duarte Town Center - Buildout Emissions South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	284.77	1000sqft	18.64	284,772.00	0
General Office Building	153.27	1000sqft	9.43	153,274.00	O
Government (Civic Center)	118.47	1000sqft	6.15	118,472.00	O
Hotel	450.00	Room	2.19	653,400.00	O
Apartments Low Rise	1,097.00	Dwelling Unit	0.00	1,097,000.00	3137
Single Family Housing	46.00	Dwelling Unit	5.15	82,800.00	132
Quality Restaurant	176.19	1000sqft	13.40	176,190.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)31Climate Zone9Operational Year2035

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximate square footage and acreage

Construction Phase - Build out operational assumptions - no construction activity assumed

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Woodstoves - No wood-burning fireplaces

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	0.00
tblFireplaces	NumberGas	932.45	987.30
tblFireplaces	NumberGas	39.10	41.40
tblFireplaces	NumberWood	54.85	0.00
tblFireplaces	NumberWood	2.30	0.00
tblLandUse	LandUseSquareFeet	284,770.00	284,772.00
tblLandUse	LandUseSquareFeet	153,270.00	153,274.00
tblLandUse	LandUseSquareFeet	118,470.00	118,472.00
tblLandUse	LotAcreage	6.54	18.64
tblLandUse	LotAcreage	3.52	9.43
tblLandUse	LotAcreage	2.72	6.15
tblLandUse	LotAcreage	15.00	2.19
tblLandUse	LotAcreage	68.56	0.00
tblLandUse	LotAcreage	14.94	5.15
tblLandUse	LotAcreage	4.04	13.40
tblProjectCharacteristics	OperationalYear	2014	2035
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	42.94	42.70

tblWoodstoves	NumberCatalytic	54.85	0.00
tblWoodstoves	NumberCatalytic	2.30	0.00
tblWoodstoves	NumberNoncatalytic	54.85	109.70
tblWoodstoves	NumberNoncatalytic	2.30	4.60

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44
Energy	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68
Mobile	84.8537	174.8558	836.4852	3.5881	228.1183	4.8610	232.9794	60.9967	4.4862	65.4829		255,892.6 059	255,892.60 59	6.5255		256,029.6 403
Total	181.5261	201.1452	1,267.977 1	4.6326	228.1183	53.1407	281.2591	60.9967	52.7514	113.7480	6,745.572 7	302,936.0 338	309,681.60 65	44.1475	0.8594	310,875.1 015

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44
Energy	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68
Mobile	84.8537	174.8558	836.4852	3.5881	228.1183	4.8610	232.9794	60.9967	4.4862	65.4829		255,892.6 059	255,892.60 59	6.5255		256,029.6 403
Total	181.5261	201.1452	1,267.977 1	4.6326	228.1183	53.1407	281.2591	60.9967	52.7514	113.7480	6,745.572 7	302,936.0 338	309,681.60 65	44.1475	0.8594	310,875.1 015

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

wgati	J	u. 00	0.00													
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	84.8537	174.8558	836.4852	3.5881	228.1183	4.8610	232.9794	60.9967	4.4862	65.4829		255,892.6 059	255,892.60 59	6.5255		256,029.6 403
Mitigated	84.8537	174.8558	836.4852	3.5881	228.1183	4.8610	232.9794	60.9967	4.4862	65.4829		255,892.6 059	255,892.60 59	6.5255		256,029.6 403

4.2 Trip Summary Information

	Aver	age Daily Trip R	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,229.23	7,854.52	6658.79	24,730,153	24,730,153
Quality Restaurant	15,848.29	16,625.29	12713.87	22,082,680	22,082,680
General Office Building	1,690.57	363.25	150.20	4,126,367	4,126,367
Government (Civic Center)	3,307.68	0.00	0.00	7,296,111	7,296,111
Hotel	3,676.50	3,685.50	2677.50	8,435,285	8,435,285
Regional Shopping Center	12,159.68	14,229.96	7187.59	25,402,895	25,402,895
Single Family Housing	440.22	463.68	403.42	1,497,787	1,497,787
Total	44,352.17	43,222.20	29,791.38	93,571,277	93,571,277

4.3 Trip Type Information

		Miles			Trip %		Trip Purpose %				
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3		
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44		
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4		
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16		
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4		
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11		
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3		

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475956	0.062534	0.188657	0.147142	0.045607	0.007258	0.017370	0.042746	0.002183	0.002612	0.003879	0.000535	0.003521

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68
NaturalGas Unmitigated	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		lb/day											lb/d	day		
Apartments Low Rise	42772.1	0.4613	3.9417	1.6773	0.0252		0.3187	0.3187		0.3187	0.3187		5,032.0106	5,032.010 6	0.0965	0.0923	5,062.634 6
General Office Building	4589.82	0.0495	0.4500	0.3780	2.7000e- 003		0.0342	0.0342		0.0342	0.0342		539.9790	539.9790	0.0104	9.9000e- 003	543.2652
Government (Civic Center)	3547.67	0.0383	0.3478	0.2922	2.0900e- 003		0.0264	0.0264		0.0264	0.0264		417.3728	417.3728	8.0000e- 003	7.6500e- 003	419.9128
Hotel	44789.2	0.4830	4.3911	3.6885	0.0264		0.3337	0.3337		0.3337	0.3337		5,269.3209	5,269.320 9	0.1010	0.0966	5,301.389 1
Quality Restaurant	112477	1.2130	11.0271	9.2628	0.0662		0.8381	0.8381		0.8381	0.8381		13,232.564 7	13,232.56 47	0.2536	0.2426	13,313.09 59
Regional Shopping Center	1326.34	0.0143	0.1300	0.1092	7.8000e- 004		9.8800e- 003	9.8800e- 003		9.8800e- 003	9.8800e- 003		156.0395	156.0395	2.9900e- 003	2.8600e- 003	156.9891
Single Family Housing	3755.73	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.138 5	25,089.13 85	0.4809	0.4600	25,241.82 68

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	42.7721	0.4613	3.9417	1.6773	0.0252		0.3187	0.3187		0.3187	0.3187		5,032.0106	5,032.010 6	0.0965	0.0923	5,062.634 6
General Office Building	4.58982	0.0495	0.4500	0.3780	2.7000e- 003		0.0342	0.0342		0.0342	0.0342		539.9790	539.9790	0.0104	9.9000e- 003	543.2652
Government (Civic Center)	3.54767	0.0383	0.3478	0.2922	2.0900e- 003		0.0264	0.0264		0.0264	0.0264		417.3728	417.3728	8.0000e- 003	7.6500e- 003	419.9128
Hotel	44.7892	0.4830	4.3911	3.6885	0.0264		0.3337	0.3337		0.3337	0.3337		5,269.3209	5,269.320 9	0.1010	0.0966	5,301.389 1
Quality Restaurant	112.477	1.2130	11.0271	9.2628	0.0662		0.8381	0.8381		0.8381	0.8381		13,232.564 7	13,232.56 47	0.2536	0.2426	13,313.09 59
Regional Shopping Center	1.32634	0.0143	0.1300	0.1092	7.8000e- 004		9.8800e- 003	9.8800e- 003		9.8800e- 003	9.8800e- 003		156.0395	156.0395	2.9900e- 003	2.8600e- 003	156.9891
Single Family Housing	3.75573	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.138 5	25,089.13 85	0.4809	0.4600	25,241.82 68

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44
Mitigated	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	11.3290					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	50.8050				0	0.0000	0.0000	Dinimini	0.0000	0.0000	Φ		0.0000	D	0	0.0000
Hearth	29.4179	4.5703	321.8490	0.9140		46.1674	46.1674		46.1528	46.1528	6,745.572 7	21,784.23 53	28,529.808 0	36.9789	0.3994	29,430.17 20
Landscaping	2.8206	1.0852	94.0876	4.9900e- 003)	0.5234	0.5234)	0.5234	0.5234		170.0541	170.0541	0.1623		173.4625
Total	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/e	day		
Architectural Coating	11.3290					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	50.8050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	29.4179	4.5703	321.8490	0.9140		46.1674	46.1674		46.1528	46.1528	6,745.572 7	21,784.23 53	28,529.808 0	36.9789	0.3994	29,430.17 20
Landscaping	2.8206	1.0852	94.0876	4.9900e- 003		0.5234	0.5234	Diniminum	0.5234	0.5234		170.0541	170.0541	0.1623	0	173.4625
Total	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44

7.0 Water Detail

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equip	ment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Duarte Town Center - Buildout Emissions South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	284.77	1000sqft	18.64	284,772.00	0
General Office Building	153.27	1000sqft	9.43	153,274.00	O
Government (Civic Center)	118.47	1000sqft	6.15	118,472.00	O
Hotel	450.00	Room	2.19	653,400.00	O
Apartments Low Rise	1,097.00	Dwelling Unit	0.00	1,097,000.00	3137
Single Family Housing	46.00	Dwelling Unit	5.15	82,800.00	132
Quality Restaurant	176.19	1000sqft	13.40	176,190.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)31Climate Zone9Operational Year2035

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N2O Intensity
 0.006

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximate square footage and acreage

Construction Phase - Build out operational assumptions - no construction activity assumed

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Woodstoves - No wood-burning fireplaces

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	0.00
tblFireplaces	NumberGas	932.45	987.30
tblFireplaces	NumberGas	39.10	41.40
tblFireplaces	NumberWood	54.85	0.00
tblFireplaces	NumberWood	2.30	0.00
tblLandUse	LandUseSquareFeet	284,770.00	284,772.00
tblLandUse	LandUseSquareFeet	153,270.00	153,274.00
tblLandUse	LandUseSquareFeet	118,470.00	118,472.00
tblLandUse	LotAcreage	6.54	18.64
tblLandUse	LotAcreage	3.52	9.43
tblLandUse	LotAcreage	2.72	6.15
tblLandUse	LotAcreage	15.00	2.19
tblLandUse	LotAcreage	68.56	0.00
tblLandUse	LotAcreage	14.94	5.15
tblLandUse	LotAcreage	4.04	13.40
tblProjectCharacteristics	OperationalYear	2014	2035
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	42.94	42.70

tblWoodstoves	NumberCatalytic	54.85	0.00
tblWoodstoves	NumberCatalytic	2.30	0.00
tblWoodstoves	NumberNoncatalytic	54.85	109.70
tblWoodstoves	NumberNoncatalytic	2.30	4.60

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44
Energy	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68
Mobile	87.7239	181.7966	864.1956	3.4107	228.1183	4.8823	233.0006	60.9967	4.5058	65.5024		244,299.2 463	244,299.24 63	6.5461		244,436.7 133
Total	184.3963	208.0860	1,295.687 4	4.4552	228.1183	53.1620	281.2803	60.9967	52.7710	113.7676	6,745.572 7	291,342.6 742	298,088.24 69	44.1681	0.8594	299,282.1 746

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44
Energy	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890)	1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68
Mobile	87.7239	181.7966	864.1956	3.4107	228.1183	4.8823	233.0006	60.9967	4.5058	65.5024		244,299.2 463	244,299.24 63	6.5461		244,436.7 133
Total	184.3963	208.0860	1,295.687 4	4.4552	228.1183	53.1620	281.2803	60.9967	52.7710	113.7676	6,745.572 7	291,342.6 742	298,088.24 69	44.1681	0.8594	299,282.1 746

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4.1 Milligation	m mouo	u100 111	0.0110													
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Unmitigated	87.7239	181.7966	864.1956	3.4107	228.1183	4.8823	233.0006	60.9967	4.5058	65.5024		244,299.2 463	244,299.24 63	6.5461		244,436.7 133
Mitigated	87.7239	181.7966	864.1956	3.4107	228.1183	4.8823	233.0006	60.9967	4.5058	65.5024		244,299.2 463	244,299.24 63	6.5461		244,436.7 133

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,229.23	7,854.52	6658.79	24,730,153	24,730,153
Quality Restaurant	15,848.29	16,625.29	12713.87	22,082,680	22,082,680
General Office Building	1,690.57	363.25	150.20	4,126,367	4,126,367
Government (Civic Center)	3,307.68	0.00	0.00	7,296,111	7,296,111
Hotel	3,676.50	3,685.50	2677.50	8,435,285	8,435,285
Regional Shopping Center	12,159.68	14,229.96	7187.59	25,402,895	25,402,895
Single Family Housing	440.22	463.68	403.42	1,497,787	1,497,787
Total	44,352.17	43,222.20	29,791.38	93,571,277	93,571,277

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475956	0.062534	0.188657	0.147142	0.045607	0.007258	0.017370	0.042746	0.002183	0.002612	0.003879	0.000535	0.003521

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68
NaturalGas Unmitigated	2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.13 85	25,089.138 5	0.4809	0.4600	25,241.82 68

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	lay		
Apartments Low Rise	42772.1	0.4613	3.9417	1.6773	0.0252		0.3187	0.3187		0.3187	0.3187		5,032.0106	5,032.010 6	0.0965	0.0923	5,062.634 6
General Office Building	4589.82	0.0495	0.4500	0.3780	2.7000e- 003		0.0342	0.0342		0.0342	0.0342		539.9790	539.9790	0.0104	9.9000e- 003	543.2652
Government (Civic Center)	3547.67	0.0383	0.3478	0.2922	2.0900e- 003		0.0264	0.0264		0.0264	0.0264		417.3728	417.3728	8.0000e- 003	7.6500e- 003	419.9128
Hotel	44789.2	0.4830	4.3911	3.6885	0.0264		0.3337	0.3337		0.3337	0.3337		5,269.3209	5,269.320 9	0.1010	0.0966	5,301.389 1
Quality Restaurant	112477	1.2130	11.0271	9.2628	0.0662		0.8381	0.8381		0.8381	0.8381		13,232.564 7	13,232.56 47	0.2536	0.2426	13,313.09 59
Regional Shopping Center	1326.34	0.0143	0.1300	0.1092	7.8000e- 004		9.8800e- 003	9.8800e- 003		9.8800e- 003	9.8800e- 003		156.0395	156.0395	2.9900e- 003	2.8600e- 003	156.9891
Single Family Housing	3755.73	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.138 5	25,089.13 85	0.4809	0.4600	25,241.82 68

<u>Mitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	42.7721	0.4613	3.9417	1.6773	0.0252		0.3187	0.3187		0.3187	0.3187		5,032.0106	5,032.010 6	0.0965	0.0923	5,062.634 6
General Office Building	4.58982	0.0495	0.4500	0.3780	2.7000e- 003		0.0342	0.0342		0.0342	0.0342		539.9790	539.9790	0.0104	9.9000e- 003	543.2652
Government (Civic Center)	3.54767	0.0383	0.3478	0.2922	2.0900e- 003		0.0264	0.0264		0.0264	0.0264		417.3728	417.3728	8.0000e- 003	7.6500e- 003	419.9128
Hotel	44.7892	0.4830	4.3911	3.6885	0.0264		0.3337	0.3337	D	0.3337	0.3337		5,269.3209	5,269.320 9	0.1010	0.0966	5,301.389 1
Quality Restaurant	112.477	1.2130	11.0271	9.2628	0.0662		0.8381	0.8381	D	0.8381	0.8381		13,232.564 7	13,232.56 47	0.2536	0.2426	13,313.09 59
Regional Shopping Center	1.32634	0.0143	0.1300	0.1092	7.8000e- 004		9.8800e- 003	9.8800e- 003		9.8800e- 003	9.8800e- 003		156.0395	156.0395	2.9900e- 003	2.8600e- 003	156.9891
Single Family Housing	3.75573	0.0405	0.3461	0.1473	2.2100e- 003		0.0280	0.0280		0.0280	0.0280		441.8512	441.8512	8.4700e- 003	8.1000e- 003	444.5402
Total		2.2998	20.6339	15.5553	0.1255		1.5890	1.5890		1.5890	1.5890		25,089.138 5	25,089.13 85	0.4809	0.4600	25,241.82 68

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Unmitigated	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44
Mitigated	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44

6.2 Area by SubCategory

Unmitigated

Ommingated																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/e	day		
Architectural Coating	11.3290					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	50.8050		.ā		Till till till till till till till till	0.0000	0.0000		0.0000	0.0000	Ō		0.0000	Tillianianianianianianianianianianianianiani		0.0000
Hearth	29.4179	4.5703	321.8490	0.9140)	46.1674	46.1674		46.1528	46.1528	6,745.572 7	21,784.23 53	28,529.808 0	36.9789	0.3994	29,430.17 20
Landscaping	2.8206	1.0852	94.0876	4.9900e- 003		0.5234	0.5234		0.5234	0.5234		170.0541	170.0541	0.1623		173.4625
Total	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	11.3290					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	50.8050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	29.4179	4.5703	321.8490	0.9140	0	46.1674	46.1674	Dinimini	46.1528	46.1528	6,745.572 7	21,784.23 53	28,529.808 0	36.9789	0.3994	29,430.17 20
Landscaping	2.8206	1.0852	94.0876	4.9900e- 003		0.5234	0.5234		0.5234	0.5234		170.0541	170.0541	0.1623		173.4625
Total	94.3725	5.6555	415.9365	0.9190		46.6907	46.6907		46.6762	46.6762	6,745.572 7	21,954.28 94	28,699.862 1	37.1412	0.3994	29,603.63 44

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equip	ment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Duarte Town Center - Buildout Emissions - Mitigated South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	284.77	1000sqft	18.64	284,772.00	0
General Office Building	153.27	1000sqft	9.43	153,274.00	O
Government (Civic Center)	118.47	1000sqft	6.15	118,472.00	O
Hotel	450.00	Room	2.19	653,400.00	O
Apartments Low Rise	1,097.00	Dwelling Unit	0.00	1,097,000.00	3137
Single Family Housing	46.00	Dwelling Unit	5.15	82,800.00	132
Quality Restaurant	176.19	1000sqft	13.40	176,190.00	О

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)31

Climate Zone 9 Operational Year 2035

Utility Company Southern California Edison

 CO2 Intensity
 630.89
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

, ,

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Approximate square footage and acreage

Construction Phase - Build out operational assumptions - no construction activity assumed

Vehicle Trips - Weekday trip rates consistent with Traffic Study

Woodstoves - No wood-burning fireplaces

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	70.00	0.00
tblFireplaces	NumberGas	932.45	987.30
tblFireplaces	NumberGas	39.10	41.40
tblFireplaces	NumberWood	54.85	0.00
tblFireplaces	NumberWood	2.30	0.00
tblLandUse	LandUseSquareFeet	284,770.00	284,772.00
tblLandUse	LandUseSquareFeet	153,270.00	153,274.00
tblLandUse	LandUseSquareFeet	118,470.00	118,472.00
tblLandUse	LotAcreage	6.54	18.64
tblLandUse	LotAcreage	3.52	9.43
tblLandUse	LotAcreage	2.72	6.15
tblLandUse	LotAcreage	15.00	2.19
tblLandUse	LotAcreage	68.56	0.00
tblLandUse	LotAcreage	14.94	5.15

tblLandUse	LotAcreage	4.04	13.40
tblProjectCharacteristics	OperationalYear	2014	2035
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	42.94	42.70
tblWoodstoves	NumberCatalytic	54.85	0.00
tblWoodstoves	NumberCatalytic	2.30	0.00
tblWoodstoves	NumberNoncatalytic	54.85	109.70
tblWoodstoves	NumberNoncatalytic	2.30	4.60

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	Г/уг		
Area	12.0598	0.1928	15.7841	0.0121		0.6425	0.6425		0.6423	0.6423	76.4935	266.3129	342.8064	0.4377	4.5300e- 003	353.4029
Energy	0.4197	3.7657	2.8388	0.0229		0.2900	0.2900		0.2900	0.2900	0.0000	11,722.98 16	11,722.981 6	0.4276	0.1481	11,777.88 31
Mobile	13.2555	29.4896	137.7027	0.5475	35.5404	0.7726	36.3130	9.5176	0.7131	10.2306	0.0000	35,543.66 39	35,543.663 9	0.9402	0.0000	35,563.40 84
Waste						0.0000	0.0000		0.0000	0.0000	422.7733	0.0000	422.7733	24.9852	0.0000	947.4623
Water						0.0000	0.0000		0.0000	0.0000	67.0154	1,091.300 7	1,158.3161	6.9333	0.1729	1,357.515 4
Total	25.7350	33.4480	156.3256	0.5825	35.5404	1.7051	37.2455	9.5176	1.6454	11.1629	566.2822	48,624.25 91	49,190.541 3	33.7240	0.3256	49,999.67 20

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	12.0598	0.1928	15.7841	0.0121		0.6425	0.6425		0.6423	0.6423	76.4935	266.3129	342.8064	0.4377	4.5300e- 003	353.4029
Energy	0.3711	3.3330	2.5370	0.0202		0.2564	0.2564		0.2564	0.2564	0.0000	10,775.72 50	10,775.725 0	0.3969	0.1349	10,825.87 36
Mobile	11.8521	20.3586	104.5396	0.3235	20.4065	0.4804	20.8868	5.4648	0.4435	5.9083	0.0000	21,000.39 17	21,000.391 7	0.5749	0.0000	21,012.46 45
Waste						0.0000	0.0000		0.0000	0.0000	211.3867	0.0000	211.3867	12.4926	0.0000	473.7312
Water	0		D		D	0.0000	0.0000		0.0000	0.0000	53.6123	933.8803	987.4926	5.5484	0.1387	1,147.004 5
Total	24.2830	23.8843	122.8607	0.3558	20.4065	1.3793	21.7857	5.4648	1.3422	6.8070	341.4925	32,976.30 98	33,317.802 3	19.4506	0.2781	33,812.47 66

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	5.64	28.59	21.41	38.92	42.58	19.11	41.51	42.58	18.43	39.02	39.70	32.18	32.27	42.32	14.58	32.37

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Mitigated	11.8521	20.3586	104.5396	0.3235	20.4065	0.4804	20.8868	5.4648	0.4435	5.9083	0.0000	21,000.39 17	21,000.391 7	0.5749	0.0000	21,012.46 45
Unmitigated	13.2555	29.4896	137.7027	0.5475	35.5404	0.7726	36.3130	9.5176	0.7131	10.2306	0.0000	35,543.66 39	35,543.663 9	0.9402	0.0000	35,563.40 84

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,229.23	7,854.52	6658.79	24,730,153	14,199,470
Quality Restaurant	15,848.29	16,625.29	12713.87	22,082,680	12,679,353
General Office Building	1,690.57	363.25	150.20	4,126,367	2,369,263
Government (Civic Center)	3,307.68	0.00	0.00	7,296,111	4,189,254
Hotel	3,676.50	3,685.50	2677.50	8,435,285	4,843,342
Regional Shopping Center	12,159.68	14,229.96	7187.59	25,402,895	14,585,742
Single Family Housing	440.22	463.68	403.42	1,497,787	859,994
Total	44,352.17	43,222.20	29,791.38	93,571,277	53,726,418

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475956	0.062534	0.188657	0.147142	0.045607	0.007258	0.017370	0.042746	0.002183	0.002612	0.003879	0.000535	0.003521

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	MT/yr										
NaturalGas Mitigated	0.3711	3.3330	2.5370	0.0202		0.2564	0.2564		0.2564	0.2564	0.0000	3,672.397 1	3,672.3971	0.0704	0.0673	3,694.746 7
NaturalGas Unmitigated	0.4197	3.7657	2.8388	0.0229	Diminion (0.2900	0.2900		0.2900	0.2900	0.0000	4,153.788 3	4,153.7883	0.0796	0.0762	4,179.067 5
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,103.327 9	7,103.3279	0.3265	0.0676	7,131.126 9
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7,569.193 4	7,569.1934	0.3479	0.0720	7,598.815 6

