Draft Supplemental Environmental Impact Report

CITY OF PLEASANTON

Housing Element and Climate Action Plan General Plan Amendment and Rezonings

Prepared for City of Pleasanton September 2011





Draft Supplemental Environmental Impact Report

CITY OF PLEASANTON

Housing Element and Climate Action Plan General Plan Amendment and Rezonings

Prepared for City of Pleasanton September 2011

ESA

225 Bush Street Suite 1700 San Francisco, CA 94104 415.896.5900 www.esassoc.com Los Angeles Oakland Olympia Palm Springs Petaluma Portland Sacramento San Diego Seattle Tampa Woodland Hills 210016

TABLE OF CONTENTS

General Plan Amendment and Rezonings Environmental Impact Report

		<u>Page</u>
1.	IntroductionA.Project OverviewB.EIR BackgroundC.Issues of ConcernD.Draft EIR Scope and ContentE.Lead, Responsible, and Trustee AgenciesF.Environmental Review Process	1 1 7 8 9 9
2.	SummaryA.IntroductionB.Regional Location and Planning AreaC.Project DescriptionD.Project ObjectivesE.Proposed Project ImpactsF.Alternatives to the Proposed ProjectG.Areas of Concern	2-1 2-1 2-2 2-2 2-3 2-4 2-5 2-8
3.	 Project Description A. Background and Context B. Regional Location and Planning Area C. Housing Element D. Climate Action Plan E. Project Objectives F. Project Approvals 	3-1 3-1 3-2 3-5 3-16 3-20 3-22
4.	 Environmental Setting, Impacts, and Mitigation Measures 4.A Aesthetics 4.B Air Quality 4.C Biological Resources 4.D Cultural Resources 4.E Greenhouse Gas Emissions 4.F Geology and Soils 4.G Hazards and Hazardous Materials 4.H Hydrology and Water Quality 4.I Land Use and Planning 4.J Noise 4.K Population and Housing 4.L Public Services and Utilities 	4-1 4.A-1 4.B-1 4.C-1 4.D-1 4.E-1 4.F-1 4.F-1 4.G-1 4.H-1 4.I-1 4.J-1 4.K-1 4.L-1

	4.M Recreation4.N Transportation and Traffic	<u>Page</u> 4.M-1 4.N-1
5.	 Alternatives to the Project A. CEQA Requirements B. Factors in the Selection of Alternatives C. Description of Alternatives Selected for Analysis D. Comparative Analysis of the Alternatives E. Environmentally Superior Alternative F. Project Alternatives Considered but Rejected for Further Analysis in this SEIR 	5-1 5-1 5-3 5-10 5-16 5-16
	G. Comparison of the Alternatives	5-17
6.	Other Statutory SectionsA. Growth-Inducing EffectsB. Significant Irreversible ChangesC. Cumulative ImpactsD. Significant and Unavoidable Environmental ImpactsE. Effects Found Not To Be Significant	6-1 6-1 6-6 6-7 6-8 6-9
7.	EIR Authors, Persons and Organizations ContactedA. EIR AuthorsB. Persons and Organizations Consulted	7-1 7-1 7-2
Apper	ndices	
A. B. C. D.	Notice of Preparation Responses to NOP and Public Scoping Letters Air Quality Transportation Analysis	A-1 B-1
List of	Figures	
3-1	Regional Location Map	3-3
3-2 3-3 3-4	Sphere of Influence Residentially Zoned Parcels without Current Approvals Potential Sites for Rezoning	3-4 3-11 3-15
4.C-1 4.C-2	Habitat Types within and in the Vicinity of Housing Sites Special Status Species Occurrences within and in the Vicinity of Housing	4.C-4
4.D-1 4.F-1 4.F-2	Sites Downtown Historic Neighborhoods and Structures Liquefaction Susceptibility Level Landslide Zones	4.C-13 4.D-6 4.F-9 4.F-10
4.J-1 4.M-1 4.N-1	Decibel Scale and Common Noise Sources Pleasanton Parks and Open Space with Housing Overlay Study Intersection Locations	4.J-2 4.M-3 4.N-3
4.N-2 4.N-3	Existing Turning Movement Volumes Lane Configurations	4.N-4 4.N-5
4.N-4 4.N-5 4.N-6	Cumulative Lane Configurations Existing Plus Project Turning Movement Volumes Cumulative Turning Movement Volumes	4.N-15 4.N-19 4.N-28

4.N-7 Cumulative Plus Project Turning Movement Volumes

4.N-29

5-1	Transit Oriented- Route 10 Corridor	<u>Page</u> 5-8
List of	Tables	
3-1	Residentially Zoned Parcels without Current Approvals	3-10
3-2	Housing Element Needs Assessment	3-12
3-3	Potential Sites for Rezoning	3-14
3-4	Estimated GHG Reduction Potential of Climate Action Plan Strategies	3-19
4.B-1	Air Quality Data Summary (2007-2009) for the City of Pleasanton	4.B-3
4.B-2	Ambient Air Quality Standards and Bay Area Attainment Status	4.B-8
4.B-3	BAAQMD Adopted Construction Related Criteria Air Pollutant and Ozone	
	Precursor Screening Level Sizes	4.B-15
4.B-4	Transportation Control Measures in the 2010 Clean Air Plan	4.B-19
4.B-5	Stationary Sources of TACs Within 1,000 Feet of the 17 Sites for Rezoning	4.B-23
4.C-1	Special-Status Species Reported or with Potential to occur within the	
	Pleasanton Housing Element Sites	4.C-9
4.D-1	Downtown Historic Structures and Neighborhoods	4.D-4
4.E-1	Pleasanton Community-Wide GHG Emissions by Sector (CO ₂ E MT) 2005	4.E-4
4.E-2	List of Recommended Actions by Sector	4.E-7
4.E-3	Housing Element GHG Emissions for Development of the 17 Sites	4.E-15
4.E-4	CO ₂ E/yr)	4.E-17
4.E-5	Projected Emissions Reductions from Pleasanton Climate Action Plan	
	Strategies	4.E-18
4.F-1	Modified Mercalli Intensity Scale	4.F-4
4.F-2	Active Faults in the Region	4.F-5
4.G-1	Properties in the Vicinity of Potential Residential Sites on the Cortese List	4.G-3
4.J-1	Acoustical Terminology	4.J-4
4.J-2	Summary of Relevant Ambient Noise Level Measurements (2006)	4.J-7
4.J-3	Forthcoming	4.J-
4.J-4	Summary of Construction Vibration Criteria (Califrans 2004)	4.J-12
4.J-5	Reference Construction Equipment Noise Levels at 50 Feet	4.J-13
4.N-1	Existing and Projected Bay Area Population by County, 2000-2025	4.K-1
4.N-2	Existing Housing Types, Pleasanton and Alameda County, 2010	4.K-2
4.K-5	Existing and Projected Employment, Pleasanton and Alameda County	4.1.5
4.13		4 K-4
4 -1	Fire Stations Serving Pleasanton	41-1
41-2	Schools in Pleasanton Unified School	41-3
4.1-3	Pleasanton Unified School District's Developer Fees	4.L-12
4.N-1	Signalized Intersection Level of Service Definitions	4.N-3
4.N-2	Existing Intersection Levels of Service	4.N-7
4.N-3	Existing Plus Project Intersection Levels of Service	4.N-18
4.N-4	Cumulative 2025 Plus Project Intersection Levels of Service	4.N-27
5-1	Project Build Alternatives Summary	5-4
5-2	2007-2014 Housing Element Needs Assessment	5-6
5-3	Alternatives Impact Summary and Comparison	5-18
5-4	Ability of Alternatives to Satisfy Project Objectives	5-19

CHAPTER 1 Introduction

This Draft Supplemental Environmental Impact Report (SEIR) has been prepared for the City of Pleasanton Housing Element update and related land use amendment and rezonings, and the adoption of a Climate Action Plan (CAP) (referred to collectively hereafter as the "proposed project" or "project"). This section describes: (1) the purpose and legal authority of the EIR; (2) the scope and content of the EIR; (3) lead, responsible, and trustee agencies; and (4) the environmental review process required under the California Environmental Quality Act (CEQA).

A. Project Overview

Purpose and Legal Authority

Approval of the proposed project requires discretionary actions to be taken by the City of Pleasanton (City). Therefore, it is subject to the requirements of CEQA. Pursuant to the provisions of CEQA, the City, as lead agency, has determined that the proposed Housing Element, General Plan Amendment and rezonings, and Climate Action Plan could result in one or more significant effects, and that an environmental impact report (EIR) must be prepared. In accordance with CEQA *Guidelines* § 15121, the purpose of this EIR is to serve as an informational document that:

...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

Environmental Review Context

The purpose of this Draft SEIR is to satisfy California Environmental Quality Act requirements by addressing the environmental effects of the proposed Housing Element, General Plan Amendment and rezonings, and Climate Action Plan specific to the implementation of the proposed General Plan Amendments.

Because the Housing Element is an integral part of the City's General Plan, the proposed General Plan Amendment modifies some of the land use designations of the General Plan land use map, proposed rezonings implement those General Plan land use changes, and the Climate Action Plan is intended to more fully address projected communitywide Greenhouse Gas (GHG) emissions and provide a plan for reducing such emissions that was previously accomplished with the City's General Plan and EIR. This document is intended as a supplemental EIR, addressing the environmental effects of implementing the proposed project in light of the previous environmental review contained in the City of Pleasanton General Plan Program EIR (State

Clearinghouse No. 2005122139), as provided for under CEQA Guidelines Sections 15162 and 15163.

CEQA Guidelines Section 15162 states that "When an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 - a) The project will have one or more significant effects not discussed in the previous EIR;
 - b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. (CEQA Guidelines Section 15162[a])."

Based on a review of the proposed project, the City has determined that, although the proposed project would not result in new significant impacts that were not addressed in the General Plan EIR or substantially increase the severity of the significant impacts addressed in that EIR, addressing the impacts of the proposed project would be a substantial change to the General Plan EIR. The substantial change includes the proposed increases in the City's residential development capacity set forth in the General Plan, as well as expansion of measures to reduce GHG emissions in the community. Because the Housing Element largely provides programs and sets forth incentives for the development of housing for all economic segments of the community that is proposed on the General Plan land use map, it was determined that the existing General Plan EIR

adequately addressed the impacts of the Housing Element, with the exception of additional sites for the development of housing the proposed Housing Element now identifies. These additional sites for the production of housing are the subject of the proposed General Plan Amendment and rezonings. In addition, while the City's General Plan and General Plan EIR provide a number of measures for reducing GHG emissions, it was determined that additional measures, in the form of a Climate Action Plan, were required to supplement the analysis set forth in the City's General Plan EIR. It was for these reasons that the City, as Lead Agency, determined that a Supplemental EIR to the General Plan EIR was needed.

Section 15163 of the CEQA Guidelines states that a lead agency may choose to prepare a "supplement" to an EIR rather than a "subsequent" EIR if:

- 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.

Further, CEQA Guidelines Section 15163 states:

- a) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- b) 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.
- c) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- d) 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.

A Supplemental EIR (SEIR) augments the EIR prepared for an existing project to address any project changes or changed circumstances since the time the prior document was certified. In the case of changes to a previously approved project, as is the case here, the purpose of an SEIR is to provide the additional analysis necessary to make the previous EIR adequately apply to the project as modified. Accordingly, the SEIR need contain only the analysis necessary to respond to the proposed change in the project that triggered the need for additional environmental review (CEQA Guidelines Section 15163). A subsequent EIR, in contrast, is a complete EIR, largely rewritten, which focuses on the conditions described in Section 15162.

The proposed project would amend the adopted General Plan by adopting the proposed Climate Action Plan and Housing Element (and adopting associated land uses changes) to achieve GHG emissions reduction and identified housing goals. The remainder of the General Plan remains in

effect as previously adopted. Based on the scope of the General Plan amendment, the City has determined that some changes to the previously certified EIR are necessary to address the impacts of increased housing development and GHG reduction measures, but much of the analysis in the previously certified EIR will not need to be changed or supplemented. Therefore, the proposed project does not require a major revision to the previously certified EIR, and a supplemental EIR is the appropriate document to respond to these minor project changes.

This Draft SEIR evaluates the effects of the proposed project on the physical environment. The environmental analysis will assess whether the proposed project would result in a new significant environmental effects impact not previously addressed in the General Plan EIR or a substantial increase in severity of previously identified significant environmental effects consistent with CEQA Guidelines Section 15162(a)(1). Implementation of the proposed project will address the implications of rezoning identified sites for residential land uses that were not previously considered in the General Plan EIR. Thus, the proposed General Plan Amendments and this Draft SEIR address substantial changes in circumstances that have occurred consistent with CEQA Guidelines 15162(a)(2).

This Draft SEIR will not analyze the impacts of environmental issues associated with implementation of the current adopted General Plan (such as growth and development within the City) as they were already adequately addressed in the General Plan EIR. Instead, this document focuses on the physical changes resulting from proposed residential development of the potential sites for General Plan land use designation revisions and rezoning. Impacts associated with these sites represent the part of the project that would alter the physical environment over and above what has already been identified and analyzed in the General Plan EIR. This document also supplements the GHG analysis contained in the General Plan EIR based on analysis of the provisions of the proposed Climate Action Plan and the effects that increasing the City's residential development and rezonings) will have on vehicle miles travelled and the change in GHG emissions resulting from an improvement in Pleasanton's jobs/housing balance.

Purpose and Function of this SEIR

This Draft Supplemental Environmental Impact Report (Draft SEIR) has been prepared to evaluate the anticipated environmental effects of the proposed project in conformance with the provisions of CEQA and CEQA Guidelines, as amended. The lead agency, the City of Pleasanton (City), is the public agency that has the principal responsibility for carrying out or approving the project, which include (1) an update of the City's General Plan Housing Element, (2) a Climate Action Plan, and (3) amendments to the General Plan to achieve the expanded inventory of land available for the development of housing (including related rezonings) as well as to incorporate provisions of the CAP into the General Plan. This Draft SEIR was prepared in accordance with CEQA *Guidelines* § 15151, which defines the standards for EIR adequacy:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a Project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have lo perfection but for adequacy, completeness, and a good faith effort at full disclosure.

As stated in the CEQA *Guidelines*, an EIR is an "informational document" intended to inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. Although this EIR does not control the ultimate decision on the proposed project, the City is required by CEQA to consider the information provided in this SEIR. The City will use the certified EIR, along with other information and public processes, to determine whether to approve, modify, or disapprove the proposed project, and to specify any applicable environmental or other conditions of approval as part of project approvals.

The purpose of this SEIR is to provide the City, public agencies, and the public in general with detailed information about the environmental effects of implementing the proposed project, to examine and institute methods of mitigating any adverse environmental impacts should the project be approved, and to consider alternatives to the project as proposed. CEQA provides that public agencies should not approve projects until all feasible means available have been employed to avoid or substantially lessen the significant environmental effects of such projects. "Feasible" means capable of being accomplished in a successful manner within areas reasonable period of time taking into account economic, environmental, social, and technological factors.

Scope of the Environmental Analysis

The purpose of the analyses contained in this Draft SEIR is not to assess whether the provisions of the proposed Housing Element, Climate Action Plan, and General Plan Amendment and rezonings will be successful or even whether they are "good", but rather to measure the potential environmental impacts that are likely to result from implementation of the policies and programs contained in the Housing Element and Climate Action Plan and the changes in land use designations proposed in the General Plan Amendment and rezonings. For the purposes of this Draft SEIR, the most feasible way to present growth, or future residential development, under the proposed General Plan Amendments, specifically related to the Housing Element and relied upon the by Climate Action Plan, is to disclose the possible areas and means by which development could take place. As such, the City has identified potential sites for rezoning and the buildout potentials of those sites to provide for an adequate inventory of housing to meet Pleasanton's share of regional housing needs through 2014.¹

Future projects identified by the proposed Housing Element would be required to adhere to the applicable regulations and mitigation measures identified in this EIR, as well as applicable provisions of the City's General Plan, Municipal Code, and any applicable specific plan or design guidelines document. Residential development in the City would occur regardless of the

¹ Increasing the City's inventory of housing to meet the City's share of regional housing needs has the added benefit in improving Pleasanton's jobs/housing balance. Improving Pleasanton's jobs/housing balance is a key measure to reduce vehicle miles travelled contained in the Climate Action Plan.

proposed project, as there are numerous sites presently zoned for residential use. The proposed Housing Element is a policy document that provides direction for how and where new housing, driven by population growth and regional housing needs, should develop. The proposed Climate Action Plan is also a policy document that provides direction for how GHG emissions should be reduced. A key factor in both of these documents is increasing the City's residential development potential to (1) meet regional housing needs (Housing Element) and (2) improve the local jobs/housing balance as a means of reducing vehicle miles travelled and associated GHG emissions (Climate Action Plan).

Subjects of this SEIR

This SEIR presents the environmental impacts of the adoption and implementation of:

- The City of Pleasanton Housing Element update and related land use amendment and rezonings; and
- The adoption of a Climate Action Plan.

Proposed Housing Element

The first subject of this SEIR is the proposed update to the City of Pleasanton's Housing Element. The Housing Element is a policy document that consists of goals, policies, and programs to guide the City and private and non-profit developers in providing housing for existing and future residents to meet projected housing demand for all economic segments of the community, as required under Government Code § 65580 *et seq.* (State housing element law). State law requires the housing element to be updated periodically, usually every seven years. The last update of the housing element occurred in 2003. Included in the proposed Housing Element is a program to expand the City's inventory of land available for the development of housing for all economic segments of the community. Expansion of this inventory is needed for the City to provide for its share of regional housing needs. Concurrent with the City's consideration of the updated Housing Element is a proposed General Plan Amendment and rezonings of sites within the City for high density residential development, sufficient to meet the City's share of the regional housing need.

The Proposed Climate Action Plan

The second subject of this SEIR is the proposed City of Pleasanton Climate Action Plan. The Climate Action Plan serves to outline strategies, goals, and actions to reduce municipal and communitywide GHG emissions. The Plan is structured to ensure that the City does its part to meet the mandates of California's Global Warming Solutions Act of 2006 (AB 32), which directs the state to reduce state-wide GHG emissions to 1990 levels by 2020. The Climate Action Plan is based on the California Air Resources Board (CARB) recommendation that in order to achieve these reductions, local governments target 2020 municipal and communitywide GHG emissions to be 15 percent below 2008 (or earlier) GHG emissions levels. The Pleasanton Climate Action Plan provides a schedule of local actions chosen primarily based on their GHG-reduction and cost-benefit characteristics, with additional considerations for funding availability and feasibility of implementation. The selected measures address emissions from transportation and land use (improving local jobs/housing balance), energy consumption and generation, water use and wastewater treatment, community engagement, and solid waste disposal.

B. EIR Background

In accordance with the CEQA *Guidelines*, the City distributed a Notice of Preparation of an EIR (NOP) to affected agencies and the public for the required 30-day period. The NOP indicated that all issues on the CEQA environmental checklist would be studied in the EIR.

The NOP originally prepared for the proposed Housing Element EIR was posted between May 2, 2011 and May 31, 2011. The Planning Commission held a scoping meeting for the Housing Element EIR on May 11, 2011. Subsequently, the scope of the EIR was expanded to also include analysis of the Climate Action Plan. A revised NOP was prepared for the project as it is currently proposed (Housing Element, General Plan Amendment and rezonings, and Climate Action Plan) on August 23, 2011, with a 30-day review period running from August 23 to September 22, 2011. A second scoping meeting was held by the Planning Commission on September 14, 2011. The City received a total of six response letters to both NOPs. The NOPs and responses to the NOPs are included in **Appendix A** of this Draft SEIR.

C. Issues of Concern

Pursuant to Section 15123 (b)2 of the CEQA Guidelines, the Draft EIR should contain areas of controversy known to the Lead Agency or issues of concern raised by local agencies or the public must be included Draft SEIR.

Housing Element

Public comment during the Housing Element update process has included community concerns related to the development of the proposed housing sites, particular related to traffic generation and the adequacy of the roadway infrastructure, compatibility of new development with existing neighborhoods, the impact of multifamily development and affordable housing on existing property values, and the impact of population growth on schools and other public facilities. These issues are discussed in Sections 4.A through 4.N of this SEIR.

The City recently entered into a settlement agreement concerning the *Urban Habitat v. City of Pleasanton* litigation. That settlement obligated the City to: increase the residential development potential of the City to meet the housing objectives set forth in the Regional Housing Needs Assessment prepared by the Association of Bay Area Governments; process the Housing Element update in accordance with certain timeframes; prepare and certify an EIR prior to or concurrent with adoption of an updated Housing Element; and "study, evaluate and consider adoption of Housing Element goals and programs that promote affordable non-profit housing development for families as well as special needs households and that strengthen and promote construction of affordable units for families." The Housing Element update has been drafted in accordance with the terms of the settlement agreement.

Climate Action Plan

In conjunction with the *Urban Habitat* settlement noted above, the City entered into a settlement agreement concerning *State of California v. City of Pleasanton*. That settlement obligated the

City to: prepare a Climate Action Plan to reduce GHG emissions consistent with the provisions of AB 32 and the recommendations for the California Air Resources Board for local municipalities.

D. Draft SEIR Scope and Content

This Draft SEIR identifies potentially significant environmental impacts of the proposed project. In addition, this Draft SEIR recommends feasible mitigation measures that would reduce impacts to a less than significant level or eliminate adverse environmental effects. As noted above, this SEIR analyzes every issue in the CEQA checklist.

The impact analyses contained in Chapter 4 of this Draft SEIR includes a description of the physical and regulatory setting within each issue area, followed by an analysis of the project's impacts. Each specific impact is called out separately and numbered, followed by an explanation of how the level of impact was determined. When appropriate, feasible mitigation measures to identify significant impacts are included following the impact discussion. Measures are numbered to correspond to the impact that they mitigate. Finally, following the mitigation measures is a discussion of the residual impact that remains following implementation of recommended measures.

Chapter 5, Alternatives to the Project, of this Draft SEIR was prepared in accordance with CEQA *Guidelines* § 15126.6 and includes evaluation of alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the project's basic objectives. Alternatives evaluated include the CEQA-required "No Project" scenario, which assumes the proposed Housing Element update and related General Plan Amendment and rezonings, as well as the proposed Climate Action Plan are not adopted and the current (2003) Housing Element is left in place, along with alternative strategies to meet the City's share of regional housing needs for all economic segments of the community through 2014 and reduce GHG emissions. The SEIR also identifies the "environmentally superior" alternative among the alternatives studied.

The level of detail contained throughout this SEIR is consistent with the requirements of CEQA and applicable court decisions. The CEQA Guidelines provide the standard of adequacy on which this document is based. The CEQA *Guidelines* § 15151 states:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

E. Lead, Responsible, and Trustee Agencies

The CEQA *Guidelines* require the identification of "lead," "responsible," and "trustee" agencies. The City of Pleasanton is the "lead agency" for the project because it has the principal responsibility for approving the project.

A "responsible agency" is a public agency other than the "lead agency" that has discretionary approval authority over the project (the CEQA *Guidelines* define a public agency as a state or local agency, but specifically exclude federal agencies from the definition). A "trustee agency" refers to a state agency having jurisdiction by law over natural resources affected by a project. California Department of Fish and Game could be a trustee agency for development facilitated by the proposed project.

The agencies whose approvals are required are outlined in Chapter 3, Project Description of this SEIR.

F. Environmental Review Process

The environmental review process, as required under CEQA and undertaken for this SEIR, is presented below.

- 1. Notice of Preparation (NOP). After deciding that an EIR is required, the lead agency must file an NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (CEQA *Guidelines* § 15082; Public Resources Code § 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP originally prepared for the proposed Housing Element EIR was posted between May 2, 2011 and May 31, 2011. The Planning Commission held a scoping meeting for the Housing Element EIR on May 11, 2011. Subsequently, the scope of the EIR was expanded to also include analysis of the Climate Action Plan. A revised NOP was prepared for the project as it is currently proposed (Housing Element, General Plan Amendment and rezonings, and Climate Action Plan) on August 23, 2011, with a 30-day review period running from August 23 to September 22, 2011. A second scoping meeting was held by the Planning Commission on September 14, 2011.
- Draft Program EIR Prepared. The Draft EIR must contain: (a) table of contents or index;
 (b) summary; (c) project description; (d) environmental setting; (e) discussion of significant impacts (i.e., direct, indirect, cumulative, growth-inducing and unavoidable impacts); (f) a discussion of alternatives; (g) mitigation measures; and (h) discussion of irreversible changes.
- 3. Notice of Completion. A lead agency must file a Notice of Completion with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the Notice in the County Clerk's office for 30 days (Public Resources Code § 21092) and send a copy of the Notice to anyone requesting it (CEQA *Guidelines* § 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: (a) publication in a newspaper of general circulation; (b) posting on and off the project site; and (c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit comments from the public and respond in writing to all written comments received (Public Resources Code § 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the

State Clearinghouse for review, the public review period must be 45 days unless a shorter period is approved by the Clearinghouse (Public Resources Code § 21091).

- 4. **Final EIR.** A Final EIR must include: (a) the Draft EIR; (b) copies of comments received during public review; (c) a list of persons and entities commenting; and (d) responses to comments.
- 5. Certification of Final EIR. Prior to making a decision on a proposed project, the lead agency must certify that: (a) the Final EIR has been completed in compliance with CEQA; (b) the Final EIR was presented to the decision-making body of the lead agency; and (c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project (CEQA *Guidelines* § 15090).
- 6. Lead Agency Project Decision. A lead agency may: (a) disapprove a project because of its significant environmental effects; (b) require changes to a project to reduce or avoid significant environmental effects; or (c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (CEQA *Guidelines* §15042 and 15043).
- 7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: (a) the project has been changed to avoid or substantially reduce the magnitude of the impact; (b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or (c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (CEQA *Guidelines* § 15091). If an agency approves a project with unavoidable significant adverse environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
- 8. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
- 9. Notice of Determination. An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared (CEQA *Guidelines* § 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code § 21167(c)).

CHAPTER 2 Summary

A. Introduction

As provided by Section 15123 of the California Environmental Quality Act (CEQA) Guidelines, this chapter provides a brief summary of the proposed project's actions and its consequences. This Draft Supplemental Environmental Impact Report (Draft SEIR) has been prepared to evaluate the anticipated environmental effects of the proposed project in conformance with the provisions of CEQA and CEQA Guidelines, as amended. The lead agency, the City of Pleasanton (City), is the public agency that has the principal responsibility for carrying out or approving the project, which include (1) an update of the City's General Plan Housing Element, (2) a Climate Action Plan (CAP), and (3) amendments to the General Plan to achieve the expanded inventory of land available for the development of housing (including related rezonings) as well as to incorporated provisions of the CAP into the General Plan.

The purpose of the analyses contained in this Draft SEIR is not to assess whether the provisions of the proposed Housing Element, Climate Action Plan, and General Plan Amendment and rezonings will be successful or even whether they are "good", but rather to measure the potential environmental impacts that are likely to result from implementation of the policies and programs contained in the Housing Element and Climate Action Plan and the changes in land use designations proposed in the General Plan Amendment and rezonings. For the purposes of this Draft SEIR, the most feasible way to present growth, or future residential development, under the proposed General Plan Amendment, specifically related to the Housing Element and relied upon by the Climate Action Plan, is to disclose the possible areas and means by which development could take place.

Future projects identified by the proposed Housing Element would be required to adhere to the applicable regulations and mitigation measures identified in this SEIR, as well as applicable provisions of the City's General Plan, Municipal Code, and any applicable specific plan or design guidelines document. Residential development in the City would occur regardless of the proposed project, as there are numerous sites presently zoned for residential use. The proposed Housing Element is a policy document that provides direction for how and where new housing, driven by population growth and regional housing needs, should develop. The proposed Climate Action Plan is also a policy document that provides direction for how greenhouse gas emissions should be reduced. A key factor in both of these documents is increasing the City's residential development potential to (1) meet regional housing needs (Housing Element) and (2) improve the local jobs/housing balance as a means of reducing vehicle miles travelled and associated GHG emissions (Climate Action Plan).

B. Regional Location and Planning Area

Pleasanton is located within Alameda County, one of nine Bay Area counties bordering the San Francisco Bay. The City of Pleasanton is generally bounded to the west by the Pleasanton ridgelands, to the north by Interstate 580 (I-580) and the city of Dublin, to the east by the city of Livermore, and to the south by the San Francisco Water Department lands and other rangelands. Interstate 680 (I-680) bisects the western portion of the City, intersecting I-580 in its northwestern corner.

The Pleasanton Planning Area (Planning Area) encompasses a 75-square mile (48,000-acre) area within which the City designates the future use of lands "bearing a relation to the city's planning."¹ The General Plan Map designates land uses for the entire Planning Area even though much of this land is unincorporated and lies within the jurisdictional authority of Alameda County.

For the purpose of this SEIR, the city limits is the project area for the Housing Element and the Draft CAP as policy and programs outlined in these documents would be applied citywide. Because environmental impacts related to the lands designated for residential use on the General Plan land use map were already analyzed adequately in the General Plan EIR (2009) for all issues other than greenhouse gas emissions, this SEIR focuses on the additional sites identified in the Housing Element that could potentially be zoned for residential use, and are (referred to as the "potential sites for rezoning" or "rezoning sites" in this SEIR. Greenhouse gas emission impacts of General Plan land uses are analyzed throughout the Planning Area.

C. Project Description

Proposed Housing Element

The first subject of this SEIR is the proposed update to the City of Pleasanton's Housing Element. The Housing Element is a policy document that consists of goals, policies, and programs to guide the City and private and non-profit developers in providing housing for existing and future residents to meet projected housing demand for all economic segments of the community, as required under Government Code § 65580 *et seq.* (State housing element law). State law requires the housing element to be updated periodically, usually every seven years. The last update of the Pleasanton Housing Element occurred in 2003.

Included in the proposed Housing Element is a program to expand the City's inventory of land available for the development of housing for all economic segment of the community. Expansion of this inventory is needed for the City to provide for its share of regional housing needs. Concurrent with the City's consideration of the updated Housing Element is a proposed General Plan Amendment and rezonings of up to 17 sites within the City for high density residential development.

The final list of approved sites to be adopted by the City Council will include the General Plan Amendment and rezoning actions, which are analyzed in this SEIR. The General Plan land use

¹ Definition of "Planning Area" by the Governor's Office of Planning and Research, General Plan Guidelines (1998).

and zoning of these sites will be converted from non-residential to high density residential (up to 30 dwelling units per acre) which would provide housing opportunity sites with sufficient density to develop lower-income housing units. Also some of the sites will be converted to allow mixed use development. In order to give the City flexibility to select the appropriate opportunity sites to meet the project objectives, this SEIR conservatively analyzes impacts of the development of all the potential sites for rezoning listed above, recognizing that only approximately two thirds of the acreage may be rezoned.

Proposed Climate Action Plan

The second subject of this SEIR is the proposed City of Pleasanton Climate Action Plan. The Climate Action Plan serves to outline strategies, goals, and actions to reduce municipal and communitywide GHG emissions. The Plan is structured to ensure that the City does its part to meet the mandates of California's Global Warming Solutions Act of 2006 (AB 32), which directs the state to reduce state-wide GHG emissions to 1990 levels by 2020. The Climate Action Plan is based on the California Air Resources Board (CARB) recommendation that in order to achieve these reductions, local governments target 2020 municipal and communitywide GHG emissions to be 15 percent below 2005 GHG emissions levels.

The Draft CAP is designed to help the City do its part to meet the mandates of California's Global Warming Solutions Act of 2006 (AB 32), while taking into account the City's General Plan vision and its goal to become the "greenest" city in California. While several initiatives at the state level will help the City reduce GHG emissions, they alone will not be sufficient to meet the 2020 target recommended by CARB. The CAP provides a roadmap for the City to be proactive in reducing GHGs through a schedule of local actions, designed to enable the City to achieve a 15 percent reduction in GHGs below 2005 levels by 2020.

The City's 2005 baseline emissions are estimated at 770,844 metric tons (MT) of carbon dioxide equivalents (CO_2e). The City's 2020 target of 15 percent below 2005 baseline equates to total annual emissions of 655,218 MT CO_2e , a reduction of 115,626 MT CO_2e below the 2005 baseline.

The Draft CAP includes dozens of strategies and actions measures for reducing GHG emissions associated with transportation and land use, energy consumption and generation, water use and wastewater treatment, and solid waste disposal. For each emissions sector, the Climate Action Plan presents goals, strategies, and specific actions for reducing emissions, along with quantified cost-benefit impacts. An implementation and monitoring plan is also provided.

D. Project Objectives

CEQA *Guidelines*, §15124(b) require that the project description in an SEIR include "a statement of the objectives sought by the proposed project," which should include "the underlying purpose of the project." The following are the project objectives for the 2007-2014 Housing Element and associated General Plan Amendment and rezonings to increase the City's inventory of land available for the development housing:

• Provide a vision for the City's housing and growth management through 2014;

- Maintain the existing housing stock to serve housing needs;
- Ensure capacity for the development of new housing to meet the RHNA at all income levels;
- Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character;
- Encourage, develop and maintain programs and policies to meet projected affordable housing needs;
- Develop a vision for Pleasanton that supports sustainable local, regional and state housing and environmental goals;
- Provide new housing communities with substantial amenities to provide a high quality of life for residents;
- Present the California Department of Housing and Community Development a housing element that meets the requirements of the settlement agreement; and
- Adopt a housing element that substantially complies with California housing element law.

The following are the project objectives for the CAP:

- Provide a vision for the City's sustainable development through 2025 while preserving the City's character;
- Provide the framework to meet the AB32 target of reducing GHG emissions to 1990 levels (or 15 percent below the 2005 baseline, consistent with recommendations provided by the California Air Resource Board);
- Incorporate GHG emissions reduction programs, consistent with the CAP, into the General Plan;
- Serve as an example of environmentally sustainable development to cities throughout California and the country at large;
- Meet the terms of the Settlement Agreement, providing GHG emissions analysis and reduction strategies for the life of the City's General Plan.

E. Proposed Project Impacts

As provided by the *CEQA Guidelines* Section 15123(b)(1), an EIR must provide a summary of the impacts, mitigation measures and significant impacts after mitigation for the proposed project. This information is provided in **Table 2-1** at the end of this chapter as determined in Chapter 4 of this Draft SEIR. The proposed project would result in significant and unavoidable impacts with respect to cultural resources, and transportation and traffic:

Impact 4.D-1: Development facilitated by the General Plan Amendment and rezonings has the potential to adversely change the significance of historical resources.

Impact 4.N-7: Development facilitated by the General Plan Amendment and rezonings could potentially add traffic to the regional roadway network to the point at which they would operate unacceptably under Cumulative plus Project conditions.

The remaining impact areas of aesthetics, air quality, biological resources, greenhouse gasses, geology, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and utilities, and recreation would be mitigated (when appropriate) to less than significant levels.

F. Alternatives to the Proposed Project

Chapter 5, *Alternatives*, analyzes a range of reasonable alternatives to the proposed project, including the No Project Alternative, a Large Properties Alternative, a Transit Oriented Alternative, Excludes East Pleasanton Alternative, and a Reduced Density Alternative. Each is summarized below.

No Project

The No Project Alternative would result in development consistent with the City's existing General Plan. The previous Housing Element addressed the housing needs of all residents, in all income levels for the previous planning period. The Housing Element for the 2007-2014 planning period addresses housing needs and identifies opportunities to improve and expand the City's housing stock, it would not, however, directly result in actual new construction or revitalization of housing units in the City. The construction of new housing is largely driven by economic factors, not the implementation of a Housing Element which provides opportunities and incentives for the production of housing by other parties than the City. Therefore, the 'No-Project' alternative is not based on a comparison of the 2007-2014 Housing Element and the 2003 Housing Element.

Although State law requires the City to adopt a Housing Element that responds to RHNA, pursuant to CEQA, the No Project Alternative assumes buildout of no more than 2,157 units under the proposed Housing Element. This includes 319 housing units constructed between 2007 and 2010, 82 units currently under construction, 1,321 units with approvals, 158 potential units on residentially zoned land, and 870 that could be accommodated due to the Hacienda Rezoning. However, this alternative would not result in additional housing units beyond the 1,128 units that have already been constructed in the City before 2014.

Since the City must plan for its RHNA allocation, it is not legally permissible to select the No Project Alternative, thus ignoring the proposed Housing Element and rezone enough of the potential sites for rezoning to meet the RHNA mandated figure. Further, the No Project would not meet the requirements of the Settlement Agreement, which states that the City would adopt a Housing Element for the 2007-2014 planning period within 90-days of receiving comments from the Department of Housing and Community Development.

Under the No Project, the Draft CAP would not be adopted and its GHG reduction measures would not be implemented. For Pleasanton, this means that it would not meet the goals AB 32, of

15 percent below 2005 baseline by 2020 (306,311 MT CO₂e below base line). However, the No Project would get credit from several high-impact state-wide measures including in the AB 32 Scoping Plan, which are estimated to be 194,017 MT CO₂e. With the addition of projected impact of rising fuel prices on driving behavior described in the Draft CAP, which is estimated to translates to a equivalent to annual emissions reductions of 18,729 MT CO₂e, Pleasanton would left with the challenge of reducing city-wide emissions by an additional 93,585 MT CO₂e per year below business-as-usual by 2020 under the No Project Alternative.

Further, the No Project would not meet the requirements of the Settlement Agreement, which states that the City would adopt a Climate Action Plan by February 17, 2012.

Alternative 1, Large Properties

Alternative 1, Large Properties, would result in the development of a total of 2,232 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. Like the proposed project, Alternative 1 would include rezoning to accommodate future residential growth. Alternative 1 would rezone 8 of the 17 potential sites, specifically the sites that could accommodate larger developments. The larger properties could more easily address neighborhood compatibility issues through site design, and also provide high quality open space as other amenities. As presented in Table 5-1, Alternative 1 would permit residential development on:

- Site 1 BART Site with 300 units
- Site 3 Stoneridge Mall with 300 units
- Site 6 Irby-Kaplan-Zia with 180 units
- Site 7 Gateway with 279 units
- Site 8 Auf de Mar/ Rickenback with 345 units
- Site 10 CarrAmerica with 252 units
- Site 11 Kiewit with 300 units
- Site 14 Legacy Partners with 276 units

Impacts to cultural resources and transportation and traffic would remain significant and unavoidable with this alternative. Other environmental resources would be less than significant impacted, similar to the proposed General Plan Amendment and rezonings.

Alternative 2, Transit Oriented

Alternative 2, Transit Oriented, would result in the development of a total of 2,324 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. Like the proposed project, Alternative 2 would include rezoning to accommodate future residential growth. Rather than focusing on larger properties as in the Large Properties Alternative, the Transit Oriented Alternative would focus on sites in proximity to transit for rezoning to residential use. Alternative 2 would rezone 11 of the 17 potential sites, specifically the sites that are closest to the BART stations and the Route 10 transit corridor, a bus line with 15-minute headways. The Kiewit and Legacy sites (Sites 11 and 14) could also be served by a future ACE train station. As presented in Table 5-1, Alternative 2 would allow residential development on:

- Site 1 BART Site with 249 units
- Site 2 Sheraton with 99 units
- Site 3 Stoneridge Mall with 300 units
- Site 4 Kaiser with 183 units
- Site 6 Irby-Kaplan-Zia with 138 units
- Site 8 Auf de Mar/ Rickenback with 345 units
- Site 9 Nearon with 168 units
- Site 10 CarrAmerica with 252 units
- Site 11 Kiewit with 300 units
- Site 14 Legacy Partners with 276 units
- Site 17 Axis Community Health with 14 units

Impacts to cultural resources and transportation and traffic would remain significant and unavoidable with this alternative. Other environmental resources would be less than significant impacted, similar to the proposed General Plan Amendment and rezonings.

Alternative 3, Excludes East Pleasanton

Alternative 3, Excludes East Pleasanton, would result in the development of a total of 2,200 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. Like the proposed project, Alternative 3 would include rezoning to accommodate future residential growth, but excludes properties 11 and 14 which have been included in the plan area for the East Pleasanton Specific Plan, as well as Sites 2, 4, 18, 19, 20 and 21, which are smaller sites. Alternative 3 would rezone 9 of the 17 potential sites, specifically the sites that could accommodate larger developments and would include one downtown residential site to increase vitality in the downtown area. As presented in Table 5-1, Alternative 3 would allow residential development on:

- Site 1 BART Site with 249 units
- Site 3 Stoneridge Mall with 300 units
- Site 6 Irby-Kaplan-Zia with 270 units
- Site 7 Gateway with 279 units
- Site 8 Auf de Mar/ Rickenback with 345 units
- Site 9 Nearon with 150 units
- Site 10 CarrAmerica with 252 units
- Site 13 CM Capital Properties with 290 units
- Site 17 Axis Community Health with 14 units

Alternative 3 adheres to Program 26.1 of the General Plan that calls for a specific plan for East Pleasanton.

Impacts to cultural resources and transportation and traffic would remain significant and unavoidable with this alternative. Other environmental resources would be less than significant impacted, similar to the proposed General Plan Amendment and rezonings.

Alternative 4, Increased Density

Alternative 4 Increased Density would result in the development of a total of 3,900 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. This alternative evaluates increased density on all the potential sites for rezoning, in the event that the City wishes to consider a higher density on one or more of the 17 sites.

G. Areas of Concern

Section 15123(b)(2) of the *CEQA Guidelines* require that an EIR summary identify areas of controversy known to the lead agency, including those issues raised by other agencies and the public. The analysis in this EIR indicates that air emissions from increased traffic would exceed applicable significance thresholds, and vehicle operations would significantly decrease service levels for certain intersections. As a result, impacts would be significant and unavoidable, even after incorporation of mitigation measures. As a result, issues related to located air quality, GHG emissions, and traffic impacts, are potential areas of controversy.

H. Issues to be Resolved

Section 15123(b)(3) of the *CEQA Guidelines* requires that an EIR present the issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects. The major issues to be resolved for the proposed project include decisions by the City of Pleasanton, as the Lead Agency, as to whether:

- This SEIR adequately describes the environmental impacts of the proposed project;
- Recommended mitigation measures should be adopted or modified;
- Additional mitigation measures need to be applied to the proposed project;
- Feasible alternatives exist that would achieve the project's objectives and would reduce potentially significant environmental impacts;
- Significant and unavoidable impacts would occur if the project is implemented; and
- The proposed project should or should not be approved.

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Aesthetics		
Impact 4.A-1: Development facilitated by the General Plan Amendment and rezonings could have a potentially	Housing Element	Less than
adverse effect on a scenic vista. (Significant)	incorporate view corridors through the site which maintain views of the ridgelines to the west from Valley Avenue.	eignineant
	Climate Action Plan	
	None required.	
Impact 4.A-2: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially damage scenic resources, including, but not limited to, troos, rocks, outcroppings, and historic buildings within a	None required.	
state scenic highway. (Less than Significant)	Climate Action Plan	
	None required.	
Impact 4.A-3: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially degrade the existing visual character or quality of Plansing Area, (Less than Simificant)	None required.	
	Climate Action Plan	
	None required.	
Impact 4.A-4: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the Planning	None required.	
Area. (Less than Significant)	Climate Action Plan	
	None required.	

Air Quality

Impact 4.B-1: Implementation of the General Plan Amendment and rezonings would result in increased long-term emissions of criteria pollutants associated with construction activities that could contribute substantially to an air quality violation. (Significant)

Housing Element

Mitigation Measure 4.B-1a: Prior to the issuance of a grading or building permit, whichever is sooner, the project applicant for a potential site for rezoning shall submit an air quality construction plan detailing the proposed air quality construction measures related to the project such as construction phasing, construction equipment, and dust control measures, and such plan shall be approved by the Director of Community Development. Air quality construction related emissions would exceed the applicable thresholds, Additional Construction Mitigation Measures (BAAQMD, May 2011) and, where construction-related emissions would exceed the applicable thresholds, Additional Construction Mitigation Measures (BAAQMD, May 2011) shall be instituted. The air quality construction plan shall be included on all grading, utility, building, landscaping, and improvement plans during all phases of construction.

Less than Significant

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigatior
Air Quality (cont.)		
Impact 4.B-1 (cont.)	Climate Action Plan None required.	
Impact 4.B-2: Development facilitated by the General Plan Amendment and rezonings could fundamentally conflict with the Bay Area 2010 Clean Air Plan because	Housing Element None required.	Less than Significant
the projected rate of increase in vehicle miles traveled (VMT) or vehicle trips is not greater than the projected rate of increase in population. (Less than Significant)	Climate Action Plan None required.	
Impact 4.B-3: Development facilitated by the General Plan Amendment and rezonings would not fundamentally conflict with the Clean Air Plan because	Housing Element None required.	Less than Significant
the plans demonstrate reasonable errorts to implement control measures contained in the Clean Air Plan. (Less than Significant)	Climate Action Plan None required.	
Impact 4.B-4: Development facilitated by the General Plan Amendment and rezonings could potentially include residential or mixed-use developments that could expose sensitive receptors to substantial health	Housing Element Mitigation Measure 4.B-4: Reduce Exposure to TACs. On project sites where screening thresholds are exceeded, the following measures shall be implemented for development on all the potential sites for rezoning to reduce exposure to TACs and improve indoor and outdoor air quality:	Less than Significant
TACs from mobile and stationary sources. (Significant)	Indoor Air Quality - In accordance with the recommendations of BAAQMD, appropriate measures shall be incorporated into building design in order to reduce the potential health risk due to exposure to TACs to achieve an acceptable interior air quality level for sensitive receptors. The appropriate measures shall include one of the following methods:	
	• Project applicants shall retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the BAAQMD requirements to determine the exposure of project residents/occupants/users to air pollutants prior to issuance of a demolition, grading, or building permit. The HRA shall be submitted to the Community Development Department for review and approval. The applicant shall implement the approved HRA recommendations, if any.	
	• Project applicants shall implement all of the following features that have been found to reduce the air quality risk to sensitive receptors and shall be included in the project construction plans. These features shall be submitted to the Community Development Department for review and approval prior to the issuance of a demolition, grading, or building permit and shall be maintained on an ongoing basis during operation of the projects.	
	 Redesign the site layout to locate sensitive receptors as far as possible from any freeways, major roadways, or other sources of air pollution (e.g., loading docks, parking lots). 	
	 Incorporate tiered plantings of trees (redwood, deodar cedar, live oak, and/or oleander) to the maximum extent feasible between the sources of pollution and the sensitive receptors. 	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Air Quality (cont.)		
Impact 4.B-4 (cont.)	 Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets or exceeds an efficiency standard of MERV 13. The HV system shall include the following features: Installation of a high efficiency filter and/or carbon filter to filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85% supply filters shall be used. 	
	 Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the pollutant sources. 	
	Install indoor air quality monitoring units in buildings.	
	 Project applicants shall maintain, repair and/or replace HV systems on an ongoing and as needed basis or shall prepare an operation and maintenance manual for the HV systems and the filters. The manual shall include the operating instructions and the maintenance and replacement schedule. This manual shall be included in the CC&Rs for residential projects and distributed to the building maintenance staff. In addition, the applicant shall prepare a separate homeowners manual. The manual shall contain the operating instructions and the maintenance and replacement schedule for the HV system and the filters. 	
	Outdoor Air Quality - To the maximum extent practicable, individual and common exterior open space, including playgrounds, patios, and decks, shall either be shielded from the source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.	
	Climate Action Plan	
	None required.	
Impact 4.B-5: Development facilitated by the proposed General Plan Amendment and rezonings could potentially include residential developments that expose occupants to sources of substantial odors affecting a substantial number	Mitigation Measure 4.B-5: If odor complaints associated with the solid waste transfer station operations are received from future residences of the potential sites for rezoning (Sites 6, 8, 11, and 14), the City shall work with the transfer station owner(s) and operator(s) to ensure that odors are minimized appropriately.	Less than Significant
of people. (Significant)	Climate Action Plan	
	None required.	
Impact 4.B-6: Development proposed as part of the General Plan Amendment and rezonings, when combined with other foreseeable development in the vicinity, could	Housing Element None required.	Less than Significant
potentially be inconsistent with the growth assumptions of the <i>Bay Area 2010 Clean Air Plan</i> resulting in a cumulative air quality impact. (Less than Significant)	Climate Action Plan None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Biological Resources		
Impact 4.C-1: Development facilitated by the General Plan Amendment and rezonings could potentially have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG, or the USFWS. (Significant)	Housing Element Mitigation Measure 4.C-1a: Pre-construction Breeding Bird Surveys. The City shall ensure that prior to development of all potential sites for rezoning (Sites 1-4, 6-11, 13, 14, and 16-21) and each phase of project activities that have the potential to result in impacts on breeding birds, the project applicant shall take the following steps to avoid direct losses of nests, eggs, and nestlings and indirect impacts to avian breeding success:	Less than Significant
	 If grading or construction activities occur only during the non-breeding season, between August 31 and February 1, no surveys will be required. 	
	 Pruning and removal of trees and other vegetation, including grading of grasslands, should occur whenever feasible, outside the breeding season (February 1 through August 31). 	
	 During the breeding bird season (February 1 through August 31) a qualified biologist will survey activity sites for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys will include all line-of-sight trees within 500 feet (for raptors) and all vegetation (including bare ground) within 250 feet for all other species. 	
	• Based on the results of the surveys, avoidance procedures will be adopted, if necessary, on a case-by-case basis. These may include construction buffer areas (up to several hundred feet in the case of raptors) or seasonal avoidance.	
	• Bird nests initiated during construction are presumed to be unaffected, and no buffer would necessary except to avoid direct destruction of a nest or mortality of nestlings.	
	 If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by nesting or other special-status birds may be pruned or removed. 	
	Mitigation Measure 4.C-1b: Pre-Construction Bat Surveys. Conditions of approval for building and grading permits issued for demolition and construction on Sites 6, 8, 9, 10, 13, 20, and 21 shall include a requirement for pre- construction special-status bat surveys when large trees are to be removed or underutilized or vacant buildings are to be demolished. If active day or night roosts are found, the bat biologist shall take actions to make such roosts unsuitable habitat prior to tree removal or building demolition. A no-disturbance buffer of 100 feet shall be created around active bat roosts being used for maternity or hibernation purposes. Bat roosts initiated during construction are presumed to be unaffected, and no buffer would necessary.	
	Mitigation Measure 4.C-1c: Burrowing Owl Surveys. Conditions of approval for building and grading permits at Site 18 (Downtown SF site) and Site 20 (Sunol Blvd. and Sycamore Road)shall require the Project Applicant to implement the following measures prior to construction initiation.	
	 A qualified biologist² shall conduct a combined Phase I and Phase II burrowing owl habitat assessment and burrow survey according to accepted guidelines developed by the Burrowing Owl Consortium and accepted by CDFG. If suitable habitat, i.e. grasslands with short cover and burrows of a size usable by owls and/or owl sign, is 	

² A qualified biologist shall have at least a bachelor's degree in a field related to wildlife ecology and shall be familiar with life history and habitats of target species for any pre-construction surveys.