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NŌx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					tor			МТ	/yr							
Apartments Low Rise	1.56118e+ 007	0.0842	0.7194	0.3061	4.5900e- 003		0.0582	0.0582		0.0582	0.0582	0.0000	833.1058	833.1058	0.0160	0.0153	838.1759
General Office Building	1.67528e+ 006	9.0300e- 003	0.0821	0.0690	4.9000e- 004		6.2400e- 003	6.2400e- 003		6.2400e- 003	6.2400e- 003	0.0000	89.3996	89.3996	1.7100e- 003	1.6400e- 003	89.9437
Government (Civic Center)	1.2949e+0 06	6.9800e- 003	0.0635	0.0533	3.8000e- 004		4.8200e- 003	4.8200e- 003		4.8200e- 003	4.8200e- 003	0.0000	69.1007	69.1007	1.3200e- 003	1.2700e- 003	69.5213
Hotel	1.63481e+ 007	0.0882	0.8014	0.6732	4.8100e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	872.3952	872.3952	0.0167	0.0160	877.7044
Quality Restaurant	4.1054e+0 07	0.2214	2.0125	1.6905	0.0121		0.1530	0.1530		0.1530	0.1530	0.0000	2,190.7995	2,190.799 5	0.0420	0.0402	2,204.132 3
Regional Shopping Center	484112	2.6100e- 003	0.0237	0.0199	1.4000e- 004		1.8000e- 003	1.8000e- 003		1.8000e- 003	1.8000e- 003	0.0000	25.8341	25.8341	5.0000e- 004	4.7000e- 004	25.9913
Single Family Housing	1.37084e+ 006	7.3900e- 003	0.0632	0.0269	4.0000e- 004		5.1100e- 003	5.1100e- 003		5.1100e- 003	5.1100e- 003	0.0000	73.1534	73.1534	1.4000e- 003	1.3400e- 003	73.5986
Total		0.4197	3.7657	2.8388	0.0229		0.2900	0.2900		0.2900	0.2900	0.0000	4,153.7883	4,153.788 3	0.0796	0.0761	4,179.067 5

Mitigated

magatou																	
	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											МТ	/yr		
Apartments Low Rise	1.2643e+0 07	0.0682	0.5826	0.2479	3.7200e- 003		0.0471	0.0471		0.0471	0.0471	0.0000	674.6760	674.6760	0.0129	0.0124	678.7820
General Office Building	1.29887e+ 006	7.0000e- 003	0.0637	0.0535	3.8000e- 004	D	4.8400e- 003	4.8400e- 003	D	4.8400e- 003	4.8400e- 003	0.0000	69.3127	69.3127	1.3300e- 003	1.2700e- 003	69.7346
Government (Civic Center)	1.00395e+ 006	5.4100e- 003	0.0492	0.0413	3.0000e- 004		3.7400e- 003	3.7400e- 003		3.7400e- 003	3.7400e- 003	0.0000	53.5748	53.5748	1.0300e- 003	9.8000e- 004	53.9008
Hotel	1.31571e+ 007	0.0709	0.6450	0.5418	3.8700e- 003		0.0490	0.0490		0.0490	0.0490	0.0000	702.1114	702.1114	0.0135	0.0129	706.3844
Quality Restaurant	3.91972e+ 007	0.2114	1.9214	1.6140	0.0115		0.1460	0.1460		0.1460	0.1460	0.0000	2,091.7139	2,091.713 9	0.0401	0.0384	2,104.443 7
Regional Shopping Center	403827	2.1800e- 003	0.0198	0.0166	1.2000e- 004		1.5000e- 003	1.5000e- 003		1.5000e- 003	1.5000e- 003	0.0000	21.5497	21.5497	4.1000e- 004	4.0000e- 004	21.6809
Single Family Housing	1.11421e+ 006	6.0100e- 003	0.0513	0.0219	3.3000e- 004		4.1500e- 003	4.1500e- 003		4.1500e- 003	4.1500e- 003	0.0000	59.4586	59.4586	1.1400e- 003	1.0900e- 003	59.8204
Total		0.3711	3.3330	2.5370	0.0203		0.2564	0.2564		0.2564	0.2564	0.0000	3,672.3971	3,672.397 1	0.0704	0.0673	3,694.746 7

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr				
Apartments Low Rise	006			0.0110	1,156.985 7
Building	2.22707e+ 006	637.3141	0.0293	003	639.8082
Government (Civic Center)	06			003	
Hotel	5.5539e+0 06	1,589.3423	0.0731	0.0151	1,595.562 2
Quality Restaurant	8.26507e+ 006	2,365.1902	0.1087	0.0225	2,374.446 4
Regional Shopping Center	4.31999e+ 006		0.0568		1,241.076 5
Single Family Housing	335559	96.0257	4.4100e- 003	9.1000e- 004	96.4015
Total		7,569.1934	0.3479	0.0720	7,598.815 6

Mitigated

mergatou										
	Electricity Use	Total CO2	CH4	N2O	CO2e					
Land Use	kWh/yr	MT/yr								
Apartments Low Rise	006				0					
Building	2.02637e+ 006	579.8786	0.0267	5.5100e- 003	582.1480					
Government (Civic Center)	006			003						
Hotel	5.0789e+0 06	1,453.4143	0.0668	0.0138	1,459.102 2					
Quality Restaurant	7.85824e+ 006	2,248.7695	0.1034	0.0214	2,257.570 1					
Regional Shopping Center	3.99487e+ 006	1,143.1987	0.0526	0.0109	1,147.672 6					
Single Family Housing	329170	94.1974	4.3300e- 003	9.0000e- 004	94.5661					
Total		7,103.3279	0.3265	0.0676	7,131.126 9					

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												МТ	/yr		
Mitigated	12.0598	0.1928	15.7841	0.0121		0.6425	0.6425		0.6423	0.6423	76.4935	266.3129	342.8064	0.4377	4.5300e- 003	353.4029
Unmitigated	12.0598	0.1928	15.7841	0.0121		0.6425	0.6425		0.6423	0.6423	76.4935	266.3129	342.8064	0.4377	4.5300e- 003	353.4029

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton			М	T/yr							
Architectural Coating	2.0676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.2719			0		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.3677	0.0571	4.0231	0.0114		0.5771	0.5771		0.5769	0.5769	76.4935	247.0291	323.5226	0.4193	4.5300e- 003	333.7325
Landscaping	0.3526	0.1357	11.7609	6.2000e- 004		0.0654	0.0654		0.0654	0.0654	0.0000	19.2838	19.2838	0.0184	0.0000	19.6703
Total	12.0598	0.1928	15.7841	0.0121		0.6425	0.6425		0.6423	0.6423	76.4935	266.3129	342.8064	0.4377	4.5300e- 003	353.4029

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton			MT	Γ/yr							
Architectural Coating	2.0676					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.2719					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.3677	0.0571	4.0231	0.0114	D	0.5771	0.5771		0.5769	0.5769	76.4935	247.0291	323.5226	0.4193	4.5300e- 003	333.7325
Landscaping	0.3526	0.1357	11.7609	6.2000e- 004		0.0654	0.0654		0.0654	0.0654	0.0000	19.2838	19.2838	0.0184	0.0000	19.6703
Total	12.0598	0.1928	15.7841	0.0121		0.6425	0.6425		0.6423	0.6423	76.4935	266.3129	342.8064	0.4377	4.5300e- 003	353.4029

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Unmitigated	1,158.3161	6.9333	0.1729	1,357.515 4
Mitigated	987.4926	5.5484	0.1387	1,147.004 5

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	Г/yr	
Apartments Low Rise	45.0597				499.8182
	16.6963				
	14.4248				
Hotel	11.415 / 1.26834	50.1884	0.3741	9.2300e- 003	60.9045
Quality Restaurant	53.4796 / 3.41359	227.0941	1.7523	0.0432	277.2674
Regional Shopping Center	21.0936 / 12.9284	126.3940	0.6928	0.0174	146.3277
Single Family Housing	2.99709 / 1.88947	18.1257	0.0985	2.4700e- 003	20.9587
Total		1,158.3161	6.9333	0.1729	1,357.515 4

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Apartments Low Rise	45.0597				428.5895
	16.6963				
	14.4248				
Hotel	9.13204 / 1.26834	40.9572	0.2993	7.3800e- 003	49.5286
Quality Restaurant	42.7837 / 3.41359	183.8458	1.4017	0.0345	223.9713
Regional Shopping Center	12.9284				
Single Family		15.7020	0.0788	1.9800e- 003	17.9719
Total		987.4926	5.5484	0.1387	1,147.004 5

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e				
	MT/yr							
Mitigated	211.3867	12.4926	0.0000	473.7312				
Unmitigated	422.7733	24.9852	0.0000	947.4623				

8.2 Waste by Land Use

Unmitigated

Ommigated									
	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons	MT/yr							
Apartments Low Rise		102.4333			229.5596				
General Office Building	142.54	28.9343	1.7100	0.0000	64.8437				
Government (Civic Center)					307.1956				
Hotel	246.38	50.0129	2.9557	0.0000	112.0822				
Quality Restaurant									
Regional Shopping Center	299.01	60.6963	3.5871	0.0000	136.0244				
Single Family Housing	54.12	10.9859	0.6493	0.0000	24.6200				
Total		422.7733	24.9852	0.0000	947.4623				

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e					
Land Use	tons	MT/yr								
Rise		51.2167	3.0268	0.0000	114.7798					
General Office Building	71.27	14.4672	0.8550	0.0000	32.4219					
	337.64	68.5379	4.0505	0.0000	153.5978					
Hotel		25.0065	1.4778	0.0000	56.0411					
Quality Restaurant	80.385	16.3174	0.9643	0.0000	36.5684					
Regional Shopping Center	149.505	30.3482	1.7935	0.0000	68.0122					
Single Family Housing		5.4929	0.3246	0.0000	12.3100					
Total		211.3867	12.4926	0.0000	473.7311					

9.0 Operational Offroad

ı	Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type	ı
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10.0 Vegetation

Date: 6/7/2016 2:21 PM

Duarte Town Center - Buildout Emissions - Mitigated South Coast Air Basin, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	со	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				Percent R	Reduction							

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Excavators	Diesel	No Change	0	3	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00

Equipment Type	ROG	NOx Unmit	CO tigated tons/yr	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2 Unmitiga	CH4 ted mt/yr	N2O	CO2e
Equipment Type ROG NOx CO SO2 Exhaust PM10 Exhaust PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N2O CO2e Mitigated tons/yr Mitigated mt/yr								CO2e				
Equipment Type ROG NOx CO SO2 Exhaust PM10 Exhaust PM2.5 Bio- CO2 NBio- CO2 CH4 N2O CO2e Percent Reduction												

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input PM2.5 No Soil Stabilizer for unpaved PM10 Reduction Roads Reduction No Replace Ground Cover of Area PM10 Reduction PM2.5 Disturbed Reduction Water Exposed Area PM10 Reduction PM2.5 No Frequency (per Reduction day) Unpaved Road Mitigation Vehicle Speed No Moisture Content % (mph) No Clean Paved Road % PM Reduction 0.00

		Unm	itigated	Mi	tigated	Percent	Reduction
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5

Operational Percent Reduction Summary

Category	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Percent Reduction													
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.15	6.15	6.16	6.15	6.15	
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mobile	10.59	30.96	24.08	40.92	37.82	37.80	0.00	40.92	40.92	38.85	0.00	40.92	
Natural Gas	11.59	11.49	10.63	11.49	11.59	11.59	0.00	11.59	11.59	11.58	11.57	11.59	
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	14.43	14.75	19.97	19.80	15.51	
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Operational Mobile Mitigation

Project Setting: Urban

itigation	Category	Measure	% Reduction	Input Value 1	Input Value 2		Input Value 3
Yes	Land Use	Increase Density	0.10	18.85		10.50	
Yes	Land Use	Increase Diversity	0.30	0.70	300000000000000000000000000000000000000)
No	Land Use	Improve Walkability Design	0.00				
No	Land Use	Improve Destination Accessibility	0.00		300000000000000000000000000000000000000)
Yes	Land Use	Increase Transit Accessibility	0.16	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00				
	Land Use	Land Use SubTotal	0.41		300000000000000000000000000000000000000)
Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off- Site			
No	Neighborhood Enhancements	Provide Traffic Calming Measures	1.				
No	Neighborhood Enhancements	Implement NEV Network	0.01				
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02)
Yes	Parking Policy Pricing	Limit Parking Supply	0.00				
No	Parking Policy Pricing	Unbundle Parking Costs	0.00				
No	Parking Policy Pricing	On-street Market Pricing	0.00)
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00				
No	Transit Improvements	Provide BRT System	0.00)
No	Transit Improvements	Expand Transit Network	0.00		311111111111111111111111111111111111111)
No	Transit Improvements	Increase Transit Frequency	0.00				
	Transit Improvements	Transit Improvements Subtotal	0.00		300000000000000000000000000000000000000)
		Land Use and Site Enhancement Subtotal	0.43				
No	Commute	Implement Trip Reduction Program					
No	Commute	Transit Subsidy					
No	Commute	Implement Employee Parking "Cash Out"	7.70				
No	Commute	Workplace Parking Charge	n=====================================		311111111111111111111111111111111111111)
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00				
No	Commute	Market Commute Trip Reduction Option	0.00		3		Dania (1911)

No	Commute	Employee Vanpool/Shuttle	0.00	2.00
No	Commute	Provide Ride Sharing Program	15.00	
	Commute	Commute Subtotal	0.00	
No	School Trip	Implement School Bus Program	0.00	
		Total VMT Reduction	0.43	

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	0
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	% Electric Lawnmower	0
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	23.30	
No	Install High Efficiency Lighting		
No	On-site Renewable	D	

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan	Филиппини	50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	D
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	0
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	0
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	50.00



Ambient	Noise	Measurements



General Information 03790 Serial Number Model SoundExpert™ LxT Firmware Version 2.206 Filename LxT_Data.054 User Olivia Chan Job Description Town Center Specific Plan Location Duarte Measurement Description Friday, 03 June 2016 11:03:53 Friday, 03 June 2016 11:18:53 Start Time Stop Time Duration 00:15:00.0 Run Time 00:15:00.0 00:00:00.0 Pause Wednesday, 27 January 2016 10:21:19 Pre Calibration Post Calibration Calibration Deviation Overall Data 62.7 LASeq dВ LASmax 03 Jun 2016 11:05:23 78.7 dВ LApeak (max) 03 Jun 2016 11:11:58 91.9 dВ LASmin 03 Jun 2016 11:18:33 52.9 dB 75.0 LCSeq dB LASeq 62.7 dВ 12.3 dВ LCSeq - LASeq LAIeq 64.2 dB LAeq 62.7 dВ LAIeq - LAeq 1.5 dВ 62.7 Ldn dB LDay 07:00-22:00 62.7 dB LNight 22:00-07:00 dВ Lden 62.7 dВ LDay 07:00-19:00 62.7 dB LEvening 19:00-22:00 --dВ LNight 22:00-07:00 dВ 92.2 dВ LASE # Overloads 0 0.0 Overload Duration s # OBA Overloads 8 30.9 OBA Overload Duration s

Statistics			
LAS5.00		67.0	dba
LAS10.00		65.5	dBA
LAS25.00		62.9	dBA
LAS50.00		60.3	dBA
LAS66.60		58.8	dBA
LAS90.00		55.9	dBA
LAS > 70.0 dB (Exceedence Counts / Duration)	4 /	18.9	s
LAS > 100.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 /	0.0	s

dВ dВ

dB

dВ

122.6

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Low
OBA Bandwidth	1/1 and $1/3$
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	At Lmax
Under Range Limit	25.4
Under Range Peak	78.9
Noise Floor	15.1

Settings

Overload

1/1 Spectra												
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	7.2	13.2	33.9	46.8	51.0	53.3	54.8	58.1	55.4	50.4	44.1	37.7
LASmax	7.2	16.2	47.0	57.1	63.0	74.0	68.1	71.4	71.1	67.6	59.2	46.6
LASmin	7.2	7.9	25.7	36.7	41.7	43.1	45.9	48.4	43.7	36.4	23.6	8.6

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	3.0	2.4	1.7	1.2	4.6	12.3	20.6	26.8	32.8	36.7	43.0	43.7
LASmax	3.0	2.4	1.7	3.0	8.6	16.0	33.0	33.9	47.2	44.4	46.7	56.8
LASmin	3.0	2.4	1.7	1.2	0.3	6.6	13.4	18.8	22.0	26.5	30.7	32.8
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	45.8	47.5	45.3	47.1	48.8	49.4	48.3	49.9	51.4	52.9	53.5	53.5
LASmax	57.2	62.0	56.7	58.6	70.0	71.9	65.6	61.5	63.9	66.2	67.3	66.2
LASmin	35.3	36.5	36.6	36.8	38.4	37.6	38.9	40.6	41.8	42.6	43.9	43.2
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	52.1	50.3	48.9	47.8	45.2	42.7	41.3	39.2	35.7	31.0	34.7	32.3
LASmax	67.4	67.5	64.6	65.2	62.4	59.3	57.2	54.0	53.2	44.5	40.4	31.1
LASmin	40.6	38.1	36.4	33.5	30.9	26.4	21.9	17.2	11.6	6.3	2.2	-0.6
G . 1 . 1	7.1 m.h											
Calibration H	istory									15	1 (-	
Preamp	Date dB re. 1V/Pa											
PRMLxT1L	27 Jan 2016 10:21:19 -28.9											
PRMLxT1L	26 Jan 2016 14:23:09 -28.9											

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3

General Information 03790 Serial Number Model SoundExpert™ LxT Firmware Version 2.206 Filename LxT_Data.055 Olivia Chan User Job Description Town Center Specific Plan Location Duarte Measurement Description Friday, 03 June 2016 11:23:21 Friday, 03 June 2016 11:38:21 Start Time Stop Time Duration 00:15:00.0 Run Time 00:15:00.0 00:00:00.0 Pause Wednesday, 27 January 2016 10:21:19 Pre Calibration Post Calibration Calibration Deviation LASeq 65.9 dВ LASmax 03 Jun 2016 11:29:00 79.8 dВ LApeak (max) 03 Jun 2016 11:29:00 102.3 dВ LASmin 03 Jun 2016 11:23:55 dВ 53.5 76.7 LCSeq dB LASeq 65.9 dВ 10.8 dВ LCSeq - LASeq LAIeq 69.1 dB LAeq 65.9 dВ LAIeq - LAeq 3.2 dВ Ldn 65.9 dB LDay 07:00-22:00 65.9 dB LNight 22:00-07:00 dВ Lden 65.9 dВ LDay 07:00-19:00 65.9 dB LEvening 19:00-22:00 --dВ LNight 22:00-07:00 dВ 95.5 dВ LASE # Overloads 0 Overload Duration 0.0 s # OBA Overloads 22 OBA Overload Duration 91.9 s Statistics

LAS5.00	70.2	dBA
LAS10.00	69.1	dBA
LAS25.00	66.7	dba
LAS50.00	63.9	dba
LAS66.60	62.3	dba
LAS90.00	59.3	dba
LAS > 70.0 dB (Exceedence Counts / Duration)	13 / 90.2	s
LAS > 100.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

sectings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Low
OBA Bandwidth	1/1 and $1/3$
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	At Lmax
Under Range Limit	25.4
Under Range Peak	78.9
Noise Floor	15.1
Overload	122.6

1/1 Spectra												
Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	7.3	15.7	33.9	47.1	54.5	54.8	58.6	61.8	57.9	53.7	46.0	40.7
LASmax	21.6	25.1	32.0	49.5	61.0	56.5	63.1	68.6	66.4	76.2	58.8	49.5
LASmin	7.2	6.0	24.3	36.0	39.8	41.8	46.2	49.8	43.5	36.6	25.5	9.9

dВ dВ

dB

dВ

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	3.1	2.6	1.9	1.7	7.8	14.8	23.2	27.8	32.2	38.9	42.1	44.4
LASmax	3.0	2.4	14.4	18.7	19.8	21.2	22.0	27.9	29.3	33.7	44.1	49.2
LASmin	3.0	2.4	1.7	1.2	0.3	3.5	11.0	16.6	21.8	21.8	29.1	32.5
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	50.4	49.6	49.1	48.9	49.9	51.1	51.9	53.9	55.1	56.7	57.5	57.1
LASmax	55.0	56.4	56.4	48.2	53.4	54.1	54.1	58.5	60.4	62.5	64.2	64.9
LASmin	33.0	24.3	34.4	35.3	36.7	37.6	31.3	41.4	42.2	43.5	43.6	44.3
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	54.8	52.6	51.3	51.5	47.7	45.4	43.2	41.1	37.4	37.3	30.9	37.3
LASmax	62.6	60.4	64.6	75.6	66.2	52.9	53.0	48.8	57.2	46.0	43.8	37.7
LASmin	39.9	37.6	37.3	34.0	30.7	27.6	23.5	19.0	13.6	8.0	2.8	-0.6
Calibration H	History											
Preamp				Date						dB re	. 1V/Pa	
PRMLxT1L				27 J		10:21:19					-28.9	
PRMLxT1L		26 Jan 2016 14:23:09					-28.9					

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3

General Information 03790 Serial Number Model SoundExpert™ LxT Firmware Version 2.206 Filename LxT_Data.056 User Olivia Chan Job Description Town Center Specific Plan Location Duarte Measurement Description Start Time Friday, 03 June 2016 11:41:52 Friday, 03 June 2016 11:56:52 Stop Time Duration 00:15:00.0 Run Time 00:15:00.0 Pause 00:00:00.0 Wednesday, 27 January 2016 10:21:19 Pre Calibration Post Calibration None Calibration Deviation Overall Data LASeq 77.1 dВ LASmax 03 Jun 2016 11:46:52 101.2 dВ LApeak (max) 03 Jun 2016 11:46:52 115.9 dВ 03 Jun 2016 11:51:39 dB LASmin 57.2 LCSeq 81.3 dВ LASeq 77.1 dВ LCSeq - LASeq 4.2 dВ 82.6 LAIeq dB LAeq 77.1 dB LAIeq - LAeq 5.5 dВ 77.1 dB Ldn LDay 07:00-22:00 77.1 dВ LNight 22:00-07:00 dВ 77.1 dВ Lden LDay 07:00-19:00 77.1 dB LEvening 19:00-22:00 dB LNight 22:00-07:00 ___ dВ 106.6 LASE dB # Overloads Λ Overload Duration 0.0 s # OBA Overloads 39 OBA Overload Duration 188.2 s LAS5.00 74.0 dBA TAS10.00 70.8 dra LAS25.00 67.8 dBA LAS50.00 65.5 dBA LAS66.60 63.9 dBA LAS90.00 60.1 dBA LAS > 70.0 dB (Exceedence Counts / Duration) 22 / 149.2 s LAS > 100.0 dB (Exceedence Counts / Duration) 1 / 2.0 s 0 / LApeak > 135.0 dB (Exceedence Counts / Duration) 0.0 s LApeak > 137.0 dB (Exceedence Counts / Duration) 0 / 0.0 s LApeak > 140.0 dB (Exceedence Counts / Duration) 0 / 0.0 s RMS Weight A Weighting Peak Weight A Weighting Detector Slow Preamp PRMLxT1L Microphone Correction Off Integration Method Exponential OBA Range Low OBA Bandwidth 1/1 and 1/3OBA Freq. Weighting A Weighting OBA Max Spectrum At Lmax 25.4 Under Range Limit Under Range Peak 78.9 dВ Noise Floor dВ 15.1 Overload 122.6 dB

1/1 Spectra Freq. (Hz):

LASeq

LASmax

LASmin

8.0

12.3

35.2

7.2

16.0

15.7

34.4

5.2

31.5

35.1

38.4

25.8

63.0

50.2

47.5

38.3

125

57.9

55.9

43.6

250

58.8

65.1

46.0

500

60.6

74.3

49.9

1k

69.9

90.5

51.7

2k

65.1

86.4

47.2

4k

58.2

77.8

39.8

8k

50.5

71.0

30.3

16k

44.5

61.5

12.8

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	5.4	7.0	9.3	8.1	8.9	13.7	22.2	25.9	34.3	40.7	44.4	48.2
LASmax	24.7	26.2	33.9	29.5	30.9	29.7	33.0	33.5	36.4	37.5	41.2	46.0
LASmin	3.0	2.4	1.7	1.2	0.3	1.2	7.7	8.6	23.3	16.1	30.6	36.7
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	51.2	54.0	53.8	53.6	53.7	54.9	54.9	55.2	57.2	61.5	66.8	65.7
LASmax	46.1	50.3	54.4	49.9	56.5	64.6	57.5	59.2	74.3	79.9	89.5	89.1
LASmin	35.6	38.7	39.5	39.6	40.3	40.5	42.0	42.9	46.9	49.0	45.9	45.2
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	62.7	59.8	56.6	55.5	52.8	50.1	47.9	45.3	41.8	44.0	34.1	29.9
ASmax	84.4	82.2	77.1	74.9	73.5	70.2	68.1	66.0	62.9	59.3	55.8	52.5
LASmin	43.6	41.4	40.1	36.9	34.9	30.7	28.5	24.2	18.8	11.5	4.3	-0.5
Calibration B	listory											
reamp	1100017			Date						dB re	. 1V/Pa	
PRMLxT1L					an 2016 1	10:21:19				22 10	-28.9	
RMLxT1L											-28.9	
DMT TT		26 Jan 2016 14:23:09 -28.9										