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Biological Resources		
Impact 4.C-1 (cont.)	not present at a site then the qualified biologist shall prepare a written report to be submitted to CDFG stating the reasons why the site is not considered to be burrowing owl habitat and no further surveys or mitigation are necessary.	
	 If the Phase I and II surveys find that suitable habitat and burrows are present at a site the qualified biologist will conduct Phase III surveys to determine presence or absence of burrowing owls. A minimum of four surveys will be conducted during the breeding season (April 15 to July 15). If owls are not observed then a minimum of four surveys will be conducted during the wintering season. If owls are not observed during either Phase III survey then no further mitigation is generally required, although CDFG may require pre-construction surveys. In either case a Phase IV survey report shall be prepared and submitted to CDFG. 	
	If required, pre-construction surveys for burrowing owl shall be conducted as follows:	
	 A qualified biologist shall conduct a pre-construction survey for burrowing owl if construction occurs during the breeding season (February 1 through August 31). Surveyors shall walk transects no more than 100 feet apart to attain 100 percent visual coverage of all grassland habitats within the project site. Where possible, agricultural or grassland habitats within 300 feet of the project site shall also be surveyed. If owls are not detected during this survey, project work can move forward as proposed. 	
	 If owls are detected during this survey, no project activities shall occur within 250 feet of occupied burrows until the breeding season is over, unless owls have not begun laying eggs or juveniles are capable of independent survival. 	
	 If project activities will occur during the non-breeding season (September 1 through January 31), a second pre- construction survey shall be conducted for burrowing owl to document wintering owls that have migrated to the project site, as well as breeding owls that may have left the project site. If owls are not detected during this survey, project work can move forward as proposed. 	
	 If occupied burrows are detected during this survey and can be avoided, project activities shall not occur within 160 feet of occupied burrows. 	
	 If occupied burrows cannot be avoided, one-way doors shall be installed to passively relocate burrowing owls away from active work areas. Two natural burrows or one artificial burrow shall be provided in adjacent grassland habitat for each one-way door installed in an active burrow. One-way doors shall remain in place for 48 hours. The project site shall be monitored daily for up to one week to ensure owls have moved to replacement burrows. 	
	 Once unoccupied, burrows shall be excavated by hand and backfilled to prevent owl occupation. When feasible, other unoccupied burrows in ground disturbance area should also be excavated by hand and backfilled. Depending on the California red-legged frog and California tiger salamander Habitat Assessment results the project site may require a pre-construction survey for these species as well before burrows can be collapsed. 	
	Mitigation Measure 4.C-1d: Compensatory mitigation for annual grassland habitat providing potentially suitable habitat for burrowing owl. Annual grasslands at the Site 18 may provide foraging, nesting, or wintering habitat for burrowing owl. If burrowing owls are found to be absent through the surveys prescribed above, then consistent with standard CDFG mitigations standards and ratios, annual grassland habitat at Sites 18 and Site 20 shall be compensated for at a ratio of 1:1. If burrowing owl are found to be occupying Site 18 or 20, then	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Biological Resources		
Impact 4.C-1 (cont.)	compensatory mitigation shall be required at a ratio of 3:1, acres replaced to acres lost. The project applicant may fulfill this obligation by purchasing annual grassland property suitable for, or occupied by, burrowing owl. Such land shall be protected in perpetuity through an endowed conservation easement. Alternatively, the project applicant may purchase credits in an approved mitigation bank for burrowing owl. Climate Action Plan None required.	
Impact 4.C-2: Development facilitated by the General Plan Amendment and rezonings could potentially adversely affect wetlands, streams, or riparian habitat. (Significant)	Housing Element Mitigation Measure 4.C-2: Consistent with the Alameda County Watercourse Protection Ordinance, no new grading or development at Sites 6, 8, 9, 10, 13, 20, or 21 shall be allowed within 20 feet of the edge of riparian vegetation or top of bank, whichever is further from the creek centerline, as delineated by a qualified, City-approved biologist. Climate Action Plan None required.	Less than Significant
Impact 4.C-3: Development facilitated by the General Plan Amendment and rezonings could potentially interfere 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. (Significant)	Housing Element Implement Mitigation Measures 4.C-1a through 4.C-1d and 4.C-2c. Climate Action Plan None required.	Less than Significant
Impact 4.C-4: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant)	Housing Element None required. Climate Action Plan None required.	
Impact 4.C-5: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. (Less than Significant)	Housing Element None required. Climate Action Plan None required.	
Impact 4.C-6: Development facilitated by the General Plan Amendment and rezonings, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, could potentially have a cumulatively considerable impact on biological resources. (Less than Significant)	Housing Element None required. Climate Action Plan None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Cultural Resources		
Impact 4.D-1 : Development facilitated by the General Plan Amendment and rezonings has the potential to adversely change the significance of historical resources. (Significant and Unavoidable)	Housing Element Mitigation Measure 4.D-1a: Prior to demolition, the project applicant shall have a historic resource evaluation conducted for the ice house and farmhouse on Site 6 and for the residence on Site 21. If it is determined that this structure is historic, Mitigation Measure 4.D-1b will be required. If the structure is not found to be historic, demolition of the structure will be considered a less than significant impact.	Significant and Unavoidable
	Mitigation Measure 4.D-1b: If the historic resources evaluation determines that Site 6 contains a historic resource, prior to demolition, the structure shall be documented according to Historic American Building Survey (HABS) standards. These standards include large format black and white photographs, an historical narrative describing the architectural and historical characteristics of the building, and measured drawings (or reproduced existing drawings if available). The HABS documentation shall be archived at the City of Pleasanton Planning Department and the City of Pleasanton Public Library.	
	Climate Action Plan	
	None required.	
Impact 4.D-2: Development facilitated by the General	Housing Element	Less than
Plan Amendment and rezonings has the potential to adversely affect archaeological resources. (Significant)	Mitigation Measure 4.D-2 : Prior to the issuance of grading permits for development on the potential sites for rezoning that have not been previously developed or have only experienced minimal disturbance, including Sites 6, 7, 8, and 18, the applicant shall submit to the City an archaeological mitigation program that has been prepared by a licensed archaeologist with input from a Native American Representative. The applicant shall implement the requirements and measures of this program, which will include, but not be limited to:	Significant
	 Submission of periodic status reports to the City of Pleasanton and the NAHC. 	
	 Submission of a final report, matching the format of the final report submitted for CA-Ala-613/H, dated March 2005, to the City and the NAHC. 	
	 A qualified archaeologist and the Native American Representative designated by the NAHC will be present on site during the grading and trenching for the foundations, utility services, or other on-site excavation, in order to determine if any bone, shell, or artifacts are uncovered. If human remains are uncovered, the applicant will implement Mitigation Measure 4.D-4, below. 	
	Climate Action Plan	
	None required.	
Impact 4.D-3: Development facilitated by the General	Housing Element	Less than
Plan Amendment and rezonings may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Significant)	Mitigation Measure 4.D-3: In the event that paleontological resources are encountered during the course of development, all construction activity must temporarily cease in the affected area(s) until the uncovered fossils are properly assessed by a qualified paleontologist and subsequent recommendations for appropriate documentation and conservation are evaluated by the Lead Agency. Excavation or disturbance may continue in other areas of the site that are not reasonably suspected to overlie adjacent or additional paleontological resources.	Significant
	Climate Action Plan	

None required.

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Cultural Resources (cont.)		
Impact 4.D-4 : Development facilitated by the General Plan Amendment and rezonings has the potential to disturb human remains, including those interred outside of formal cemeteries. (Significant)	Housing Element Mitigation Measure 4.D-4: In the event that human remains are discovered during grading and construction of development facilities by the Housing Element, work shall stop immediately. There shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify the persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains.	Less than Significant
	Climate Action Plan	
	None required.	
Impact 4.D-5: Development facilitated by the General	Housing Element	Less than
Plan Amendment and rezonings, in combination with past, present, existing, approved, pending, and	Implement Mitigation Measure 4.D-1a.	Significant
adversely affect historical resources on or adjacent to	Climate Action Plan	
cumulative project sites, could form a significant cumulative impact to historical resources. (Significant)	None required.	
Greenhouse Gas Emissions		
Impact 4.E-1: Development facilitated by the proposed	Housing Element	
Housing Element; Climate Action Plan; General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement:	None required.	
and rezoning of sites for residential development could	Climate Action Plan	
potentially produce greenhouse gas emissions that could exceed applicable quantitative thresholds. (Less than Significant)	None required.	
Impact 4.E-2: The proposed Housing Element; Climate	Housing Element	
Action Plan; General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended	None required.	
sites for residential development sufficient to meet	Climate Action Plan	
Pleasanton's share of the regional housing need could potentially conflict with an applicable plan, policy or regulation of an appropriate regulatory agency adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)	None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Geology		
Impact 4.F-1: Development facilitated by the General Plan Amendment and rezonings would expose people or structures to rupture of a known earthquake fault.	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.F-2: Development facilitated by the General Plan Amendment and rezonings could potentially expose people or structures to adverse effects of strong seismic groundshaking or seismic-related ground failure	Housing Element None required.	
(Less than Significant)	Climate Action Plan None required.	
Impact 4.F-3: Development facilitated by the General Plan Amendment and rezonings could potentially expose people or structures to landslides or mudflows. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.F-4: Development facilitated by the General Plan Amendment and rezonings could potentially be subject to risk from settlement and/or subsidence of land lateral spreading or expansive soils creating	Housing Element None required.	
substantial risks to life or property. (Less than Significant)	Climate Action Plan None required.	
Impact 4.F-5: Development facilitated by the General Plan Amendment and rezonings could potentially result in substantial soil erosion. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.F-6: Development facilitated by the General Plan Amendment and rezonings in combination with past, present, and future development in the current in a cumulative activities.	Housing Element None required.	
impacts to geologic and seismic hazards. (Less than Significant)	Climate Action Plan None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Hazards and Hazardous Materials		
Impact 4.G-1: Development facilitated by the General Plan Amendment and rezonings could create a potentially significant hazard to the public through routine transport, use, or disposal of hazardous materials. (Less than Significant)	Housing Element None required. Climate Action Plan None required.	
Impact 4.G-2: Development facilitated by the General Plan Amendment and rezonings could accidentally release hazardous materials into the environment, creating a potentially significant hazard to the public or environment. (Significant)	Housing Element Mitigation Measure 4.G-2: The City shall ensure that each project applicant retain a qualified environmental consulting firm to prepare a Phase I environmental site assessment in accordance with ASTM E1527-05 which would ensure that the City is aware of any hazardous materials on the site and can require the right course of action. The Phase I shall determine the presence of recognized environmental conditions and provide recommendations for further investigation, if applicable. Prior to receiving a building or grading permit, project applicant shall provide documentation from overseeing agency (e.g., ACEH or RWQCB) that sites with identified contamination have been remediated to levels where no threat to human health or the environment remains for the proposed uses. Climate Action Plan None required.	Less than Significant
Impact 4.G-3: Development facilitated by the General Plan Amendment and rezonings could potentially result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant)	Housing Element None required. Climate Action Plan None required.	
Impact 4.G-4: Development facilitated by the General Plan Amendment and rezonings could potentially be located on one or more sites that are included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5, resulting in a hazard to the public or the environment. (Significant)	Housing Element Implement Mitigation Measure 4.G-2. Climate Action Plan None required.	Less than Significant
Impact 4.G-5: Development facilitated by the General Plan Amendment and rezonings could potentially be affect the operations at the Livermore Municipal Airport or present a safety hazard to people residing or working in the vicinity. (Significant)	 Housing Element Mitigation Measure HAZ-4.G-5: a. Prior to PUD approval for Sites 11 (Kiewit), 14 (Legacy Partners), 6 (Irby-Kaplan-Zia), 8 (Auf de Maur/Richenback), 10 (CarrAmerica), 16 (Vintage Hills Shopping Center), 17 (Axis Community Health), and 21 (4202 Stanley): 1) the project applicant shall submit information to the Director of Community Development demonstrating compliance with the ALUPP, as applicable, including its height guidance; and 2) the Director of Community Development shall forward this information and the proposed PUD development plans to the ALUC for review. 	Less than Significant

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Hazards and Hazardous Materials		
Impact 4.G-5 (cont.)	b. Prior to any use permit approval for Sites 11 (Kiewit), and 14 (Legacy Partners): the project applicant shall submit information to the Director of Community Development demonstrating compliance with the ALUPP, as applicable; and 2) the Director of Community Development shall forward this information and the proposed use permit to the ALUC for review.	
	c. The following condition shall be included in any PUD development approval for all the potential sites for rezoning: Prior to the issuance of a grading permit or building permit, whichever is sooner, the project applicant shall submit verification from the FAA, or other verification to the satisfaction of the City Engineer or Chief Building Official, of compliance with the FAA Part 77 (Form 7460 review) review for construction on the project site.	
	Climate Action Plan	
	None required.	
Impact 4.G-6: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially result in a safety hazard for people residing or working in the vicinity of a private airstein. (No Impact)	None required.	
	Climate Action Plan	
	None required.	
Impact 4.G-7: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation	None required.	
plan. (Less than Significant)	Climate Action Plan	
	None required.	
Impact 4.G-8: Development facilitated by the General	Housing Element	
expose people or structures to a significant risk of loss, injury or death involving wildland fires, including	None required.	
wildlands adjacent to urbanized areas or residences	Climate Action Plan	
intermixed with wildlands. (Less than Significant)	None required.	
Impact 4.G-9: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings, combined with other past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity, and could potentially result in cumulative hazards or hazardous materials impacts. (Less than Significant)	None required.	
	Climate Action Plan	
	None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Hydrology and Water Quality		
Impact 4.H-1: Development facilitated by the General Plan Amendments could have potential impacts on water quality, flooding, and could create additional sources of polluted runoff. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.H-2: Development facilitated by the General Plan Amendments could potentially deplete groundwater supplies or interfere with groundwater recharge. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.H-3: Development facilitated by the General Plan Amendment and rezoning could potentially alter runoff characteristics on sites proposed for residential development which could lead to onsite and off-site erosion or flooding. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.H-4: Development facilitated by the General Plan Amendment and rezonings could potentially result in construction of residences within a FEMA 500-year flood hazard area. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.H-5: Development facilitated by the General Plan Amendment and rezonings could potentially expose people and structures to flooding as a result of a levee or dam failure. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.H-6: Development facilitated by the General Plan Amendment and rezonings, in conjunction with past, present and future projects, could potentially have a cumulative adverse impact with respect to hydrology and water quality. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Land Use and Planning		
Impact 4.I-1: Development facilitated by the General Plan Amendment and rezonings could potentially physically divide an established community. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.I-2: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with applicable land use plans and policies. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.I-3: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with adopted habitat conservation plans. (Less than Significant)	Housing Element None required.	
than Significanty	Climate Action Plan None required.	
Impact 4.I-4: Development facilitated by the General Plan Amendment and rezonings, combined with other past, present, existing, approved, pending, and reasonably foreseeable future plans or projects in the	Housing Element None required.	
area, could potentially result in a significant adverse cumulative land use impact. (Less than Significant)	Climate Action Plan None required.	
Noise		

Impact 4.J-1: Development facilitated by the General Plan Amendment and rezonings could potentially increase construction noise levels at sensitive receptors located near construction sites. (Significant)

Housing Element

Mitigation Measure 4.J-1: In addition to requiring that all project developers comply with the applicable construction noise exposure criteria established within the City's Municipal Code 9.04.100, the City shall require developers on the potential sites for rezoning to implement construction best management practices to reduce construction noise, including:

- a. Locate stationary construction equipment as far from adjacent occupied buildings as possible.
- b. Select routes for movement of construction-related vehicles and equipment so that noise-sensitive areas, including residences, and outdoor recreation areas, are avoided as much as possible. Include these routes in materials submitted to the City of Pleasanton for approval prior to the issuance of building permits.
- c. All site improvements and construction activities shall be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Saturday. In addition, no construction shall be allowed on State and federal holidays. If complaints are received regarding

Less than

Significant
Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Noise (cont.)		
Impact 4.J-1 (cont.)	the Saturday construction hours, the Community Development Director may modify or revoke the Saturday construction hours. The Community Development Director may allow earlier "start-times" for specific construction activities (e.g., concrete-foundation/floor pouring), if it can be demonstrated to the satisfaction of the Community Development Director that the construction and construction traffic noise will not affect nearby residents.	
	d. All construction equipment must meet DMV noise standards and shall be equipped with muffling devices.	
	e. Designate a noise disturbance coordinator who will be responsible for responding to complaints about noise during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site and shall be provided to the City of Pleasanton. Copies of the construction schedule shall also be posted at nearby noise-sensitive areas.	
	Climate Action Plan	
	None required.	
Impact 4.J-2: Construction associated with development facilitated by the General Plan Amendment and rezonings could potentially generate ground-borne vibration at neighboring sensitive uses. (Significant)	 Housing Element Mitigation Measure 4.J-2: The City shall require developers on the potential sites for rezoning to conduct a vibration study which will estimate vibration levels at neighboring sensitive uses, and if required, provide mitigation efforts needed to satisfy the applicable construction vibration level limit established in Table 4.J-4. It is expected that vibration mitigation for all project sites will be reasonable and feasible. 	Less than Significant
	Climate Action Plan	
	None required.	
Impact 4.J-3: Development facilitated by the General Plan Amendment and rezonings could potentially locate residential uses near an existing rail line. Future residents could potentially be exposed to excessive exterior and interior noise exposure from train noise events. (Significant)	 Housing Element Mitigation Measure 4.J-3: The City shall require project applicants (Sites 8, 11, 14, 18, and 21) to conduct site-specific acoustical assessments to determine train-related noise exposure, impact, and mitigation. Recommendations in the acoustical assessment shall be sufficient to satisfy the applicable City of Pleasanton 70 dB Ldn and 50/55 dB Lmax exterior and interior noise exposure criteria, respectively, using appropriate housing site design and building construction improvements. 	Less than Significant
	Climate Action Plan	
	None required.	
Impact 4.J-4: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially locate residential uses near an existing rail line. Future residents would be exposed to substantial vibration from	None required.	
train pass-by events. (Less than Significant)	Climate Action Plan	
	None required.	

Impacts

Mitigation Measures and General Conditions of Approval

Significance after Mitigation

Noise (cont.)

Impact 4.J-5: Development facilitated by the General Plan Amendment and rezonings could potentially generate additional traffic on local area roadways and associated increases in traffic noise exposure relative to existing conditions. (Significant)

Housing Element

Mitigation Measure 4.J-5a: Prior to prior to PUD approval a potential site for rezoning would add traffic noise in exceed of 55dBA described in Table 4.J-6, the project applicant shall conduct an off-site noise study to determine the project contribution to off-site roadway noise and contribute its fair-share to mitigate the established noise impact.

Mitigation Measure 4.J-5b: Any residential or office buildings shall be built to California's interior-noise insulation standard so that interior traffic noise exposure does not exceed 45 dB Ldn. Before building permits are issued, the project applicant shall be required to submit an acoustical analysis demonstrating that the buildings have been designed to limit interior traffic noise exposure to a level of 45 dB Ldn/CNEL or less.

Mitigation Measure 4.J-5c: Any locations of outdoor activity for sensitive uses associated with the project site shall be designed so that the noise exposure from traffic does not exceed 65 dB Ldn at these activity areas. This shall be done thru site orientation (i.e., location of activity areas away from roadways or shielded by project buildings) or with the inclusion of appropriate noise barriers. Before building permits are issued, the project applicant shall be required to submit an acoustical analysis demonstrating that outdoor activity spaces associated with sensitive uses do not exceed 65 dB Ldn within these spaces.

Climate Action Plan

None required.

Housing Element

Mitigation Measure 4.J-6a: For all of the potential sites for rezoning the City shall require site-specific acoustical assessments to determine noise exposure, impact, and mitigation regarding non-transportation sources. Noise exposure shall be mitigated to satisfy the applicable City Code criterion using appropriate housing site design.

Mitigation Measure 4.J-6b: For Site 14 the City shall require a site-specific acoustical assessment to determine noise from quarrying noise sources. Recommendations in the acoustical assessment shall be sufficient to satisfy the applicable City of Pleasanton 70 dB Ldn and 50/55 dB Lmax exterior and interior noise exposure criteria, respectively.

Mitigation Measure 4.J-6c: For all of the potential sites for rezoning, the City shall require a noise disclosures and noise complaint procedures for new residents at the project site. The requirement shall include a) a disclosure of potential noise sources in the project vicinity; b) establish procedures and a contact phone number for a site manager the residents can call to address any noise complaints.

Climate Action Plan

None required.

Housing Element

Mitigation Measure 4.J-7: For residential developments at Sites 9, 10, 11, 13, and 14 near the extended centerline of Runway 25R (Livermore Municipal Airport) or the left-hand pattern of Runway 25L, the City shall require a site-specific acoustical assessments to determine noise exposure, impact, and mitigation regarding aircraft single events. The assessments shall include the collection of aircraft single-event noise level data for no less than 48-hours on or

Less than Significant

Less than

Significant

Impact 4.J-7: Development facilitated by the General Plan Amendment and rezonings could potentially be exposed to aircraft noise associated with the closest airport which would exceed the applicable noise exposure criteria. (Significant)

Impact 4.J-6: Development facilitated by the General

noise sources that would exceed the applicable City of

Plan Amendment and rezonings could potentially be

affected by existing, stationary (non-transportation)

Pleasanton Municipal Code criteria. (Significant)

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Noise (cont.)		
Impact 4.J-7 (cont.)	in the vicinity of the given housing areas. If needed, aircraft-related single-event noise exposure may be mitigated to satisfy the applicable City of Pleasanton Code criteria of 50 dB Lmax (bedrooms) and 55 dB Lmax (other habitable rooms) using acoustically rated construction materials/systems.	
	Climate Action Plan	
	None required.	
Impact 4.J-8: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially generate construction activity at sites zoned for	None required.	
residential development, in combination with cumulative		
noise effects at noise-sensitive uses. (Less than	None required.	
Significant)		
Impact 4.J-9: Development facilitated by the General Plan Amendment and rezonings, in combination with other foreseen projects in the city could potentially produce a significant cumulative increase in traffic noise exposure under the project scenario. (Significant)	Housing Element Mitigation Measure 4.J-9: Prior to prior to PUD approval a potential site for rezoning would add traffic noise in exceed of 55dBA described in Table 4.J-7, the project applicant shall conduct an off-site noise study to determine the project contribution to off-site roadway noise and contribute its fair-share to mitigate the established noise impact.	Less than Significant
	Climate Action Plan	
	None required.	
Impact 4.J-10: Development facilitated by the General Plan Amendment and rezonings could potentially locate residential uses or mixed-use buildings near an existing highway, arterial, or collector roadway, exposing future residents to excessive exterior and interior traffic noise exposure. (Significant)	Mitigation Measure: Implement Mitigation Measures 4.J-5b and 4.J-5c.	Less than Significant
Population and Housing		
Impact 4.K-1: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could directly induce substantial population growth in the City. (Less than Significant)	None required.	
organica ny	Climate Action Plan	
	None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Population and Housing (cont.)		
Impact 4.K-2: Development facilitated by the General Plan Amendment and rezonings could potentially displace substantial numbers of existing homes,	Housing Element None required.	
elsewhere. (Less than Significant)	Climate Action Plan None required.	
Impact 4.K-3: Development facilitated by the General Plan Amendment and rezonings could potentially displace substantial numbers of people, necessitating	Housing Element None required.	
the construction of replacement housing elsewhere. (Less than Significant)	Climate Action Plan None required.	
Impact 4.K-4: Development facilitated by the General Plan Amendment and rezonings, along with potential development in the surrounding region could potentially introduce additional population to the region, and would	Housing Element None required.	
result in unanticipated population, housing, or employment growth, or the displacement of existing residents or housing units on a regional level. (Less than Significant)	Climate Action Plan None required.	
Public Services and Utilities		
Impact 4.L-1: Development facilitated by the General Plan Amendment and rezonings could potentially result in substantial adverse physical impacts associated with the provision of new or physically altered governmental	Housing Element None required.	
facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios. response times, or other	Climate Action Plan None required.	

Housing Element

Mitigation Measure 4.L-2: Prior to the recordation of a Final Map, the issuance of a grading permit, the issuance of a building permit, or utility extension approval to the site, whichever is sooner, the applicant shall submit written verification from Zone 7 Water Agency or the City of Pleasanton's Utility Planning Division that water is available for the project. To

Less than Significant

facilities. (Less than Significant)

entitlements. (Less than Significant)

performance objectives for public services such as fire protection, police protection, schools, parks and other

Impact 4.L-2: Development facilitated by the General

Plan Amendment and rezonings could potentially

require new or expanded water supply resources or

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Public Services and Utilities (cont.)		
Impact 4.L-2 (cont.)	receive the verification, the applicant may need to offset the project's water demand. This approval does not guarantee the availability of sufficient water capacity to serve the project.	
	Climate Action Plan	
	None required.	
Impact 4.L-3: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially result in the need for construction of wastewater treatment facilities or exceed capacity available by the wastewater	None required.	
treatment provider which serves or may serve the	Climate Action Plan	
residential development sites identified in the General Plan's Amendment and the rezonings. (Less than Significant)	None required.	
Impact 4.L-4: Development facilitated by the General	Housing Element	
Plan Amendment and rezonings could potentially be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.	None required.	
or conflict with statues and regulations related to solid	Climate Action Plan	
waste. (Less than Significant)	None required.	
Impact 4.L-5: Development facilitated by the General	Housing Element	
other past, present, existing, approved, pending, and reasonably foreseeable future projects within and	None required.	
around Pleasanton, could potentially result in an	Climate Action Plan	
Significant)	None required.	
Recreation		
Impact 4.M-1: Development facilitated by the General Plan Amendment and rezonings could potentially increase the use of existing neighborhood and regional	Housing Element None required.	
physical deterioration of the facilities would occur or be accelerated. (Less than Significant)	Climate Action Plan None required.	

Impacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Recreation (cont.)		
Impact 4.M-2: Development facilitated by the General Plan Amendment or rezonings could potentially include recreational facilities or require the construction or expansion of recreational facilities that might have an	Housing Element None required.	
adverse physical effect on the environment. (Less than Significant)	Climate Action Plan None required.	
Impact 4.M-3: Development facilitated by the General Plan Amendment or rezonings, in combination with other past, present, existing, approved, pending, and reasonably foreseeable future projects within and	Housing Element None required.	
around Pleasanton, could potentially result in an increased demand for recreational facilities. (Less than Significant)	Climate Action Plan None required.	
Transportation and Traffic		
Impact 4.N-1: Development facilitated by the General Plan Amendment and rezonings could potentially affect levels of service at the local study intersections under Eviciting plus Preject explicitions (Lass them Significant)	Housing Element None required.	
	Climate Action Plan None required.	
Impact 4.N-2: The residential development proposed in the General Plan Amendment and rezonings could potentially increase traffic safety hazards for vehicles, bivyclists, and nedestrians on public randways due to	Housing Element None required.	
roadway design features, incompatible uses, or project- related vehicles trips. (Less than Significant)	Climate Action Plan None required.	
Impact 4.N-3: Development facilitated by the General Plan Amendment and rezonings could potentially generate services calls from emergency vehicles. (Less than Significant)	Housing Element None required.	
	Climate Action Plan None required.	

Ir	npacts	Mitigation Measures and General Conditions of Approval	Significance after Mitigation
Т	ransportation and Traffic (cont.)		
	Impact 4.N-4: Implementation of the General Plan Amendment and rezonings could potentially be inconsistent with adopted polices, plans, and programs	Housing Element None required.	
	supporting alternative transportation. (Less than Significant)	Climate Action Plan None required.	
	Impact 4.N-5: Development facilitated by the General Plan Amendment and rezonings could potentially generate temporary increases in traffic volume and	Housing Element None required.	
	temporary effects on transportation conditions. (Less than Significant)	Climate Action Plan None required.	
	Impact 4.N-6: Development facilitated by the General Plan Amendment and rezonings could potentially affect levels of service at the local study intersections under	Housing Element None required.	
	Significant)	Climate Action Plan None required.	
	Impact 4.N-7: Development facilitated by the General Plan Amendment and rezonings could potentially add traffic to the regional roadway network to the point at which they would operate unacceptably under Cumulative plus Project conditions. (Significant and Unavoidable)	Housing Element Mitigation Measure 4.N-7: The City shall require developers on the potential sites for rezoning to contribute fair-share funds through the payment of the City of Pleasanton and Tri-Valley Regional traffic impact fees to help fund future improvements to local and regional roadways.	Significant and Unavoidable
		Climate Action Plan	

CHAPTER 3 Project Description

This chapter provides the description of the proposed project which consists of the City of Pleasanton Housing Element update and related land use amendment and rezonings, and the adoption of a Climate Action Plan (CAP) and related amendments to the General Plan (referred to collectively hereafter as the proposed project).

A. Background and Context

In October 2006, the Urban Habitat Program and Sandra De Gregorio filed a lawsuit known as *Urban Habitat Program v. City of Pleasanton* ("Urban Habitat Litigation") alleging that the City had failed to complete the rezoning of sites for affordable housing, and that certain City ordinances and requirements, including the City's 29,000-unit "Housing Cap," conflicted with the ability of the City to prepare and adopt an adequate Housing Element as required by State law.

In addition, following the City's adoption of its General Plan 2005-2025 Update in July 2009, the California Attorney General filed a lawsuit, *State of California v. City of Pleasanton*, alleging that the EIR prepared for the General Plan Update did not comply with the requirements of the California Environmental Quality Act (CEQA) in its analysis of GHG emissions and climate change. The complaint stated that the City's General Plan favored commercial development at the expense of housing, leading inevitably to a jobs/housing imbalance that would exacerbate traffic jams and increase GHG emissions as locally employed people were forced to move to the outer reaches of the metropolitan area to find affordable housing, and thus face longer commutes. Finally, the Attorney General alleged that the General Plan EIR was flawed in its analysis of climate change and the cumulative impact that the General Plan buildout would have on GHG emissions.

In August 2010, the City reached agreement with the Urban Habitat Program, State of California, and others over how to address the issues alleged by the Urban Habitat Program and the Attorney General. Under the Settlement Agreement and Covenant Not to Sue, dated August 2010, the City is obligated to update its Housing Element to meet regional housing needs (including eliminating the housing cap) and adopt a Climate Action Plan, both of which are subject to the provisions of CEQA. With the Settlement Agreement and dismissal of these lawsuits, the July 2009 approval of the General Plan and the City's certification of the program EIR for the General Plan remained in full effect. The proposed project described in detail below is intended to comply with the provisions of the Settlement Agreement between the City and the Attorney General.

As this document is a Supplemental EIR (SEIR) to the General Plan EIR, the programs and policies of the General Plan, as well as the impacts and mitigations measures identified, are incorporated by reference.

B. Regional Location and Planning Area

Regional Context

Pleasanton is located within Alameda County, one of nine Bay Area counties bordering the San Francisco Bay (see **Figure 3-1**). The City of Pleasanton is generally bounded to the west by the Pleasanton ridgelands, to the north by Interstate 580 (I-580) and the city of Dublin, to the east by the city of Livermore, and to the south by the San Francisco Water Department lands and other rangelands. Interstate 680 (I-680) bisects the western portion of the City, intersecting I-580 in its northwestern corner.

The incorporated city limits of Pleasanton include a 22.4-square mile (14,300-acre) area over which Pleasanton exercises zoning control and police powers. In addition, the City provides public services such as library services and police and fire protection within its jurisdiction.

Planning Area and Project

The Pleasanton Sphere-of-Influence, illustrated in **Figure 3-2** consists of a 42.2-square mile (27,200-acre) area adopted by the Alameda County Local Agency Formation Commission (LAFCo) and represents the probable ultimate physical boundary and service area of Pleasanton. The Sphere-of-Influence contains unincorporated lands over which Alameda County has zoning control, as well as lands incorporated within the city limits of Pleasanton.

The Pleasanton Planning Area (Planning Area) encompasses a 75-square mile (48,000-acre) area (see **Figure 3-2**) within which the City designates the future use of lands "bearing a relation to the city's planning."¹ The General Plan Map designates land uses for the entire Planning Area even though much of this land is unincorporated and lies within the jurisdictional authority of Alameda County.

For the purpose of this SEIR, the incorporated area is the project area for the Housing Element and the Draft CAP as policy and programs outlined in these documents would be applied citywide. Because environmental impacts related to the lands designated for residential use on the General Plan land use map were already analyzed adequately in the General Plan EIR (2009) for all issues other than greenhouse gas emissions, this SEIR focuses on the additional sites identified in the Housing Element that could potentially be zoned for residential use (referred to as the "potential sites for rezoning" or "rezoning sites" in this SEIR) as well as greenhouse gas emission impacts of General Plan land uses throughout the General Plan Planning Area.

¹ Definition of "Planning Area" by the Governor's Office of Planning and Research, General Plan Guidelines (1998).





- General Plan Amendment and Rezonings . 210016 Figure 3-2 Sphere of Influence

C. Housing Element

State law recognizes the vital role local governments play in the availability, adequacy, and affordability of housing. As a result, each city and county in California is required to analyze local housing needs, and provide a realistic set of programs to meet those needs as part of the agency's long-range General Plan, which each city and county is required to maintain as a guide for the physical development of the community. The required analysis of housing needs and resulting programs is included in the required "Housing Element" of the General Plan.

Housing element law mandates that local governments adequately plan to meet the existing and projected housing needs of "all economic segments of the community." The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for (and do not unduly constrain) housing production. Housing element statutes also require the State Department of Housing and Community Development (HCD) to review local housing elements for compliance with state law and to report their findings to the local government.

One component of this SEIR addresses the environmental impacts related to implementation of the proposed Housing Element, and associated land use and zoning revisions. In accordance with State law, the City of Pleasanton proposes to adopt a General Plan Amendment to update its existing Housing Element, along with revisions to the City's General Plan Land Use Element, implementing recommendations contained in the Housing Element to expand the inventory of land available for the development of new housing within the City. The City would also rezone several of the sites identified in Table 3-2, sufficient to meet the remaining unmet housing need, or approximately 55 acres of land zoned at a minimum of 30 units per acre and 14 acres of land zoned at a minimum of 23 units per acre. Depending on which specific sites are rezoned, amendments to the Bernal Property Specific Plan, the Downtown Specific Plan and the North Sycamore Specific Plan may be needed and are covered by this SEIR.

Regular updates of the Housing Element are required of each city and county in the State of California to address the housing needs of all residents and all income levels. The current requirement for cities and counties within the San Francisco Bay Area is to have an updated Housing Element addressing needs over the current planning period (2007-2014). The City's previous Housing Element for the 2000-2005 planning period was adopted in April 2003.

The Housing Element analyzes housing needs for all economic segments of the community, and identifies opportunities to improve and expand the City's housing stock. Programs contained in the Housing Element aim at ensuring an adequate inventory of land for the development of housing to meet the projected needs for all economic segments of the community, as well as programs to facilitate the development of such housing. Although, the Housing Element is designed to encourage and facilitate new housing construction and rehabilitation of existing housing units in the City, the Housing Element does not propose any specific development projects.

Purpose of a Housing Element

The purpose of a Housing Element is to identify current and projected housing needs for "all economic segments of the community," and set goals, policies, and programs to address those needs. The proposed Housing Element is an update to the existing adopted General Plan Housing Element, which was adopted by the City Council April 2003. The proposed Housing Element is a statement by the City of its current and future housing needs and proposed actions to facilitate the provision of housing to meet those needs at all income levels, and presents a comprehensive set of housing policies and actions between January 1, 2007 and June 30, 2014.

Policies and programs established throughout the General Plan affect housing development in Pleasanton. To provide for consistency with the other elements of the City's General Plan, Program 44.1 has been incorporated into the 2007-2014 Housing Element stating the following:

Program 44.1: Implement the applicable housing related air quality, climate change, green building, water conservation, energy conservation, and community character programs of the Pleasanton General Plan, including:

- Policy 6 and programs 6.1 and 6.3 of the Air Quality and Climate Change Element
- Programs 1.5, 1.7, 1.8, 1.12, 1.13, 1.14, and 3.12 of the Water Element
- Program 9.1 of the Community Character Element
- Policies 2,3, 4, 6 and 7 and programs 2.1-2.7, 3.1-3.5, 4.1-4.3, 6.1-6.4, 7.1-7.3, and 7.6 of the Energy Element

Regional Housing Needs Allocation

Under State law, new housing construction need is determined, at the local level, through a Regional Housing Needs Allocation (RHNA) process. During the RHNA process, the State HCD determines the amount of housing needed for all income groups within each region of the state, based on existing housing need and expected population growth. In April 2007, HCD determined that, at a minimum, the nine-county Bay Area needed to provide 214,500 new dwelling units between 2007 and 2014 to satisfy regional housing demand.

Each city's and county's share of regional housing demand within the San Francisco Bay Area is based on a plan prepared by ABAG, the Regional Housing Needs Determination, which was adopted in June 2008. The City of Pleasanton (along with all other cities and counties in the State) is required to provide a plan and programs to accommodate its share of the housing need of persons at all income levels in its Housing Element, including a demonstration that sufficient land area is designated and zoned for residential use at appropriate densities to meet the needs for new housing construction set forth as part of the RHNA process. Under the ABAG plan, the City needs to accommodate 3,277 new housing units between January 2007 and June 2014 to meet its "fair share" of the State's and San Francisco Bay Area region's housing need.

According to the RHNA for the San Francisco Bay Area, the City's projected need for new housing construction to accommodate its fair share of regional housing needs is 3,277 housing units

between January 2007 and June 2014, which is equivalent to an annual need for 437 new housing units. The RHNA identifies not only the overall need for new housing within the City (i.e., 3,277 new housing units), but also the City's "fair share" of housing for "all economic segments of the community" as follows:

- 1,076 new dwelling units should be affordable to very low income households (household income below 50 percent of the County median income);2
- 728 should be affordable to low income households (household income between 50 and 80 percent of the County median income);
- 720 should be affordable to moderate income households (household income between 80 and 120 percent of County median income); and
- 753 should be market rate units affordable to "above moderate income" households (household income greater than 120 percent of the County median income).

The proposed Housing Element policies and/or programs are intended to ensure that the City can fully accommodate its RHNA, either through existing sites that are zoned and available for housing development, or through Housing Element implementation actions such as the proposed General Plan Amendment and rezonings to increase Pleasanton's available land inventory for to make additional sites available for housing development to accommodate the RHNA needs by June 30, 2014.

Housing Element Update Process

In October 2010, the City Council confirmed an 11-member Housing Element Task Force with the mission to oversee the update of the City's Housing Element, with a focus on the following:

- Provide recommendations on potential sites to rezone to accommodate high density multifamily development sufficient to meet the City's share of the regional housing need;
- Address requirements for homeless, transitional and supportive housing as required by State housing law;
- Develop a non-discrimination policy and program and otherwise comply with the requirements relating to the Housing Element in the Settlement Agreement in the matters of *Urban Habitat Program v. City of Pleasanton* and *State of California v. City of Pleasanton*;
- Undertake outreach to the Pleasanton community to obtain feedback on housing strategy choices.

After nine Task Force meetings, four community workshops, input from housing experts, and extensive community input at Task Force and community meetings, and via e-mail, the Housing Element Task Force recommended a draft Housing Element (including a list of potential sites for rezoning and draft

² State law requires that one-half of these units be affordable for "extremely low income" households (less than 30% of county median income).

Goals, Policies and Programs) to the City Council for its consideration. The Housing Commission and Planning Commission considered the documents on June 15 and June 22, 2011, respectively, and on July 19, 2011, the City Council authorized staff to submit the draft Housing Element to the Department of Housing and Community Development for its 60-day review. All meeting materials and draft documents are available for public review on the City's website at www.ci.pleasanton.ca.us.

Following receipt and consideration of comments from HCD, staff will prepare any revisions to the draft Housing Element and will schedule review by the Housing Commission, the Planning Commission and the City Council. This SEIR will also be available at the time the Housing Element is being considered for adoption.

Relationship of the Housing Element to the General Plan

California Government Code § 65300 et seq. mandates that all cities prepare a General Plan that establishes polices and standards for future development, housing affordability, and resource protection. Jurisdictions are encouraged to keep general plans current through regular updates. Further, State law requires that a General Plan and its constituent elements "...comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." This implies that all elements have equal legal status and no one element is subordinate to any other element.

Thus, the Housing Element must be consistent with land use goals and policies set forth in the General Plan. However, the General Plan contains many policies which may in some cases address different goals, policies, and objectives and thus some policies may compete with each other. The Planning Commission and City Council, in deciding whether to approve a proposed project, must decide whether, on balance, the project is consistent (i.e., in general harmony) with the General Plan.

The adoption of the General Plan Housing Element would also require amendments to the Land Use Element of the General Plan related to the land use designation changes for new housing sites and to add new land use designations for High Density Residential 23 to 29 units per acre, and High Density Residential 30 or more units per acre, and mixed use.

Housing Element Components

The proposed Housing Element is organized into two parts: the Background Report and the *Housing Element* Goals, Policies and Programs. The Background Report includes an introduction to State law and terms, Housing Conditions and Trends, and Future Housing Needs and Opportunities. The appendix of the Background Report includes the Potential Housing Sites Inventory which illustrates how the City would meet their housing goals through land use allocations. The second part is the *Housing Element*, Chapter 5 of the General Plan, which includes the goals, policies and programs.

The proposed Housing Element includes two means of accommodating the City's housing needs: (1) meeting housing needs through the existing housing stock; and (2) identification of sites sufficient to accommodate housing needs for the balance of goals not achieved through existing housing. The potential sites for rezoning are the focus of the SEIR analysis as they have the

potential to result in physical impacts to the environment that were not previously analyzed in the General Plan EIR.

Existing Residential Development Capacity

The proposed Housing Element accounts for parcels within the City limits that are residentially zoned without any development approvals, or existing residential development capacity. **Table 3-1** presents a list of properties which are designated as residential on the General Plan map or zoned for residential use and have no planning entitlements. There are 24 parcels that could accommodate 1,028 housing units. The locations of these properties are presented in **Figure 3-3**.

Housing Needs Assessment

The housing needs assessment portion of the Housing Element includes the City's housing need based on the current (2007-2014) regional housing needs allocation and the remaining unmet need from the last Housing Element cycle, minus the residential units approved or developed since the beginning of the planning period, as well as what would be developed on any vacant land currently designated for residential development. Finally, the Housing Element identifies parcels that could be redesignated or upzoned to multifamily to meet the RHNA requirements for density and affordability requirements (further discussed below under *Potential Sites for Rezoning*). The housing needs assessment is presented in **Table 3-2**, below. In order to meet State mandated goals, the City needs to provide zoning for a minimum of 1,992 units in order to meet its housing needs assessment targets; the housing sites must meet the need for the remaining extremely-low income, very-low income, low income, and moderate income housing categories.

As noted above, the City's share of regional housing needs through June 2014 is 3,277 dwelling units, while the current inventory of land for the production of housing is capable of producing 1,028 dwelling units. After considering units that are under construction and existing residential development approvals, the resulting unaccommodated housing needs within the City is 1,992 dwelling units. This shortfall is proposed to be made up through the General Plan Amendment and rezonings of non-residential land described below.

Potential Sites for Rezoning

In compliance with Housing Element law, the Housing Element identifies potential sites suitable for redesignation and/or rezoning to address affordable housing needs. The potential sites for rezoning indentified were developed consistent with the provisions of Government Code § 65583.1, which states, in part, that:

"(a) The Department of Housing and Community Development, in evaluating a proposed or adopted housing element for substantial compliance with this article, may allow a city or county to identify adequate sites, as required pursuant to § 65583, by a variety of methods, including, but not limited to, redesignation of property to a more intense land use category and increasing the density allowed within one or more categories."

#	Property	APN	General Plan Designation	Acres	Potential Acreage for MF Development	Residential Units at Capacity
1	Joel & Greist Property; Joel Property	941 200000102; 941 190000200	Parks and Recreation; Ag and Grazing, RDR	3.86; 50.4	0.8; 5.6; 2.4	1, 1
2	Olesen property	946 393000402	LDR	1.11	1.0	1
3	McCarthy property	946 39300501	LDR	1.61	1.6	1
4	Valley Trails Church Site	941 090305700	Public & Institutional	8.95	9.0	25
5	Harvest Valley Christian Church	941 090706200	HDR	2.99	3.0	44
6	Altieri/Marshall (Hoile) (PUD-66)	946 347900100	MDR; Public Health and Safety; Wildland Overlay	9.09	6.8; 0.7; 0.7	14
7	Singleton property	946 114604600	LDR	1.67	1.7	1
8	Gonsalves property (RZ-97-02)	946 114604700	LDR	1.66	1.7	1
9	Wiemken property (RZ-97-02)	946 457400400	LDR	1.01	1.0	1
10	Selway property	946 457 400600	LDR	5.09	5.1	4
11	Wiemken property (RZ-97-02)	946 457400400	LDR	1.55	1.6	1
12	Molinaro/ Donato	946 168901600; 946 168901100; 946 168901700; 946 168901800; 946 168901900	HDR	1.17	0.1, 0.3, 0.3, 0.3, 0.2	1;2
13	Remen Tract	946 170400801; 946 170400805	MDR	0.82	0.8	3; 1
14	Auf der Maur property	N/A	MDR	10.25	10.2	51
15	Lund Ranch II property (PUD-25)	948 001500104	LDR; MDR; Public Health and Safety; RDR	195.07	36.0; 0.1; 4.3; 26.3	UNK
16	Spotorno	949 001600600	MDR	157.56	8.9; 6.4; 2.1; 0.4; 23.1; 38.3; 0.4	UNK
17	Lin Property	950 000400206	LDR; Parks and Recreation; Public Health and Safety; RDR	560.31	26.0; 82.3; 12.3; 0.0	UNK
18	Nolan & Dwyer Property	094 012804100	MDR	1.5	1.5	3
19	Auf de Maur / Maestas Property	094 015300100	HDR	0.26	0.26	4
20	Frades/Fuller property	941 210000900	RDR	11.76	0.9	1
21	Gywy property	941 210000500	RDR	11.76	0.3	0
22	W.P. Carey	941277801300 941277801200	Mixed Use		11	330
23	BRE	941277801100	Mixed Use		8.2	245
24	Roche Molecular Systems	941276100300	Mixed Use	33.4	12.4	372
Total						1,028

TABLE 3-1 RESIDENTIALLY ZONED PARCELS WITHOUT CURRENT APPROVALS

SOURCE: Pleasanton Housing Element, June 2011



 General Plan Amendment and Rezonings . 210016
 Figure 3-3
 Residentially Zoned Parcels without Current Approval (Preliminary Draft)

SOURCE: The City of Pleasanton

	Total	Units Affordable to Very Low Income	Units Affordable to Low Income	Units Affordable to Moderate Income	Above Moderate Income
Remaining Need remaining from the 1999-2007 housing period	871	0	871	0	0
2007-2014 RHNA	3,277	1,076	728	720	753
Total RHNA	4,148	1,076	1,599	720	753
Permits finaled 2007-2010 ¹	319	0	5	38	276
Units Under Construction ²	82	0	5	39	38
Approved (zoned) projects with building permits not yet issued ³	1,321	102	32	312	875
Land Designated for Residential Development w/no entitlements ⁴	1,028	435	435	0	158
Additional Residential Zoning Capacity Required (units)	1,992	539	1,122	331	-594
Total Unaccommodated Need			1,992 units	;	

TABLE 3-2 HOUSING ELEMENT NEEDS ASSESSMENT

1. Includes Low Income and Moderate Income units from Birch Creek; 31 second units; 5 apartment units

2. Includes Low Income and Moderate Income Civic Square apartments and 7 second units.

 Includes affordable Staples Ranch units, Windstar units affordable to Very- Low Income households and balance of Windstar as units affordable to Moderate Income households.

4. This number does not include development potential for several hill area sites which require further analysis.

SOURCE: Pleasanton Housing Element, March 2011

The City conducted an analysis of the suitability of the various sites to accommodate housing that could be affordable to the different income categories. In selecting the considered sites, a list of criteria by which to evaluate potential new multifamily housing sites was developed. The criteria reflect housing location principles related to:

- Building on existing neighborhoods (i.e. being an in-fill site rather than extending urban development);
- Proximity to transit and bike routes;
- Neighborhood convenience and livability (within a half-mile of elementary and middle schools, grocery stores, and parks);
- Absence of adverse conditions (such as odors, bad air quality, geologic or fire hazard area or high noise environment);
- Compatibility with surrounding residential development in terms of height and massing, impact on any sensitive environments, trees, or historic resources;
- Consistency with General Plan themes such as preserving and enhancing Pleasanton's character and quality of life; and

• The property owners interest in having the site rezoned to allow multifamily residential development.

Using the evaluation criteria described above, the City has identified the following potential sites for rezoning that can accommodate future housing to meet the RHNA target. The potential sites for rezoning are presented in **Figure 3-4**. As noted in **Table 3-2**, the additional residential zoning capacity required consists of sites for 539 units affordable to very low income households, 1,122 units affordable to low income households, and 331 units affordable to moderate income households, or a total of 1,992 housing units. The City has identified potential sites for rezoning that could accommodate approximately 3,900 units, substantially more than needed to accommodate the City's RHNA. Although the City has identified 17 appropriate sites in **Table 3-3**, the City intends to amend General Plan land use designations and rezone only enough sites to meet the remaining unaccommodated need for 1,992 additional multi-family units.

The final list of approved sites to be adopted by the City Council will include the General Plan Amendment and rezoning actions, which are analyzed in this SEIR. The General Plan land use and zoning of these sites will be converted from non-residential to high density residential (up to 30 dwelling units per acre) which would provide housing opportunity sites with sufficient density to develop lower-income housing units. Also some of the sites will be converted to allow mixed use development. State Housing Law allows cities to make assumptions about what densities facilitate the development of housing that is affordable to lower income households (very low and low income together). Government code provides two options: (1) the City can conduct an analysis of market demand and trends, financial feasibility, and residential project experience to demonstrate the densities that facilitate lower income housing development; or, (2) apply Government Code Section 65583.2(3)(B), which allows governments to utilize "default" density standards deemed adequate to meet the "appropriate zoning" test. In Pleasanton, sites designated at 30 units per acre or more would meet the "default" density standards deemed adequate to meet the "appropriate zoning" test for housing sites with units affordable to low- and very-low income households. In order to give the City flexibility to select the appropriate opportunity sites to meet the project objectives, this SEIR conservatively analyzes impacts of the development of all the potential sites for rezoning listed above, recognizing that only approximately two thirds of the acreage may be rezoned.

The proposed rezonings would not alter the Wildland Overlay or the Public Health and Safety Land Use Designations of the potential sites for rezoning that fall within those areas. Additionally, for sites located in the East Side Specific Plan area, this SEIR only covers the rezoning of those sites, and is not intended to cover additional environmental impacts of the proposed specific plan.