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3

General Information 03790 Serial Number Model SoundExpert™ LxT Firmware Version 2.206 Filename LxT_Data.057 User Olivia Chan Job Description Town Center Specific Plan Location Duarte Measurement Description Start Time Friday, 03 June 2016 12:02:02 Friday, 03 June 2016 12:17:02 Stop Time Duration 00:15:00.0 Run Time 00:15:00.0 Pause 00:00:00.0 Wednesday, 27 January 2016 10:21:19 Pre Calibration Post Calibration None Calibration Deviation Overall Data LASeq 65.6 dВ LASmax 03 Jun 2016 12:14:41 80.9 dВ LApeak (max) 03 Jun 2016 12:14:40 97.2 dВ 03 Jun 2016 12:12:01 59.3 dB LASmin LCSeq 79.0 dВ LASeq 65.6 dВ LCSeq - LASeq 13.4 dВ 67.3 LAIeq dB LAeq 65.6 dB LAIeq - LAeq 1.7 dВ 65.6 dB Ldn LDay 07:00-22:00 65.6 dВ LNight 22:00-07:00 dВ 65.6 dВ Lden LDay 07:00-19:00 65.6 dB LEvening 19:00-22:00 dB LNight 22:00-07:00 ___ dВ 95.1 dВ LASE # Overloads Λ Overload Duration 0.0 s # OBA Overloads 48 OBA Overload Duration 212.8 s LAS5.00 69.8 dBA TAS10.00 67.3 dra LAS25.00 65.1 dBA LAS50.00 63.6 dBA LAS66.60 63.0 dBA LAS90.00 61.8 dBA LAS > 70.0 dB (Exceedence Counts / Duration) 12 / 59.9 s LAS > 100.0 dB (Exceedence Counts / Duration) 0 / 0.0 s 0 / LApeak > 135.0 dB (Exceedence Counts / Duration) 0.0 s LApeak > 137.0 dB (Exceedence Counts / Duration) 0 / 0.0 s LApeak > 140.0 dB (Exceedence Counts / Duration) 0 / 0.0 s RMS Weight A Weighting Peak Weight A Weighting Detector Slow Preamp PRMLxT1L Microphone Correction Off Integration Method Exponential OBA Range Low OBA Bandwidth 1/1 and 1/3OBA Freq. Weighting A Weighting OBA Max Spectrum At Lmax 25.4 Under Range Limit Under Range Peak 78.9 dВ Noise Floor dВ 15.1 Overload 122.6 dB 1/1 Spectra Freq. (Hz): 8.0 16.0 31.5 63.0 125 250 500 1k 2k 4k 8k 16k

57.7

68.8

50.4

61.3

69.0

56.2

57.1

67.4

52.1

49.9

63.8

41.7

42.6

58.8

28.4

29.5

46.5

8.5

LASeq

LASmax

LASmin

7.2

7.2

7.2

22.0

32.3

10.3

37.2

46.8

29.5

49.5

56.1

42.0

54.4

61.7

43.6

54.4

64.6

46.2

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	3.0	2.4	1.8	7.8	14.6	20.9	24.7	31.0	35.6	40.1	43.5	47.5
LASmax	3.0	2.4	2.0	13.9	23.3	31.7	36.2	43.4	43.7	48.6	49.9	54.8
LASmin	3.0	2.4	1.7	1.2	2.3	9.3	15.1	22.5	27.7	32.8	34.4	36.7
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	50.7	49.5	48.4	49.2	49.6	50.0	51.2	53.0	54.1	56.3	57.2	56.1
LASmax	55.0	56.2	59.6	59.5	59.4	60.8	62.8	65.3	65.1	65.4	63.6	63.0
LASmin	36.2	37.9	38.8	35.5	41.0	39.1	42.8	44.6	47.3	50.8	52.2	50.8
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	54.2	52.1	49.3	46.9	44.8	42.5	39.9	38.1	33.1	27.8	23.8	12.9
LASmax	63.4	61.7	62.3	61.1	58.5	56.6	56.4	54.7	47.9	45.3	44.2	31.1
LASmin	49.0	47.0	42.7	39.5	36.0	31.2	26.9	20.9	13.1	6.4	1.8	-1.0
Calibration F	listory											
Preamp	IISCOLY			Date						dB re	. 1V/Pa	
PRMLxT1L						0.21.10				ab ic.	-28.9	
PRMLxT1L		27 Jan 2016 10:21:19							-28.9 -28.9			
PKMUXIII	26 Jan 2016 14:23:09								-20.9			

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3

General Information 03790 Serial Number Model SoundExpert™ LxT Firmware Version 2.206 Filename LxT_Data.058 User Olivia Chan Job Description Town Center Specific Plan Location Duarte Measurement Description Start Time Friday, 03 June 2016 12:20:44 Friday, 03 June 2016 12:35:44 Stop Time Duration 00:15:00.0 Run Time 00:15:00.0 Pause 00:00:00.0 Wednesday, 27 January 2016 10:21:19 Pre Calibration Post Calibration None Calibration Deviation Overall Data 70.4 LASeq dВ LASmax 03 Jun 2016 12:21:23 90.6 dВ LApeak (max) 03 Jun 2016 12:21:22 102.4 dВ 03 Jun 2016 12:34:18 59.6 dB LASmin LCSeq 81.0 dВ LASeq 70.4 dВ LCSeq - LASeq 10.6 dВ LAIeq 72.4 dB LAeq 70.4 dB LAIeq - LAeq 2.0 dВ 70.4 dB Ldn LDay 07:00-22:00 70.4 dВ LNight 22:00-07:00 dВ 70.4 dВ Lden LDay 07:00-19:00 70.4 dB LEvening 19:00-22:00 dB LNight 22:00-07:00 ___ dВ 100.0 LASE dB # Overloads Λ Overload Duration 0.0 s # OBA Overloads 65 OBA Overload Duration 293.1 s LAS5.00 72.7 dBA TAS10.00 dra 71.2 LAS25.00 69.1 dBA LAS50.00 67.0 dBA LAS66.60 65.9 dBA LAS90.00 63.3 dBA LAS > 70.0 dB (Exceedence Counts / Duration) 36 / 249.7 s LAS > 100.0 dB (Exceedence Counts / Duration) 0 / 0.0 s 0 / LApeak > 135.0 dB (Exceedence Counts / Duration) 0.0 s LApeak > 137.0 dB (Exceedence Counts / Duration) 0 / 0.0 s LApeak > 140.0 dB (Exceedence Counts / Duration) 0 / 0.0 s RMS Weight A Weighting Peak Weight A Weighting Detector Slow Preamp PRMLxT1L Microphone Correction Off Integration Method Exponential OBA Range Low OBA Bandwidth 1/1 and 1/3OBA Freq. Weighting A Weighting OBA Max Spectrum At Lmax 25.4 Under Range Limit Under Range Peak 78.9 dВ Noise Floor dВ 15.1 Overload 122.6 dB 1/1 Spectra

Freq. (Hz):

LASeq

LASmax

LASmin

8.0

7.2

7.2

7.2

16.0

19.9

25.6

8.9

31.5

35.6

36.5

24.4

63.0

51.0

54.8

42.8

125

57.1

74.5

45.1

250

61.2

79.0

48.6

500

61.3

75.9

50.8

1k

64.5

75.1

56.3

2k

61.0

70.4

51.6

4k

53.9

62.6

41.3

8k

45.6

51.9

30.4

16k

33.8

48.0

10.8

1/3 Spectra												
Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	3.0	2.4	1.7	5.1	13.4	18.6	24.2	29.2	34.1	40.2	46.6	48.4
LASmax	3.0	2.4	1.7	5.4	16.6	25.2	25.1	30.9	35.4	39.7	49.1	53.9
LASmin	3.0	2.4	1.7	1.2	1.8	6.8	16.8	14.6	26.7	31.8	36.7	38.7
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	50.1	53.4	52.9	55.5	58.3	54.6	55.0	56.7	57.6	59.4	60.2	59.6
LASmax	61.9	72.6	73.9	75.1	75.5	71.1	70.0	71.6	72.4	70.4	71.0	69.3
LASmin	33.6	40.0	40.1	43.1	44.6	42.4	43.2	44.8	47.9	51.2	52.0	51.4
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	57.8	56.2	53.7	51.5	48.5	45.4	43.3	40.3	36.3	31.8	27.8	22.4
LASmax	67.4	65.6	63.4	60.2	57.0	53.5	49.6	46.2	42.4	38.8	36.1	47.8
LASmin	48.9	46.5	42.8	39.1	35.5	31.6	28.8	23.5	15.5	9.0	4.2	-0.6
Calibration H	History									_		
Preamp				Date						dB re.	. 1V/Pa	
PRMLxT1L				27 Ј		0:21:19			-28.9			
PRMLxT1L		26 Jan 2016 14:23:09						-28.9				

Calibration History		
Preamp	Date	dB re. 1V/Pa
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3



NPUT: TRAFFIC FOR Lden									201	2015 Existing	gu.								-		
MIG									4	14 June 2016	010								+		
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Central e/o Highland	Highlar	þ																		
Roadway	Points																				
Vame	Name	ò	Segment																		
			ADT	Autos			2	MTrucks	s		Ŧ	HTrucks		_	Buses			M	Motorcycles	cles	
				۵%	%D %E %N S %D %E %N S	N%	%	<u>%</u>	<u>%</u> ⊒	s	□ %	3% E	N%	%D %E %N S %D %E %N S %D %E %N S	%D %	% = %	S Z	%	<u>%</u> E	2 %	S
			veh/24hrs % % mph % %	%	%		whdu	%	%	mp	%	%	%	% % ydm % % ydm	%	% ,	Ē	% ydw	%	%	mph
Sentral e/o Highland	point1		7813		95 71 98	86	40	40 2 11	1	1 40		3 18	_	40	0	0	0	0	0	0	0
	point2	2												Ĺ							

RESULTS: SOUND LEVELS								2015 Existing	ing					
MIG								14 June 2016	016					
MIG								TNM 2.5						
								Calculate	Calculated with TNM 2.5	2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		2015 E	2015 Existing											
RUN:		Centra	Central e/o Highland	and										
BARRIER DESIGN:		INPU	INPUT HEIGHTS						Average p	avement typ	Average pavement type shall be used unless	ed unless		
									a State hi	ghway agenc	a State highway agency substantiates the use	es the use		
ATMOSPHERICS:		75 dec	75 deg F, 50% RH	I					of a differ	ent type with	of a different type with approval of FHWA.	HWA.		
Receiver														
Name	è.	#DNs	Existing	No Barrier	ier					With Barrier				
			Lden	Lden			Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction		
				Calculated Crit'n	ted Cr	iťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	ъ
								Sub'l Inc					minus	
													Goal	
			dBA	dBA	dBA	Ϋ́	dB	dВ		dBA	dB	dВ	dВ	
100 Ft from Centerline	Ĺ		0.	0.0	0.69	0	0.69		0 Snd Lvl	0.69	0.0		0	0.0
Dwelling Units		# DUs	# DUs Noise Reduction	eduction										
			Mir.	Avg	Σ	Max								
			dВ	dВ	ВВ									
All Selected			.0	0.0	0.0	0.0								
All Impacted			0.	0.0	0.0	0.0								
All that meet NR Goal			0.	0.0	0.0	0.0								
														1

NPUT: TRAFFIC FOR Lden								ŀ	201;	2015 Existing	ting								ŀ	ŀ	ŀ
MIG									4	14 June 2016	2016										
MIG									2	TNM 2.5											
INPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Mountain n/o Huntington	/o Hunt	ngton		1														H		
Roadway	Points																				
Name	Name	Š.	Segment																		
			ADT	Autos			2	MTrucks	S		Ė	HTrucks		_	Buses			Σ	otorc	Motorcycles	
				۵%	<u>°</u> ∃%	N ₀	<u>~</u>	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	o z	□ %	₩	N%	s	- - - - - - - - - -	% Е	S No	%	<u>%</u>	<u>%</u>	S
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % %	%	%	u %	% ydu	%	%	m	%	%	%	, udm	%	6 %	m %	% yd	%	%	mph
Mountain n/o Huntington	point1		6938		95 71 98 40	86	40	2	2 11	4	40	3 18	_	40	0	0	0	0	0	0	0
	point2	2																			

							,					
RESULIS: SOUND LEVELS							ZU15 EXISTING	D .				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 Existing	cisting									
RUN:		Mounta	Mountain n/o Huntington	tington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	sq nuless	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Š.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dB	dВ
100 Ft from Centerline		1	0.0	68.5		0 68.5		0 Snd Lvl	68.5	0.0	0	0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dВ	ВВ							
All Selected		-	0.0	0.0	0.0	0						
All Impacted		_	0.0	0.0	0.0	0						
All that meet NR Goal		_	0.0	0.0	0.0	0						

INPUT: IRAFFIC FOR Laen									2015	2015 Existing	g.								-		
MIG									14 J	14 June 2016	116	_									
MIG									Ž	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Mountain s/o Huntington	/o Hunt	ington																L		
oadway	Points																				
Vame	Name	Š	Segment																		
			ADT	Autos			Ξ	MTrucks			HTrucks	,ks		ā	Buses			Š	Motorcycles	cles	
				۵%	%E %	S Z	<u>%</u>	- %E	N %	s		- - - - - - - -	N%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	<u>%</u>	<u>%</u>	S	3%	<u>%</u>	% N	S
			veh/24hrs	%	% %	E	% ud	%	%	mph	%	%	u %	% Hdu	%	%	m	% u	%	%	mph
Mountain s/o Huntington	point1		10763	10763 95 71 98 40	7.1	86		2 11		40	က	18	-	40	0	0	0	0	0	0	0
	point2		2																		

RESULTS: SOUND LEVELS							2015 Existing	ing					
MIG							14 June 2016	016					
MIG							TNM 2.5						
							Calculate	Calculated with TNM 2.5	2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		2015 E	2015 Existing										
RUN:		Mounta	Mountain s/o Huntington	ıtington									
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	sed unless		
								a State high	ghway agenc	a State highway agency substantiates the use	tes the use	o.	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	FHWA.		
Receiver													
Name	Š	#DNs	Existing	No Barrier					With Barrier				
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ıction		
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	ō
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dВ	
100 Ft from Centerline		1	0.0	70.4	4.	0 70.4		0 Snd Lvl	70.4		0.0	0	0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction									
			Mir	Avg	Max								
			dВ	dВ	ВВ								
All Selected			0.0		0.0	0.0							
All Impacted			0.0		0.0	0.0							
All that meet NR Goal			0.0		0.0	0.0							

INPUT: TRAFFIC FOR Lden									2015 E	2015 Existing	5	ŀ				-					
MIG									14 Jı	ine 20	16	_									
MIG									ΣNΕ	TNM 2.5		+									
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Buena Vista n/o Huntington	a n/o Hu	untington									H									
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			Ā	MTrucks		_	HTrucks	S		B	Buses			Mot	Motorcycles	es	
				۵%	%E %	S N	₽%	₩ %	×%	s	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	<u>%</u> щ	σ z	9 %	₩ %	2 %	S	0%	%E	×%	s
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % % %	%	%	Ë	% yc	%	%	, ydw	%	%	Ē	% yc	%	%	mp	%	%	%	hdm
Buena Vista n/o Huntington	point1		5175	II	71	95 71 98 35		2 11	_	35	3	18	-	35	0	0	0	0 0	0		0
	point2	2	2																		

RESULTS: SOUND LEVELS							2015 Existing	cisting				
MIG							14 Jun	14 June 2016				
MIG							TNM 2.5	.5				
							Calcul	Calculated with TNM 2.5	NM 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 E	2015 Existing									
RUN:		Buena	Vista n/o F	Buena Vista n/o Huntington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Averag	Average pavement type shall be used unless	oe shall be us	ed unless	
ATMOSPHERICS:		75 dea	75 dea F. 50% RH					a State of a dif	a State highway agency substantiates the use of a different type with approval of FHWA.	cy substantia ι approval of	tes the use FHWA.	
Receiver												
Name	N	#DNs	Existing	No Barrier					With Barrier	_		
			Lden			Increase	Increase over existing	g Type	Calculated	Calculated Noise Reduction	ction	
				Calculated Crit'n	Criť	Calculated	d Crit'n		Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc	nc				minus
												Goal
			dBA	dBA	dBA	фВ	ВВ		dBA	фB	ВВ	дB
100 Ft from Centerline	<u> </u>	Ĺ	0.0	0 66.3	3	0	66.3	0 Snd Lvl	vl 66.3		0.0	0.0
Dwelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			용	용	쁑							
All Selected		,	1 0.0		0.0	0.0						
All Impacted			1 0.0		0.0	0.0						
All that meet NR Goal			0.0		0.0	0.0						

INPU I: IKAFFIC FOR Laen									2015	2015 Existing	g										
MIG									14 J	14 June 2016	116										
MIG									N N	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	βL																			
RUN:	Buena Vista	a btwn I	Buena Vista btwn Huntington & Central	& Centi	<u>10</u>														L		
Roadway	Points																				
Vame	Name	ŏ.	Segment																		
			ADT	Autos			Ξ	MTrucks			HTrucks	sk		б	Buses			Mot	Motorcycles	les	
					%E %	S N	1 %	3%E	N %	S	Q%	%E €	N%	%	% 	₩ =	S	□ %	₩ 	N %	S
			veh/24hrs % % mph % % mph % % mph % % mph % % % % % % % % %	· %	% %	E	% yd	%	%	hdm	%	5 %	u %	% ydu	%	%	dm	% 4	%	%	mph
Buena Vista btwn Huntington & Central	point1		15363	92	71	98 35	35	2 11	1	32	က	18	-	35	0	0	0	0	0		0
	point2	2																			

				2015 Existing	ing					
				. ;						
				14 June 2016	016					
				TNM 2.5						
				Calculate	d with TNN	12.5				
2015 Existing										
Vista btwn	Huntington &	Central								
INPUT HEIGHTS					Average p	avement typ	e shall be us	ed unless	_	
					a State hi	ghway agenc	y substantia	es the us	e e	
75 deg F, 50% RH					of a differ	ent type with	approval of	FHWA.		
Existing	No Barrier					With Barrier				
Lden	Lden		Increase over	existing	Type	Calculated	Noise Redu	ction		
	Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated	ated
				Sub'l Inc					minus	
									Goal	
dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dВ	
0.0					Snd Lvl	71.(0	0	0.0
Noise Rec	duction									
Min	Avg	Max								
В	ВВ	gB B								
0.0										
0.0										
0.0										
Kistin HEIG HEIG HEIG HEIG HEIG HEIG HEIG HEIG	9 bbwn HTS HTS HTS	2015 Existing Buena Vista btwn Huntington & Buena Vista btwn Huntington & Buena Vista btwn Huntington & T5 deg F, 50% RH #DUS Existing No Barrier Lden Lden Lden Lden Lden Lden Lden Lden Lden Lden Lden Lden ABA ABA HDUS Noise Reduction Avg Alba Ang Alba 1 0.0 0.0 0.0	No Barrier Calculated Cartiforn Calculated Calc	No Barrier Calculated Critin	No Barrier Calculated Carifn Calculated Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Calculated Carifn Cari	No Barrier Calculated Cal	No Barrier Calculated Cal	No Barrier Calculated Cal	No Barrier Calculated Cal	No Barrier Calculated with TNM 2.5 Calculated with TNM 2.5

INPUT: INAFFIC FOR LOON									20.13	ZU15 EXISTING	<u>B</u>										
MIG									4	14 June 2016	016										
MIG									₹	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ō																			
RUN:	Buena Vista	btwn	Buena Vista btwn Central & I-210	0																	
Roadway	Points																				
Vame	Name	è.	Segment																		
			ADT	Autos			Σ	MTrucks			HTrucks	cks		_	Buses			_	lotor	Motorcycles	
				%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N % S %N	<u>%</u> =%	S Z	%	2 %E	% 	S	۵%	3% E	N%	S	- Q%	%E %	N _S	•	<u>.</u>	<u>«</u>	σ Z
			veh/24hrs	% % ydm % % ydm % % ydm % % ydm % % % ydm % %	%	Ε	% yd	%	%	hdm	%	%	%	hdm	%	6 9	, u	% Hdr	.0	%	hdm ,
Buena Vista btwn Central & I-210	point1	_	22675	95 71	7.1	86	35	2	1	1 35	5	18	_	35	0	0	0	0	0	0	0
	point2																				

RESULTS: SOUND LEVELS								2015 Existing	ting					
MIG								14 June 2016	016					
MIG								TNM 2.5						
								Calculate	Calculated with TNM 2.5	2.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		2015 E	2015 Existing											
RUN:		Buena	Buena Vista btwn Central & I-210	n Centra	al & 1-21	0								
BARRIER DESIGN:		IN PC	INPUT HEIGHTS	"					Average	avement typ	Average pavement type shall be used unless	ed unless		
									a State hi	ghway agenc	a State highway agency substantiates the use	es the use		
ATMOSPHERICS:		75 dec	75 deg F, 50% RH	¥					of a differ	ent type with	of a different type with approval of FHWA.	HWA.		
Receiver														
Name	è.	#DNs	Existing	No Barrier	ırrier					With Barrier				
			Lden	Lden			Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	ction		
				Calcu	Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	p
								Sub'l Inc					minus	
													Goal	
			dBA	dBA		dBA	dB	dВ		dBA	dB	dВ	dВ	
100 Ft from Centerline			0	0.0	71.8		0 71	71.8	0 Snd Lvl	71.8	0.0		0	0.0
Dwelling Units		# DNs	# DUs Noise Reduction	eductio	_									
			Min	Avg		Max								
			dВ	dВ		фB								
All Selected			0	0.0	0.0		0.0							
All Impacted			0	0.0	0.0	0	0.0							
All that meet NR Goal			1 0	0.0	0.0	0	0.0							
														Ì

NPUT: TRAFFIC FOR Lden									201	2015 Existing	g .								-		
MIG									4	14 June 2016	910								+		
MIG									Ę	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	gu																			
RUN:	Buena Vista s/o I-210	a s/o I-2	10																		
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos	s		2	MTrucks	s		Ŧ	HTrucks			Buses			ĕ	Motorcycles	cles	
				۵%	- - - - - - -	N%	%	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S	۵%	₩ %	N%	S	% 0%	<u>%</u> в	S Z	%	<u>%</u>	% N	s
			veh/24hrs % % mph % %	%	%	. %	% Hdu	%	%	mp	%	%	%	% % ydw % % ydw	%	% ,	Ē	% ydw	%	%	mph
Buena Vista s/o I-210	point1	Ĺ	6350		95 71 98	86	35	2 11	11	-3	35 3	3 18	-	35	0	0	0	0	0	0	0
	point2		2																_		

ESULTS: SOUND LEVELS							2015 Existing	Đ.				
91							14 June 2016	16				
<u> </u>							TNM 2.5					
							Calculated with TNM 2.5	with TNM	2.5			
ESULTS: SOUND LEVELS												
ROJECT/CONTRACT:		2015 Ex	2015 Existing									
:UN:		Buena	Buena Vista s/o I-210	210								
ARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement type	Average pavement type shall be used unless	salun pa	
								a State hig	hway agency	a State highway agency substantiates the use	es the use	
TMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
eceiver												
ame	Š.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Calculated Noise Reduction	tion	
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
00 Ft from Centerline		1	0.0	67.1		0 67.1	0	Snd Lvl	67.1	0.0		0.0
welling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Мах							
			ВВ	дB	용							
All Selected		_	0.0	0.0	0.0	0						
Il Impacted		_	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden								-	2015	2015 Existing	БL			_		_	-				
MIG									14.	14 June 2016	916										
MIG									ž	TNM 2.5											
INPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Cotter n/o Huntington	Junting	ton									Г									
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			Σ	MTrucks			HTrucks	sk		ā	Buses			Mot	Motorcycles	se	
	=			۵%	%E %	S.	%	- NE	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S	S	۵%	%E %	S N	%	9% C	% 	S	۵%	%E	N%	S
			veh/24hrs % % mph % % %	%	%	E	% yd	%	%	mph	% ydm % % ydm	%	۵.	% ydi	%	%	m	% ydm	%	%	щфи
Cotter n/o Huntington	point1	Ì	1075	1075 95 71 98 25 2 11 1	7.1	86	25	7	_	1 25	က	18	-	25	0 0		0 0	0 0	0	0	0
	point2		2																		

ESULTS: SOUND LEVELS							2015 Existing	ing				
⊪G							14 June 2016	016				
MG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
ROJECT/CONTRACT:		2015 Existing	risting									
KUN:		Cotter	Cotter n/o Huntington	lton								
JARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	d unless	
								a State hi	ghway agenc	a State highway agency substantiates the use	s the use	
TMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
lame	Š.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dВ	dB
100 Ft from Centerline		-	0.0	58.1	0	58.1		0 Snd Lvl	58.1	0.0		0.0
Owelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Мах							
			фB	dB	дB							
All Selected		_	0.0	0.0	0.0							
All Impacted		_	0.0	0.0								
Land Clark to the little		•			0							

NPUT: TRAFFIC FOR Lden								ŀ	201	2015 Existing	g .								ŀ		
MIG									4	14 June 2016	016										
MIG									2	TNM 2.5											
INPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	βL																			
RUN:	Highland n/o Huntington	o Hunti	ngton																H		
Roadway	Points																				
Name	Name	Š.	Segment																		
			ADT	Autos			2	MTrucks	s		HTrucks	cks		Ш	Buses			Š	Motorcycles	cles	
				۵%	%E %	N ₀	%	ر %	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S	۵%	3% E	Z%	<u>%</u>	<u>%</u>	<u>%</u> ш	s z	3%	<u>%</u>	% N	S
			veh/24hrs % % mph % % mph % % mph % % mph % % % %	%	%	, v	whdu	%	%	mpł	%	%	%	mph %	%	%	m d	% yc	%	%	mph
Highland n/o Huntington	point1		2225		95 71 98	86	35	2 11	11	- 3	35 3	3 18	-	35	0	0	0	0	0	0	0
	point2	2																			

RESULTS: SOUND LEVELS							2015 Existing	ing				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 E	2015 Existing									
RUN:		Highla	Highland n/o Huntington	tington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	ed unless	
								a State hig	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	FHWA.	
Receiver												
Name	Š	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	dВ		dBA	dВ	фB	В
100 Ft from Centerline		Ĺ	0.0		62.6	0 62.6		0 Snd Lvl	62.6	0.0		0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Мах							
			ВВ	дB	쁑							
All Selected		Ì	1 0.0		0.0	0.0						
All Impacted		Ì	1 0.0		0.0	0.0						
All that meet NR Goal			0.0		0.0	0.0						

NPUT: TRAFFIC FOR Lden									20,	2015 Existing	ting	-	-									
MIG									4	14 June 2016	2016											
MIG									F	TNM 2.5			4									
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2015 Existing	g																				
RUN:	Highland bt	wn Hur	Highland btwn Huntington & Central	entra									L									
oadway	Points			L																		
Vame	Name	Š.	Segment																			
			ADT	Autos	s		_	MTrucks	ks		도	HTrucks			Buses	S			Moto	Motorcycles	s	
				۵%	3%	N%	s	%D %	%D %E %N S %D %E %N S	σ Z	%	3%E	≥	%D %E %N S %D %E %N S %D %E %N	۵%	₩	N%	s	- %	- - - - - -		s
			veh/24hrs % % mph % % mph % % mph % % % %	%	%	%	, udm	6 %	% %	Ë	% yo	%	%	mph	%	%	%	hdm % % hdm	%	%	%	hdu
Highland btwn Huntington & Central	point1	_	8888	36	71	71 98	35	2	11	-	35	3	18	1 35	0	0	0	0	0	0	0	
	point2	2	2																			

RESULTS: SOUND LEVELS							2015 Existing	ing					
MIG							14 June 2016	916					_
MIG							TNM 2.5						_
							Calculated	Calculated with TNM 2.5	2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		2015 E	2015 Existing										_
RUN:		Highla	nd btwn Hu	Highland btwn Huntington & Central	entral								_
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	d unless		
								a State hig	hway agenc	a State highway agency substantiates the use	s the use		
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.		\neg
Receiver													
Name	Š.	#DNs	Existing	No Barrier					With Barrier				
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	tion		
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dВ	
100 Ft from Centerline	-		0.0	9.89		0 68.6	0	Snd Lvl	9.89	0.0		0 0.0	
Dwelling Units		# DNs	Noise Reduction	duction									Т
			Min	Avg	Мах								
			В	ВВ	쁑								
All Selected			0.0	0.0	0.0	0							
All Impacted			0.0	0.0	0.0	0							_
All that meet NR Goal		-	0.0	0.0	0.0	0							

NPUT: TRAFFIC FOR Lden					l	ŀ			201	2015 Existing	gu.			ŀ		ŀ			ŀ		-
MIG									4	14 June 2016	016								+		
MIG									ž	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Huntington w/o Mountain	w/o Mc	untain		1							Г							L		
oadway	Points																				
Name	Name	Š.	Segment																		
			ADT	Autos			2	MTrucks	s		HTrucks	cks		Ш	Buses			ĕ	torcy	Motorcycles	
				۵%	%E %	S No	%	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S	۵%	, =%	N%	%	<u>%</u>	<u>%</u>	s z	%	<u>%</u>	<u>%</u>	S
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % %	%	%	, u	% Hdu	%	%	qm	%	%	%	% Hdu	%	%	Ē	% yc	%	%	mph
Huntington w/o Mountain	point1		8400		95 71 98 40	86	40	2 11	7	4	40 3	18	-	40	0	0	0	0	0	0	0
	point2	2																			

RESULTS: SOUND LEVELS							2015 Existing	bu				
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculated	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 Existing	cisting									
RUN:		Hunting	Huntington w/o Mountain	ountain								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	d unless	
								a State hig	hway agenc	a State highway agency substantiates the use	s the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ant type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Š.	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dВ	dB
100 Ft from Centerline	1		0.0	69.3		0 69.3	3 0	Snd Lvl	69.3	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			фВ	dB	дB							
All Selected		_	0.0	0.0	0.0	0						
All Impacted		-	0.0	0.0	0.0	0						
All that meet NR Goal		_	0.0	0.0	0.0	0						

INPUT: TRAFFIC FOR Lden								ŀ	201	2015 Existing	gu.								-		-
MIG									4	14 June 2016	5016										
MIG									ž	TNM 2.5											
INPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	βL																			
RUN:	Highland s/o Central	o Centr	a		1																
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			Σ	MTrucks	s		Ŧ	HTrucks		ш	Buses			Š	otorc	Motorcycles	
				۵%	%E %	S No	%	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S	۵%	Э%	×	° s	<u>%</u>	<u>«</u>	S N	%	<u>%</u> _	<u>%</u>	S
			veh/24hrs % % % mph % % mph % % mph % % mph % % % mph % % %	%	%	, u ,	% Hdu	%	%	qm	%	%	%	mph %	6 9	%	3	% yd	%	%	mph
Highland s/o Central	point1		2538	II	95 71 98	86	35	2	11	1	35	3 18	-	35	0	0	0	0	0	0	0 0
	point2	2																			

RESULTS: SOUND LEVELS							2015 Existing	bu				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculater	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 E	2015 Existing									
RUN:		Highla	Highland s/o Central	tral								
BARRIER DESIGN:		INPU	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	ed unless	
								a State hig	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 dec	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	FHWA.	
Receiver												
Name	Ñ.	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	dВ		dBA	dB	фB	В
100 Ft from Centerline		Ĺ	1 0.0		63.2	0 63.2		0 Snd Lvl	63.2	2 0.0		0.0
Dwelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Мах							
			θВ	дB	쁑							
All Selected			1 0.0		0.0	0.0						
All Impacted			1 0.0		0.0	0.0						
All that meet NR Goal			1 0.0		0.0	0.0						

INPUT: IRAFFIC FOR Laen									2012	ZU15 EXISTING	Đ.							-	_		
MIG									14 J	14 June 2016	916										
MIG									₽	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Mt Olive n/o Huntington	o Hunti	ngton									П							H		
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			Ξ	MTrucks			HTrucks	sks		Ш	Buses			ě	Motorcycles	ses	
				0%	<u>%</u> =%	S N	3%	%E	N %	S	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	→ 3%	N%	%	<u>%</u>	Ж.	σ Z	3%	<u>%</u>	N%	S
			veh/24hrs	% %	%	E	% ud	%	% % ydm %	mph	% % ydm % % ydm % % ydm	%	- w	w ydu	%	%	Ĕ	% Yu	%	%	mph
Mt Olive n/o Huntington	point1		3738		95 71	98 25	25	2 11	,	1 25	3	18	-	25	0	0	0	0	0	0	0 0
	point2		2																		

RESULTS: SOUND LEVELS								2015 Existing	ing				
MIG								14 June 2016	016				
MIG								TNM 2.5					
								Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		2015 E	2015 Existing										
RUN:		Mt Oliv	Mt Olive n/o Huntington	tington									
BARRIER DESIGN:		INPUT	INPUT HEIGHTS						Average p	avement typ	Average pavement type shall be used unless	salun pe	
									a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 dec	75 deg F, 50% RH						of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver													
Name	Š.	#DNs	Existing	No Barrier	ier					With Barrier			
			Lden	Lden			Increase over existing	existing -	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated		Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
								Sub'l Inc					minus
													Goal
			dBA	dBA	dBA	Ϋ́	dB	dB		dBA	dB	dВ	dВ
100 Ft from Centerline			1 0.	0.0	63.6	0	63.6		0 Snd Lvl	63.6	0.0		0.0
Dwelling Units		# DNs	# DUs Noise Reduction	eduction	l								
			Min	Avg	Σ	Max							
			dВ	dВ	B	фB							
All Selected			0.	0.0	0.0	0.0							
All Impacted			0.	0.0	0.0	0.0							
All that meet NR Goal			0.	0.0	0.0	0.0							
					1								

NPUT: TRAFFIC FOR Lden									201	2015 Existing	gu								ŀ		
MIG									4	14 June 2016	2016										
MIG									Ĕ	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ō																			
RUN:	Huntington	btwn M	Huntington btwn Mountain & BuenaVista	uenaV	sta								L								
Roadway	Points																				
Name	Name	Ņ.	Segment																		
			ADT	Autos			2	MTrucks	S		Ė	HTrucks			Buses			Σ	lotorc	Motorcycles	
				0 %	%E %	Z,	%	٥ %	<u>%</u>	S	□%	₩	N%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N S %N S %N S %N S %	- Q%	%E %	S Nº	%	ان %	<u>№</u>	S
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % %	%	%	۰,	% Hdu	%	%	m	%	%	%	mph	%	%	m %	% Hdı	%	%	hdm
Huntington btwn Mountain & BuenaVista	point1	_	28663	Ш	95 71	86	98 40	2	2 11	1	40	3 18	-	40	0	0	0	0	0	0	0 0
	point2	2																			

RESULTS: SOUND LEVELS							2015 Existing	ing					
SIWI C							44 June 2046	946					
5							14 June 2	010					
MIG							TNM 2.5						
							Calculate	Calculated with TNM 2.5	2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		2015 E	2015 Existing										
RUN:		Huntin	gton btwn	Huntington btwn Mountain & BuenaVista	uenaVist								П
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	ed unless		
								a State hig	hway agenc	a State highway agency substantiates the use	es the us		
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differe	ent type with	of a different type with approval of FHWA.	FHWA.		П
Receiver													
Name	è.	#DNs	Existing	No Barrier					With Barrier		ì		
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction		
				Calculated Crit'n	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dВ		dBA	dB	dB	dВ	
100 Ft from Centerline	1		0.0	74.9	6	0 74.9		0 Snd Lvl	74.9	0.0	0	0	0.0
Dwelling Units		# DNs	Noise Reduction	duction									
			Min	Avg	Max								П
			dВ	dВ	ф								
All Selected			0.0	0.0		0.0							
All Impacted			0.0	0.0		0.0							
All that meet NR Goal		-	0.0	0.0		0.0							

NPU I: IKAFFIC FOR Laen									201	2015 Existing	ting							İ			
MIG									4	14 June 2016	2016										
MIG									ž	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing																				
RUN:	Huntington btwn BuenaVista & Cotter	twn B	uenaVista 8	Cotte	_																
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			2	MTrucks	s		Ė	HTrucks			Buses				Motor	Motorcycles	un.
				۵%	%E	N%	·	ص 2	% 	S	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	%E	N %	s	٠ 0%	 ■%	N%	"	- Q%	, =%	S N%
			veh/24hrs % % mph % %	%	%	. %	% ydu	%	%		% % ydm % % ydm	%	%	mph	%	%	%	% ydw	%	%	ydm %
Huntington btwn BuenaVista & Cotter	point1		27550	92	95 71 98	86	40	2	11	-	40	3 18	-	40	0	0	0	0	0	0	0
	point2		2																		

14 June 2016 C:\TNM25\Duarte\2015\3

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2015 Existing Huntington btwn BuenaVista & Cotter INPUT HEIGHTS 75 deg F, 50% RH RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: ATMOSPHERICS: Receiver © W

2015 Existing

RESULTS: SOUND LEVELS

Name	No.	#DNs	Existing	Existing No Barrier					With Barrier				
			Lden	Lden		Increase over existing Type	existing		Calculated	Calculated Noise Reduction	tion		
				Calculated	Criťn	Calculated Crit'n	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	ted
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dВ	
100 Ft from Centerline	1	1	0.0	74.6	0	74.6	0	Snd Lvl	74.6	0.0		0	0.0
Dwelling Units		# DNs	# DUs Noise Reduction	luction									
			Min	Avg	Max								
			фB	ф	쁑								
All Selected		1	0.0	0.0	0.0								
All Impacted		-	0.0	0.0	0.0								
All that meet NR Goal		1	0.0	0.0	0.0								

NPUT: TRAFFIC FOR Lden								-	201	2015 Existing	ting								ŀ	-	
MIG									4	14 June 2016	2016										
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	g																			
RUN:	Huntington	btwn C	Huntington btwn Cotter & Highland	land									Ц						H		
Roadway	Points					ĺ															
Vame	Name	Š	Segment																		
			ADT	Autos	(0		2	MTrucks	S		Ė	HTrucks			Buses			Σ	otorc	Motorcycles	
				۵%	%E	N%	·	ر %	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N % S %N	S	□ %	%E	N %	s	- Q%	%E %	S Nº	%	<u>%</u>	%	S
			veh/24hrs % % mph % % %	%	%	- %	wph %	%	%	m	%	%	%	% % ydm % % ydm	%	6 %		% % ydw	%	%	mph
Huntington btwn Cotter & Highland	point1		25413	95	25413 95 71 98	86	40	40 2 11	7	4	40	3 18	-	40	0	0	0	0	0	0	0
	point2		2			Ī															

RESULTS: SOUND LEVELS							2015 Existing	ing				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 Existing	risting									
RUN:		Hunting	ton btwn	Huntington btwn Cotter & Highland	land							
3ARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	pavement typ	Average pavement type shall be used unless	ed unless	
								a State h	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a diffe	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Vame	O	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dВ
100 Ft from Centerline		1	0.0	74.4		0 74.4		0 Snd Lvl	74.4	0.0		0.0
Dwelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dB	В							
All Selected		-	0.0	0.0	0.0							
All Impacted		_	0.0	0.0								
I The state of the contract of		*	0		0							

INPU I: IKAFFIC FOR Laen					l				2015	2015 Existing	g .				-				ŀ		
MIG									4,	14 June 2016	016								+		
MIG									Ž	TNM 2.5											
NPUT: TRAFFIC FOR Lden																			+		
PROJECT/CONTRACT:	2015 Existing	ng																			
RUN:	Huntington	btwn H	Huntington btwn Highland & I-605	902															L		
oadway	Points												İ								
Vame	Name	Š.	Segment																		
			ADT	Autos			Σ	MTrucks	"		HTrucks	cks		Ш	Buses			Ĕ	Motorcycles	cles	
				۵%	%E %	S No	%	- NE	%N	S	۵%	∃%	N%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	<u>%</u>	Ж 3	σ Z	%	<u>%</u>	%	s
			veh/24hrs	%	%	u .	% Hdı	%	%	mph	%	%	%	wph %	%	%	Ë	% yc	%	%	mph
Huntington btwn Highland & I-605	point1		28525	28525 95 71 98 40	71	86		2 11	1	1 40	က	18	-	40	0	0	0	0	0	0	0 0
	point2		2																		

RESULTS: SOUND LEVELS								2015 Existing	ing					
MIG								14 June 2016	910					
MIG								TNM 2.5						
								Calculate	Calculated with TNM 2.5	12.5				
RESULTS: SOUND LEVELS														
PROJECT/CONTRACT:		2015 E	2015 Existing											
RUN:		Huntin	gton btwn	Huntington btwn Highland & I-605	§ 1-605									
BARRIER DESIGN:		INPUT	INPUT HEIGHTS						Average p	Average pavement type shall be used unless	oe shall be u	sed unless		
									a State hi	a State highway agency substantiates the use	cy substant	iates the use		-
ATMOSPHERICS:		75 deç	75 deg F, 50% RH	Į.					of a differ	of a different type with approval of FHWA.	h approval o	f FHWA.		
Receiver														
Name	Š.	#DNs	Existing	No Barrier	34					With Barrier	_			
			Lden	Lden		Inci	Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	duction		
				Calculated	ed Crit'n		Calculated	Crit'n	Impact	Lden	Calculated Goal	d Goal	Calculated	eq
								Sub'l Inc					minus	
													Goal	
			dBA	dBA	dBA	dВ		dВ		dBA	dВ	dВ	dВ	
100 Ft from Centerline		Ĺ	0.	0.0	74.9	0	74.9		0 Snd Lvl	74.9		0.0	0	0.0
Dwelling Units		# DUs	# DUs Noise Reduction	eduction										
			Min	Avg	Max									
			dВ	dВ	용									
All Selected)	0.	0.0	0.0	0.0								
All Impacted		Ì	0.	0.0	0.0	0.0								
All that meet NR Goal			0.	0.0	0.0	0.0								

NPUT: TRAFFIC FOR Lden									201	2015 Existing	ting										
MIG									4	14 June 2016	2016		_								
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NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	ing																			
RUN:	Huntington e/o I-605	9-I o/ə u	92																Н		
Roadway	Points			L																	
Vame	Name	Š	Segment																		
			ADT	Autos			_	MTrucks	(S		토	HTrucks			Buses	s		_	Notor	Motorcycles	
				۵%	 ⊒%	N%	·	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	σ z	<u>%</u>	₩ -	х %	s	□%	∃%	N%	s s	-% -0%	%	S
			veh/24hrs % % mph % % % mph % % mph % % %	%	%	%	hdu	%	%	m	% 4	%	%	mph	%	%	%	% ydw	%	%	mph
Huntington e/o I-605	point1		21825	95	95 71 98 40	98	40	2	2 11	-	40	3	18	1 40		0 0	0	0	0	0	0 0
	point2		2																		

	Ì					2015 Exist	ing					
						14 June 2	016					
						TNM 2.5						
						Calculate	d with TNM	2.5				
2	015 Ex	sting										
_	unting	ton e/o I-6	05									
_	NPUT	TEIGHTS					Average p	avement typ	e shall be use	sq nuless		
							a State hig	hway agenc	y substantiat	es the use	•	
-	75 deg	F, 50% RH					of a differe	ant type with	approval of F	HWA.		
No.		Existing	No Barrier					With Barrier				
		Lden	Lden		Increase over	rexisting	Type	Calculated	Noise Redu	tion		
			Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated	-
						Sub'l Inc					minus	
											Goal	
		dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dВ	
-	1	0.0					Snd Lvl	73.5			0	0.0
**	¢ DUs	Noise Re	duction									
		Min	Avg	Мах								
		фВ	дB	쁑								
	1	0.0			0							
	1	0.0			0							
	1	0.0			0							
		2015 EX Hunding INP UT 75 deg # # DUs # DUs 1 1 1 1 1 1 1 1 1	2015 EX Hunding INP UT 75 deg # # DUs # DUs 1 1 1 1 1 1 1 1 1	2015 Existing Huntington e/o L6 INPUT HEIGHTS 75 deg F, 50% RH #DUs Existing Lden ABA 0.0 # DUs Min 0.0 1 0.0 1 0.0	#DUS Existing #DUS Existing #DUS Existing No Barrier #DUS Existing No Barrier #DUS	#DUS Existing #DUS Existing #DUS Existing No Barrier #DUS #DU	#DUS Existing #DUS Existing No Barrier #DUS Existing No Barrier #DUS Calculated Crit'n Calculated	## DUS Faciliting 14 June 20 14 June 2	## DUS Faciliting 14 June 20 14 June 2	## DUS Faciliting 14 June 20 14 June 2	## DUS Faciliting 14 June 20 14 June 2	## DUS FINE TANIM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Calculated with TNM 2.5 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. #DUS Calculated Calculated Criff Calculated

INPUT: TRAFFIC FOR Lden					İ				201	2015 Existing	ting		-									
9										-	- 3		_							-		
MIG									14	14 June 2016	2016											
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INPUT: TRAFFIC FOR Lden													-									
PROJECT/CONTRACT:	2015 Existing	ng																				
RUN:	Central w/o Buena Vista	Buena	Vista										H									
Roadway	Points																					
Vame	Name	Š.	Segment																			
			ADT	Autos			_	MTrucks	(S		토	HTrucks			Bü	Buses			ğ	Motorcycles	cles	
				۵%	, =%	N%	·	<u>%</u>	я %	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	%	3/ _K E	N%	S	□%	%E	% 	S	□ %	<u>%</u>	<u>%</u>	S
			veh/24hrs	%	%	- W	hdu	%	%	% % ydu % % ydu % % ydu % % ydu % % %	% uc	%	%	m	% 4	%	%	mp	% ydu	%	%	mph
Central w/o Buena Vista	point1	Ì	2013	35	95 71		98 40	2	2 11	-	40	6	18	1	40	0	0	0	0	0	0	0 0
	point2		0																	_		

MIG MIG RESULTS: SOUND LEVELS											
MIG RESULTS: SOUND LEVELS						14 June 2016	016				
RESULTS: SOUND LEVELS						TNM 2.5					
RESULTS: SOUND LEVELS						Calculate	Calculated with TNM 2.5	A 2.5			
PROJECT/CONTRACT:	2015 E	2015 Existing									
RUN:	Centra	Central w/o Buena Vista	ı Vista								
BARRIER DESIGN:	INPUT	INPUT HEIGHTS					Average	Average pavement type shall be used unless	e shall be us	ed unless	
							a State hi	a State highway agency substantiates the use	y substantia	tes the use	
ATMOSPHERICS:	75 deg	75 deg F, 50% RH					of a diffe	of a different type with approval of FHWA.	approval of	FHWA.	
Receiver											
Name No.	#DUs	Existing	No Barrier					With Barrier		ì	
		Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction	
			Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
						Sub'l Inc					minus
											Goal
		dBA	dBA	dBA	dB	фB		dBA	В	дB	B
100 Ft from Centerline	1	0.0	63.1		0 63.1		0 Snd Lvl	63.1		0.0	0.0
Dwelling Units	# DNs	Noise Reduction	duction								
		Min	Avg	Мах							
		dВ	dВ	фB							
All Selected		0.0	0.0		0.0						
All Impacted		0.0	0.0		0.0						
All that meet NR Goal		0.0	0.0		0.0						

NPU I: IKAFFIC FUK Lden									2	2015 Existing	sting											
MIG									Ť	14 June 2016	2016		_									
MIG									-	TNM 2.5	10		-									
NPUT: TRAFFIC FOR Lden													-									
PROJECT/CONTRACT:	2015 Existing	m																				
RUN:	Central btwn BuenaVista & I-210WB Off	Buen	aVista & I-2	10WB	Off															L		
Roadway	Points																					
Vame	Name	Š.	Segment																			
			ADT	Autos	S			MTrucks	ks		Ξ	HTrucks			Buses	es			Moto	Motorcycles	es	
				۵%	3%E	N%	S	- - - - - - - - - - -	%D %E %N S %D %E %N S	S N	%	2 %E	₩ :	S	1	₩	N %	S	۵%	%E	N%	s
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Central btwn BuenaVista & I-210WB Off	point1	-	11163		95 71 98 40	98	40	2 11	11	-	40	٠ ٣	18	1 40	0	0	0	0	0	0	0	
	point2	0											-									