TABLE 3-3 POTENTIAL SITES FOR REZONING

#	Property	APN	Existing General Plan Designation	Acres	Potential Acreage for MF Development	No. Units at 23 units/ac	No. Units at 30+ units/ac
1	BART ^a	941-2771-015-00 941-2778-002-00	Mixed Use/Business Park	14.9	3.0		90-249
2	Sheraton	941-1201-057-02	Retail/Highway/ Service Commercial, Business & Prof. Offices	3.3	3.3		99-132
3	Stoneridge Shopping Center	941-1201-028-00 941-1201-029-00 941-1201-030-06 941-1201-092-00 941-1201-094-03 941-1201-095-00	Retail/Highway/ Service Commercial, Business & Prof. Offices	74.6	7.0		210-400
4	Kaiser	941-1201-052-03	Retail/Highway/ Service Commercial, Business & Prof. Offices	6.1	6.1		183-244
6	Irby-Kaplan-Zia	946-1680-004-04 946-1680-003-02 946-1680-002-03	Retail/Highway/ Service Commercial, Business & Prof. Offices Public Health and Safety Wildland Overlay	14.8	6.0	138	180
7	Pleasanton Gateway	947-0008-017-00	Retail/Highway/ Service Commercial, Business & Prof. Offices	39.6	10.0		300-400
8	Auf de Maur/ Richenback	946-4542-045-03	Retail/Highway/ Service Commercial, Business & Prof. Offices	16.0	11.5		345-460
9	Nearon Site	941-2764-015-00	Mixed Use/Business Park	5.6	5.6	129	168
10	CarrAmerica ^b	941-2780-019-01	Mixed Use/Business Park	60.0	8.4		252-420
11	Kiewit	946-1251-007-04	East Pleasanton SP	49.0	10.0		300-400
13	CM Capital Properties	941-2762-006-00 941-2762-011-01	Mixed Use/Business Park	12.6	12.6		378
14	Legacy Partners	946-1250-019-05 946-1350-003-08	East Pleasanton SP	51.2	12.0		360-480
17	Axis Community Health	094-0107-011-20	Retail/Highway/ Service Commercial, Business & Prof. Offices	0.6	0.6	13	18
18	Downtown (SF site)	094-0157-005-17 094-0157-022-00	Public & Institutional	3.2	3.2	74	96
19	Sunol Blvd. and Sonoma Dr.	948-0009-001-00 948-0009-002-00	General and Limited Industrial	1.3	1.3	30	39
20	Sunol Blvd. and Sycamore Rd.	948-0004-002-02 948-0017-008-04 948-0017-008-06	Retail/Highway/ Service Commercial, Business & Prof. Offices	2.3	1.0	23	30
21	4202 Stanley	946-1691-001-01	Medium Density Residential Public Health and Safety Wildland Overlay	1.8	1.8	41	54

Total

2965-4148

Notes: a The proposed housing on Site 1 would be part of a mixed use project that could include a hotel, office and retail development and such project has been evaluated in this SEIR. b The proposed residential development on Site 10 would be part of a mixed use project including retail development.

SOURCE: Pleasanton Housing Element, June 2011



SOURCE: The City of Pleasanton

- General Plan Amendment and Rezonings . 210016 Figure 3-4 Potential Sites for Rezoning

D. Climate Action Plan

California lawmakers have made clear in recent years that preventing or mitigating climate change is a key component of the state's sustainable future. Recent law recognizes the important role that local governments play in reducing community-wide emissions with their control over local land use planning. California's landmark climate change legislation, the Global Warming Solutions Act of 2006 (AB32), directs the state to reduce state-wide GHG emissions to 1990 levels by 2020. In 2008, the California Air Resources Board (CARB) published its Climate Change Scoping Plan (CARB 2008) recommending that local governments target their 2020 community-wide emissions at 15 percent below current levels³, consistent with the state-wide commitment, to account for emissions growth that had occurred statewide since 1990.

In addition to the Housing Element and related General Plan Amendment and rezoning to increase the City's residential land inventory, the second component of this SEIR addresses the environmental impacts related to implementation of the City of Pleasanton Draft Climate Action Plan (Draft CAP). The Draft CAP outlines strategies, goals, and actions for reducing municipal and community-wide GHG emissions. CAPs are generally recognized by regional and state agencies as being an important planning tool for reducing emissions at the local level. The Draft CAP is a comprehensive document that functions as the framework for City GHG reduction strategies for the short, medium, and long term.

Purpose of the Climate Action Plan

The Draft CAP is designed to help the City do its part to meet the mandates of California's Global Warming Solutions Act of 2006 (AB 32), while taking into account the City's General Plan vision and its goal to become the "greenest" city in California. While several initiatives at the state level will help the City reduce GHG emissions, they alone will not be sufficient to meet the 2020 target recommended by CARB. The CAP provides a roadmap for the City to be proactive in reducing GHGs through a schedule of local actions, designed to enable the City to achieve a 15 percent reduction in GHGs below 2005 levels by 2020.

The City's 2005 baseline emissions are estimated at 770,844 metric tons (MT) of carbon dioxide equivalents (CO_2e). The City's 2020 target of 15 percent below 2005 baseline equates to total annual emissions of 655,218 MT CO_2e , a reduction of 115,626 MT CO_2e below the 2005 baseline.

The Draft CAP includes dozens of strategies and actions measures for reducing GHG emissions associated with transportation and land use, energy consumption and generation, water use and wastewater treatment, and solid waste disposal. For each emissions sector, the Climate Action Plan presents goals, strategies, and specific actions for reducing emissions, along with quantified cost-benefit impacts. An implementation and monitoring plan is also provided.

³ CARB made its recommendation in 2008. The BAAQMD and others have interpreted this guidance to indicate that local governments should reduce emissions 15 percent below a baseline year of 2008 or earlier. Most local governments in California, including Alameda County, that have completed community GHG inventories have used 2005 as the base year due to the availability of accurate and complete data.

Prior City Sustainability Efforts

The City pursued and implemented several GHG reduction efforts prior to 2005. They include the following:

- Commercial Irrigation Rebates: In 2002, the City implemented a commercial irrigation rebate program. The Program provides rebates for rain sensors, drip retrofits, irrigation controllers, and sprinkler head retrofits.
- City Facility Retrofits: Since 2004 the City has participated in local government partnership programs to evaluate and upgrade heating, ventilation and air-conditioning (HVAC) and lighting systems in multiple facilities.
- Commercial Green Building Ordinances: Since 2002, the City has had a Green Building Ordinance (GBO) that requires new and significantly remodeled buildings to incorporate measures from the U.S Green Building Council's Leadership in Energy and Environmental Design (LEED) certification system.
- Traffic Signal LEDs: In 2000-2001, the City replaced incandescent bulbs with lightemitting diodes (LEDs) in traffic signals.

Qualified CAP Provisions

The BAAQMD's newly adopted CEQA Guidelines (BAAQMD, 2011) include a provision for streamlining GHG analysis of future projects that are consistent with a "qualified" GHG Reduction Plan (or Climate Action Plan) that can be shown to meet or exceed AB 32 mandates. BAAQMD considers a qualified Climate Action Plan as one that accommodates growth in a manner that does not hinder the State's ability to achieve AB 32 goals. If a project under CEQA is consistent with a qualified plan, then the GHG emissions impact of that project is presumed to be insignificant.

The Draft CAP is designed to be qualified per the Bay Area Air Quality Management District (BAAQMD) guidelines, which includes meeting the following provisions:

- A GHG inventory for current year (2008 or earlier, as interpreted by BAAQMD) and a forecast for 2020.
- An adopted GHG reduction goal for 2020 for the jurisdiction from all sources (existing and future) which is at least one of the following (these performance thresholds are considered to be equivalent in terms of AB 32's 2020 state-wide emission target):
 - 1990 GHG emission levels; or
 - 15 percent below 2008 emission levels (or earlier); or
 - A plan-level efficiency of 6.6 metric tons of CO₂e per service population per year. The service population approach is based on the community emissions divided by the sum of the population and employment in the city.
- Identification of feasible reduction measures to reduce GHG emissions for 2020 to the identified target.

- Application of relevant reduction measures included in the AB 32 Scoping Plan that are within the jurisdiction of the local land use authority (such as building energy efficiency, etc.).
- Quantification of the reduction effectiveness of each of the feasible measures identified including disclosure of calculation method and assumptions.
- Identification of implementation steps and financing mechanisms to achieve the identified goal by 2020.
- Procedures for monitoring and updating the GHG inventory and reduction measures at least twice before 2020 or at least every five years.
- Identification of responsible parties for implementation.
- Schedule of implementation.
- Certified CEQA document, or equivalent process.

Components of the CAP

The CAP is made up of several major components including municipal government and community-wide GHG inventories, projected future emissions, cost-benefit analysis of GHG reduction strategies and actions, actions that the City can take to prepare for climate change, and a monitoring and implementation plan.

Greenhouse Gas Inventory

A greenhouse gas (GHG) inventory quantifies the GHG emissions for all activities throughout a community for a given year. The community-wide 2005 baseline GHG inventory for the City of Pleasanton, described in Chapter 2 of the CAP, totals 770,884 metric tons (MT) of carbon dioxide equivalents (CO₂e). The Inventory is presented into two parts: community-wide and municipal operations. The community-wide inventory describes emissions from the community-at-large, while the municipal inventory accounts for emissions stemming from facilities and operations under government control. The municipal operations inventory contributes less than one percent of total emissions.

The community-wide inventory includes sources that fall under the City's direct and indirect control. Some sources are affected directly by the City's activities, or by its land use decisions, municipal codes, and General Plan policies; while others sources, such as residential energy use, fall outside of the local government's direct control, but nevertheless can be influenced by the City's policies or programs.

Greenhouse Gas Reduction Strategies

Greenhouse gas reduction strategies, as outlined in Chapter 3 of the Draft CAP, are designed to achieve a community-wide reduction in GHGs of 15 percent by 2020, as compared to the 2005 baseline. The Draft CAP's cost-benefit analysis shows that if all CAP strategies are implemented,

the City can expect to reduce emissions by 101,649 MT CO_2e annually by 2020. **Table 3-4** below presents the GHG reduction potential of CAP strategies, summed by sector.

	1
43,027	42%
29,605	29%
28,646	28%
371	<1%
NA	NA
101,649	100%
	43,027 29,605 28,646 371 NA 101,649

TABLE 3-4 ESTIMATED GHG REDUCTION POTENTIAL OF CLIMATE ACTION PLAN STRATEGIES

SOURCE: City of Pleasanton CAP, 2011

Draft CAP measures targeting energy use account for reductions of 43,027 MT CO₂e per year by 2020. In general, these measures are designed to improve efficiency and increase renewable energy production, both in the community and the local government, by leveraging outside programs to increase energy efficiency and conservation, strengthening green building codes, streamlining permitting for renewable, and other measures. Public outreach and financial incentives for energy efficiency and renewable energy projects are also emphasized.

Measures targeting solid waste minimization account for reductions of 29,605 MT CO_2e per year by 2020. In general, these measures are designed to reduce the amount of organic material sent to landfill, where it decomposes into methane (a GHG with approximately 23 times more warming potential that CO_2). Strategies include expanding and improving recycling and composting programs and encouraging residents and businesses to consume and waste less.

Measures targeting land use and transportation account for reductions of 28,646 MT CO₂e per year by 2020. In general, these measures are designed to reduce vehicle miles traveled (VMT) through more energy-efficient transportation systems and land use patterns, increase vehicle fuel efficiency, and encourage drivers to switch to non-petroleum or cleaner fuels.

The Draft CAP relies largely on the General Plan Amendment and rezonings associated with the Housing Element to achieve a more balanced jobs/housing balance, thus reducing VMT, as VMT represents the single largest contributor to the City's GHG emissions. The transportation strategies outlined in the Draft CAP would reduce overall daily VMT by promoting a more balanced transportation/land use environment, encouraging development near transit corridors, and encouraging use of alternative transportation.

Several state-wide measures included in the AB 32 Scoping Plan target emissions from transportation and power generation. The Low Carbon Fuel Standard (LCFS), the Pavley Bill for reducing passenger vehicle emissions (Assembly Bill 1493), and the Renewable Portfolio Standard (RPS) are each expected to provide significant emissions reduction benefits for the City. Two additional state-wide measures in the AB 32 Scoping Plan are expected to reduce emissions

from passenger vehicles and heavy/medium-duty trucks because of efficiencies gains realized by manufacturers.

The Draft CAP indicates that mandated statewide measures included in CARB's Climate Change Scoping Plan are expected to reduce annual GHG emissions by 194,017 MT CO₂e by the year 2020. The Draft CAP also calculates the impact of anticipated fuel price increases on driving behavior, reducing annual emissions by an additional 18,729 MT CO₂e per year by 2020.

Summing the impact of the City's reduction strategies (101,649 MT), the impact of mandated statewide measures (194,017 MT CO_2e), and the impact of rising fuel prices (18,729 MT CO_2e), the Draft CAP estimates that total GHG emissions reductions will amount to 314,395 MT CO_2e per year by 2020. This exceeds the City's 2020 target by about 8,064 MT CO_2e per year.

Preparing Pleasanton for Climate Change

Chapter 4 of the Draft CAP provides an overview of the impacts the City of Pleasanton can expect to experience due to projected changes in the climate, and what the City can do to begin preparing for them. Expected local impacts include higher temperatures and extreme weather events, wildfires, and water uncertainty. Local vulnerabilities include public health, water management, agriculture and local food, ecosystems and biodiversity, and energy management.

Monitoring and Implementation

Chapter 5 of the Draft CAP outlines how the City will monitor the progress of reducing community-wide GHG emissions and meeting its obligations under AB32. To translate measures into actual emission reductions will in many cases require municipal code changes, and development and funding of programs. The Draft CAP proposes a measure implementation schedule, an annual progress report, and a GHG inventory and CAP update at least every 5 years.

Implementation of GHG reduction measures is grouped into three categories:

- near-term actions, which are expected to be implemented in 2011-2012;
- medium-term actions, which are expected to be implemented in 2013-2014;
- longer-term actions, which are expected to be implemented by 2015 and beyond.

Chapter 5 also identifies potential funding sources for implementation. These include grants and low-interest loans, state agencies, regional organizations, renewable energy municipal financing and revolving fund programs, public financing, municipal fees, impact fees, private and non-governmental support, and carbon offsets and banking.

E. Project Objectives

CEQA *Guidelines*, §15124(b) require that the project description in an SEIR include "a statement of the objectives sought by the proposed project," which should include "the underlying purpose

of the project." The following are the project objectives for the 2007-2014 Housing Element and associated General Plan Amendment and rezonings to increase the City's inventory of land available for the development housing:

- Provide a vision for the City's housing and growth management through 2014;
- Maintain the existing housing stock to serve housing needs;
- Ensure capacity for the development of new housing to meet the RHNA at all income levels;
- Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character;
- Encourage, develop and maintain programs and policies to meet projected affordable housing needs;
- Develop a vision for Pleasanton that supports sustainable local, regional and state housing and environmental goals;
- Provide new housing communities with substantial amenities to provide a high quality of life for residents;
- Present the California Department of Housing and Community Development a housing element that meets the requirements of the settlement agreement; and
- Adopt a housing element that substantially complies with California housing element law.

The following are the project objectives for the CAP:

- Provide a vision for the City's sustainable development through 2025 while preserving the City's character;
- Provide the framework to meet the AB32 target of reducing GHG emissions to 1990 levels (or 15 percent below the 2005 baseline, consistent with recommendations provided by the California Air Resource Board);
- Incorporate GHG emissions reduction programs, consistent with the CAP, into the General Plan;
- Serve as an example of environmentally sustainable development to cities throughout California and the country at large;
- Meet the terms of the Settlement Agreement, providing GHG emissions analysis and reduction strategies for the life of the City's General Plan.

F. Project Approvals

If this SEIR is certified by the City Council, several actions may be undertaken by the City Council, including adoption of the 2007-2014 Housing Element, adoption of the Climate Action Plan, adoption of the amendments and rezonings to implement the Housing Element programs to increase the inventory of land available for the development of housing, and adoption of General Plan amendments to incorporate provisions of the CAP into the General Plan. These actions could occur after any required review by the Planning Commission. Individual housing development projects would be reviewed and approved as required by the procedures of the City's Planning Code.

Although the proposed project does not require other public agency approvals, the City is required to submit a draft of the 2007-2014 Housing Element to the California Department of Housing and Community Development (HCD), per § 65585 of the State Government Code, and consider HCD's findings on the Housing Element before it can be adopted by the City Council as a General Plan Amendment.

Further, implementation of the CAP would require municipal code changes which would require approval by the Planning Commission, the City Council, and the public through a broad stakeholder engagement process. Individual reduction actions would be reviewed and approved on a case-by-case basis.

Regulatory Requirements, Permits and Approvals

This SEIR may be used for the following direct and indirect actions regarding the Planning Area:

City of Pleasanton

Housing Element

The City of Pleasanton City Council, as the city's legislative body, is the approving authority for the Housing Element. As part of the approval, the City Council will consider the following discretionary actions:

- Adoption of the 2007-2014 Housing Element.
- Amendments to the General Plan Land Use Element, modifying the Element's land use map, and adding High Density Residential land use designations, along with rezoning of land consistent with the program contained in the Housing Element to expand the inventory of land available for the development of housing.
- Amendments to the Bernal Property Specific Plan, the Downtown Specific Plan and the North Sycamore Specific Plan as necessary (depending on the specific sites to be rezoned)

Subsequent actions that may be taken by the City regarding the project include, but are not limited to, the following:

- Approval of subsequent development applications for residential and mixed use development such as Planned Unit Development approval and project-related approvals such as growth management approval, tentative map approval, final map approval, and grading and building permit approval.
- Implementation of the programs set forth in the Housing Element.
- Approval of subsequent public facility and roadway improvement projects in support of such residential and mixed use development.

Climate Action Plan

The City of Pleasanton City Council, as the city's legislative body, is the approving authority for the Climate Action Plan. As part of the approval, the City Council will consider the following discretionary actions:

- Adoption of the Climate Action Plan.
- Amendments to the General Plan to incorporate provisions of the CAP into the General Plan.
- Evaluation of and adoption of GHG reduction actions on a case-by-case basis.
- Monitoring of CAP progress over time.
- Approval of subsequent actions to monitor or reduce GHG emissions.

Other Governmental Agency Approvals

Additional subsequent approvals and permits that may be required for future residential development projects from local, regional, state and federal agencies include, but are not limited to, the following:

- Bay Area Air Quality Management District (BAAQMD) approval of permits for point source emissions. Review of CAP for "qualified" status.
- Caltrans approval of improvements and/or funding for any future improvements on state facilities. Possible review and approval for large-scale transportation emission reduction measures.
- Extension of service and/or expansion of infrastructure facilities by area and nearby service districts (Water, Utility District, Pacific Gas & Electric, Services District, Sanitation District, Fire District, School District).
- Regional Water Quality Control Board (RWQCB) approval of any activity impacting Planning Area water features, pursuant to the Clean Water Act and RWQCB standards.
- Alameda County Airport Land Use Commission approvals to ensure the elements of any proposed projects adhere to, and comply with, referral area restrictions.
- Zone 7 Water Agency possible review and approval for some water reduction measures.

References – Project Description

- Association of Bay Area Governments (ABAG), San Francisco Bay Area Housing Needs Plan 2007-2014, June 2008
- Bay Area Air Quality Management District (BAAQMD), 2011. California Environmental Quality Act Air Quality Guidelines, May 2011.

California State Government Code

- CARB, 2008, Climate Change Scoping Plan (available at http://arb.ca.gov/cc/scopingplan/scopingplan.htm)
- City of Pleasanton, Pleasanton General Plan 2005-2025. July 21, 2009.

City of Pleasanton, Draft Housing Element 2007-2014. June, 2011.

City of Pleasanton. Draft Climate Action Plan. August, 2011

CHAPTER 4 Environmental Setting, Impacts, and Mitigation Measures

This chapter contains the analysis of the potential effects to environmental topics considered under CEQA from implementation of Housing Element and Climate Action programs and residential development facilitated by the proposed land use amendment and rezonings. This chapter describes the existing setting for each topic, the potential impacts that could result from residential development on the potential sites for rezoning under the proposed Housing Element and relevant plans and policies that would minimize or avoid potential adverse environmental effects that could result. Finally, this chapter identifies mitigation measures necessary to reduce the potential impacts resulting from residential development facilitated by the proposed land use amendment and rezonings.

The impact analysis of the potential rezonings in this SEIR is based on development of all 17 of the potential sites for rezoning. However, it is in the intent of the Pleasanton City Council to rezone to allow multifamily development on sites sufficient to meet the City's share of the regional housing need which is approximately 70 acres, rather than the total 112 acres.

The following provides an overview of the scope of the analysis included in this chapter, organization of the sections, the methods for determining what impacts are significant.

A. Environmental Topics

The following Sections in this chapter analyze the environmental topics as listed below and presented in the Table of Contents at the front of this document:

- 4.A Aesthetics
- 4.B Air Quality
- 4.C Biological Resources
- 4.D Cultural Resources
- 4.E Greenhouse Gas Emissions
- 4.F Geophysical
- 4.G Hazards and Hazardous Materials

- 4.H Hydrology and Water Quality
- 4.I Land Use, Plans and Policies
- 4.J Noise
- 4.K Public Services and Utilities
- 4.L Population and Housing
- 4.M Recreation Facilities
- 4.N Transportation and Traffic

Agricultural Resources and Mineral Resources were determined not to be directly relevant to the proposed project and are briefly discussed in Chapter 6, *Impact Overview and Growth Inducement*, under Section 6.E, *Effects Found Not to Be Significant*.

B. Format of Environmental Topic Sections, Impact Statements, and Mitigation Measures

Each environmental topic section generally includes two main subsections:

- *Existing Setting*, which includes baseline conditions, regulatory setting, Thresholds/Criteria of Significance; and
- *Impacts and Mitigation Measures*, which identifies and discusses the potential impact and mitigation measures that would, to the extent possible, reduce or eliminate adverse impacts identified in this chapter.

This SEIR identifies all impacts with an alpha-numeric designation that corresponds to the environmental topic addressed in each section (e.g., "4.G" for Section 4.G, Hazards and Hazardous Materials). The topic designator is followed by a number that indicates the sequence in which the impact statement occurs within the section. For example, "Impact 4.G-1" is the first (i.e., "1") hazardous materials impact identified in the SEIR. All impact statements are presented in bold text.

The Impact Classification (discussed below) of the project's effects prior to implementation of mitigation measures is stated in parentheses immediately following the impact statement.

Similarly, each mitigation measure is numbered to correspond with the impact that it addresses. Where multiple mitigation measures address a single impact, each mitigation measure is numbered sequentially. For example "Mitigation Measure 4.G-1" is the first mitigation identified to address the first hazardous materials impact (i.e., "4.G-1"). All mitigation measure statements are presented in bold text.

Further, to distinguish the potential environmental impacts related to the adoption and subsequent implementation of the Housing Element and Climate Action Plan separately, this SEIR uses subheadings under each impact statement. If mitigation is identified, it is presented under the subheading of the respective topic. Finally, the significance after mitigation or the statement that no mitigation is required is presented at the conclusion of impact analysis for both the Housing element and the Climate Action Plan.

C. Thresholds/Criteria of Significance

The CEQA *Guidelines* § 15382 defines a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." Determinations of significance vary with the physical conditions affected and the setting in which the change occurs. The significance criteria used in this SEIR are the thresholds for determining significance of potential impacts and are based on Appendix G of the CEQA *Guidelines*.

D. Impact Classifications

The following level of significance classifications are used throughout the impact analysis in this SEIR:

- Less than Significant (LS) The impacts of the proposed project, either before or after implementation of standard conditions of approval and/or feasible mitigation measures, do not reach or exceed the defined Threshold/Criteria of Significance. Generally, no mitigation measure is required for a LS impact.
- **Significant** (S) The impact of the proposed project is expected to reach or exceed the defined Threshold/Criteria of Significance. Feasible mitigation measures and/or standard conditions of approval may or may not be identified to reduce the significant impact to a less than significant level.
- Significant Unavoidable (SU) The impact of the proposed project reaches or exceeds the defined Threshold/Criteria of Significance. No feasible mitigation measure is available to reduce the S impact to LS. In these cases, feasible mitigation measures are identified to reduce the S impact to the maximum feasible extent, and the significant impact is considered SU. Impacts are also classified as SU if a feasible mitigation measure is identified that would reduce the impact to LS, but the approval and/or implementation of the mitigation measure is not within the City of Pleasanton's or a project applicant's sole control, in which case the analysis cannot presume implementation of the mitigation measure and the resulting LS impact. It is important to clarify that SU is an impact classification that only applies *after* consideration of possible mitigation measures.
- No Impact (N) No noticeable adverse effect on the environmental would occur.

E. Environmental Baseline

Overall, pursuant to CEQA *Guidelines* §15125(a), this SEIR measures the physical impacts of the proposed project (i.e., the development on the potential sites for rezoning) against a "baseline" of physical environmental conditions at and in the vicinity of city and the potential sites for rezoning. The environmental "baseline" is the combined circumstances existing around the time the NOP of the EIR was published, which is August 2011.¹ In most cases, the baseline condition relevant to the environmental topic being analyzed is described within each environmental topic section in this chapter. In some cases (such as Section 4.A, Aesthetics), discussion of the baseline condition is detailed or restated in the Impacts Analysis to provide the impact analysis in the most reader-friendly format and organization. The baseline also includes the policy and planning context in which development facilitated by the proposed project is proposed, such as the existing land use designation, zoning, and General Plan policies that currently govern the city and the potential sites for rezoning. This is discussed in detail within Section 4.I, Land Use and Planning, and the discussion identifies any inconsistencies between the development facilitated by the proposed General Plan Amendment and rezonings, and applicable, currently adopted plans and policies.