RESULTS: SOUND LEVELS							2015 Existing	ing				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 Existing	risting									
RUN:		Central	btwn Bue	Central btwn BuenaVista & I-210WB Off	0WB Off							
3ARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	bavement typ	Average pavement type shall be used unless	ed unless	
								a State hi	ghway agend	a State highway agency substantiates the use	es the us	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	FHWA.	
Receiver												
Vame	Ñ.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dВ
100 Ft from Centerline	_	1	0.0	9.69	0	9.69		0 Snd Lvl	9.69	0.0		0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Мах							
			фВ	dB	ВВ							
All Selected		-	0.0	0.0	0.0							
All Impacted		_	0.0	0.0								
I and the state of the contract of the contrac		*	0		0							

NPUT: TRAFFIC FOR Lden								-	201	2015 Existing	ting										_
MIG									4	14 June 2016	2016		_								
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2015 Existing	g																			
RUN:	Central btw	n I-210	Central btwn I-210WBOff & Highland	hland									Ц								
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			2	MTrucks	S		Ŧ	HTrucks			Buses			2	lotor	Motorcycles	
				۵%	%E	N%	<u>~</u>	Ğ.	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N % S %N	S	□ %	₩	№	S	۵%	%E %	N%	·	<u>%</u>	ж %	σ Z
			veh/24hrs % % mph % % %	%	%	- %	whdu	%	%	m	% % ydm % % ydm	%	%	mph	%	%		% % ydw	%	%	mph
Central btwn I-210WBOff & Highland	point1		7050	Ш	95 71 98	98		40 2 11	1	1	40	3 18	3	40	0	0	0	0	0	0	0
	point2		2																		

RESULTS: SOUND LEVELS							2015 Existing	bu				
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculated	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2015 Existing	isting									
RUN:		Central	btwn I-210	Central btwn I-210WBOff & Highland	hland							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	d unless	
								a State hig	hway agenc	a State highway agency substantiates the use	s the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ant type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	9	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
100 Ft from Centerline	-	_	0.0	8.89		0 68.8	3 0	Snd Lvl	68.8	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dB	дB							
All Selected		-	0.0	0.0	0.0	0						
All Impacted		1	0.0	0.0	0.0	0						
All that meet NR Goal		1	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden						ľ			203	2036 No Project	roject					ŀ			ŀ	ŀ	
MIG									4	14 June 2016	2016		_						+		
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																			+		
PROJECT/CONTRACT:	2036 No Project	ject																			
RUN:	Central e/o Highland	Highlar	Þ										Ц						H		
oadway	Points																				
Vame	Name	Š	Segment																		
			ADT	Autos			2	MTrucks	s		Ē	HTrucks		_	Buses			ĕ	Motorcycles	cles	
				۵%	%D %E %N S %D %E %N S	N%	%	<u>%</u>	₩ =	S	□ %	%E	№	%D %E %N S %D %E %N S %D %E %N S	%D %	%E %	S No	%	<u>%</u>	% N	S
			veh/24hrs % % %	%	%	. %	% % ydw	%	%	m	%	%	%	% % ydu % % ydu	%	6 9	m %	% ydw	%	%	hdm
Sentral e/o Highland	point1		9225	95	95 71 98	98	40	40 2 11	1	1 40		3 18	-	40	0	0	0	0	0	0	0
	point2	2																	_		

RESULTS: SOUND LEVELS							2036 No Project	roject				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Centra	Central e/o Highland	and								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	salun pa	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Š.	#DNs		Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	er existing	Type	Calculated	Noise Reduction	tion	
				Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	ф		dBA	фB	dВ	дВ
100 Ft from Centerline		1	0.0	7.69 0		69 0	0 2.69	0 Snd Lvl	69.7	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Мах							
			ВВ	ВВ	용							
All Selected			0.0	0.0	0.0	10						
All Impacted		Ì	0.0	0.0	0.0	0						
All that meet NR Goal		Ì	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden									20	2036 No Project	Proje	ಕ	ŀ			ŀ	ŀ			ŀ		
MIG									-	14 June 2016	≥ 2016		_									
MIG									H	TNM 2.5	10		+									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	oject																				
RUN:	Mountain n/o Huntington	/o Hun	ington										H									
Roadway	Points																					
Vame	Name	Š.	Segment																			
			ADT	Autos			_	MTrucks	ks		Ξ	HTrucks	·		ā	Buses			Σ	otor	Motorcycles	
				Q%	- 3% E	N%	·	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S	S N	%	<u>%</u>	<u>%</u> ш	S Z	%	<u>%</u>	<u>%</u> ш	s z	%	<u>ه</u>	<u>%</u> щ	σ z
			veh/24hrs % % mph % % mph % % mph % % % mph % %	%	%	u %	hdn %	6 9	% %	E	% ud	%	%	Ε	% yd	%	%	Ε	% % ydw	%	%	hdm
Mountain n/o Huntington	point1		8188	3 95	95 71	98	98 40	2	2 11	_	40	3	18	-	40	0	0	0	0	0	0	0
	point2		0																	-		

T:	RESULTS: SOUND LEVELS							2036 No Project	roject					
14 June 25 15 Security 15 Security 15 June 25 16 June 26 17 June 25 17 June 25 17 June 25 17 June 25 17 June 25 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 26 17 June 27 Jun	1													
SECOND LEVELS SOU	MIG							14 June 2	910					
S. SOUND LEVELS 2036 No Project Mountain n'o Huntington No Huntington No Mountain n'o Huntington No Mountain n'o Hunting	MIG							TNM 2.5						
Strict S								Calculate	d with TNN	12.5				
Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Huntington Mountain n/o Mountain n/	RESULTS: SOUND LEVELS													
Mountain n/o Huntington Mountain n/o Huntington	PROJECT/CONTRACT:		2036 N	o Project										
No. #DUs Existing No Barrier No. #DUs Existing No Barrier No. #DUs Existing No Barrier No. #DUs Existing No Barrier No. #DUs Existing No Barrier No. #DUs Existing No Barrier No. #DUs Existing No Barrier No. #DUs No #DUs No Barrier No. #DUs No Barrier No. #DUs No Barrier No. #DUs No	RUN:		Mount	in n/o Hu	ntington									
HERICS: 75 deg F, 50% RH	BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement typ	e shall be use	d unless		
No. #DUS Existing No Barrier Increase over existing Increase									a State hi	ghway agenc	y substantiate	s the use		
No. #DUs Existing No Barrier No Barr	ATMOSPHERICS:		75 deg	F, 50% R	I				of a differ	ent type with	approval of F	HWA.		
No. #DUs Existing No Barrier Not #Dus Existing No Barrier Not #Dus Existing No Barrier Not #Dus Not #	Receiver													
Lden Lden Lden Increase over existing Type Calculated Noise Reduction Calculated Crif*n Impact Lden Calculated Crif*n Impact Lden Calculated		Š.	#DUs	Existing						With Barrier				
Calculated Crif*n Calculated Crif*n Calculated Crif*n Impact Lden Calculated Calculated Crif*n Impact Lden Calculated				Lden	Lden		Increase ov	er existing	Type	Calculated	Noise Reduc	tion		
A					Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated	pa
A								Sub'l Inc					minus	
													Goal	
1 1 0.0 69.2 0 69.2 0 Snd LW 69.2				dBA	dBA	dBA	dB	dВ		dBA	dB	dB	dВ	
# DUS Noise Reduction Avg Max Abg dB dB dB dB dB dB dB dB dB dB dB dB dB	100 Ft from Centerline		Ĺ	0.		2				69.2			0	0.0
Min Avg Max dB dB dB dB 1 0.0 0.0 1 0.0 0.0	Dwelling Units		# DNs		eduction									
dB dB dB dB dB dB dB dB				Mi'	Avg	Мах								
1 0.0 0.0				dВ	dB	ВВ								
1 1 1	All Selected		Ì	0.			0.0							
000	All Impacted		Ì	0.			0.0							
0.0	All that meet NR Goal		`	0			0.0							

NPUT: TRAFFIC FOR Lden									200	2036 No Project	Proje	5	-		-							
MIG									-	14 June 2016	2016		_									
MIG									-	TNM 2.5	10		+									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	roject																				
RUN:	Mountain s/o Huntington	s/o Huni	ington										H									
Roadway	Points																					
Vame	Name	Š	No. Segment																			
			ADT	Autos			_	MTrucks	ks		Ξ	HTrucks			Bü	Buses			Moto	Motorcycles	es	
				۵%	ÿ =%	N%	<u></u>	- - - -	<u>%</u> В	%D %E %N S %D %E %N S %D %E %N S %D %E %N S	%	<u>%</u>	<u>%</u>	S	□ %	%E	N %	S	۵%	%D %E %N		S
			veh/24hrs % % mph % % mph % % mph % % % %	%	%	ı %	, hdn	%	%	E .	% ud	%	%	m	% u	%	%		mph %	%	%	mph
Mountain s/o Huntington	point1		12700		95 71 98	86	40	2	40 2 11 1		40	က	18	-	40	0	0	0	0 0 0		0	
	point2		2																			

RESULIS: SOUND LEVELS							2036 No Project	olect				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculated	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Mount	Mountain s/o Huntington	tington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	Average pavement type shall be used unless	e shall be us	sed unless	
								a State hig	a State highway agency substantiates the use	y substantia	tes the use	
ATMOSPHERICS:		75 deç	75 deg F, 50% RH					of a differ	of a different type with approval of FHWA.	approval of	FHWA.	
Receiver												
Name	No.	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated Crit'n	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculate
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dB	dВ
100 Ft from Centerline		-	1 0.0	71.1		0 71.1	0	Snd Lvl	71.1		0.0	0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dВ	ВВ							
All Selected			1 0.0	0.0	0.0	0						
All Impacted			1 0.0	0.0	0.0	0						
All that meet NR Goal			0.0	0.0		0.0						

NPUT: TRAFFIC FOR Lden									20.	2036 No Project	Proje	t l	-							ŀ		
MIG									Ť	14 June 2016	e 201		_									
MIG									-	TNM 2.5	2											
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	oject																				
RUN:	Buena Vista n/o Huntington	a n/o H	untington										H									
Roadway	Points						İ															
Vame	Name	Š.	Segment				İ															
			ADT	Autos			_	MTrucks	ks		. I	HTrucks	S		ā	Buses			Σ	otorc	Motorcycles	
				Q%	3%E	N%	S.	° 0%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S No	<u>%</u>	<u>%</u>	ñ %	σ z	%	<u>%</u>	<u>%</u> ш	s z	%	<u>%</u>	<u>%</u> ш	S
			veh/24hrs % % mph % % mph % % mph % % % %	%	%	1 %	hdn.	6 %	% %	u,	% Hdi	%	%	Ε	% udi	%	%	Е	% ydu	%	%	mph
Buena Vista n/o Huntington	point1		6113	3 95	95 71	98	98 35	2	2 11	-	35	3	18	-	35	0	0	0	0	0	0	0 0
	point2		2																	_		

RESULTS: SOUND LEVELS							2036 No Project	roject				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Buena	Vista n/o l	Buena Vista n/o Huntington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	sq nuless	
								a State hi	ghway agend	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	ě.	#DNs	Existing	Existing No Barrier					With Barrier	_		
			Lden	Lden		Increase ov	Increase over existing	Type	Calculated	Noise Reduction	tion	
				Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	фB	ВВ		dBA	dB	dВ	æ
100 Ft from Centerline		Ĺ	0.0	0.79		9 0	0.79	0 Snd Lvl	67.0	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Ā	Avg	Max							
			ВВ	쁑	쁑							
All Selected		Ì	0.0	0.0	0.0	lo						
All Impacted		Ì	0.0	0.0	0.0	0						
All that meet NR Goal		,	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden									20.	2036 No Project	Proje	, l	-							-		
MIG									7	14 June 2016	2016		_									
MIG									F	TNM 2.5	10		_									
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ject																				
RUN:	Buena Vista	a btwn	Buena Vista btwn Huntington & Central	& Cent	ra I								L					L				
Roadway	Points				Ï		ĺ															
Vame	Name	Š	Segment				İ															
			ADT	Autos			_	MTrucks	ks		도	HTrucks			Bus	Buses			Mot	Motorcycles	es	
				۵%	- - - - - - -	N%	S.	° 0%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S N	%	3 %E	- N	S	□ %	₩ %	N %	Ø	□%	₩ ₩	%	Ø
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % % 8	%	%	- %	hdn.	%	% %	E	% ud	%	%	dm	% 4	%	%	mpf	%	%	%	hdm
Buena Vista btwn Huntington & Central	point1	Ĺ	18138	Ш	71	98	35	2	95 71 98 35 2 11	~	35	3	18	-	35	0	0	0	0	0	0	0 0
	point2		2										L									

RESULTS: SOUND LEVELS	٠						2036 No Project	roject					ſ
							:	_ :					
MIG							14 June 2016	910					
MIG							TNM 2.5						
							Calculate	Calculated with TNM 2.5	12.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		2036 N	2036 No Project										
RUN:		Buena	Vista btwn	Buena Vista btwn Huntington & Central	& Central								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	pavement typ	Average pavement type shall be used unless	sq nuless		
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use		
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.		
Receiver													
Name	Š	#DNs	Existing	No Barrier					With Barrier				
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	ction		
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated	-
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dВ	dВ	
100 Ft from Centerline		1	0.0	71.7		0 71.7		0 Snd Lvl	71.7	0.0		0	0.0
Dwelling Units		# DNs	Noise Reduction	duction									
			Min	Avg	Мах								
			ВВ	dВ	쁑								
All Selected			0.0	0.0		0.0							
All Impacted			0.0	0.0		0.0							
All that meet NR Goal		_	0.0	0.0		0.0							
												1	

									ı	-	- 3	-	_							4		
MIG									7	14 June 2016	2016	_										
MIG									F	TNM 2.5			_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ject																				
RUN:	Buena Vista	btwn	Buena Vista btwn Central & I-210	10									H							Ц		
Roadway	Points																					
Name	Name	è.	Segment																			
			ADT	Autos	"		_	MTrucks	(S		Ξ	HTrucks			Bus	Buses			Mot	Motorcycles	es	
				۵%	3%E	N%	s	<u>%</u>	я %	υ Z	%	<u>%</u>	<u>%</u> 	s z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N	% E	<u>×</u>	S	0%	%E	№	s
			veh/24hrs	%	%	%	4dm % % 4dm %	% %	%	Ε.	% uc	%	%	Ĕ	% % ydu	%	%	mpł	% ч	%	%	mph
Buena Vista btwn Central & I-210	point1	Ĺ	26775 95 71 98 35 2 11	92	71	98	35	2	7	-	32	က	18	~	35 0 0 0 0	0	0	0	0	0		0
	point2	.,																				

RESULTS: SOUND LEVELS	ļ						2036 No Project	roject				
							_:	_ ;				
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Buena	Vista btwr	Buena Vista btwn Central & I-210	10							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	ed unless	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Ñ.	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dB	dВ
100 Ft from Centerline		Ĺ	0.0	0 72.5	2	0 72.5		0 Snd Lvl	72.5	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Мах							
			дB	dВ	æ							
All Selected		Ì	0.0	0.0		0.0						
All Impacted		`	0.0	0.0		0.0						
All that meet NR Goal		`	0.0	0.0		0.0						
		1										

													_									
MIG									_	14 June 2016	e 2016											
MIG									۲	TNM 2.5	2		_									
													_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ject																				
RUN:	Buena Vista s/o I-210	?-I 0/s	10																	Ц		
Roadway	Points																					
Name	Name	è	No. Segment																			
			ADT	Autos	un.			MTrucks	ks		Ξ	HTrucks	s		Bus	Buses			Mot	Motorcycles	es	
				۵%	%D %E %N S	N %	s	<u>°</u>	<u>%</u> ⊒%	S N	%	<u>%</u>	<u>%</u> ш	S	S N% S N% S N% S N% S N% S N% S N% S N%	<u>%</u>	№	S	□%	%D %E %N	%	S
			veh/24hrs	%	%	%	mph	%	% % ydm	ш	% uduu	%	%	щ	% % ydu	%	%	w hdm	% "	%	%	mph
Buena Vista s/o I-210	point1	Ĺ	7500	7500 95 71 98 35 2 11 1	71	98	35	2	11		35	3	18	-	35	0	0	0	0 0	0 C	0	0
	point2																					

14 June 2016 C:\TNM25\Duarte\2036 No Project\16

Calculated minus Goal Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal фВ 6.79 14 June 2016 TNM 2.5 Calculated with TNM 2.5 Snd Lvl 2036 No Project Increase over existing
Calculated Crit'n I 쁑 #DUs Existing No Barrier
Lden Lden
Calculated Criffn Max dBA Noise Reduction
Min Avg
dB dB 2036 No Project Buena Vista s/o I-210 INPUT HEIGHTS dBA 75 deg F, 50% RH dBA # DNs RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: RESULTS: SOUND LEVELS 100 Ft from Centerline Dwelling Units ATMOSPHERICS: MIG

0.0

0.0

All Selected
All Impacted
All that meet NR Goal

2036 No Project INPUT: TRAFFIC FOR Lden

MIG										14 Ju	14 June 2016	91											
MIG									ĺ	TNM 2.5	2.5												
INPUT: TRAFFIC FOR Lden																							
PROJECT/CONTRACT:	2036 No Project	ect																					
RUN:	Cotter n/o Huntington	unting	ton																				
Roadway	Points																						
Name	Name	ě	No. Segment																				
			ADT	Autos	(n			MTrucks	cks		_	HTrucks	cks			Buses	s			Motorcycles	cycle	s	
				۵%	⊒%	N%	s	۵%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %D %E	N%	s	0%	- 3%	N%	s	0 %	∃%	N%	s	<u>-</u> %	- - - - - - - -	Z%	s
			veh/24hrs	%	%	%	mph	%	% % ydu % % ydu % % %	%	, udu	%	%		mph	% % W Hdm % % W Hdm	%	%	mph	%	%	%	mph
Cotter n/o Huntington	point1		1263	92	71	98	25	2	1263 95 71 98 25 2 11 1	-	25	က	18	-	25	25 0	0	0	0	0	0	0	0
	point2		2																				

RESULTS: SOUND LEVELS							2036 No Project	roject				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 No	2036 No Project									
RUN:		Cotter	Cotter n/o Huntington	gton								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	ed unless	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					a State hi of a differ	ghway agenc ent type with	a State highway agency substantiates the use of a different type with approval of FHWA.	es the use	
Receiver)							:			
	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
100 Ft from Centerline	1	-	0.0	58.8	3	0 58.8		0 Snd Lvl	58.8	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Мах							
			ВВ	ВВ	쁑							
All Selected		_	0.0	0.0		0.0						
All Impacted		_	0.0	0.0		0.0						
All that meet NR Goal		_	0.0	0.0		0.0						

2036 No Project INPUT: TRAFFIC FOR Lden

									_; 		- 3		-							+		
MIG									14) nu	14 June 2016											
MIG									Ε	TNM 2.5	2		_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ect																				
RUN:	Highland n/o Huntington	Hunti	ngton										H							H		
Roadway	Points																					
Name	Name	è	Segment																			
			ADT	Autos	"		_	MTrucks	(S		Ξ	HTrucks			Bais	Buses			Mo	Motorcycles	ses	
				۵%	- - - - - - -	Z%	s	<u>%</u>	я %	σ Z	%	<u>%</u>	<u>%</u> 	σ Z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	% E	<u>%</u>	S	₽	₩ 	×%	S
			veh/24hrs % % mph % % mph % % mph % % mph % % % % % % % %	%	%	%	hdu	% %	%	E	% yd	%	%	Ε	% yc	%	%	mp	% 4	%		mph
Highland n/o Huntington	point1	-	2625	92	71	86	2625 95 71 98 35 2 11	2	7	-	32	က	18	~	35 0	0	0	0 0	0 0	0	0	0 0
	point2	2																				

14 June 2016 C:\TNM25\Duarte\2036 No Project\18

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2036 No Project Highland n/o Huntington INPUT HEIGHTS 75 deg F, 50% RH RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: ATMOSPHERICS: Receiver © W

2036 No Project

RESULTS: SOUND LEVELS

Necelvel												
Name	No.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing Type	existing		Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n		Calculated Crit'n		Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
100 Ft from Centerline	1	1	0.0	63.3	0	63.3	0	Snd Lvl	63.3	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	luction								
			Min	Avg	Мах							
			dВ	дB	용							
All Selected		1	0.0	0.0	0.0							
All Impacted		1	0.0	0.0	0.0							
All that meet NR Goal		-	0.0	0.0	0.0							

2036 No Project INPUT: TRAFFIC FOR Lden

													_									
MIG									4	June	14 June 2016	_										
MIG									F	TNM 2.5	2		_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ect																				
RUN:	Highland btwn Huntington & Central	n Hun	ington & Co	entral									Н									
Roadway	Points																					
Name	Name	No.	Segment																			
			ADT	Autos	"		_	MTrucks	ks		Ξ	HTrucks			Buses	es			Moto	Motorcycles	s	
				۵%		N%	S	<u>~</u> 0%	<u>%</u> "	σ z	%	<u>%</u>	<u>%</u>	S	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	Э %	N %	S	۵%	3% E		s
			veh/24hrs % % mph % % mph % % % mph % % % mph % % % % % % % % %	%	%	%	hdm	6 %	% ,	Е	% yd	%	%	m	% u	%	%	mph	%	%	%	mph
Highland btwn Huntington & Central	point1	-	10488	95	71	98	35	2	10488 95 71 98 35 2 11	-	32	6	18 1	-	35 0 0 0 0 0	0	0		0	0	0	0
	point2	2																				

RESULTS: SOUND LEVELS	Ì						2036 No Project	roject				
								_ 3				
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 No	2036 No Project									
RUN:		Highlan	d btwn Hu	Highland btwn Huntington & Central	entral							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	ed unless	
								a State hi	ghway agend	a State highway agency substantiates the use	es the us	6
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	r existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dВ	dВ
100 Ft from Centerline	1	1	0.0	69.3	3	0 69.3		0 Snd Lvl	69.3	0.0	0	0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Мах							
			ВВ	ВВ	쁑							
All Selected		_	0.0	0.0		0.0						
All Impacted		_	0.0	0.0		0.0						
All that meet NR Goal		1	0.0	0.0		0.0						

NPUT: TRAFFIC FOR Lden									203	2036 No Project	rojec	,										
MIG									4	14 June 2016	2016		_									
MIG									É	TNM 2.5			_									
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ject																				
RUN:	Huntington w/o Mountain	w/o Mc	untain										L									
oadway	Points																					
Vame	Name	Š	Segment																			
			ADT	Autos	(D		_	MTrucks	ks		노	HTrucks			Buses	S			Moto	Motorcycles	s	
	-			۵%	3%E	N%	(O	-% -0%	%D %E %N S %D %E %N S	σ Z	%	%D %E %N S %D %E %N S %D %E %N	<u>«</u>	S	۵%	₩	N%	s		3%E		s
			veh/24hrs % % mph % % mph % % mph % % % %	%	%	1 %	nph 9	%	%	ä	% u	%	%	mph	%	%	%	mph	ndm % % hdm	%	%	mph
Huntington w/o Mountain	point1	_	9913		95 71 98 40 2 11	98	40	2	11	-	40	3	18	1 40	0	0	0	0	0	0	0	
	point2	2																				

RESULTS: SOUND LEVELS							2036 No Project	roject				
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 No	2036 No Project									
RUN:		Hunting	Huntington w/o Mountain	ountain								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	pavement typ	Average pavement type shall be used unless	d unless	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Š.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	er existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	ф	ф		dBA	dB	dВ	ф
100 Ft from Centerline	1	-	0.0	70.1		0 70	70.1	0 Snd Lvl	70.1	1 0.0	0	0.0
Dwelling Units		# DUs	Noise Reduction	duction								
			Min	Avg	Мах							
			dВ	dB	дB							
All Selected		1	0.0	0.0	0.0	0						
All Impacted		1	0.0	0.0	0.0	0						
All that meet NR Goal		-	0.0	0.0	0.0	0						

INPUT: TRAFFIC FOR Lden								-	203	2036 No Project	roject								-		
MIG									4	14 June 2016	2016										
MIG									Z	TNM 2.5											
INPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 No Project	oject																			
RUN:	Highland s/o Central	o Cent	je.								L										
Roadway	Points																				
Vame	Name	ò	Segment																		
			ADT	Autos	"		2	MTrucks	S		Ė	HTrucks		_	Buses			ĕ	Motorcycles	cles	
				۵%	%D %E %N S %D %E %N S	N%	<u>%</u>	ر ا	<u>%</u> ш	S	□ %	₩ ₩	×	%D %E %N S %D %E %N S %D %E %N S	%D %	%E %	S N	%	%E	2 %	S
			veh/24hrs % % %	%	%	- %	% % ydm	%	%		% ydw	%	%	% ydw % %	%	%	m %	% ydw	%	%	mph
Highland s/o Central	point1		2988	36	95 71 98	98	35	2	11	1.	35	3 18	-	35	0	0	0	0	0	0	0
	point2		2			l								Ĺ							

C:\TNM25\Duarte\2036 No Project\20

RESULTS: SOUND LEVELS							2036 No Project	roject	,			
SIM							14 June 2016	904				
0							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Highlar	Highland s/o Central	tral								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	sq nuless	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	ŏ.	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	er existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dB
100 Ft from Centerline		1	0.0	0 63.9	6	0 63.9		0 Snd Lvl	63.9	0.0		0.0
Dwelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			фВ	dВ	В							
All Selected		-	0.0	0.0		0.0						
All Impacted		-	0.0	0.0		0.0						
All that meet NR Goal		1	0.0	0.0		0.0						

MIG									4	14 June 2016	016											
MIG									₹	TNM 2.5												
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ect																				
RUN:	Mt Olive n/o Huntington	Huntir	ıgton																			
Roadway	Points																					
Name	Name	ė	Segment																			
			ADT	Autos			2	MTrucks			Ę	HTrucks			Buses	s			Motorcycles	cycle	"	_
				۵%	%E %	S N	*	8 N/0 S N/2	₩ 	S	□ %	₩ %	× %	s	۵%	, E	N%	s	<u> </u>	<u>,</u> %Е	Z,	"
			veh/24hrs	%	6 %	, u	% Hdu	4dw % % % 4dw % % 4dw % % 4dw % % % 4dw % % %	%	mph	%	%	%	mph	%	%	%	mph	, %	%	/e	hdn
Mt Olive n/o Huntington	point1	_	4413	95	7.1	86	25	4413 95 71 98 25 2 11 1 25 3	=	7	(,)	18	_	25	0		0	0	0 0 0 0 0	0	0	0
	point2	2																				

RESULTS: SOUND LEVELS	ŀ	ļ					2036 No Project	roject		ŀ		
							;					
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Mt Oliv	Mt Olive n/o Huntington	ington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	pavement typ	Average pavement type shall be used unless	salun p	
								a State hi	ghway agend	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	ě.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase ov	Increase over existing	Type	Calculated	Noise Reduction	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
								L				minus
												Goal
			dBA	dBA	dBA	ф	8 B		dBA	ф	дB	В
100 Ft from Centerline		Ĺ	0.0	0 64.3		79 0	64.3	0 Snd Lvl	64.3	3 0.0	0	0.0
Dwelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			дB	æ	용							
All Selected		Ì	0.0	0.0	0.0	0						
All Impacted		`	0.0	0.0	0.0	0						
All that meet NR Goal		`	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden									203	2036 No Project	roject								-		
MIG									4	14 June 2016	2016								+		
MIG									Ĕ	TNM 2.5											
INPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 No Project	oject																			
RUN:	Huntington	btwn N	Huntington btwn Mountain & BuenaVista	uena\	ista																
Roadway	Points																				
Vame	Name	No.	Segment																		
			ADT	Autos			_	MTrucks	S		Ė	HTrucks			Buses			ĕ	Motorcycles	cles	
				۵%	%E	N%	(O	<u>%</u>	<u>%</u>	S	□ %	₩ ₩	≥	s	<u>-</u> 0%	%E %	N _S	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	<u>%</u> E	N %	S
			veh/24hrs % % mph % % % mph % % % mph % %	%	%	. %	hdu	%	%	ш	%	%	%	mph	%	%	ш %	% ydw	%	%	mph
Huntington btwn Mountain & BuenaVista	point1		33825		95 71	86	40	2	2 11	1	40	3 18		40		0 0	0	0	0	0	0 0
	point2	0																			

14 June 2016 C:\TNM25\Duarte\2036 No Project\2 2036 No Project RESULTS: SOUND LEVELS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2036 No Project Huntington btwn Mountain & BuenaVista INPUT HEIGHTS RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: ATMOSPHERICS: Receiver © W

75 deg F, 50% RH

Name	Š.	#DNs	Existing	No. #DUs Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing Type	existing		Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n		Calculated Crit'n		Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	фB		dBA	фB	дB	B
100 Ft from Centerline		-	0.0	75.7	0	75.7	0	Snd Lvl	75.7	0.0		0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dВ	дB							
All Selected		-	0.0	0.0	0.0							
All Impacted		_	0.0	0.0	0.0							
All that meet NR Goal		-	0.0	0.0	0.0							

NPUT: TRAFFIC FOR Lden									203	2036 No Project	roject										
MIG									4	14 June 2016	2016										
MIG									₽	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 No Project	ject																			
RUN:	Huntington	btwn B	Huntington btwn BuenaVista & Cotter	Cotte	_																
oadway	Points																				
Name	Name	Š	Segment																		
			ADT	Autos			2	MTrucks	s)		토	HTrucks		_	Buses	10		2	lotor	Motorcycles	
				۵%	%E →	N%	°	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S	□ %	₩ %	N%	s	- Q%	%E →	S N%	%	ت %	%	σ Z
			veh/24hrs % % % mph % % mph % % mph % % mph % % % mph % % %	%	%	. %	hdu %	%	%	m	%	%	%	hdm	%	5 %	m %	% Hdr	%	%	mph
Huntington btwn BuenaVista & Cotter	point1	_	32500		95 71 98	98	40	2	11	4	40	3 18	-	40	0	0	0	0	0	0	0
	point2	2				l															

KESULIS: SOUND LEVELS							2036 No Project	roject				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculated	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Hunting	gton btwn	Huntington btwn BuenaVista & Cotter	& Cotter							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	pavement type	Average pavement type shall be used unless	ed unles	
								a State hi	ghway agen	a State highway agency substantiates the use	tes the us	9
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	I				of a differ	ent type witl	of a different type with approval of FHWA.	FHWA.	
Receiver												
Name	Š.	#DNs	Existing	No Barrier					With Barrier	_		
			Lden	Lden		Increase over existing	er existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	ф		dBA	dB	фВ	ВВ
100 Ft from Centerline		1	0.0	0 75.3		0 75	75.3 0	0 Snd Lvl	75.3		0.0	0.0
Dwelling Units		# DNs		Noise Reduction								
			Min	Avg	Max							
			дB	용	용							
All Selected		_	0.0	0.0	0.0	0						
All Impacted		_	0.0	0.0	0.0	0						
All that meet NR Goal			0.0	0.0	0.0	0						

MIG									4	- ú	14 June 2016	- ,,	-									
MIG									F	TNM 2.5	2		_									
													_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ect																				
RUN:	Huntington btwn Cotter & Highland	twn Co	tter & High	and									Н									
Roadway	Points												H									
Name	Name	ě	Segment																			
			ADT	Autos	un.			MTrucks	ks		Ξ	HTrucks			Bus	Buses			Mot	Motorcycles	es	
				۵%	3% E	N%	s	<u>°</u>	<u>%</u> ⊒%	ς Z	%	<u>%</u>	<u>%</u> 	s z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	%	2 %	S	0%	₩ %	Z %	s
			veh/24hrs % % % mph % % mph % % % mph % %	%	%	%	, udm	6 %	% %	ш	% Hdı	%	%	Ε	% uc	%	%	mpł	% ر	%	%	mph
Huntington btwn Cotter & Highland	point1	_	29975 95 71 98 40 2 11 1	92	71	98	40	2	7	-	40	က	8	-	3 18 1 40 0 0 0 0 0	0	0	0	0	0		0
	point2	2																				

14 June 2016

MIG							14 June 2016	2016				
MIG							TNM 2.5					
							Calculat	Calculated with TNM 2.5	M 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Hunting	gton btwn	Huntington btwn Cotter & Highland	hland							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	Average pavement type shall be used unless	pe shall be us	ed unless	
								a State	a State highway agency substantiates the use	cy substantia	tes the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a diff	of a different type with approval of FHWA.	h approval of	FHWA.	
Receiver												
Name	N	#DNs	Existing	Existing No Barrier					With Barrier	-		
			Lden	Lden		Increase	Increase over existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criť	Calculated	d Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc	o				minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dB
100 Ft from Centerline	-		0.0	75.1	-	0	75.1	0 Snd Lvl	1 75.1		0.0	0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Mir	Avg	Max							
			ф	ВВ	쁑							
All Selected		-	0.0		0.0	0.0						
All Impacted			0.0		0.0	0.0						
All that meet NR Goal			0.0		0.0	0.0						

											- 3		_							_		
MIG									14	June	14 June 2016											
MIG									≓	TNM 2.5			_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ect																				
RUN:	Huntington btwn Highland & I-605	twn H	ghland & I-6	902									H							L		
Roadway	Points																					
Name	Name	è	Segment																			
			ADT	Autos	"		_	MTrucks	s		눞	HTrucks			Buses	es			Mot	Motorcycles	es	
				۵%	 ⊒%	Z N	'n	<u>%</u>	<u>%</u> ш	S	%	₩ 6	%	S	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N	% E	N %	S	□%	₩ 	2 %	S
			veh/24hrs % % % mph % % mph % % % mph % % % % % % % %	%	%	. %	hdu	% %	%	ш	% u	%	%	m	% u	%	%	mpł	% ر	%	%	mph
Huntington btwn Highland & I-605	point1	_	33675 95 71 98 40 2 11 1	92	71	86	40	2	7	-	40	3	00	-	18 1 40 0 0		0	0 0	0 0	0		0
	point2	2																				

TIMM 2.5 TIMM 2.5	RESULTS: SOUND LEVELS							2036 No	2036 No Project				
TS: SOUND LEVELS CAICUIDE AWITH TNIM 2.5 TS SOUND LEVELS CAICUIDE WITH TNIM 2.5 THURTH TO THE CHITS TS AGG F, 50% RH INDUT HEIGHTS ER DESIGN: Hurtington blvn Highland & I-605 Hurtington blvn Highland & I-605 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. TS AGG F, 50% RH Er DESIGN: No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS No Barrier No #DUS No Barrier No #DUS No Barrier No #DUS No #DUS No #DUS No #DUS No #DUS No #DUS NO #	O.							14	2000				
TS: SOUND LEVELS Calculated With TNM 2.5 Calculated With TNM 2.5	9							100 +	2 2010				
Table Calculated Calculat	MIG							TNM 2.	2				
TS: SOUND LEVELS								Calcula	ted with TI	IM 2.5			
Figure F	RESULTS: SOUND LEVELS												
Huntington btwn Highland & 1-605 Average pavement type shall be used unless a State highway agency substantiates the used unless and the spanning of the spanning and the used unless and the spanning and the used unless and the spanning and the used unless and th	PROJECT/CONTRACT:		2036 N	lo Project									
No. Mol. M	RUN:		Huntin	gton btwn	Highland & I	-605							
Particle Particle	BARRIER DESIGN:		INPUT	. HEIGHTS					Average	pavement ty	pe shall be us	ed unless	
PPHERICS: 75 deg F, 50% RH PHERICS: of a different type with approval of FHWA. er Mol. #DUs Existing No Barrier Moles Reduction Moles Reduction from Centerline 1 1 0 75.7 0 75.7 0 80 L/M 75.7 0 80 L/M 48 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>a State</td> <td>highway agen</td> <td>cy substantia</td> <td>es the use</td> <td></td>									a State	highway agen	cy substantia	es the use	
er No. #DUs Existing No. Barrier Increase over existing Type Calculated Collection from Centerline 1 dBA	ATMOSPHERICS:		75 deg	y F, 50% R	I				of a diff	erent type wit	h approval of	FHWA.	
No. #DUs Existing No Barrier Not #DUs Existing No Barrier Not #DUs Existing No Barrier Not Existing No Barrier Not Existing Not Not Existing Not Not Existing Not Existing Not Existing Not Existing Not Existing Not Existing Not Existing Not Exis	Receiver												
Lden Lden Lden Increase over existing Type Calculated Noise Reduction	Name	Š.	#DNs		No Barrier					With Barrie	-		
Calculated Crif'n Calculated Crif'n Impact Lden Calculated Goal				Lden	Lden		Increase ov	ver existing		Calculated	Noise Redu	ction	
Sub Inc GBA					Calculated	Criťn	Calculated	Crit'n			Calculated	Goal	Calculated
													minus
dBA dBA dBA dB dB dB dB													Goal
1 1 0.0 75.7 0 75.7 0.0 0.0 # DUs Min Avg Max 4 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1 0.0				dBA	dBA	dBA	дB	фB		dBA	dB	dВ	В
# DUS Noise Reduction	100 Ft from Centerline		1	1 0.0				5.7					0.0
Min Avg Max	Dwelling Units		# DUs	_	aduction								
dB dB dB dB dB dB dB dB				Min.	Avg	Max							
1 00 00				ф	ВВ	쁑							
1 0.0	All Selected			1 0.0			0						
0.0	All Impacted			0.0			0						
9	All that meet NR Goal			0.0			0						

NPUT: TRAFFIC FOR Lden									203(2036 No Project	roject								-		
MIG									4	14 June 2016	010								-		
MIG									Ę	TNM 2.5											
NPUT: TRAFFIC FOR Lden																			-		
PROJECT/CONTRACT:	2036 No Project	ject																			
RUN:	Huntington e/o I-605)9-I o/ə	12																H		
Roadway	Points																				
Vame	Name	ŏ.	Segment																		
			ADT	Autos			Σ	MTrucks	s		Ŧ	HTrucks		ш	Buses			ě	Motorcycles	ses	
				۵%	%D %E %N S %D %E %N S	N%	%	, Q	₩ ₩	S	□ %	3% E	N%	%D %E %N S %D %E %N S %D %E %N S	% Q;	<u>%</u>	σ Z	%	<u>%</u>	N %	S
			veh/24hrs % % mph % %	%	%	u %	w ydu	%	%	mpł	%	%	%	% % ydw % % ydw	% %	%	Ĕ	% ydw	%	%	mph
Huntington e/o I-605	point1		25750		95 71 98	98	40	40 2 11	11	1 40		3 18	-	40	0	0	0	0	0	0	0
	point2		2																		

14 June 2016

RESULTS: SOUND LEVELS							2036 No Project	roject				
MIG							14 June 2016	2016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:	203	98 No	2036 No Project									
RUN:	로	ntingt	Huntington e/o I-605	05								
BARRIER DESIGN:	Z	PUTH	INPUT HEIGHTS					Average	pavement typ	Average pavement type shall be used unless	salun p	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:	75	deg F	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	No. #DI	#DONS E	xisting	Existing No Barrier					With Barrier			
		_	Lden	Lden		Increase ov	ncrease over existing	Type	Calculated	Calculated Noise Reduction	tion	
				ated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
												minus
												Goal
		σ	dBA	dBA	dBA	dB	В		dBA	dB	dВ	дВ
100 Ft from Centerline	-	1	0.0	74.2		0 74	74.2	0 Snd Lvl	74.2	0.0		0.0
Dwelling Units	1#	# DNs	Noise Reduction	luction								
		Ī	Min	Avg	Мах							
			фB	ф	쁑							
All Selected		-	0.0	0.0	0.0	0						
All Impacted		-	0.0	0.0	0.0	0						
All that meet NR Goal		-	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden									2036	2036 No Project	oject		İ			-	ŀ		_		
MIG									4	14 June 2016	016								-		
MIG									Ē	TNM 2.5											
NPUT: TRAFFIC FOR Lden																			-		
PROJECT/CONTRACT:	2036 No Project	oject																			
RUN:	Central w/o Buena Vista	Buena	Vista																		
Roadway	Points																				
Vame	Name	No.	Segment																		
			ADT	Autos			Σ	MTrucks	- 40		HTrucks	cks			Buses			Mot	Motorcycles	es	
				۵%	%D %E %N S %D %E %N S	S No	%	<u>%</u>	<u>×</u>	s	۵%	3% E	N%	%D %E %N S %D %E %N S %D %E %N	<u>%</u>	<u>%</u>	S	□ %	%E	N %	s
			veh/24hrs % % %	%	%	, u	% % ydw	%	%	mph	%	%	%	% % ydm % % ydm	%	%		% ydw	%	%	hdm
Central w/o Buena Vista	point1		2375		95 71 98	98	40 2 11	2	11	1 40	3	18	-	40	0	0	0	0	0	0	0
	point2	2																			

14 June 2016 C:\TNM25\Duarte\2036 No Project\7

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2036 No Project Central w/o Buena Vista INPUT HEIGHTS RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: © W

2036 No Project

RESULTS: SOUND LEVELS

ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differe	int type with	of a different type with approval of FHWA.	HWA.		\neg
Receiver													
Name	No.	#DNs	Existing	No Barrier					With Barrier				
			Lden	Lden		Increase over existing Type	rexisting		Calculated	Calculated Noise Reduction	tion		
				Calculated Crit'n		Calculated Crit'n		Impact	Lden	Calculated Goal	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	дB	dВ		dBA	dB	дB	8 B	
100 Ft from Centerline	1	1	0.0	63.8)	0 63.8	0	Snd Lvl	63.8	0.0		0.0	
Dwelling Units		# DNs	# DUs Noise Reduction	duction									
			Min	Avg	Мах								
			ВВ	дB	용								
All Selected		-	0.0	0.0	0.0	0							
All Impacted		-	0.0	0.0	0.0	0							_
All that meet NR Goal		1	0.0	0.0	0.0	0							
													1

													_							-			
MIG									•	14 June 2016	ne 20'	16											
MIG									Ė	TNM 2.5	2		_										
INPUT: TRAFFIC FOR Lden																							
PROJECT/CONTRACT:	2036 No Project	ject																					
RUN:	Central btw	n Buer	Central btwn BuenaVista & I-210WB Off	10WB	Off															H			
Roadway	Points																						Г
Name	Name	è.	Segment																				
			ADT	Autos	s			MTrucks	sks		_	HTrucks	(S		ā	Buses			Σ	Motorcycles	rcles		_
				۵%	%E	N %	s	Q %	<u>"</u>	N%	"	<u>%</u>	<u>~</u>	Z,	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N	<u>%</u>	<u>ж</u>	σ Z	%	<u>~</u>	<u>~</u>	S	_
			veh/24hrs	%	%	%	mph	, hdm % % hdm %	%	. v	hdn	% %	,0	,	% % ydm % % ydm % %	%	%	Ë	% Hd	%	%	mph	长
Central btwn BuenaVista & I-210WB Off point1	point1	Ĺ	1 13150 95 71 98 40 2 11	95	71	98	40	2	7	~	40	က	18		40 0 0 0 0	0	0	0	0	0	0	0	0
	point2	.,	0																				

14 June 2016 C:\TNM25\Duarte\2036 No Project\8

Calculated minus Goal Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal фВ 70.4 14 June 2016 TNM 2.5 Calculated with TNM 2.5 Snd Lvl 2036 No Project Increase over existing
Calculated Crit'n I 쁑 쁑 0.0 2036 No Project Central btwn BuenaVista & I-210WB Off INPUT HEIGHTS #DUs Existing No Barrier
Lden Lden
Calculated Criffn Max dBA 0.0 Noise Reduction
Min Avg
dB dB dBA 0.0 75 deg F, 50% RH dBA # DNs Š RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: RESULTS: SOUND LEVELS All Selected
All Impacted
All that meet NR Goal 100 Ft from Centerline Dwelling Units ATMOSPHERICS: MIG

FOR Lden

MIG									4	- in	14 June 2016		-									
MIG									F	TNM 2.5	2		_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 No Project	ect																				
RUN:	Central btwn I-210WBOff & Highland	I-210V	/BOff & Hig	ıland									Н									
Roadway	Points												H									
Name	Name	Š.	Segment																			
			ADT	Autos	"		_	MTrucks	ks		Ξ	HTrucks			Bus	Buses			Mot	Motorcycles	s	
				Q%	- - - - - - -	Z%	s	° 0%	<u>%</u> ≝	S Z	%	<u>%</u>	<u>~</u>	s z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	% E	2 %	s	0%	₩ 		s
			veh/24hrs % % % mph % % mph % % % mph % % mph % % % % %	%	%	%	, udm	6 %	% %	ш	% yd	%	%	m	% u	%	%	mpł	% "	%	%	mph
Central btwn I-210WBOff & Highland	point1	_	8313	95	71	98	40	2	8313 95 71 98 40 2 11 1	-	40	'n	00	-	18 1 40 0 0	0	0	0 0	0 0	0	0	0
	point2	2																				

KESULIS: SOUND LEVELS							ZU36 No Project	roject				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 N	2036 No Project									
RUN:		Centra	I btwn I-21	Central btwn I-210WBOff & Highland	ghland							
BARRIER DESIGN:		INPU	INPUT HEIGHTS					Average p	Average pavement type shall be used unless	e shall be us	sed unless	
								a State hi	a State highway agency substantiates the use	y substantia	tes the use	
ATMOSPHERICS:		75 de	75 deg F, 50% RH	_				of a differ	of a different type with approval of FHWA.	approval of	FHWA.	
Receiver												
Name	Š	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase ov	Increase over existing	Type	Calculated	Calculated Noise Reduction	rction	
				Calculated Crit'n	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	В		dBA	В	ф	В
100 Ft from Centerline		1	1 0.0	9.69 (9	9 0	9.69	0 Snd Lvl	9.69		0.0	0.0
Dwelling Units		# DUs	Noise Reduction	duction								
			Min	Avg	Мах							
			쁑	쁑	쁑							
All Selected			1 0.0		0.0	0.0						
All Impacted			1 0.0	0.0		0.0						
All that meet NR Goal			00	00		00						

2036 Plus Project INPUT: TRAFFIC FOR Lden

MIG									4	14 June 2016	2016											\top
MIG									Ē	TNM 2.5												
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	ject																				
RUN:	Central e/o Highland	ighlan	-																			
Roadway	Points																					
Name	Name	Š.	Segment																			
			ADT	Autos			2	MTrucks	"		Ē	HTrucks			Buses	"		_	Notorc	Motorcycles		
_				Q%	<u>%</u> =%	Z,	×	<u>~</u>	%D %E %N S %D %E %N S %D %E %N S %D % S %N S %D %E	S	□ %	₩ %	N %	s	1 %	В	S N%	•	<u>°</u>	%D %E %N	σ z	_
			veh/24hrs % % mph % % mph % % mph % % % mph % % % % % % % % %	%	6 %	,0	% Hdr	%	%	mpł	% ر	%	%	mph	%	%	u %	6 Hdr	% %	%	hdm	hd
Central e/o Highland	point1	_	9263	95	7.1	98	40	2	9263 95 71 98 40 2 11 1	1 40	0	18	_	18 1 40 0 0	0	0	0 0	0	0	0	0	0
	point2	2																				

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
9 <u>2</u>							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:	2	036 PIL	2036 Plus Project									
RUN:	0	entral	Central e/o Highland	멑								
BARRIER DESIGN:	<u> </u>	NPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	sel unless	
ATMOSPHERICS:		5 deg	75 deg F, 50% RH					a State hi of a differ	ghway agenc ent type with	a State highway agency substantiates the use of a different type with approval of FHWA.	es the use FHWA.	
Receiver												
	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	rexisting	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dВ	dВ	dВ
100 Ft from Centerline	-	-	0.0	69.7	7	0 69.7		0 Snd Lvl	69.7	0.0		0.0
Dwelling Units	+4	# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			ф	фB	æ							
All Selected		-	0.0	0.0		0.0						
All Impacted		-	0.0	0.0		0.0						
All that meet NR Goal		-	0.0	0.0		0.0						
	l											

MIG									14	14 June 2016	2016		_									
MIG									É	TNM 2.5			_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject.																				
RUN:	Mountain n/o Huntington	o Hunti	ngton										Ц									
Roadway	Points																					
Name	Name	No.	Segment																			
			ADT	Autos			2	MTrucks	S		눞	HTrucks			Buses	s			Motorcycles	cycle		
				۵%	%D %E %N S	N%	·	ő %	S N% S N% S N% S N% S N% S N% S N% S	s z	%	₩ -	<u>х</u>	S	۵%	∃%	N%	s	%D %E %N	₩ = %	Z,	-
			veh/24hrs	%	% ydm % % %	- %	% Hdu	%	%	ш	% ydw	%	%	mph	% % ydu	%		wph %	%	%	,0	hdm
Mountain n/o Huntington	point1	-	8300	92	8300 95 71 98 40	98	40	2 11	7	-	40	3 18	m	1 40	0	0	0	0	0	0	0	0
	point2	2			П		H			H												