¹ Except as specified otherwise, any reference to "existing" conditions throughout this EIR refers to the baseline condition as of generally August 2011.

F. Cumulative Analysis

Approach to the Cumulative Analysis

CEQA defines cumulative as "two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impact." CEQA *Guidelines* § 15130 requires that an EIR evaluate potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past, present, existing, approved, pending and reasonably foreseeable future projects causing related impacts. "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the projects." The City of Pleasanton's analysis approach specifies "past, present, existing, approved, pending and reasonably foreseeable future projects."

Cumulative Context

The context used for assessing cumulative impacts typically varies depending on the specific topic being analyzed to reflect the different geographic scope of different impact areas. For example, considerations for the cumulative air quality analysis are different from those used for the cumulative analysis of aesthetics which focuses on public view corridors and scenic vistas. In assessing air quality impacts, on the other hand, all development within the air basin contributes to regional emissions of criteria pollutants, and basin-wide projections of emissions is the best tool for determining the cumulative effect. The cumulative development analysis is intended to capture all of the Planning Area intersections considered in the traffic analysis for the proposed project. Accordingly, the geographic setting and other parameters of each cumulative analysis discussion can vary and are described under their respective cumulative analysis impact in Chapter 4.

For the purpose of this SEIR, the city limits is the project area as programs and policies outlined in the Housing Element and CAP would be applied citywide. Additionally, this SEIR specifically analyzes the potential sites for rezoning, referred to as the "potential sites for rezoning or Sites". The development of land that is already zoned for residential development or other uses is considered in the cumulative scenario as it has already been considered in the General Plan EIR (2009).

Generally, cumulative development beyond the city limits could potentially result in an incremental impact when added to the proposed development facilitated by the General Plan Amendment and rezonings, was used to identify past, present, existing, approved, pending and reasonably foreseeable future projects in the vicinity of the city. As discussed above, cumulative projects considered in the cumulative context can vary by environmental topic; therefore, some of the list above may not be directly relevant to the cumulative context, depending on the environmental topic.

In some cases, the cumulative context may include more development than the specific known projects. A primary example is the transportation analyses (and transportation-related traffic and air quality), which uses a growth rate to account for background traffic from projects citywide

and the broader regional context. Alternatively, as mentioned above, the aesthetics analysis would primarily consider projects within the viewsheds of the potential sites for rezoning, which may not, for example, include those located in distant areas, particularly low-rise development not affecting the Pleasanton ridge. Further, projects contributing to potential cumulative effects to cultural resources, for example, could consider development in and near the potential sites for rezoning as well as development citywide (in the case of impacts to resource types such as libraries, railroad-related resources, and ethnic sites found throughout the city, although not the case for the proposed project analyzed in this SEIR).

The cumulative discussions in each topical section throughout this Chapter describe the cumulative geographic context considered for each topic at a level appropriate to the program-level analysis presented in this SEIR.

G. Use of General Plan EIR

With the exception of the potential sites being rezoned for residential uses, impacts of the General Plan Amendment and rezoning were previously addressed in the *City of Pleasanton General Plan 2005-2025 EIR* (City of Pleasanton, 2009), which is hereby incorporated by reference in this SEIR. Because environmental impacts related to the lands designated for residential use on the General Plan land use map were already analyzed adequately in the General Plan EIR for all issues other than greenhouse gas emissions, this SEIR focuses on the additional sites identified in the Housing Element that could potentially be zoned for residential use, and are referred to as the "potential sites for rezoning" in this SEIR, as well as greenhouse gas emission impacts of General Plan land uses throughout the General Plan Planning Area. Therefore, for this SEIR, environmental resources, except for the Greenhouse Gas analysis were reviewed with a particular focus on the potential sites for rezoning. The Greenhouse Gas analysis considers the existing General Plan, as proposed to be amended as part of this project.

The General Plan EIR is summarized below and available in-full at the Community Development Department and on the City's website [http://www.ci.pleasanton.ca.us/pdf/genplan-DEIR-2005-2025.pdf and http://www.ci.pleasanton.ca.us/pdf/GP-FEIR-comments-2009.pdf]

General Plan EIR Summery

Project Description

The Pleasanton General Plan 2005-2025 establishes a planning framework and policies to the planning horizon of 2025, and replaced the 1996 General Plan for all elements with the exception of Housing, which was last revised in 2003. The General Plan reflects changes to and development in Pleasanton since the preparation of the 1996 General Plan and to shape future growth. The General Plan is comprised of goals, policies, programs, a land use map, other graphic figures and maps (e.g., open space systems, a transportation network, and public facilities) to guide future development within the City's Planning Area, through the year 2025. The General Plan includes six of the seven elements required by State law, notably Land Use, Circulation,
Open Space, Conservation, Noise, and Safety. (The seventh required is the Housing Element, which is not part of the proposed General Plan). It also adds seven optional elements that address local concerns: public facilities and community programs; water; air quality; energy; community character; economic and fiscal matters; and subregional planning. Some of the optional elements contain required information delineated in the State Guidelines under other topics, e.g., the guidelines discuss water under land use, conservation, open space, and safety, while the Pleasanton General Plan discusses water in its own element as well as briefly in the Public Safety Element.

Pleasanton's objectives for the General Plan and the changes that would occur due to its implementation focus on quality of life and sustainability concerns. Guiding objectives include: 1) preserve Pleasanton's character; 2) encourage both resource sustainability and sustainable development; 3) confine development to within the Urban Growth Boundary; 4) promote the development of walkable communities; 5) achieve and maintain a complete well-rounded community of desirable neighborhoods and a strong employment base; 6) expand and improve the overall roadway/transit/trail network to provide more travel options; 7) provide housing opportunities for all age and socioeconomic groups; 8) protect the population and minimize risks to lives and property in the event of natural or human-caused hazards; 9) provide sufficient available and convenient community-program, park, open-space, and hiking/bicycling opportunities for all residents; 10) preserve agricultural uses and land; 11) provide adequate water and wastewater service to all residents and businesses; 12) promote high quality water and air resources in Pleasanton; 13) conserve energy through green building and other measures; 14) continue Pleasanton's economic vitality by supporting appropriate development and 15) provide for Pleasanton's long-term fiscal sustainability.

Estimated General Plan Buildout

Under the General Plan, by 2025, if all residential land shown on the General Plan Map is built out, Pleasanton will contain a maximum of 29,000 housing units, approximately 600 second units, and approximately 1,100 residents in congregate (group) living facilities. These units will support a residential population of about 78,200. If all commercial, office, industrial, and other employment-generating land were built-out Pleasanton would contain approximately 32 million square feet of building floor area, enough to support about 88,000 jobs. Including "placeholder" development assumptions for the East Pleasanton Specific Plan area, this total could rise to approximately 35 million square feet and 109,000 jobs.

Impacts and Mitigation Measures Indentified

The General Plan's goals, policies, and programs in its various elements mitigate most of the potentially significant effects that could occur due to buildout of the General Plan. One impact would be significant and unavoidable with no mitigation available while another impact would be significant with mitigation available, if the City implements the mitigation measures. **Table 4-1** summarizes all of the environmental impacts and mitigation measures of the General Plan EIR.

Impacts	Mitigation Measures	Significance after Mitigation
Land Use and Planning		
Impact LU-1: The proposed General Plan would not physically divide an established community.	None required.	Less than Significant
Impact LU-2: The proposed General Plan may result in land use conflicts and incompatibility between existing and proposed land use. However, existing regulations, procedures, and the proposed General Plan would reduce these effects to less than significant.	None required.	
Impact LU-3: The potential annexation of land by the City as part of the proposed General Plan would not conflict with County and LAFCo policies adopted for the purposes of avoiding or mitigating an environmental effect.	None required.	
Impact LU-4: Implementation of the proposed General Plan may result in land use conflicts and incompatibility between existing agricultural uses and proposed non-agricultural land use. However, existing regulations and proposed General Plan goals, policies and programs would reduce these effects to less-than-significant levels.	None required.	
Impact LU-5: The proposed General Plan would conflict with lands under existing Williamson Act contracts.	None required.	
Impact LU-6: Implementation of the proposed General Plan would permanently convert up to five acres of Prime Farmland (as defined by LAFCo), two acres of Unique Farmland, and 39 acres of Farmland of Statewide Importance, as identified by the CA Farmland Mapping and Monitoring Program, to non-agricultural uses.	None required.	
Transportation		
Impact TR-1: Increased motor vehicle traffic due to implementation of proposed General Plan buildout would cause an increase in traffic at study intersections that would be substantial in relation to the existing traffic load and capacity of the street system.	Mitigation Measure TR-1.1: Owens Drive at Hopyard Road (#9) – Reconfigure Owens Drive at Hopyard Road to provide the following lanes: two northbound left, three northbound through, one northbound right; three southbound left, three southbound through, one southbound right (free); two eastbound left, two eastbound through, one eastbound right; two westbound left, two westbound through, one westbound right (free); change signal timings accordingly.	LTS
	Mitigation Measure TR-1.2: Stanley Boulevard at EI Charro Road (#14) – Redesign the future intersection to widen the southbound approach to provide two left-turn and two right-turn lanes, and the westbound approach to provide a second through lane.	
	Mitigation Measure TR-1.3: Stoneridge Drive at EI Charro Road (#15) – Redesign the future intersection to provide a southbound free right-turn lane.	

TABLE 4-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES FROM THE GENERAL PLAN EIR

Impacts	Mitigation Measures	Significance after Mitigation
Transportation (cont.)		
	Mitigation Measure TR-1.4: Stoneridge Drive at Johnson Drive (#17) – Re-stripe westbound right-turn lane to shared through/right lane and widen westbound departure to receive 4	
Impact TR-2: Development due to implementation of proposed General Plan buildout would add traffic to roadway and highway segments that already exceed volume-to-capacity standards established by the Alameda County Congestion Management Agency. These increases would be allowable under the Alameda County Congestion Management Agency thresholds of significance for volume.	None required.	
Impact TR-3: Development due to implementation of the proposed General Plan buildout would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that would result in substantial safety risks.	None required.	
Impact TR-4: Development due to implementation of the proposed General Plan buildout would not substantially increase hazards due to a design feature or incompatible uses, nor would the development due to its implementation result in inadequate emergency access.	None required.	
Impact TR-5: Development due to implementation of the proposed General Plan buildout could result in increased demand for motor vehicle parking.	None required.	
Impact TR-6: Development due to implementation of the proposed General Plan buildout would not conflict with adopted policies, plans, or programs supporting alternative transportation and would not disrupt existing transit service. Implementation of the proposed General Plan would increase transit accessibility and amenities.	None required.	
Impact TR-7: Development due to implementation of proposed General Plan buildout could adversely affect bicycle facilities.	None required.	
Impact TR-8: Development due to implementation of proposed General Plan buildout could result in an impact on pedestrian facilities.	None required.	

Impacts	Mitigation Measures	Significance after Mitigation
		Mittgation
Population, Employment, and Housing		
Impact POP-1: Implementation of buildout of the proposed General Plan would result in direct population and housing unit growth in the Planning Area and in indirect growth due to road and infrastructure changes. However, population and housing unit growth would be limited by the City's housing cap of 29,000 units. Furthermore, the goals, policies, and programs included in the proposed General Plan would reduce the impacts to less-than-significant levels.	None required.	
Public Services		
ImpactPS-1 : Development associated with buildout of the proposed General Plan would result in increased demand for services from the Livermore- Pleasanton Fire Department. Provision of new fire protection services could require the construction of new fire protection facilities, the construction of which would result in a less-than-significant impact.	None required.	
Impact PS-2 : Development near the Urban Growth Boundary associated with buildout of the proposed General Plan would not increase risk from wildland fires due to new development's proximity to open space areas composed of chaparral or grasslands.	None required.	
Impact PS-3 : Development associated with buildout of the proposed General Plan would result in increased demand for policing services from the Pleasanton Police Department. Provision of new police protection services could require the construction of new police facilities, the construction of which would result in a less-than-significant impact.	None required.	
Impact PS-4 : New development would generate additional school enrollment within the Pleasanton Unified School District. This could necessitate the construction of new school facilities, the construction of which would have a less-than-significant impact.	None required.	
Impact PS-5 : New development would not increase the use of existing neighborhood, community, and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.	None required.	
Impact PS-6 : Buildout under the proposed General Plan may include recreational facilities or require the construction of recreational facilities that could have an adverse physical effect on the environment.	None required.	

TABLE 4-1 (Continued)
SUMMARY OF IMPACTS AND MITIGATION MEASURES FROM THE GENERAL PLAN EIR

Ir	npacts	Mitigation Measures	Significance after Mitigation
U	tilities		
	Impact UT-1: New or expanded water entitlements may be needed to serve the Planning Area in connection with the buildout of the proposed General Plan. Through buildout, the Planning Area is likely to have sufficient, reliable, water supplies from existing entitlements and resources. Through 2015, the Planning Area has sufficient sustainable water supplies. After 2015, the Planning Area may have sufficient sustainable water supplies, depending on a number of factors, in particular, if the past water sustainability factors used by Zone 7 on its imported water supplies are brought back to pre-2008 levels to meet demand through buildout under the proposed General Plan.	None required.	
	Impact UT-2: The Dublin-San Ramon Services District and the Livermore- Amador Valley Water Management Agency have adequate capacity to serve projected demand from the development allowed under the proposed General Plan, resulting in a less-than-significant impact.	None required.	
	Impact UT-3: The Dublin-San Ramon Services District and Livermore- Amador Valley Water Management Agency would meet the wastewater treatment and disposal requirements of the San Francisco Bay Regional Water Quality Control Board as a result of implementing the proposed General Plan buildout.	None required.	
	Impact UT-4: Development due to buildout of the proposed General Plan would be served by a landfill with sufficient permitted capacity to accommodate Pleasanton's solid waste disposal needs.	None required.	
	Impact UT-5: Development due to buildout of the proposed General Plan would be served by a landfill with sufficient permitted capacity to accommodate Pleasanton's solid waste disposal needs.	None required.	
	Impact UT-6: The proposed General Plan would not encourage the wasteful or inefficient use of energy.	None required.	
	Impact UT-7: Implementation of buildout of the proposed General Plan would require new water storage and supply facilities and distribution pipes, wastewater facilities, and energy production and transmission infrastructure, the construction of which would result in less-than-significant environmental effects.	None required.	

			···
I	mpacts	Mitigation Measures	Significance after Mitigation
ł	lydrology and Water Quality		
	Impact HY-1: Development due to buildout of the proposed General Plan could have potential construction and post-construction impacts on water quality and create additional sources of polluted runoff. However, at the programmatic level, existing regulations and standards are sufficiently protective of water quality and beneficial uses; neither water quality standards nor waste discharge requirements would be violated.	None required.	
	Impact HY-2: Development under the proposed General Plan would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.	None required.	
	Impact HY-3: The proposed General Plan would alter runoff characteristics in the Planning Area that could lead to more on-site and off-site erosion.	None required.	
	Impact HY-4: The proposed General Plan would alter the Planning Area runoff characteristics that could exceed the capacity of existing stormwater drainage systems and result in off-site flooding, a potentially significant impact.	None required.	
	Impact HY-5: Implementation of the proposed General Plan may result in construction of residences and structures within a FEMA 100-year flood hazard area that would be subject to Municipal Code Chapter 17.08 and the Public Safety Element of the General Plan.	None required.	
	Impact HY-6: Implementation of the proposed General Plan buildout could expose people and structures to a severe but extremely unlikely risk of loss, injury, or death involving flooding as the result of a levee or dam failure.	None required.	
	Impact HY-7: Implementation of proposed General Plan buildout would require the construction of additional stormwater detention features, the construction of which would not be expected to cause a significant environmental effect.	None required.	
	Impact HY-8: Development due to implementation of the proposed General Plan would continue to allow on-site sewage systems in the Main Basin groundwater basin area. On-site sewage systems can contribute to ground and surface water quality degradation that could contribute to a violation of water quality standards, a potentially significant impact. However, existing Pleasanton Municipal Code regulations and standards would ensure that potential development due to implementation of the proposed General Plan would not result in degradation of water quality by septic systems.	None required.	

Impacts	Mitigation Measures	Significance after Mitigation
Geology		
ImpactGEO-1: Buildout due to implementation of the proposed General Plan would not expose people or structures to rupture of a known earthquake fault.	None required.	
Impact GEO-2: Buildout due to implementation of the proposed General Plan would not expose people or structures to strong seismic groundshaking or seismic-related ground failure.	None required.	Less than Significant
Impact GEO-3: Buildout of the proposed General Plan would not expose people or structures to landslides or mudflows.	None required.	
Impact GEO-4: Buildout due to implementation of the proposed General Plan would not be subject to risk from settlement and/or subsidence of land, lateral spreading, or expansive soils, creating substantial risks to life or property.	None required.	
Impact GEO-5: Buildout due to implementation of the proposed General Plan would not result in substantial soil erosion.	None required.	
Impact GEO-6: Buildout due to implementation of the proposed General Plan Update would not result in the loss of availability of a regionally valued mineral resource.	None required.	
Biological Resources		
Impact BIO-1: Development due to implementation of the proposed General Plan could create a potential health hazard, or involve the use, production or disposal of materials that pose a potential hazard to plant or animal populations in the affected area.	None required.	
Impact BIO-2: Development due to implementation of the proposed General Plan could adversely affect special status plant species due to the substantial degradation of the quality of the environment or reduction of population or habitat below self-sustaining levels.	None required.	
Impact BIO-3: Development due to implementation of the proposed General Plan could result in degradation of the quality of the environment or reduction of habitat or population of special status birds below self-sustaining levels, through the loss of both nesting and foraging habitat.	None required.	
Impact BIO-4: Development due to implementation of the proposed General Plan could result in degradation of the quality of the environment or reduction of habitat or population of special status birds below self-sustaining levels, through the loss of both nesting and foraging habitat.	None required.	

		Significance after
Impacts	Mitigation Measures	Mitigation
Biological Resources (cont.)		
Impact BIO-5: Development due to implementation of the proposed General Plan could result in degradation of the quality of the environment or reduction of habitat or population of special status amphibians and reptiles below self-sustaining levels.	None required.	
Impact BIO-6: Development due to implementation of the proposed General Plan could result in degradation of the quality of the environment or reduction of habitat or population of special status mammals below self-sustaining levels.	None required.	
Impact BIO-7: Implementation of the Proposed General Plan could result reduction of aquatic habitat or populations below self-sustaining levels of special status fish.	None required.	
Impact BIO-8: Implementation of the proposed General Plan could result in the loss or modification of riparian habitat, resulting in a substantial adverse effect.	None required.	
Impact BIO-9: Implementation of the Proposed General Plan could result in an adverse effect on State or federally protected wetlands and/or waters of the United States through direct removal, filling, or hydrological interruption.	None required.	
Impact BIO-10: Development due to implementation of the proposed General Plan could result in the loss of California Department of Fish and Game defined sensitive natural communities such as Sycamore Alluvial Woodland.	None required.	
Impact BIO-11: Development due to implementation of the proposed General Plan could lead to removal of mature trees.	None required.	
Impact BIO-12: Development due to implementation of the proposed General Plan could interfere 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.	None required.	
Impact BIO-13: Implementation of buildout of the proposed General Plan, combined with other buildout assumed in the Tri-Valley area, could result in a regional loss of special status plant or wildlife species or their habitat.	None required.	
Impact BIO-14: Implementation of buildout of the proposed General Plan, combined with buildout assumed in the Tri-Valley Planning Area, could contribute to the cumulative loss of sensitive natural communities including wetlands and riparian habitat in the region.	None required.	

_

Impacts	Mitigation Measures	Significance after Mitigation
Noise		
Impact NO1: Development due to implementation of proposed General Plan could result in an increase in exterior noise levels, although these noise levels would be within the Noise and Land-Use Compatibility Guidelines of the City and the increase would be allowable based on community response.	None required.	
Impact NO-2: Development due to implementation of the proposed General Plan would not increase residential or other sensitive receptor interior noise levels above Ldn 45 dB.	None required.	
Impact NO-3: Development due to implementation of the proposed General Plan would subject existing and/or planned residential and commercial areas to construction noise and groundborne vibration. Construction-related noise levels would meet the standards of Pleasanton's Noise Ordinance.	None required.	
Air Quality and Climate Change		
Impact AQ-1: Development due to buildout of the proposed General Plan buildout would result in an increase in population lower than that estimated in the newest air quality plan (2005 Ozone Strategy) and an increase in vehicle miles traveled. This would lead to increases in air pollutants due to cumulative development in the Planning Area that could conflict with implementation of the current air quality plan.	Limiting population based on the housing cap while allowing and encouraging business development would be a cumulative effect of building out the Planning Area that is intrinsic to both the existing and proposed General Plans. Thus no mitigation measures are available to lower this cumulative impact to a less-than-significant level.	Significant and Unavoidable
Impact AQ-2: Development due to implementation of the proposed General Plan would not result in carbon monoxide concentrations that exceed (violate) the 1-hour State ambient air quality standard of 20.0 parts per million (ppm), the 8-hour state ambient standard of 9.0 ppm, or the federal standards, which are not as stringent.	None required.	
Impact AQ-3: Development due to implementation of the proposed General Plan would result in shortterm air quality emissions as a result of construction activities.	None required.	
Impact AQ-4: Development due to implementation of the proposed General Plan buildout would not 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.	None required.	
Impact AQ-5: Development due to implementation of the proposed General Plan could result in toxic air contaminant (TAC) emissions that could create a risk for new sensitive receptors.	None required.	

h	npacts	Mitigation Measures	Significance after Mitigation
A	ir Quality and Climate Change (cont.)		
	Impact AQ-6: Development due to implementation of proposed General Plan buildout would generate greenhouse gases), which would contribute to the cumulative impact of global climate change. However, the proposed General Plan's contribution to regional greenhouse gas emissions would not be considerable.	None required.	
	Impact AQ-7: Development due to implementation of the proposed General Plan would not result in the creation of odors affecting a substantial number of people.	None required.	
٧	isual Resources		
	Impact VR-1: Development due to implementation of the proposed General Plan would not have substantial adverse impacts on scenic vistas and visual natural resources within the Planning Area.	None required.	
	Impact VR-2: Development associated with implementation of the proposed General Plan would not substantially alter the existing visual character or quality and urban design within the Planning Area.	None required.	
	Impact VR-3: New development due to implementation of the proposed General Plan would create new sources of daytime glare, and could change nighttime lighting and illumination levels in the City.	None required.	

None required.

TABLE 4-1 (Continued) SUMMARY OF IMPACTS AND MITIGATION MEASURES FROM THE GENERAL PLAN EIR

Cultural Resources

policies, and programs included in the proposed General Plan.	
Impact CR-2: Development associated with buildout of the proposed General Plan could damage unknown historic, prehistoric, or archaeological resources in the Planning Area.	None required.
Hazards and Hazardous Materials	
Impact HAZ-1: Construction and operation due to implementation of the	None required.

proposed General Plan would not create a potentially significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact CR-1: Development associated with implementation of buildout of the

proposed General Plan would not lead to potential damage or loss of known historic, archaeological, or paleontological resources, because of the goals,

		Significance after
Impacts	Mitigation Measures	Mitigation
Hazards and Hazardous Materials (cont.)		
Impact HAZ -2: Activities related to implementation of the proposed General Plan could accidentally release hazardous materials into the environment, creating a potentially significant hazard to the public or the environment.	None required.	
Impact HAZ -3: Buildout of development due to implementation of the proposed General Plan could result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	None required.	
Impact HAZ-4: Development that would be expected with buildout of the proposed General Plan could be located on one or more sites included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in a hazard to the public or the environment.	None required.	
Impact HAZ-5: Implementation of the proposed General Plan would not effect the operations at the Livermore Municipal Airport or present a safety hazard to people residing or working in the Planning Area.	None required.	
Impact HAZ-6: Buildout of the proposed General Plan would not result in a safety hazard for people residing or working in the vicinity of a private airstrip.	None required.	
Impact HAZ-7: Buildout of the proposed General Plan would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	None required.	
Impact HAZ-8: Implementation due to buildout of the proposed General Plan would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including wildlands adjacent to urbanized areas or residences intermixed with wildlands.	None required.	
Impact HAZ-9: Implementation of the proposed General Plan, combined with buildout assumed in the Tri-Valley area, could result in regional water pollution.	None required.	
Source: Pleasanton General Plan EIR, 2009	-	

4.A Aesthetics

This section analyzes the potential impacts the proposed project would have on visual quality. The evaluation of aesthetic impacts focuses on the physical changes resulting from proposed residential development of the potential sites for General Plan land use designation revisions and rezoning. Impacts associated with these sites represent the part of the project that would alter the physical environment over and above what has already been identified and analyzed in the General Plan EIR. This section also discusses the aesthetic effects of light and glare associated with nighttime activities. This section also summarizes applicable policies related to visual quality contained in the Pleasanton General Plan Community Character Element and Land Use Element.

Setting

Visual Character

The visual setting of the City of Pleasanton is varied, reflecting the unique characteristics of the community's topography, street grids, public open spaces, and distinct neighborhoods. Pleasanton is situated in the Livermore-Amador Valley, part of the "Tri-Valley" region of the San Francisco Bay Area. Numerous street trees throughout Pleasanton visually connect the City to the surrounding tree-covered hills. The surrounding hills provide a visual boundary that separates Pleasanton from surrounding communities, and provides a rural character along Pleasanton's western and southern edges.