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
MIG							14 June 2016	916				
MIG							TNM 2.5					
							Calculated	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 PI	2036 Plus Project									
RUN:		Mounta	Mountain n/o Huntington	tington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	salun p	
								a State hi	jhway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	ò N	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
100 Ft from Centerline			0.0	69.3		0 69.3	0	Snd Lvl	69.3	0.0		0.0
Dwelling Units		# DUs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			фВ	dB	ВВ							
All Selected		_	0.0	0.0	0.0							
All Impacted			0.0	0.0	0.0							
All that meet NR Goal		_	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden									2036	2036 Plus Project	Projec	ای					-		-	-	-
MIG									4	14 June 2016	910								+		
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 Plus Project	roject																			
RUN:	Mountain s/o Huntington	/o Hunt	ington																		
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos	"		Σ	MTrucks	s		HTrucks	cks		ш	Buses			ĕ	Motorcycles	cles	
				۵%	%D %E %N S %D %E %N S	S N%	%	<u>%</u>	₩	s	۵%	₩	N%	%D %E %N S %D %E %N S %D %E %N S	<u>~</u> □%	<u>%</u>	s Z	1%	<u>%</u>	<u>×</u>	s
			veh/24hrs % % mph % %	%	%	u %	w ydu	%	%	mph	%	%	%	% % ydw % % ydw	%	%		% ydw	%	%	mph
Mountain s/o Huntington	point1	Ĺ	12813		95 71 98	86	40	40 2 11	7	1 40		3 18	-	40	0	0	0	0	0	0	0
	point2		2																_		

LTS: SOUND LEVELS ECT/CONTRACT:											
LTS: SOUND LEVELS ECT/CONTRACT:											
LTS: SOUND LEVELS ECT/CONTRACT:						14 June 2016	910				
LTS: SOUND LEVELS ECT/CONTRACT:						TNM 2.5					
LTS: SOUND LEVELS ECT/CONTRACT:						Calculate	Calculated with TNM 2.5	12.5			
ECT/CONTRACT:											
	2036 Plus Project	Project									
KUN:	Mountain s/o Huntington	s/o Hunt	ington								
BARRIER DESIGN: INF	INPUT HEIGHTS	IGHTS					Average	pavement typ	Average pavement type shall be used unless	sq nuless	
							a State hi	ghway agend	a State highway agency substantiates the use	es the use	
ATMOSPHERICS: 75	75 deg F, 50% RH	50% RH					of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver											
Name No. #DL	#DNs Ex	isting	Existing No Barrier					With Barrier			
	٦	Lden	Lden		Increase over existing	er existing	Type	Calculated	Noise Reduction	ction	
			lated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
						Sub'l Inc					minus
											Goal
	dBA		dBA	dBA	dB	фB		dBA	dВ	фB	ВB
100 Ft from Centerline	-	0.0	71.2		0 71	71.2	0 Snd Lvl	71.2	0.0		0.0
Dwelling Units # E	# DUs Noise Reduction	oise Rec	luction								
	Σ	Min	Avg	Max							
	늉	дB	В	용							
All Selected	-	0.0	0.0	0.0	0						
All Impacted	-	0.0	0.0	0.0	0						
All that meet NR Goal	-	0.0	0.0	0.0	0						

NPUT: TRAFFIC FOR Lden									203	2036 Plus Project	Proje	<u>, </u>									
MIG									4	14 June 2016	2016										
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 Plus Project	Project																			
RUN:	Buena Vista n/o Huntington	a n/o Hu	ıntington																		
Roadway	Points																				
Vame	Name	Š.	No. Segment																		
			ADT	Autos			Σ	MTrucks	s		Ė	HTrucks			Buses			2	Motorcycles	ycles	
					%E %	S No	%	<u>~</u>	<u>%</u>	S	□ %	%	N%	s	<u>-</u> 2%	₩ = %	S N	%	<u>0</u>	<u>ж</u>	σ Z
			veh/24hrs %	%	%	u %	% Hdı	%	%	mpł	% ر	%	%	mph	%	%	u %	whu %	%	%	du .
Buena Vista n/o Huntington	point1	_	6225	92	71 98	86	35	2	35 2 11 1	1 35	5	3 18	_	35	0	0	0	0	0	0	0
	point2	2																			

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 PI	2036 Plus Project									
RUN:		Buena	Vista n/o l	Buena Vista n/o Huntington								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	pavement typ	Average pavement type shall be used unless	ed unless	
								a State hi	ghway agend	a State highway agency substantiates the use	tes the use	•
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	FHWA.	
Receiver												
Name	No	#DNs	Existing	Existing No Barrier					With Barrier	_		
			Lden	Lden		Increase over existing	r existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dВ	dВ
100 Ft from Centerline		1	0.0	07.1	1.	0 67.1		0 Snd Lvl	67.1		0.0	0 0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			æ	æ	쁑							
All Selected		_	0.0		0.0	0.0						
All Impacted		_	0.0		0.0	0.0						
All that meet NR Goal			0.0		0.0	0.0						

NPUT: TRAFFIC FOR Lden									203	2036 Plus Project	Proje	ij									
MIG									4	14 June 2016	2016										
MIG									É	TNM 2.5			4								
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 Plus Project	roject																			
RUN:	Buena Vista btwn Huntington & Central	btwn	untington 8	& Cent	- -																
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			2	MTrucks	S)		Ė	HTrucks			Buses	s		_	Notorc	Motorcycles	
				0 %	%E %	Z,	%	٥ %	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	s z	□ %	₩	2 %	s	0 %	- 3%	S N%	·	-% -0%	%	σ z
			veh/24hrs % % % mph % % mph % % mph % % mph % % % mph % % %	%	%	,0	% Hdu	%	%	m	%	%	%	mph	%	%	и %	hdn %	%	%	hdm
Buena Vista btwn Huntington & Central	point1	_	21350	92	95 71	98	98 35	2	2 11	-	35	3 18	3	35	0	0	0	0	0	0	0
	point2	2																			

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 PI	2036 Plus Project									
RUN:		Buena	Vista btwn	Buena Vista btwn Huntington & Central	& Central							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	avement typ	Average pavement type shall be used unless	salun pe	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the us	9
ATMOSPHERICS:		_ 75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA	HWA.	
Receiver												
Name	ě.	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	er existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated Crit'n	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	ф		dBA	dB	dВ	dВ
100 Ft from Centerline		1	0.0	72.4	4	0 72	72.4	0 Snd Lvl	72.4	1 0.0	0	0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Mir	Avg	Мах							
			dВ	dВ	В							
All Selected		_	0.0		0.0	0.0						
All Impacted		_	0.0		0.0	0.0						
All that meet NR Goal		_	0.0		0.0	0.0						

													_									
MIG									7	June	14 June 2016											
MIG									F	TNM 2.5			_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject																				
RUN:	Buena Vista btwn Central & I-210	btwn C	entral & I-2	0	' '								L						П			
Roadway	Points																					
Name	Name	O	Segment																			
			ADT	Autos			_	MTrucks	(S		도	HTrucks			Buses	"		_	Aotor	Motorcycles		_
				0 %	- - - - - - - - - - - - - - - - - - -	Z %	'n	<u>~</u>	Ж.	s z	%	- %E	≥	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %D %E	0%	- WE	N%	**	<u>0</u>	<u>%</u> ⊒%	S N	_
			veh/24hrs % % mph % % mph % % mph % % mph % % % % mph % % % % % % % mph % % % mph % % % mph % % mph % % mph % % mph % % mph % % mph % % mph % % mph % % mph % % mph % % mph % % mph % % mph	%	%	%	hdu	%	%	Ε	% qc	%	%	mph	%	%	- %	hdu	° ,	%	<u></u>	mph
Buena Vista btwn Central & I-210	point1	-	29763 95 71 98 35 2 11	95	71	98	35	2	7	-	35	2	18	1 35	35 0	0	0 0	0	0	0	0	0
	point2	2																				

14 June 2016 C:\TNM25\Duarte\2036 Plus Project\15

Calculated minus Goal Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal фВ 72.9 14 June 2016 TNM 2.5 Calculated with TNM 2.5 Snd Lvl 2036 Plus Project Increase over existing
Calculated Crit'n I 쁑 0.0 #DUs Existing No Barrier
Lden Lden
Calculated Criffn Max dBA 2036 Plus Project Buena Vista btwn Central & I-210 INPUT HEIGHTS 0.0 | Noise Reduction | Avg | Avg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg dBA 75 deg F, 50% RH dBA # DNs RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: RESULTS: SOUND LEVELS All Selected
All Impacted
All that meet NR Goal 100 Ft from Centerline Dwelling Units ATMOSPHERICS: MIG

MIG									4	14 June 2016	2016		_									
MIG									F	TNM 2.5			_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject																				
RUN:	Buena Vista s/o I-210	s/o I-2	0										L									
Roadway	Points																					
Name	Name	No.	No. Segment																			
			ADT	Autos	s		_	MTrucks	S)		눞	HTrucks			Buses	S			Moto	Motorcycles	s	
				۵%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N S %N S %N S %N S %	Z%	·^	<u>%</u>	<u>"</u>	s z	%	3%E	<u>«</u>	S	□%	В %	N%	s	Q %	3% E	N%	s
			veh/24hrs % % mph % % mph %	%	%	%	hdu %	%	%	m.	% u	%	%	mpk	% ydm % % ydm % %	%	%	mph	%	%	%	mph
Buena Vista s/o I-210	point1	_	7938	95	7938 95 71 98 35 2 11	98	35	2	1	-	35	6	18	1 35	0	0	0	0	0	0	0	0
	point2	2																				

14 June 2016 C:\TNM25\Duarte\2036 Plus Project\16

Calculated minus Goal Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal фВ 68.1 14 June 2016 TNM 2.5 Calculated with TNM 2.5 Snd Lvl 2036 Plus Project Increase over existing
Calculated Crit'n I 쁑 68.1 #DUs Existing No Barrier
Lden Lden
Calculated Criffn dBA 68.1 | Noise Reduction | Avg | Avg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg | Abg 2036 Plus Project Buena Vista s/o I-210 INPUT HEIGHTS dBA 75 deg F, 50% RH dBA # DNs RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: RESULTS: SOUND LEVELS 100 Ft from Centerline Dwelling Units ATMOSPHERICS: MIG

Max

0.0

All Selected
All Impacted
All that meet NR Goal

2036 Plus Project INPUT: TRAFFIC FOR Lden

													-									
MIG									~	14 June 2016	e 201	9										
MIG									۲	TNM 2.5	2		_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject																				
RUN:	Cotter n/o Huntington	unting	ton																			
Roadway	Points																					
Name	Name	è.	Segment																			
			ADT	Autos	"		_	MTrucks	ks		I	HTrucks	s		B	Buses			ĕ	Motorcycles	ses	
				۵%	3%E	N%	s	<u>°</u>	<u>%</u>	S N	*	%	<u>%</u> ш	S Z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N 8 %N % 8 %N	%	<u>%</u> ш	σ z	%	<u>%</u>	<u>«</u>	s
			veh/24hrs	%	%	%	, hdm % % hdm %	%	%	u.	% Hdı	%	%	ш	% % ydm % % ydm % %	%	%	m.	% yo	%	%	mph
Cotter n/o Huntington	point1		1263	92	71	98	1263 95 71 98 25 2 11	2	7	-	25	က	18	~	25 0 0 0 0	0	0	0	0	0	0	0
	point2	2																				

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14 June 2016

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
MIG							14 June 2016	016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 P	2036 Plus Project									
RUN:		Cotter	Cotter n/o Huntington	gton								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	sq nuless	
								a State hi	ghway agend	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	No	#DNs	Existing	Existing No Barrier					With Barrier	_		
			Lden	Lden		Increase ov	Increase over existing	Type	Calculated	Noise Reduction	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	В	В		dBA	dB	дB	명
100 Ft from Centerline		Ĺ	0.0	58.8		0 58	58.8	0 Snd Lvl	58.8	8 0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Ā	Avg	Max							
			ВВ	쁑	쁑							
All Selected		Ì	0.0	0.0	0.0	0						
All Impacted		Ì	0.0	0.0	0.0	0						
All that meet NR Goal		,	0.0	0.0	0.0	0						

INPUT: IRAFFIC FOR Laen				-					8	ZUSO WITH Project	5	Ject	ŀ		-	-				ŀ		
MIG									-	14 June 2016	e 2016		_									
MIG									-	TNM 2.5	2											
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 With Project	Project																				
RUN:	Highland n/o Huntington	/o Hunt	ington																	Ш		
Roadway	Points																					
Vame	Name	Š	No. Segment																			
			ADT	Autos	s			MTrucks	ks		Ι	HTrucks	, so		B	Buses			Mot	Motorcycles	ses	
				Q%	₩ 8	N%	s	%D %	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S No	%	<u>%</u>	<u>%</u> В	s z	3%	%E	N %	တ	□ %	<u>%</u> E	2 %	S
			veh/24hrs % % % mph % % mph % % mph % % mph % % mph % % mph % % % mph % % % % % % % % %	%	%	%	mph	6 %	% %	'n,	% Hdı	%	%	m	% H	%	%	mpł	% u	%	%	mph
Highland n/o Huntington	point1	_	1 2625		95 71	86		2	35 2 11 1	-	32	က	18	-	35	0	0	0	0 0	0		0
	point2		2																			

14 June 2016 C:\TNM25\Duarte\2036 Plus Project\18

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2036 With Project Highland n/o Huntington INPUT HEIGHTS RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: © W

2036 With Project

RESULTS: SOUND LEVELS

								م مرمره	IIWay ageire	a otate ingliway ageiley substantiates ure use	on all o	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differe	nt type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	ŏ.	#DUs	Existing	No. #DUs Existing No Barrier					With Barrier			
			Lden	Lden		Increase over	Increase over existing Type		Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Criť	Calculated Crit'n	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	ф		dBA	dВ	dВ	B
100 Ft from Centerline	1	1	0.0	63.3	8	0 63.3	.3 0	Snd Lvl	63.3	0.0		0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dВ	дB							
All Selected		-	0.0	0.0		0.0						
All Impacted		-	0.0	0.0		0.0						
All that meet NR Goal		-	0.0	0.0		0.0						

NPUT: TRAFFIC FOR Lden									203	S Plus	2036 Plus Project	,									
MIG									4	14 June 2016	2016										
MIG									₹	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 Plus Project	roject																			
RUN:	Highland bt	wn Hur	Highland btwn Huntington & Central	entral																	
Roadway	Points																				
Vame	Name	Š.	Segment																		
			ADT	Autos			Σ	MTrucks	s		Ē	HTrucks			Buses			Š	otorc	Motorcycles	
				1 1 2 1 2 1 2 2 3 3 4 5 3 4 5 5 5 5 5 5 5 5 5	<u>%</u> ■%	S.	%	<u>%</u>	<u>%</u> ⊒	s	۵%	Ж %	N%	s	- - - - - -	% ∃%	S N	%	<u>%</u>	<u>%</u> ш	S
			veh/24hrs % % mph % % mph % % mph % % mph % % % %	%	%	u.	% Hdı	%	%	mp	% ر	%	%	hdm	%	%	ш	% ud	%	%	mph
Highland btwn Huntington & Central	point1		11125	92	71	86	95 71 98 35	2 11	11	1 35		3 18	_	35	0	0	0	0	0	0	0 0
	point2	2																			

14 June 2016	RESULTS: SOUND LEVELS							2036 Plus Project	Project					
TAM 2.5 Calculated with TMM 2.5														
TS: SOUND LEVELS CTCONTRACT: Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Alberta Central Highland btwn Huntington & Central Highland btwn Huntington & Central Highland btwn Huntington & Central Alberta Centr	MIG							14 June 2	016					
TS: SOUND LEVELS 2036 Plus Project Highland brwn Huntington & Central Highland brwn Huntington & Central Highland brwn Huntington & Central Highland brwn Huntington & Central Highland brwn Huntington & Central Average pavement type shall be used unless a State highway agency substantiates the use a State highway agency substantiates the use a State highway agency substantiates the use a Central No. #DUS Existing No Barrier No. #DUS Existing No Barrier No. #DUS Calculated Crif* Calculated Crif* Calculated Crif* Calculated Crif* Calculated Crif* Calculated Crif* Calculated Calcul	MIG							TNM 2.5						
Figure Face								Calculate	d with TNM	2.5				
Highland blum Huntington & Central Highland blum Huntington & Central Highland blum Huntington & Central Highland blum Huntington & Central Highland blum Huntington & Central Highland blum Huntington & Central Average pavement type shall be used unless spherics: Average pavement type shall be used unless a State highway agency, substantiates the use of a State highway agency substantiates the use of a State highway agency substantiates the use of a State highway agency substantiates the use of a State highway agency substantiate the use of a State highway agency substantiate the use of a State highway agency substantiate the use of a State highway agency and unless a State highway agency and unless a State highway agency and unless a State highway agency and unless a State highway agency and unless an	RESULTS: SOUND LEVELS													
Highland btwn Huntington & Central Average pavement type shall be used unless a State below. INPUT HEIGHTS Average pavement type shall be used unless a State highway agency substantiates the use and the state of a different type with approval of FHWA. Institute Institut	PROJECT/CONTRACT:		2036 P	us Project										
NPUT HEIGHTS SPHERICS: 75 deg F, 50% RH Average pavement type shall be used unless a State highway agency substantiates the use a Unless and Average pavement type shall be used unless a State highway agency substantiates the use a State highway agency substantiates the use a Universal PHWA.	RUN:		Highla	d btwn H	untington & (Sentral								
Particle Particle	BARRIER DESIGN:		INPUT	HEIGHTS					Average p	avement typ	e shall be u	sed unless		
PFHERICS: 75 deg F, 50% RH PARTIES Of a different type with approval of FHWA. er No. #DUS Existing No Barrier Mith Barrier Lden Lden Lden Lden Calculated Grif'n Galculated Grif'n Impact Type Calculated Goal Galculated Grif'n Impact Calculated Grif'n Impact Calculated Grif'n Impact Calculated Grif'n Impact Calculated Grif'n Impact Calculated Grif'n Impact Galculated Grif'n I									a State high	ghway agend	sy substanti	ates the us	n	
er No. #DUs Existing No Barrier Increase over existing With Barrier Index of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the contention of the content of the c	ATMOSPHERICS:		75 deg	F, 50% RI	_				of a differ	ent type with	approval o	FHWA.		
No. #Pus Existing No Barrier No Barr	Receiver													
Lden Lden Lden Increase over existing Type Calculated Crif*n Impact Lden Calculated Goal	Name	Š	#DNs	Existing						With Barrie	_			
Calculated Crif'n Calculated Crif'n Calculated Crif'n Calculated Crif'n Calculated Crif'n Calculated Crif'n Calculated Colouration Calculated Crif'n Calculated Crif'n Calculated Calculat				Lden	Lden		Increase ove	rexisting	Type	Calculated	Noise Red	uction		
A					Calculated		Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated	-
Second Color Col								Sub'l Inc					minus	
													Goal	
1 1 0.0 69.6 0 69.6 0 Snd Lvl 69.6 0.0 # DUs Noise Reduction Min Avg Max dB dB dB dB dB dB dB				dBA	dBA	dBA	dB	dВ		dBA	dB	dВ	dВ	
# DUS Noise Reduction Max Min Avg Max GB GB GB GB GB GB GB G	100 Ft from Centerline		1	0.0		9			Snd Lvl	.69		0.0	0	0.0
Min Avg Max	Dwelling Units		# DNs	Noise Re	duction									
dB dB dB dB dB dB dB dB				Mir	Avg	Max								
1 0.0 0.0				dВ	dВ	ВВ								
1 0.0	All Selected			0.0			0.							
000	All Impacted			0.0			0.							
0.0	All that meet NR Goal			0.0			0.0							

2036 Plus Project INPUT: TRAFFIC FOR Lden

MIG									4	14 June 2016	2016											_
MIG									Z	TNM 2.5												
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	ject																				
RUN:	Huntington w/o Mountain	/o Mor	ıntain		1																	П
Roadway	Points																					
Name	Name	Š.	Segment																			
			ADT	Autos			2	MTrucks	un.		Ė	HTrucks			Buses				Aotorc	Motorcycles		
_				Q%	%E →	Z,	%	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D % S %N S	S	□ %	%E	N %	S	<u>-</u> 0%	₩ = %	S N%	•	<u>%</u>	%D %E %N	σ z	_
			veh/24hrs % % mph % % mph % % mph % % mph % % % % %	%	6 %	9	% Hdu	%	%	mpł	% ر	%	%	mph	%	%	n %	hdu %	% %	%	mph	ر ا
Huntington w/o Mountain	point1	-	10588 95 71 98 40 2 11 1	95	7.1	98	40	2	7	1 40	0	31	_	18 1 40 0 0	0	0	0 0	0	0	0	0	0
	point2	2																				

14 June 2016 C:\TNM25\Duarte\2036 Plus Project\1

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
MIG							14 June 2016	2016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 P	2036 Plus Project									
RUN:		Huntin	Huntington w/o Mountain	lountain								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	avement typ	Average pavement type shall be used unless	ed unless	
								a State hi	ghway agend	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Š	#DNs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase o	Increase over existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	dВ		dBA	dB	dВ	dВ
100 Ft from Centerline		,	0.0		70.3	0 2	70.3	0 Snd Lvl	70.3	3 0.0		0.0
Dwelling Units		# DNs	# DUs Noise Reduction	duction								
			Min	Avg	Мах							
			дB	dВ	ВВ							
All Selected		_	1 0.0		0.0	0.0						
All Impacted		`-	1 0.0		0.0	0.0						
All that meet NR Goal		`-	0.0		0.0	0.0						

													_									
MIG									4	14 June 2016	2016											
MIG									É	TNM 2.5	_		_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject																				
RUN:	Highland s/o Central	Centr	-										H					Ц		Ц		
Roadway	Points																					
Name	Name	è	Segment																			
			ADT	Autos			_	MTrucks	s		토	HTrucks			Buses	es			Mot	Motorcycles	es	
				۵%	 ⊒%	Z N	<u>ه</u>	<u>%</u>	<u>%</u>	s z	<u>%</u>	<u>%</u>	<u>%</u>	σ z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N	% E	2 %	S	□%	₩ 	≥ %	S
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % % %	%	%	- %	hdu %	%	%	Ę	% uc	%	%	ш	% u	%	%	mph	%	%		hdm
Highland s/o Central	point1	_	3025	95	71	98	3025 95 71 98 35 2 11	2	7	-	35	6	18	-	35 (_	0	0	0	0	0	0
	point2	2																				

14 June 2016 C:\TNM25\Duarte\2036 Plus Project\20

Calculated minus Goal Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal фВ 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2036 Plus Project Increase over existing
Calculated Crit'n I 쁑 #DUs Existing No Barrier
Lden Lden
Calculated Criffn dBA 2036 Plus Project Highland s/o Central INPUT HEIGHTS 75 deg F, 50% RH dBA RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: RESULTS: SOUND LEVELS 100 Ft from Centerline Dwelling Units ATMOSPHERICS:

63.9

Snd Lvl

63.9

Max

Noise Reduction
Min Avg
dB dB

DNs

0.0

0.0

All Selected
All Impacted
All that meet NR Goal

																							_
MIG										4 Ju	14 June 2016	16											
MIG										TNM 2.5	5.5												
INPUT: TRAFFIC FOR Lden																							
PROJECT/CONTRACT:	2036 Plus Project	oject																					
RUN:	Mt Olive n/o Huntington	Huntir	ıgton																	П			
Roadway	Points																						
Name	Name	ě	Segment																				
			ADT	Autos	s			MTrucks	ks			HTrucks	ks			Buses			_	Motorcycles	ycles		_
				۵%	9%	N%	s	<u>-</u> 0%	<u>в</u>	Z,	s	- Q%	<u>.</u>	Z%	s	9	<u>"</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N S %N S %N S %N S %	•	<u>°</u>	<u>~</u> щ		s
			veh/24hrs	% %	%	%	mph	% ydm % % ydm %	%	9	, ydu		%	%	mph 9	,0	%	% % ydm % % ydm % %	hdu %	% %	%		mph
Mt Olive n/o Huntington	point1	_	4450	92	71	98	25	4450 95 71 98 25 2 11	1	-	52	က	18	-	25 0	0	0	0	0	0	0	0	0
	point2	2																					