Areas of special visual interest include the Pleasanton Ridgelands and the hill areas. The Pleasanton Ridgelands is an area that includes approximately 13,000 acres and is generally bounded by Interstate 580 (I-580) to the north, the 670-foot elevation near Foothill Road to the east, Niles Canyon Road to the south and Palomares Road to the west. The hillside areas include the Pleasanton, Main, and Southeast Hills.

In *Measure F*, passed in November of 1993, Pleasanton citizens voted to protect the existing visual quality of the Pleasanton Ridgelands. In *Measures PP and QQ*, passed in November 2008, Pleasanton citizens voted to preserve hillside and ridge views in the hill areas.

Visual Character of Pleasanton

The street patterns of the city vary from the traditional grid of the Downtown to more typically suburban subdivision cul-de-sac patterns of housing developments built since the 1960s. Broad and curving thoroughfares characterize the circulation within the City's business parks.

Bernal Avenue and Valley Avenue create a loop that circles the older core of the city, centered on the historic Downtown. The city's arterial roads all lead to the Downtown, reinforcing it as the major visual axis or community focus of Pleasanton. In addition, pedestrian pathways connect several neighborhoods to parks, such as those of the Pleasanton Meadows and Birdland neighborhoods. However, there are few paths that serve to connect to other neighborhoods, or to schools, thus limiting the walkability of the city as a whole. To reach their destinations, residents, including children walking to school, often use sidewalks along major arterials which are designed primarily for vehicle use.

The visual character of Pleasanton is further distinguished by the areas of public and private open space and greenways, including parks and landscaping. The City houses the Sports and Recreation Community Park, Val Vista Community Park, Amador Valley Community Park, Augustin Bernal Park, Shadow Cliffs Recreation Area, Pleasanton Ridge Regional Park, Callippe Preserve Golf Course, school playgrounds, and many neighborhood parks. Some of these parks, such as Kottinger Community Park, provide focal points which enhance the sense of place within their neighborhoods. For a more in depth discussion of the City's parks, see the Parks, Recreation and Open Space discussion in Section 4.M, Recreation, of this EIR.

Landforms and Significant Visual Features

Pleasanton is located in the eastern valley area of Alameda County, in the Tri-Valley, ringed by the Diablo Range of hills. Hills rising to a height of 1,000 to 1,500 feet border the valley floor to the west (including the Pleasanton and Main Ridges) and east. To the northwest is the Trampas Ridge, which is also highly visible. To the valley's north lie the Black Hills (part of the Diablo Range) including Mount Diablo, while the south side of the valley rises approximately 3,000 to 3,500 feet above sea level. These prominent landforms define the high points in the landscape of the Tri-Valley area and provide a scenic backdrop for all development in the valley floor portions of the Planning Area.

Agricultural land uses that consist primarily of grazing lands and vineyards are located in the western and southern hills next to the city. The majority of the topography in the developed portion of Pleasanton is relatively flat, sloping gently in all directions toward the surrounding foothills. Surrounding hillside and open space areas, together with trees and other landscaping that have been planted throughout the city's history further reinforce the experience of Pleasanton as a community in a natural setting. The most noticeable visual feature beyond the Pleasanton is Mount Diablo. Rising to an elevation of 3,849 feet above sea level, it is a prominent landmark dominating the northern skyline.

The major watercourse features in Pleasanton include Arroyo de la Laguna, Arroyo del Valle, Arroyo Mocho, Alamo Canal, Chabot Canal, and Tassajara Creek. Shadow Cliffs Lake and the Chain of Lakes are former quarry gravel pits located at the eastern edge of the city. A portion of the San Antonio Reservoir is located in the southern portion of Pleasanton. Other nearby water features include: Alameda Creek, Arroyo las Positas, Lake del Valle, Arroyo Seco, Altamont Creek, and Collier Canyon Creek. Water features provide a natural contrast to the predominantly urban and suburban development pattern of the Tri-Valley, which is largely defined by highways and commercial, residential, and industrial structures within the cities. Newer development along the Dublin side of the I-580 corridor includes moderate- to high-density residential and transitoriented development around the existing and planned Bay Area Rapid Transit (BART) stations. This newer development introduces taller structures to otherwise low-rise development in the Tri Valley. Riparian vegetation represents a valuable scenic resource. The most established riparian communities within the Planning Area are found along Arroyo del Valle, Arroyo Mocho, and Arroyo de la Laguna. Most other creeks within the City have been culverted and/or channelized, so vegetation around them tends to be sparser.

The Downtown area of Pleasanton is the historic center of the city. Physical characteristics of the downtown, including the mix of local-serving uses, historic buildings, the greenway along Arroyo del Valle and city parks, define the essential character of Pleasanton. The City's historic Downtown contains older residential neighborhoods and retail areas, the Alameda County Fairgrounds, and an abundance of street trees. Business park development, which occurred during the 1980s and 1990s, and suburban neighborhood development from the 1960s to the present also create design elements which the City would like to perpetuate so as to harmonize new development with the existing community character.

Scenic Routes/Viewsheds

Scenic routes are intended to preserve or enhance road corridors that afford pleasurable views. The types of views located in the vicinity of the City range from distant views of Mount Diablo to rural farmland views of both flatland areas and surrounding hillsides. Interstate 680 (I-680), traversing Pleasanton in a north-south direction, is an officially designated State Scenic Highway. I-580, traversing Pleasanton in an east-west direction, is an Eligible State Scenic Highway, but is not an officially designated scenic route. I-680 and I-580 (between Palomares and Foothill Roads) feature wooded hillsides, valleys, and other open-space qualities. I-580, between Foothill and El Charro Roads, provides mostly urbanized views with landscaping. A scenic highway designation protects the scenic values of an area and can enhance community identity and pride. Scenic highways provide a passive recreational opportunity to observe scenic vistas.

The designated I-680 scenic route provides a pleasant viewing experience for motorists. However, since the 1980s, the I-680 and I-580 corridors have experienced increasing urbanization of nearly all land use types, reducing the transition and distinction between Pleasanton and other cities of the Tri-Valley area.

Light and Glare

Consistent with the institutional and residential developments in the City, sources of light and glare near the potential sites for rezoning or existing residentially zoned sites include vehicle headlights on public roadways, luminars in parking lots and along public streets, and building and parking security lighting.

Regulatory Setting

This section identifies policies related to the physical environment that pertain to the proposed project's potential effects to scenic vistas, scenic resources, and visual quality and character.

State of California

State Scenic Highway Program

In 1963, the California Legislature established the State's Scenic Highway Program, intended to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, § 260 et seq. In the Planning Area, I-680 is an officially designated state scenic highway and I-580 is not officially designated, but is an "eligible" scenic highway (Caltrans, 2011).

The State Scenic Highways program, a provision of the Streets and Highways code, is administered by the California Department of Transportation (Caltrans) and was established to preserve and enhance the natural beauty of California. The State Scenic Highway System includes highways that are either eligible for designation as scenic highways or have been designated as such. As stated above, I-680 is a designated state scenic highway through the City of Pleasanton. As such, the I-680 scenic corridor (defined as the area of land generally adjacent to and visible from the highway) is subject to protection.

Title 24 of the California Code of Regulations Building Energy Efficiency Standards

All new development would be subject to the Nighttime Sky-Title 24 Outdoor Lighting Standards, which was passed by California Legislature in 2001. Lighting requirements for dark and rural areas are stricter in order to protect the areas from new sources of light pollution and light trespass. All new developments in Pleasanton would be subject to the State's Nighttime Sky-Title 24 Outdoor Lighting Standards, which requires new development to adopt energy efficiency standards for outdoor lighting for the public and private sector.

Local Plans and Policies

City of Pleasanton General Plan

The following goals, policies and programs contained in the City's 2009 General Plan provide for protection of scenic resources:

Land Use Element

Goal 2: Achieve and maintain a complete well-rounded community of desirable neighborhoods, a strong employment base, and a variety of community facilities.

- Policy 8: Preserve and enhance the character of existing residential neighborhoods.
- Program 8.1: Enforce the provisions of the City's Zoning Ordinance and related planning ordinances to maintain the character of existing residential neighborhoods.

- Program 8.2: Use the City's development review procedures to minimize intrusions into existing neighborhoods.
- Policy 10: Provide flexibility in residential development standards and housing type consistent with the desired community character.
- Program 10.1: Use Planned Unit Development (PUD) zoning for residential properties that have unique characteristics or to accommodate development that does not fit under standard zoning classifications.
- Policy 12: Preserve the character of the Downtown while improving its retail and residential viability and preserving the traditions of its small-town character.
- Program 12.3: In the Downtown, encourage mixed-use development which incorporates higher density and affordable residential units consistent with the *Downtown Specific Plan*.
- Program 12.4: Encourage second-floor apartments above first-floor commercial uses and livework units in the Downtown. Also allow mixed-use development in the Downtown where residences are located behind commercial uses.
- Policy 21: Preserve scenic hillside and ridge views of the Pleasanton ridgelands and Southeast Hills.
- Program 21.1: Continue to implement the land-use and development standards of the Pleasanton Ridgelands Initiative of 1993 (Measure F).
- Program 21.2: Study the feasibility of preserving large open-space acreage in the Southeast Hills by a combination of private open-space and a public park system.
- Program 21.3: Develop a ridgeline preservation ordinance and scenic hillside design guidelines to improve safety and reduce the potential negative visual impacts of development in hilly areas.

Conservation and Open Space Element

- Goal 1: Promote sustainability to preserve and protect natural resources and open space.
- Goal 5: Preserve and protect existing and proposed open space lands for public health and safety, recreational opportunities, natural resources (e.g., agriculture, sand, and gravel mining), sensitive viewsheds, and biological resources.
- Policy 2: Preserve heritage trees throughout the Planning Area.
- Program 2.1: Strongly encourage preservation of heritage trees; where preservation is not feasible, the City will require tree replacement or a contribution to the Urban Forestry Fund. The City encourages no net loss of trees.

Program 2.2:	Follow the provisions of the City's <i>Heritage Tree Ordinance, Pleasanton Municipal Code</i> Chapter 17.16, Tree Preservation, when reviewing future development projects.				
Policy 8:	Preserve as permanent open space all areas of outstanding scenic qualities or areas which provide extraordinary views of natural and human-made objects.				
Program 8.1:	Develop a ridgeline preservation ordinance and scenic hillside design guidelines to improve safety and reduce the potential negative visual impacts of development in hilly areas.				
Program 8.2:	Implement the recommendations contained in the Scenic Highway Plan for I- 680.				
Program 8.3:	Retain the scenic attributes of existing I-680 and proposed scenic highways (I- 580 and State Route 84) including views of woodlands, hills and ridges, valleys, and grazing lands.				
Program 8.4:	Along freeway corridors, use setbacks, landscaping, and architecturally integrated screen walls to screen views of parking lots, loading docks, and service and storage areas.				
Program 8.6:	Encourage developers to provide open-space buffers in areas where there are conflicting land uses.				
Program 13.1:	Light only those trails in natural areas that provide a reasonable alternative to transportation, or important links, between residential areas, parks, and commercial centers, as long as such lighting does not intrude upon environmentally sensitive areas or impact nearby residents.				
Community Character Element					
Goal 1:	Preserve and enhance Pleasanton's community character.				

Goal 2:	Preserve and enhance Downtown Pleasanton as a major focus of the community.
Policy 2:	Improve the visual appearance of the Downtown.
Program 2.1	Improve the major gateways into the Downtown to create a sense of arrival and to enhance the aesthetics along these roadways, as described in the Downtown Specific Plan.
Program 2.2:	Implement the design and beautification goals, policies, and objectives of the <i>Downtown Specific Plan</i> .
Program 2.3:	Concentrate immediate Building Code enforcement efforts on the old residential areas of the Downtown.

- Program 2.4: Use the *Downtown Design Guidelines* to evaluate the design of new development proposals.
- Policy 3: Maintain the scale and character of the historic Downtown and surrounding residential areas.
- Program 3.1: Require the height, mass, setbacks, and architectural style of new buildings to reflect the unique character and pedestrian scale of the Downtown, as exemplified in the *Downtown Design Guidelines*.
- Goal 4: Enhance the appearance of major city entryways.
- Policy 7: Improve the visual quality of entryways to Pleasanton.
- Program 7.1: As part of the design review process, encourage the installation of distinctive landscaping, and discourage advertising signage and bright franchise colors at major street entryways to the City.
- Program 7.2: The City should be particularly sensitive to aesthetic considerations when landuse planning in areas adjacent to City entryways.
- Program 7.3: Design and install City identification signs at major entryways to the City.
- Program 7.4: Give the Hopyard/I-580 area a high priority for visual improvement when making land-use and public investment decisions.
- Program 7.5: Consider new locations near entryways for community-service-organization signboards.
- Program 7.6: Explore public/private partnerships to clean up and improve the appearance of Caltrans freeway on/off ramps at Foothill Road and I-580 and at other locations as needed.
- Goal 5: Enhance streetscapes and areas near the freeways.
- Policy 9: Enhance landscaping along city streets and the freeways.
- Program 9.1: Complete and infill the street tree and median landscaping along streets, when feasible.
- Program 9.2: When the opportunity arises and when feasible, add landscaped parkway strips along street edges to soften their appearance and improve the pedestrian experience.

Program 9.3:	Increase the width of existing narrow parkway strips when the opportunity arises, and encourage applicants of new developments to provide parkway strips which are at least 6-10 feet wide.
Program 9.4:	Install landscaped instead of paved medians and replace paved medians with landscaped medians wider than 6 feet, whenever possible and feasible.
Program 9.5:	In new developments, require developers, owners associations, or maintenance associations to maintain landscaped medians.
Program 9.6:	Provide landscaping to soften the visual appearance of existing and new walls and fences that abut city streets, whenever possible and feasible.
Program 9.7:	Require additional setbacks and screening of development adjacent to a freeway.
Program 9.8:	Work with Caltrans to enhance landscaping along the freeways.
Program 9.9:	Along streets, work with developers and property owners to place a greater emphasis on the use of native plant species and on pruning techniques which allow species to appear more as they would in a natural setting, especially in larger planting areas.
Policy 10:	Repair existing City-owned soundwalls and fences facing city streets, when in disrepair, and discourage the installation of new soundwalls facing city streets and freeways.
Policy 14:	Improve the appearance of utility boxes and newspaper racks.
Goal 6:	Preserve and enhance the city's commercial areas and residential neighborhoods.

- Policy 17: Maintain, enhance, and protect the quality, character, and distinctiveness of residential neighborhoods.
- Program 17.1: In existing and new residential areas, where such principles will not conflict with surrounding development patterns or the physical conditions of the site, encourage the use of traditional residential neighborhood planning which incorporates the following design features:
 - Usable front porches
 - 6- to 10-foot-wide parkway strips
 - Large canopy street trees
 - Home fronts facing the street, instead of walls abutting streets
 - Minimal garage presence
 - Narrower streets
 - Pathways to parks, schools, and other neighborhoods
 - Neighborhoods open and accessible to one another

- Program 17.2: In high-density developments, encourage design treatments that enhance the attractiveness of the streetscape and other publicly accessible areas through architectural detail, neighborhood and public gathering areas, gardens, and public art.
- Program 17.3: Work with PG&E to underground power lines in existing residential neighborhoods, when the opportunity arises.
- Program 17.4: In older neighborhoods, schedule the maintenance and replacement of public improvements, such as pavement and streetlights, commensurate in quality and appearance to those in more recently constructed neighborhoods.
- Program 17.5: Consider a City-sponsored street tree replacement program in neighborhoods where street trees have died, been removed, or substantially damaged.
- Program 17.8: Adopt a City street tree ordinance to protect existing and future street trees that are maintained by property owners, and establish planting, care, and pruning standards.
- Policy 18: Evaluate land-use changes in the context of overall City welfare and goals, as well as the desires of the surrounding neighborhoods.
- Program 18.2: Require appropriate buffers, edges, and transition areas between dissimilar land uses and neighborhoods.
- Program 18.3: Through the City's review process, address issues of privacy, proximity and orientation.
- Policy 20: Preserve scenic hillside and ridge views, and other natural features in the hills.
- Program 20.1: Continue to support the Pleasanton Ridgelands Initiative of 1993 (Measure F).
- Program 20.2: In new developments, preserve scenic hillsides and other hillside features including ridges, plants, streams, and wildlife.
- Program 20.3: Discourage grading on slopes of 25 percent or greater.

Downtown Specific Plan

The current Specific Plan for the Downtown area was adopted on March 5, 2002. The overall goal of the Specific Plan is to improve upon the commercial and residential viability of the Downtown while preserving the traditions of its small-town character and scale.

In May 2006, the City adopted design guidelines for the Downtown area as part of the provisions of the Specific Plan. For multi-family zones, the City's goal is that multiple family housing should be sited and designed to fit in with the character of the single family neighborhood. Generally, the Specific Plan states that duplex or triplex homes are preferable within the

Downtown area. The least preferable option is continuous monolithic buildings with little distinction between residential units. The architectural style and scale of the buildings should fit the existing character of the neighborhood.

Bernal Property Phase I and II Specific Plan

The City adopted the Phase I Specific Plan on August 21, 2000 for a 198-acre "private" development of the entire 516-acre property. Phase II, which includes the 318 acres that were dedicated to the City by the Phase I developer, was adopted on May 16, 2006. Phase I consisted of 571 mixed-density housing units, a "village common" and roads. It also allows the development of 750,000 square feet of commercial/office-building floor space. Phase II provides for community uses including parks and open space, a youth and community center, as well as an amphitheater and agricultural uses. Objectives, policies, and guidelines regarding aesthetic resources include:

Visual Resources Objective

To retain key visual resources of the site and provide views of and across the site from Bernal Avenue and I-680.

Visual Resources Policy 1: Protection of Visual Resources. Protect the existing significant visual resources on the site.

Guidelines:

1.1 Riparian vegetation along the Arroyo de la Laguna should be protected to the extent consistent with regional flood control objectives.

1.2 The Knoll, along with its existing valley oak trees, should be retained.

Visual Resources Policy 2: Maintenance of View Sheds. Maintain key view sheds into and across the site.

Guidelines:

2.1 Landscape treatment along the south side of Bernal Avenue should be designed to maintain views across the site to the Southeastern Hills and to Pleasanton Ridge.

2.2 The landscaping and berm along the western edge of I-680 should allow views of Pleasanton Ridge over the berm.

- Key viewpoints that are to remain largely unobstructed should include southbound views of Pleasanton Ridge from the Bernal Avenue overpass south to the UPRR bridge structure.
- Berm construction should be enhanced to appear as a natural landform.
- Landscaping on berms should not be designed or maintained to grow so high or so dense as to block views of the Pleasanton Ridge.

2.3 Projects should be designed to provide attractive views over and into the site for travelers on I-680 at the northern and southern ends of the Planning Area where the Freeway is elevated.

2.4 The view of outdoor lighting fixtures from lighted sports fields, parking lots and buildings shall be screened, and lighting should be directed downward.

2.5 Direct illumination on-site and downward, and separate existing residential areas from light sources through the use of mixed deciduous and evergreen tree species to ensure year-round screening.

2.6 Install cut-off shields and luminaries on sports field lighting poles that minimize "light spill" (light falling beyond the specific area of illumination).

2.7 Establish a procedure for citizens to report potential complaints about nighttime lighting to the City.

Pleasanton Municipal Code

Chapter 17.16 of the Pleasanton Municipal Code regulates the removal and preservation of Heritage trees within the city. Any removal of Heritage trees is required to go through City staff review and the development review process (See Impact 4.C-5 of *Biological Resources*). Chapter 18.20 of the Municipal Code requires the review of a variety of development projects, including site plans, landscape plans, building architecture, and other plans and reports, in order to preserve and enhance the city's aesthetic values and ensure the preservation of public health, safety and general welfare. Chapter 18.28 of the Municipal Code prevents a process or use of equipment or materials that produce illumination or glare, which is found to be objectionable to persons residing or working in the vicinity. Chapter 18.48 of the Municipal Code prevents any use, except for temporary construction operation, which would create changes in temperature or direct or sky reflected glare, detectable by human senses without the aid of instruments beyond the boundaries of the site. It also established restrictions on exterior and interior illuminating in relation to a site's boundaries. Chapter 18.78 of the Municipal Code for the west Foothill Road Corridor Overlay District seeks to implement the goals and polices of the General Plan as they relate to the natural beauty and rural character of the Foothill Road area adjacent to the rural and open-space areas of the Pleasanton Ridgelands. Chapter 18.88 of the Municipal Code provides regulations for street parking facilities which includes deflecting parking area illumination and lighting away from residential sites so as to cause no annoying glare. Chapter 18.96 of the Municipal Code regulates the location, height, size, and illumination of signs in order to maintain the attractiveness and orderliness of the city's appearance, to protect business sites from loss of prominence resulting from excessive signs on surrounding sites, and to protect the public safety and welfare.

Impacts and Mitigation Measures

Significance Criteria

The visual character of a landscape depends on such attributes as color, texture, complexity, and the form of landscape components. Impacts on visual resources are evaluated and determined by comparing changes in these attributes that would result from the project. The reduction of a view's complexity, or the obstruction of or encroachment upon background or middle ground views all would contribute to the significance of impacts. Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist) the project could have a significant impact on visual resources if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views of the area.

Approach to Analysis

"Visual impact" is measured by the amount of visual change adversely affecting an area's perceived aesthetic value or conditions of the setting. A highly visible change resulting from a project that is incompatible with the setting is considered to substantially degrade the visual character or quality of the site or its surroundings and contribute to a significant adverse visual impact. Factors to be considered include: the physical layout of constructed elements with respect to each other and existing structures, the open and closed spaces defined between structural elements, the density or intensity of development, scale relationships between existing and proposed structures, site landscaping, and other features of development that affect the pedestrian scale of movement. For example, significant differences in mass or form or open space between existing and new structures would be expected to generate adverse visual impacts.

Adverse visual impact would also be expected to result from the removal of vegetation that had enhanced the appearance of existing conditions. Exceptions would include the removal of vegetative massings or plant specimens that are haphazard in placement, show evidence of crowding and overgrowth, retain poor health indicators or otherwise do not significantly contribute to the aesthetic quality of the setting.

Temporary adverse visual impacts would be expected during site construction where excavation, grading, and materials and equipment storage occur. However, this would be short-term, lasting only during the construction period. In addition, adverse visual impact would be expected to result from any new lighting fixtures that introduce point sources of light or glare that interfere with nighttime views.

Impacts and Mitigation Measures

Impact 4.A-1: Development facilitated by the General Plan Amendment and rezonings could have a potentially adverse effect on a scenic vista. (Significant)

Housing Element

New residential housing on the potential sites for rezoning could result in an impact by partially obscuring a scenic vista. If the new residential housing were developed in a manner that obstructs views from a scenic vista from a public area or introduces a visual element that would dominate or upset the quality of a view, this would create a significant impact on a scenic vista. The proposed Housing Element would result in increased intensity and could result in greater bulk and mass of buildings. Design and density standards for the new residential housing will be required to comply with General Plan and Housing Element policies, as well as zoning requirements, and any applicable Specific Plan provisions or other guidelines regarding project design. However, the introduction of high intensity development on the potential sites for rezoning could potentially affect nearby scenic vistas due to the potential for taller buildings and/or bulkier buildings, which could block views to the site from these scenic vistas. Scenic vistas in the City include the Pleasanton Ridgelands, which are to the west of I-680; and the Pleasanton, Southeast, and Main Hills, which are to the west, southeast, and east Pleasanton.

Furthermore, along the I-580 corridor, residential development on the potential sites for rezoning is anticipated near the West Pleasanton/Dublin BART Station (Sites 2 and 3) and at the Dublin/Pleasanton BART Station (Site 1). The changed land use designation would not be expected to intensify development; it would only change the types of uses allowed to include housing. The Housing Element policies would ensure the housing developments would remain consistent with the General Plan, therefore reducing possible impacts. Additional development would be infill at all three sites. Consistency with the Housing Element, General Plan policies, rezoning requirements, design guidelines, and specific plans would ensure no negative visual impacts along the I-580 corridor or from other vantage points from the proposed Housing Element.

With the exception of the Staples Ranch area (located directly west of El Charro Road), the I-580 corridor from Foothill Road to El Charro Road has already been developed and continues to allow for development at urban densities and intensities and is expected to be developed in the near future; this area contains 124-acre parcels of undeveloped land. Development on both sides of I-580 has already affected the scenic highway eligibility of this roadway segment.

Along the I-680 corridor, additional development (housing and a Safeway) is proposed for the Pleasanton Gateway (Site 7). The Specific Plan for Pleasanton Gateway originally identified office uses with three- to four-story buildings for the Site 7 area, which is currently undeveloped. Due to their height, the addition of three- to four-story residential buildings could affect views from Valley and Bernal Avenues of Pleasanton Ridge, located to the west of Site 7 across I-680.

No residential development is proposed outside of the Urban Growth Boundary. Most of the potential sites for rezoning are infill development that would have no effect on the area's scenic

vistas. The development along scenic corridors would occur in areas that are already densely developed (i.e., Sites 1, 2, and 3), except in the case of Site 7, which would be constructed on currently undeveloped land. By following goals, policies, and programs included as part of the proposed Housing Element, General Plan, applicable zoning requirements, design guidelines and specific plans, Pleasanton's visual resources, including hillsides and ridgelines, would largely be protected from impacts resulting from development facilitated by the proposed Housing Element. However, the obstruction of views of the ridgeline west of I-680 by development at Site 7 would still be considered significant. Mitigation Measure 4.A-1 would reduce these impacts to less than significant levels.