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14 June 2016

Calculated minus Goal Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal фВ 64.3 14 June 2016 TNM 2.5 Calculated with TNM 2.5 Snd Lvl Type Impact 2036 Plus Project Increase over existing
Calculated Crit'n I 쁑 0.0 #DUs Existing No Barrier
Lden Lden
Calculated Criffn Max dBA 0.0 Noise Reduction
Min Avg
dB dB 2036 Plus Project Mt Olive n/o Huntington INPUT HEIGHTS dBA 0.0 75 deg F, 50% RH dBA # DNs Š RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: RESULTS: SOUND LEVELS All Selected
All Impacted
All that meet NR Goal 100 Ft from Centerline Dwelling Units ATMOSPHERICS: MIG

NPUT: TRAFFIC FOR Lden									50	2036 Plus Project	s Pro	ect	-							ŀ		
MIG									-	14 June 2016	≥ 2016		_									
MIG									-	TNM 2.5	10		+									
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	roject																				
RUN:	Huntington	btwn N	Huntington btwn Mountain & BuenaVista	uenaV	ista								H									
Roadway	Points																					
Vame	Name	Š.	Segment																			
			ADT	Autos			_	MTrucks	ks		Ξ	HTrucks			ā	Buses			Σ	otorc	Motorcycles	
				%D %E %N S %D %E %N S %D %E %N S %B %S %D %E %N S %D %E %N	- H	N%	"	<u>ئ</u>	% = %	S N	%	<u>%</u>	<u>%</u>	ς N	%	<u>%</u>	%	σ z	%	<u>~</u>	<u>%</u> ш	S
			veh/24hrs % % mph % % mph % % mph % % % %	%	%	- «	hdu	%	% %	m.	% ud	%	%	Ε	% ud	%	%	٤	% ydm	%	%	mph
Huntington btwn Mountain & BuenaVista	point1		36550		95 71		98 40		2 11	-	40	က	18	-	40	0	0	0	0	0	0	0 0
	point2		0										-									

RESULTS: SOUND LEVELS							2036 PI	2036 Plus Project				
							;	- 3				
MIG							14 Jun	14 June 2016				
MIG							TNM 2.5	2				
							Calcul	Calculated with TNM 2.5	IM 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 P	2036 Plus Project									
RUN:		Huntin	gton btwn	Huntington btwn Mountain & BuenaVista	BuenaVis	g						
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	Average pavement type shall be used unless	o∈ shall be use	sq nuless	
								a State	a State highway agency substantiates the use	cy substantiat	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a diff	of a different type with approval of FHWA.	approval of F	HWA.	
Receiver												
Name	No	#DUs	Existing	No Barrier					With Barrier	_		
			Lden	Lden		Increase	Increase over existing	g Type	Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Crit'n	Calculated	ed Crit'n			Calculated Goal	Goal	Calculated
							Sub'l Inc	20				minus
												Goal
			dBA	dBA	dBA	8 B	В		dBA	фB	фB	용
100 Ft from Centerline		_	0.0	76.0	0	0	76.0	0 Snd Lvl	л 76.0	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Air	Avg	Мах							
			ВВ	쁑	쁑							
All Selected			0.0		0.0	0.0						
All Impacted			0.0		0.0	0.0						
All that most NR Goal			0		00	0						

NPUT: TRAFFIC FOR Lden									20.	2036 Plus Project	s Pro	ect	-									
MIG									Ť	14 June 2016	3 2016		_									
MIG									-	TNM 2.5	10		+									
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	Project																				
RUN:	Huntingtor	btwn	Huntington btwn BuenaVista & Cotter	% Cotte	·								H							L		
Roadway	Points															_						
Vame	Name	ě	Segment																			
			ADT	Autos	"		_	MTrucks	ks		Ξ	HTrucks			Bu	Buses			Mot	Motorcycles	les	
				Q%	%E	3 N%		%D %	<u>%</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S	%	<u>%</u>	1 %	S	3%	%E	N %	S	□ %	%D %E %N	×%	S
			veh/24hrs % % mph % % mph % % mph % % % %	%	%	J %	hdu	6 %	% %	ш,	% yd	%	%	щ	% yo	%	%		% ydw	%	%	mph
Huntington btwn BuenaVista & Cotter	point1	Ì	39363	3 95	71	86	40	2	40 2 11 1	_	40	က	18	-	40	0	0	0	0	0		0
	point2		2					l												L		

RESULTS: SOUND LEVELS	ŀ						2036 Plus Project	Project				
MIG							14 June 2016	116				
MIG							TNM 2.5					
							Calculated with TNM 2.5	with TNN	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 P	2036 Plus Project									
RUN:		Huntin	gton btwn	Huntington btwn BuenaVista & Cotter	Cotter							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average I	pavement typ	Average pavement type shall be used unless	sq nuless	
								a State hi	ghway agenc	a State highway agency substantiates the use	es the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	ent type with	of a different type with approval of FHWA.	HWA.	
Receiver												
Name	Š.	#DNs	Existing	Existing No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	tion	
				Calculated Crit'n	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	фВ		dBA	dB	ф	ВB
100 Ft from Centerline		1	0.0	76.2		0 76.2	0	Snd Lvl	76.2	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			dВ	dВ	ВВ							
All Selected			0.0	0.0	0.0							
All Impacted			0.0	0.0	0.0							

NPUT: TRAFFIC FOR Lden									203	2036 Plus Project	Proje	,									
MIG									4	14 June 2016	2016										
MIG									Z	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 Plus Project	Project																			
RUN:	Huntington	btwn 0	Huntington btwn Cotter & Highland	land															Ц		
Roadway	Points																				
Vame	Name	Š	Segment																		
			ADT	Autos			_	MTrucks	s		Ŧ	HTrucks		_	Buses			Mot	Motorcycles	es	
				۵%	- 3%	N%	·	<u>%</u>	<u>%</u>	S	□ %	%E	N%	s	<u>%</u> 0%	<u>%</u>	σ z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	%E	N%	S
			veh/24hrs % % mph % % % mph % % % mph % %	%	%	%	hdu	%	%	mp	%	%	%	hdm	%	%	Ĕ	% ydw	%	%	mph
Huntington btwn Cotter & Highland	point1		35200		95 71	98	40	2	2 11	1	40	3 18	_	40	0	0	0	0	0	0 0	0
	point2		2																		

	İ						ZOOD LIES LIOSON	200				
							14 June 2016	016				
								2				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 PIL	2036 Plus Project									
RUN:		Hunting	ton btwn C	Huntington btwn Cotter & Highland	land							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	Average pavement type shall be used unless	e shall be us	sed unless	
								a State hig	a State highway agency substantiates the use	y substantia	tes the use	
ATMOSPHERICS:		75 deg	75 deg F, 50% RH					of a differ	of a different type with approval of FHWA.	approval of	FHWA.	
Receiver												
Name	Š.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing	existing	Type	Calculated	Calculated Noise Reduction	ıction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculate
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dВ		dBA	dB	dB	dВ
100 Ft from Centerline	1	1	0.0	75.8		0 75.8		0 Snd Lvl	75.8		0.0	0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Max							
			фB	쁑	쁑							
All Selected		1	0.0	0.0	0.0 0	0						
All Impacted		-	0.0	0.0	0.0	0						
All that meet NR Goal		1	0.0	0.0	0.0	0						

													_									_
MIG									4	June	14 June 2016											
MIG									É	TNM 2.5			_									
													_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject																				
RUN:	Huntington btwn Highland & I-605	twn Hi	ghland & I-6	902																		
Roadway	Points																					
Name	Name	ò	Segment																			
			ADT	Autos			_	MTrucks	(S		도	HTrucks			Buses	S			Moto	Motorcycles		
				۵%	, =%	Z %	'n	-% -0%	8 NO 8 NO 8 NO 8 NO 8 NO 8 NO 8 NO 8 NO	σ Z	~	<u>%</u>	% %	S	□%	В	N%	s	۵%	<u>°</u> ⊒%	S No	_
			veh/24hrs % % % mph % % % mph % % % mph % % % mph % % %	%	%	%	hdu	%	%	Ε	% yc	%	%	mph	%	%	%	mph	%	%	٥,	hdm
Huntington btwn Highland & I-605	point1	-	38413 95 71 98 40 2 11 1	92	71	98	40	2	7		40	3	18 1	1 40	0	0 0	0	0 0	0	0	0	0
	point2	2																				

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14 June 2016

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA. With Barrier
Calculated Noise Reduction
Lden Calculated Goal 14 June 2016 TNM 2.5 Calculated with TNM 2.5 2036 Plus Project Huntington btwn Highland & I-605 INPUT HEIGHTS 75 deg F, 50% RH RESULTS: SOUND LEVELS
PROJECT/CONTRACT:
RUN:
BARRIER DESIGN: ATMOSPHERICS: MIG

2036 Plus Project

RESULTS: SOUND LEVELS

Calculated minus Goal

Increase over existing
Calculated Crit'n I

Crit'n

#DUs Existing No Barrier
Lden Lden
Calculated C

фВ

쁑

dBA

dBA

dBA

INPUT: IRAFFIC FOR Laen									2036	2036 Plus Project	oject.										
MIG									14 J.	14 June 2016	16										
MIG									Ν̈́	TNM 2.5											
NPUT: TRAFFIC FOR Lden																					
PROJECT/CONTRACT:	2036 Plus Project	Project																			
RUN:	Huntington e/o I-605)9-I o/ə ı	15																		
oadway	Points																				
Vame	Name	ŏ N	Segment																		
			ADT	Autos			¥	MTrucks			HTrucks	(S		Bn	Buses			Mot	Motorcycles	es	
				%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	<u>%</u>	σ z	%	%E	N%	s	%D %	<u>%</u> В	S N	3%	%E	% 	S	□ %	%E	N %	S
			veh/24hrs	%	% ,	Ë	% uc	%	%	mph	%	%	m.	% yd	%	%	mpł	% ر	%	%	mph
Huntington e/o I-605	point1		26575	26575 95 71 98 40	7.1	86	40	2 11	-	40	က	18	-	40	0	0	0	0	0		0
	point2		2																		

RESULTS: SOUND LEVELS	į						2036 Plus Project	Project				
MIG							14 June 2016	2016				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 P	2036 Plus Project									
RUN:		Huntin	Huntington e/o I-605	305								
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average p	Average pavement type shall be used unless	e shall be us	ed unless	
								a State hi	a State highway agency substantiates the use	y substantia	tes the us	n
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	of a different type with approval of FHWA.	approval of	FHWA.	
Receiver												
Name	Š.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase o	Increase over existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated Crit'n	Criť	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dВ	dВ		dBA	dB	dВ	dВ
100 Ft from Centerline		,	0.0	74.3	3	0 7	74.3	0 Snd Lvl	74.3	3 0.0	0	0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Mir	Avg	Max							
			dВ	dB	дB							
All Selected			1 0.0	0.0		0.0						
All Impacted			0.0	0.0		0.0						
All that meet NR Goal		,	0.0	00		00						

2036 Plus Project INPUT: TRAFFIC FOR Lden

										-	-		_									
MIG									~	14 June 2016	2016											
MIG									F	TNM 2.5	10		_									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	oject																				
RUN:	Central w/o Buena Vista	Buena	Vista										H							L		
Roadway	Points																					
Name	Name	è.	Segment																			
			ADT	Autos	"		_	MTrucks	(S		Ξ	HTrucks			B	Buses			Mot	Motorcycles	es	
				۵%	3%E	N%	s	<u>۰</u>	щ %	υ Z	%	<u>%</u>	<u>~</u>	s z	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %N S %N	% E	% 	s	□%	₩	2 %	s
			veh/24hrs	%	%	%	, hdm % % hdm %	%	%	Ε.	% yd	%	%	Ĕ	% % ydm % % ydm % %	%	%	mpł	% u	%	%	mph
Central w/o Buena Vista	point1	_	2375	92	71	98	95 71 98 40 2 11	2	11	-	40	က	18	~	40 0 0 0 0	0	0	0	0 0	0		0 (
	point2	2																				

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RESULTS: SOUND LEVELS							2036 Plus Project	Project					
MIG							14 June 2016	016					
MIG							TNM 2.5						
							Calculate	Calculated with TNM 2.5	2.5				
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:	2036 F	2036 Plus Project	t										
RUN:	Centra	Central w/o Buena Vista	na Vista										
BARRIER DESIGN:	INPU	INPUT HEIGHTS	S					Average p	avement typ	Average pavement type shall be used unless	ed unless		
								a State hi	ghway agend	a State highway agency substantiates the use	es the us	9	
ATMOSPHERICS:	75 de	75 deg F, 50% RH	¥					of a differ	ent type with	of a different type with approval of FHWA.	FHWA.		
Receiver													
Name No.	#DNs	Existing	No Barrier	rier					With Barrier				
		Lden	Lden			Increase over existing	er existing	Type	Calculated	Calculated Noise Reduction	ction		
			Calculated	ated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated	eq
							Sub'l Inc					minus	
												Goal	
		dBA	dBA	O	dBA	dB	dВ		dBA	dB	dВ	dВ	
100 Ft from Centerline	1	1 0	0.0	63.8		0 63.8		0 Snd Lvl	63.8	3 0.0	0	0	0.0
Dwelling Units	# DUs	# DUs Noise Reduction	Reduction	ı									
		Z Z	Avg		Max								
		dВ	dВ		фB								
All Selected		1 0	0.0	0.0	0.0	0							
All Impacted		1	0.0	0.0	0.0	0							
All that meet NR Goal		1	0.0	0.0	0.0	0							

NPUT: TRAFFIC FOR Lden									8	2036 Plus Project	us Pro	oject								ľ		
MIG										14 June 2016	e 201	9										
MIG										TNM 2.5	5.		+									
INPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	roject																				
RUN:	Central btw	η Buen	Central btwn BuenaVista & I-210WB Off	10WB																П		
Roadway	Points																					
Vame	Name	Š.	Segment																			
			ADT	Autos				MTrucks	sks		_	HTrucks	S		ш	Buses			_	Aotor	Motorcycles	
				۵%	- - - - - -	N%	s	- G%	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %N S %D %E	S N%	<u>~</u>	<u>%</u>	<u>%</u> چ	N.	·	0	<u>°</u>	S No	<u>°</u>	9	<u>«</u>	S
			veh/24hrs % % mph % % mph % % mph % % % mph % %	%	%	%	mph	%	%	<u>ا</u> ۵	% Hdr	,0	%	,	hdu %	0	0	u %	% % ydw	9	%	hdm °
Central btwn BuenaVista & I-210WB Off	point1	_	13825	95	95 71		98 40		2 11	-	40	က	18	-	40	0	0	0	0	0	0	0
	point2	2																				

RESULTS: SOUND LEVELS							2036 Plus Project	Project				
							:	;				
MIG							14 June 2016	910				
MIG							TNM 2.5					
							Calculate	Calculated with TNM 2.5	12.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		2036 PI	2036 Plus Project									
RUN:		Central	btwn Bue	Central btwn BuenaVista & I-210WB Off	10WB Off							
BARRIER DESIGN:		INPUT	INPUT HEIGHTS					Average	Average pavement type shall be used unless	e shall be us	ed unless	
								a State hi	a State highway agency substantiates the use	y substantia	tes the use	_
ATMOSPHERICS:		75 deg	75 deg F, 50% RH	_				of a differ	of a different type with approval of FHWA.	approval of	FHWA.	
Receiver												
Name	Š.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase ov	ncrease over existing	Type	Calculated	Calculated Noise Reduction	ction	
				Calculated	Criťn	Calculated	Crit'n	Impact	Lden	Calculated Goal	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dВ	dB
100 Ft from Centerline	1	_	0.0	9.07	9	0 70	70.6	Snd Lvl	70.6	0.0		0.0
Dwelling Units		# DNs	Noise Reduction	duction								
			Min	Avg	Мах							
			фВ	дB	ВВ							
All Selected		_	0.0	0.0		0.0						
All Impacted		1	0.0	0.0		0.0						
All that meet NR Goal		1	0.0	0.0		0.0						

NPUT: TRAFFIC FOR Lden									8	2036 Plus Project	JS Pro	ject	ŀ							ŀ		
MIG									_	14 June 2016	e 201	- (0	_									
MIG									_	TNM 2.5	2		+									
NPUT: TRAFFIC FOR Lden																						
PROJECT/CONTRACT:	2036 Plus Project	roject																				
RUN:	Central btw	n I-210	Central btwn I-210WBOff & Highland	hland									H							П		
Roadway	Points																					
Vame	Name	Š.	Segment			İ																
			ADT	Autos			_	MTrucks	sks		I	HTrucks	s		ш	Buses			2	lotor	Motorcycles	
				۵%	- 3%	N%	s	<u>م</u>	%D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N S %D %E %N	S No	%	<u>%</u>	<u>%</u> щ	s z	%	ر م	я Ж	S	-5	<u>ه</u>	<u>%</u> щ	s z
			veh/24hrs % % mph % % mph % % mph % % mph % %	%	%	%	, udu	5 %	%	m,	% Hdi	%	%	_	% Hdı	%	%	, ш	% Hdr	.0	%	mph
Central btwn I-210WBOff & Highland	point1	_	8713	35	95 71		98 40		2 11 1	-	40	3	18	-	40	0	0	0	0	0	0	0 0
	point2	2											_									

MIG Figure Figu	RESULTS: SOUND LEVELS							2036 Plus Project	Project				
TIME ALS Calculated with TNM 2.5 TIME ALS Calculated with TNM 2.5 Calculated with TNM	C N							14 June 2	916				
Thirting No Calculated Ca	0 5							TNM 2 5	2				
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T.S. SOUND LEVELS								Calculate	d with TNN	2.5			
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The Design The	RUN:		Central	btwn 1-210	WBOff & Hig	hland							
Particular Par	BARRIER DESIGN:		INPUT	HEIGHTS					Average	pavement type	shall be use	d unless	
ref No. #Dus Existing Light Full Ligh									a State hi	ghway agenc	y substantiate	s the use	
ref No. #DUs Existing No. Barrier Increase over existing Type Calculated Cartin Noise Reduction Calculated Goal Roll Hearier Noise Reduction Calculated Goal	ATMOSPHERICS:		75 deg	F, 50% RF					of a differ	ent type with	approval of F	HWA.	
No. #DUs Existing No. #Dus	Receiver												
Line Lider Lider Lider Lider Lider Raise Reduction Impact Lider Raise Reduction Impact Lider Raise Reduction Raise Reduction Raise Reduction Raise Reduction Lider Raise		Š.	#DNs	Existing	No Barrier					With Barrier			
Calculated Crift Calculated Crift Calculated Crift Impact Liden Calculated Goal Calculated Calcula				Lden	Lden		Increase ove	existing.	Type	Calculated	Noise Reduc	tion	
Sub'l Inc Sub'					Calculated	Criťn	Calculated	Crit'n	Impact	Lden		Goal	Calculated
								Sub'l Inc					minus
													Goal
1 1 0.0 69.8 0 69.8 0 Snd Lvl 69.8 0.0 0 # DUS Noise Reduction				dBA	dBA	dBA	dB	фВ		dBA	фB	dВ	ф
# DUS Noise Reduction	100 Ft from Centerline			0.0					Ш	8.69			
Min Avg Max dB dB dB 1 0.0 0.0 1 0.0 0.0 1 0.0 0.0	Dwelling Units		# DUs	_	duction								
AB AB AB AB AB AB AB AB				Min	Avg	Max							
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0				dВ	фB	ВВ							
1 0.0 0.0	All Selected			0.0			10						
1 0.0 0.0	All Impacted			0.0			0						
	All that meet NR Goal		_	0.0			0						





Occurrence Report

California Department of Fish and Wildlife



Map Index Number: 02447 EO Index: 23223

Key Quad:Baldwin Park (3411718)Element Code:CTT32720CAOccurrence Number:1Occurrence Last Updated:1998-07-13

Scientific Name: Riversidian Alluvial Fan Sage Scrub Common Name: Riversidian Alluvial Fan Sage Scrub

Listing Status: Federal: None Rare Plant Rank:

State: None Other Lists:

State: \$1.1

G1

General Habitat: Micro Habitat:

Last Date Observed: 1985-09-23 Occurrence Type: Natural/Native occurrence

 Last Survey Date:
 1985-09-23

 Owner/Manager:
 LAX COUNTY, PVT

 Trend:
 Unknown

Presence: Presumed Extant

Global:

Location:

SANTA FE FLOOD CONTROL BASIN, SAN GABRIEL RIVER, WEST OF AZUSA, EAST OF MONROVIA.

Detailed Location:

CNDDB Element Ranks:

Ecological:

ERIOGONUM FASCICULATUM W/ SEVERAL CO-DOMINANT SPP. 3 VEG ZONES REFLECT TIME SINCE LAST FLOOD DISTURBANCE. BOUNDARY FORM 1978 AIR PHOTOS.

Threats:

FRAGMENTED BY GRAVEL MINES, SPREADING GROUNDS.

General:

PART IS COUNTY PARK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

 PLSS:
 T01S, R10W, Sec. 05 (S)
 Accuracy:
 specific area
 Area (acres):
 395

 UTM:
 Zone-11 N3775864 E412234
 Latitude/Longitude:
 34.11994 / -117.95170
 Elevation (feet):
 500

County Summary: Quad Summary:

Los Angeles Baldwin Park (3411718), Azusa (3411728)

Sources:

HAN80U0002 HANES, T. & D. JENSEN - REPORT OF MEETING WITH TED HANES ON ALLUVIAL FAN COASTAL SAGE, CNERIDIUM STANDS,

COMAROSTAPHYLIS & XYLOCOCCUS, TECATE CYPRESS, KNOBCONE PINE, ENGELMANN OAK, AND REDSHANK.. 1980-10-28

HOL85F0036 HOLLAND, R.F. - FIELD SURVEY FORM FOR RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB (NC32720) 1985-02-12

MOO85F0001 MOONEY, M. & L. LAPRE - FIELD SURVEY FORM FOR SANTA FE FLOOD CONTROL BASIN (RIVERSIDIAN ALLUVIAL FAN SAGE

SCRUB - NC32720.001) 1985-09-23

SMI80A0001 SMITH, R.L. - ALLUVIAL SCRUB VEGETATION OF THE SAN GABRIEL RIVER FLOOD PLAIN, CA. MADRONO 27(3) 126-38. 1980-07-

XX



Occurrence Report

California Department of Fish and Wildlife





Key Quad: Azusa (3411728) **Element Code:** CTT32720CA **Occurrence Number:** 13 Occurrence Last Updated: 1997-04-11

Scientific Name: Riversidian Alluvial Fan Sage Scrub **Common Name:** Riversidian Alluvial Fan Sage Scrub

Rare Plant Rank: **Listing Status:** Federal: None

Other Lists: State: None

State: S1.1

G1

Global:

General Habitat: Micro Habitat:

Last Date Observed: 1935-XX-XX Occurrence Type: Natural/Native occurrence

Last Survey Date: 1978-09-19 Occurrence Rank: None Owner/Manager: **UNKNOWN** Trend: Unknown

Presence: Extirpated

CNDDB Element Ranks:

SAWPIT WASH, FROM NEAR CONFLUENCE WITH RUBY CANYON DOWNSTREAM TO VICINITY OF HUNTING DRIVE.

Detailed Location:

Ecological:

Location:

OPEN STAND OF QUERCUS AGRIFOLIA OVER ARTEMISIA CALIFORNICA, LEPIDOSPARTUM & RHUS LAURINA ACCORDING TO WIESLANDER SURVEY.

Threats:

EXTIRPATED BY URBANIZATION.

General:

SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T01N, R11W, Sec. 24 (S) Area (acres): 220 Accuracy: specific area Zone-11 N3779726 E409159 Latitude/Longitude: Elevation (feet): 800 UTM: 34.15451 / -117.98545

County Summary: Quad Summary:

Azusa (3411728) Los Angeles

Sources:

HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728,

3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX

USF35M0003 U.S. FOREST SERVICE - "WIESLANDER" VEG MAPS FOR LOS ANGELES COUNTY 1935-XX-XX

Map of Project Area