To address building heights, the proposed Housing Element includes the following goal and policy:

- Goal 2: Encourage residential densities capable of supporting affordable housing while taking into account the character and development pattern of the surrounding area.
- Policy 3: Encourage developments on sites designated for multiple-family residential uses which are adjacent to commercial districts to be designed at the maximum height allowed for multiple-family residential zoning districts, consistent with neighborhood character; however in the Downtown, multiple-family residential building height should be consistent with the design policies of the Downtown Specific Plan and the Downtown Design Guidelines.

By following goals, policies, and programs included as part of the proposed Housing Element, General Plan, applicable zoning requirements, design guidelines and specific plans, Pleasanton's visual resources, including hillsides and ridgelines, would largely be protected from impacts resulting from development facilitated by the proposed Housing Element on the potential sites for rezoning. However, to ensure that the development on Site 7 would maintain the views of the ridgelines across I-680, **Mitigation Measure 4.A-1** would be required.

Mitigation Measure 4.A-1: The City shall require that site plans for the proposed Site 7 residential development to incorporate view corridors through the site which maintain views of the ridgelines to the west from Valley Avenue.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect scenic resources, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion and measures to mitigate those impacts are provided as well. To the extent that the Draft CAP achieves GHG emissions reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient, implementation of the plan would tend to maintain the less than significant aesthetic impacts identified in the General Plan EIR. Visual policies adopted as part of the General Plan would continue to apply.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.A-2: Development facilitated by the General Plan Amendment and rezonings could potentially damage scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a state scenic highway. (Less than Significant)

Housing Element

I-680 is located along the western edge of the City and is an officially designated state scenic highway. I-580, which is located along the northern border of the City, is designated as an Eligible State Scenic Highway; however, it is not officially designated as a State Scenic Highway by Caltrans. Proposed changes in land use designations would not intensify planned development of Sites 1 through 4. These sites are already designated and planned for commercial and office development, which would result in a similar intensity of development as the proposed highdensity residential uses. The impact of this type of development was evaluated in the General Plan EIR, which concluded that no negative visual impacts would be expected from I-580 or from other vantage points due to these land uses (City of Pleasanton, 2009). For example, Sites 1, 2, and 3 are within full or partial view of I-580. All three sites are currently developed with commercial uses or with parking lots for commercial or office uses, and as such, there are no scenic resources on any of the three sites that could be damaged or removed as the result of the proposed Housing Element. Sites 2 and 7 are within full or partial view of I-680. Site 2 is currently developed with the Stoneridge Shopping Center and is only partially visible from I-680. Trees, shrubs, and office buildings block the views of the Stoneridge Shopping Center from I-680. The addition of multifamily residences at Site 2 would be barely discernable, if discernable at all, from I-680. As mentioned above, there are no scenic resources on Site 2. Thus, the proposed residential use of these sites would increase their intensity of use; however, since views from the freeway corridors are already urban in nature, intensification of development on these sites would not result in the loss of views of open vistas, and would not, therefore substantially degrade the existing visual character or quality of the sites and their surroundings.

Site 7 abuts I-680, and views of this site from I-680 are unobstructed; therefore, no scenic features would be blocked or obstructed. A Safeway grocery store has been approved for this site and is currently under construction. Office use was also approved for this site; however, per the proposed Housing Element, the office uses would be replaced with multi-family housing. The Initial Study prepared for this site concluded that impacts related to aesthetic resources due to the proposed development on the site would be less than significant (City of Pleasanton, 2010).

Any future proposed multi-family housing on Site 7 would have to follow all design guidelines outlined in the Bernal Property Specific Plan and would be sited adjacent to the existing residential uses developed as part of Phase I of the Specific Plan. There are no scenic resources on Site 7. The development of 300 units on the Site 7 would not substantially change the views along the I-680 corridor. There is development both north and south of Site 7 along I-680, and the addition of multi-family housing would be visually consistent.

Although multiple sites zoned for residential development or identified as potential sites for rezoning under the proposed Housing Element are visible along the I-580 and I-680 corridors, development of these sites would not result in substantial damage to scenic resources, which consist primarily of the hillsides and ridgelines that surround the City. The proposed project would not result in any development on these hillsides or ridgelines. Therefore, potential impacts on scenic resources from development on the potential sites for rezoning would be less than significant.

By following goals, policies, and programs included as part of the proposed Housing Element, General Plan, zoning ordinance, design guidelines, and specific plans, visual resources, including hillsides and ridgelines, would largely be protected from impacts resulting from development facilitated by the proposed Housing Element. Furthermore, development of existing residential land was analyzed in the General Plan EIR, and found a less than significant impact. Implementation of the proposed Housing Element would have a less than significant impact on visual resources.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect scenic resources, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion and measures to mitigate those impacts are provided as well.

To the extent that the Draft CAP achieves GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient, implementation of the plan would tend to maintain the less than significant aesthetic impacts identified in the General Plan EIR. Visual policies adopted as part of the General Plan would continue to apply.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.A-3: Development facilitated by the General Plan Amendment and rezonings could potentially degrade the existing visual character or quality of Planning Area. (Less than Significant)

Housing Element

With the exception of sites 11 and 14, most of the potential sites for rezoning are infill sites. As a result, this would reduce potential adverse effects of new development on the visual character of the site and surrounding area because, through the Design Review process required by Chapter 18.20 of the Pleasanton Municipal Code, the infill development would be consistent with the character of its surrounding area and, overall, would retain the existing visual character of Pleasanton. Therefore, visual impacts due to new housing development would be less than significant.

Development of Sites 11 and 14 on the edge of existing urban development in Pleasanton may be perceived as constituting the most visual change as this area is currently undeveloped. However, the City would prepare a Specific Plan prior to the development of these sites and the Specific Plan would include detailed guidance as to the development of housing as well as other land uses, infrastructure and public facilities. This area includes Zone 7's Chain of Lakes, a series of lakes that acts as groundwater recharge resource. Future plans for the lakes include flood control, water supply, and recreational uses. This future specific plan will be subject to further environmental review. In addition, this plan and its future development would be subject to the goals, plans, and policies of the existing General Plan that relate to visual character and quality that were discussed in the regulatory setting section, above.

The proposed Housing Element and the existing General Plan include policy direction that would help mitigate impacts of future development associated with buildout of the proposed Housing Element and existing General Plan. This policy direction includes design guidelines to ensure high-quality development and requirements for compatibility with existing development, as well as urban design elements for maintaining the quality of development in Pleasanton.

The potential sites for rezoning within existing specific plan areas include Site 7 in the Bernal Property Specific Plan Area; Sites 17, 18, and 21 in the Downtown Specific Plan Area; and Site 20 in the North Sycamore Specific Plan Area. In addition to following design guidelines found in the General Plan, the development that would be built on sites within Specific Plan areas would be required to follow all guidelines included in their respective specific plan. For the most part, the goals and policies in the specific plans are similar to those of the General Plan. Generally, residential development should be two-story and match the design style of the area, and groupings of townhouse-style units are preferable to monolithic buildings. While some of the development (i.e., 30 units per acre in three- to four-story structures), the design review process required under Chapter 18.20 of the *Pleasanton Municipal Code* would ensure that this development would be consistent with the architectural style of the surrounding area and that the heights and massing of the buildings would respect the overall context. Because the provisions of Chapter 18.20 of the *Pleasanton Municipal Code* are designed to protect the visual character or quality of development

sites and their surroundings, compliance with those provisions will avoid substantial degradation of the visual character of those sites and their surroundings.

As described in the General Plan EIR, the existing character of Pleasanton is that of a low-density residential community surrounded by business parks and shopping centers in a relatively vegetation filled setting, with historic and more compact urban design elements in its central Downtown Area. Although the potential new development would incrementally increase development intensity and density, as noted above, new development would comply with the policies in the General Plan, specific plans, and the zoning ordinances to ensure compatibility with the context of the site and city in general. Changes to the visual character would not be substantial. In addition, all new development is required to adhere to City policies designed to reduce visual impacts and preserve view corridors.

Large trees as components of the city's visual character are protected by existing ordinances, as no new development would be permitted to remove heritage trees without a permit as set forth in Chapter 17.16 of the *Pleasanton Municipal Code*. Compliance with this ordinance would prevent the unnecessary removal of heritage trees and would serve to minimize impacts to the city's visual character caused by implementation of the proposed Housing Element buildout.

The proposed Housing Element includes the following goals, policies, and programs that protect visual character of the City:

Goal 2:	Encourage residential densities capable of supporting affordable housing while taking into account the character and development pattern of the surrounding area.
Policy 3:	Encourage developments on sites designated for multiple-family residential uses which are adjacent to commercial districts to be designed at the maximum height allowed for multiple-family residential zoning districts, consistent with neighborhood character; however in the Downtown, multiple-family residential building height should be consistent with the design policies of the Downtown Specific Plan and the Downtown Design Guidelines.
Policy 6:	Actively promote the creation of second units on single-family residential lots and their maintenance as sources of moderate-, low-, and very-low income housing.
Program 6.1:	Continue monitoring second units to determine if they are being rented and, if so, determine their rent levels. Include conditions of approval for second unit Administrative Design Review approvals requiring a monitoring program.
Program 6.2:	Create incentives to homeowners to rent their second units to moderate-, low-, and very-low-income households. Incentives should include fee reductions or waivers and information/assistance to help homeowners be landlords. Such incentives should be made available to applicants of second units during the Administrative Design Review or Building permit process.

Program 6.3: Consider allowing second units without an Administrative Design Review process in new single-family developments, subject to performance standards, and consider reducing the existing Second Unit Ordinance requirements, such as the parking and height limit requirements, to encourage the development of second units, and consider other measures to promote the creation of second units.

By following the goals, policies, and programs of the proposed Housing Element in combination with the existing General Plan, potential impacts to the visual character or quality and the urban design of Pleasanton would less than significant.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect scenic resources, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

The Draft CAP includes numerous land use planning initiatives, including recommendations that the City revise existing development standards and design guidelines to promote high-quality mixed-use and transit-oriented development projects. Actions under these initiatives would be required to be in compliance with the Pleasanton Municipal Code and General Plan policies, which together contain provisions to protect the visual character of the community, and would therefore avoid significant impacts. The implementation of the Draft CAP would have a lessthan-significant impact on the visual character or quality of Planning Area.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.A-4: Development facilitated by the General Plan Amendment and rezonings could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the Planning Area. (Less than Significant)

Housing Element

New development that would occur as a result of implementation of the Housing Element would introduce artificial light from new residential development and outdoor parking areas would be subject to the City's General Plan policies and regulations. Some new development due to implementation of the proposed Housing Element would occur on undeveloped land in East Pleasanton (Sites 8, 11, and 14) that is devoid of light sources; this new development would

change conditions in that portion of Pleasanton with respect to lighting and glare levels. Compliance with design guidelines and standards outlined in the General Plan, Municipal Code (specifically Chapter 18.48), and Specific Plans would reduce light and glare that could affect views of the areas.

Depending on the amount and type of glazing and the exterior building materials, future buildings in the city, including residential buildings facilitated by the proposed Housing Element have the potential to reflect sunlight, creating glare for nearby residents or motorists and potentially cause significant impacts to day or nighttime views of the area. The proposed Housing Element would enable construction of additional roadways and pedestrian walkways with accompanying new street lighting. However, compliance with design guidelines and standards outlined in the General Plan and Specific Plans would reduce light and glare that could affect views of the areas. In addition, individual development applications would be submitted to the City and would be subject to review by the Planning Commission and City Council. As a result of the development application process, and the existing design policy, design guidelines, and discretionary approval it is expected that exterior building facades would not create discomfort glare or disability glare. On a program level, this would be a less-than-significant impact.

All new developments in Pleasanton would be subject to the State's Nighttime Sky-Title 24 Outdoor Lighting Standards (described in the regulatory section above), which requires new development to adopt energy efficiency standards for outdoor lighting for the public and private sector. Different lighting standards are set by classifying areas by lighting zone. The majority of Pleasanton is designated as LZ3 (urban). Application of Title 24 requirements would limit the amount of outdoor light new development in Pleasanton would create, thereby minimizing nighttime illumination impacts.

In addition, Sections 18.48.100, 18.88.040, and 18.96.020 of the *Pleasanton Municipal Code* would serve to limit glare and spillover light from signs as well as limit interior and exterior illumination. Compliance with these ordinances and standards would also reduce potential light and glare impacts to a less-than-significant level.

Through compliance with applicable rules, codes, and regulations related to lighting and glare, the development per the proposed Housing Element would result in a less than significant impact.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would create sources of light or glare, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. In addition, 18.48.100, 18.88.040, and 18.96.020 of the *Pleasanton Municipal Code* regulate lighting practices and systems that minimize light pollution, glare, and light trespass. These regulations would serve to

limit glare and spillover light from signs as well as limit interior and exterior illumination, including glare from solar installation that would be encouraged under the Draft CAP. Compliance with these ordinances and standards would also reduce potential light and glare impacts to a less-than-significant level. Therefore, impacts associated with nighttime artificial light are considered less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.A-5: Development facilitated by the General Plan Amendment and rezonings, in combination with other past, present, existing, approved, pending, and reasonably foreseeable future projects, would potentially result in cumulatively considerable impacts to aesthetic resources. (Less than Significant)

The cumulative context for visual quality encompasses all other areas that are visible in the views of the potential sites for rezoning. In addition to the immediate vicinity of the identified Sites, this would also include other nearby areas within the City that could be viewed in combination with development on the potential sites for rezoning.

As analyzed in this section, development facilitated by the proposed General Plan Amendment and rezoning with mitigation would not result in a significant impact related to views, scenic resources, visual character, or light and glare. Furthermore, development in areas surrounding the potential sites for rezoning would be subject to the design guidelines contained within the City's General Plan and other applicable guidelines and would require separate environmental and/or architectural review by the City. This process would reduce or mitigate any potential impacts to visual quality that could result from the construction of other nearby projects. Therefore, the General Plan Amendment and rezonings would not combine with, or add to, any potential adverse aesthetic impacts that may be associated with other cumulative development.

Based on the information in this section and for the reasons summarized above, development facilitated by the General Plan Amendment and rezonings would not contribute to any significant adverse cumulative visual quality impacts when considered together with past, present, pending and reasonably foreseeable development.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Aesthetics

- California Department of Transportation (Caltrans), Eligible and Officially Designated Routes, <u>http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm</u>, Accessed May 31, 2011.
- City of Pleasanton, 2000, Bernal Property Phase I and II Specific Plan, adopted August 21, 2000.

City of Pleasanton, 2002, Downtown Specific Plan, adopted March 5, 2002.

- City of Pleasanton, 2006, Downtown Design Guidelines, adopted May 2006.
- City of Pleasanton, 2009. Pleasanton General Plan 2005-2025, adopted July 21, 2009.
- City of Pleasanton, 2010. Pleasanton Gateway Initial Study, prepared August 2, 2010.
- City of Pleasanton, 2011a. Draft Housing Element, Chapter 4 of the City of Pleasanton General *Plan*, prepared July 2011.
- City of Pleasanton, 2011b. Draft Housing Element Background, prepared July 2011.
- City of Pleasanton, 2001c. Draft Climate Action Plan, prepared August 2011.

4.B Air Quality

This section evaluates the potential impacts on air quality resulting from the proposed project, the adoption of the proposed Housing Element and Climate Action Plan, and the potential residential buildout of potential sites for rezoning proposed in the Housing Element and upon which the Climate Action Plan relies. This assessment includes the potential for the project to violate an air quality standard or contribute substantially to an existing or projected air quality violation, to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment, or to expose sensitive receptors to substantial pollutant concentrations, including odors. Air quality effects related to the proposed project are evaluated against State and Federal ambient air quality standards, as well as the standards established by the Bay Area Air Quality Management District (BAAQMD). With the exception of the potential sites being rezoned for residential uses, impacts on the air quality environment within the City were previously addressed in the City of Pleasanton General Plan 2005-2025 EIR (City of Pleasanton, 2009a), which is hereby incorporated by reference in this SEIR.

Greenhouse gases and climate change are discussed in Section 4.E, Greenhouse Gas Emissions.

Setting

Climate and Meteorology

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The proposed Housing Element is for the City of Pleasanton, which is within the boundaries of the San Francisco Bay Area (Bay Area) Air Basin. The Bay Area Air Basin encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin and Napa counties, and the southern portions of Solano and Sonoma counties. The climate of the Bay Area is determined largely by a high-pressure system that is almost always present over the eastern Pacific Ocean off the West Coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as ozone and secondary particulates, such as nitrates and sulfates.

More specifically, the proposed Housing Element and Climate Action Plan cover an area within the Livermore Valley climatological subregion. According to the BAAQMD, the western side of this valley is bordered by 1,000- to 1,500-foot hills with two gaps connecting the valley to the central Bay Area, the Hayward Pass and Niles Canyon. The eastern side of the valley is also bordered by 1,000- to 1,500-foot hills with one major passage to the San Joaquin Valley called the Altamont Pass and several secondary passages. To the north of the valley lies the Black Hills and Mount Diablo. A northwest to southeast channel connects the Diablo Valley to the Livermore

Valley. The south side of the Livermore Valley is bordered by mountains approximately 3,000 to 3,500 feet high (BAAQMD, 2011a).

During the summer months, when there is a strong inversion with a low ceiling, air movement is weak and pollutants become trapped and concentrated. Maximum summer temperatures in the Livermore Valley range from the high 80s to the low 90s, with extremes in the 100s. At other times in the summer, a strong Pacific high pressure cell from the west, coupled with hot inland temperatures causes a strong onshore pressure gradient which produces a strong, afternoon wind. With a weak temperature inversion, air moves over the hills with ease, dispersing pollutants. In the winter, with the exception of an occasional storm moving through the area, air movement is often dictated by local conditions. At night and early morning, especially under clear, calm and cold conditions, gravity drives cold air downward. The cold air drains off the hills and moves into the gaps and passes. On the eastern side of the valley the prevailing winds blow from north, northeast and east out of the Altamont Pass. Winds are light during the late night and early morning hours. Winter daytime winds sometimes flow from the south through the Altamont Pass to the San Joaquin Valley. Average winter maximum temperatures range from the high 50s to the low 60s, while minimum temperatures are from the mid-to-high 30s, with extremes in the high teens and low 20s (BAAQMD, 2011a).

Air pollution potential is high in the Livermore Valley, especially for photochemical pollutants in the summer and fall. High temperatures increase the potential for ozone to build up. The valley not only traps locally generated pollutants but can be the receptor of ozone and ozone precursors from San Francisco, Alameda, Contra Costa and Santa Clara counties. On northeasterly wind flow days, most common in the early fall, ozone may be carried west from the San Joaquin Valley to the Livermore Valley. During the winter, the sheltering effect of the valley, its distance from moderating water bodies, and the presence of a strong high pressure system contribute to the development of strong, surface-based temperature inversions. Pollutants such as carbon monoxide and particulate matter, generated by motor vehicles, fireplaces and agricultural burning, can become concentrated. Air pollution problems could intensify because of population growth and increased commuting to and through the subregion (BAAQMD, 2011a).

Existing Air Quality

The BAAQMD operates a regional monitoring network that measures the ambient concentrations of criteria air pollutants. Existing and probable future levels of air quality in Pleasanton can generally be inferred from ambient air quality measurements conducted by the BAAQMD at its nearby monitoring stations. The monitoring station closest to the City of Pleasanton is the Rincon Avenue station in Livermore. The Rincon station monitors ozone (one-hour and eight-hour) and particulate matter (PM10 and PM2.5), which are the major pollutants of concern in the Bay Area. **Table 4.B-1**, below, shows a three-year summary of monitoring data (2007 through 2009). Due to the proximity of the proposed project to these monitoring stations, the air quality measurements shown are generally representative of conditions in the City. Table 4.B-1 also compares measured pollutant concentrations with state and national ambient air quality standards.

	Monitoring Data by Year		
Pollutant	2007	2008	2009
Ozone – (Rincon Ave, Livermore Station)	-		
Highest 1 Hour Average (ppm) ^b	0.120	0.141	0.113
Days over State Standard (0.09 ppm) ^a	2	5	8
Highest 8 Hour Average (ppm) ^b	0.091	0.111	0.086
Days over National Standard (0.075 ppm) ^a	2	6	6
Days over State Standard (0.07 ppm) ^a	3	8	8
Particulate Matter (PM10) – (Rincon Ave, Livermore Station)			
Highest 24 Hour Average – State/National (µg/m³) ^b	74.8 /71.4	46.8/46.3	NA
Estimated Days over National Standard (150 μ g/m ³) ^{a,c}	0	NA	NA
Estimated Days over State Standard (50 μ g/m ³) ^{a,c}	12	NA	NA
State Annual Average (State Standard 20 μ g/m ³) ^{a,b}	19.8	NA	NA
Particulate Matter (PM2.5) – (Rincon Ave, Livermore Station)			
Highest 24 Hour Average $(\mu g/m3)^b$ – National Measurement	54.9	38.6	45.7
Estimated Days over National Standard (35 μ g/m ³) ^{a,c}	9	2.1	4
State Annual Average (12 µg/m3) ^b	9.0	10.1	9.2

 TABLE 4.B-1

 AIR QUALITY DATA SUMMARY (2007-2009) FOR THE CITY OF PLEASANTON

a. Generally, state standards and national standards are not to be exceeded more than once per year.

b. ppm = parts per million; μ g/m³ = micrograms per cubic meter.

c. PM10 and PM2.5 is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.

NA = Not Available. Values in **Bold** exceed the respective air quality standard.

SOURCE: California Air Resources Board (ARB), 2011. Summaries of Air Quality Data, 2007-2009;

http://www.arb.ca.gov/adam/topfour/topfour1.php, accessed June 3, 2011.

Criteria Air Pollutants

Ozone

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NOx). ROG and NOx are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NOx under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.
Carbon Monoxide

Ambient carbon monoxide concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Wind speed and atmospheric mixing also influence carbon monoxide concentrations. Under inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area that may extend some distance from vehicular sources. When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses.

Carbon monoxide (CO) concentrations have declined dramatically in California due to existing controls and programs and most areas of the state including the project region have no problem meeting the carbon monoxide state and federal standards. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, fewer emissions from new vehicles, and improvements in fuels. The clear success in reducing CO levels is evident in the first paragraph of the executive summary of the California Air Resources Board's (ARB) 2004 Revision to the California State Implementation Plan for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas (ARB, 2004), shown below:

"The dramatic reduction in carbon monoxide (CO) levels across California is one of the biggest success stories in air pollution control. Air Resources Board (ARB or Board) requirements for cleaner vehicles, equipment and fuels have cut peak CO levels in half since 1980, despite growth. All areas of the State designated as non-attainment for the federal 8-hour CO standard in 1991 now attain the standard, including the Los Angeles urbanized area. Even the Calexico area of Imperial County on the congested Mexican border had no violations of the federal CO standard in 2003. Only the South Coast and Calexico continue to violate the more protective State 8-hour CO standard, with declining levels beginning to approach that standard."

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a reddish brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2 . NO_2 may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Nitrogen dioxide is an air quality concern because it acts as a respiratory irritant and is a precursor of ozone. Nitrogen dioxide is a major component of the group of gaseous nitrogen compounds commonly referred to as NOx. Nitrogen oxides are produced by fuel combustion in motor vehicles, industrial stationary sources (such as industrial activities), ships, aircraft, and rail transit. Typically, nitrogen oxides emitted from fuel combustion are in the form of nitric oxide (NO) and NO₂. NO is often converted to NO_2 when it reacts with ozone or undergoes photochemical reactions in the

atmosphere. Therefore, emissions of NO_2 from combustion sources are typically evaluated based on the amount of NOx emitted from the source.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO_2 is also a precursor to the formation of atmospheric sulfate, particulate matter and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

Particulate Matter

PM10 and PM2.5 consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. (A micron is one-millionth of a meter). PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility. Large dust particles (diameter greater than 10 microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fraction, PM10 and PM2.5, are a health concern particularly at levels above the federal and state ambient air quality standards. PM2.5 (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus, are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing. Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Children are more susceptible to the health risks of PM10 and PM2.5 because their immune and respiratory systems are still developing.

Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health (Dockery and Pope, 2006).

Lead

Ambient lead concentrations meet both the federal and state standards in the project area. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline products. The phase-out of leaded gasoline in California resulted in decreasing levels of atmospheric lead. Development facilitated by the proposed Housing Element would not introduce any new sources of lead emissions; consequently, lead emissions are not required to be quantified and are not further evaluated in this analysis.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

TACs do not have ambient air quality standards, but are regulated by the BAAQMD using a riskbased approach. This approach uses a health risk assessment to determine what sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis of exposure to toxic substances and human health risks from exposure to toxic substances is estimated, based on the potency of the toxic substances.¹

Roadway traffic, especially on Interstates 580 and 680, would be the primary sources of TACs in the Planning Area. In addition, BAAQMD provides public source inventories of TAC emissions sources within its jurisdiction, including the recently released (May 2011) Google Earth-based inventory of stationary source risks and hazards. This source indicates that there are 40 permitted TAC sources within 1,000 feet of at least one of the potential sites for rezoning under the proposed project. These sources are predominantly associated with commercial and industrial uses in the area, such as gasoline dispensing facilities, automotive repair, and dry cleaning operations which may be located near potential sites for rezoning.

Odorous Emissions

Though offensive odors from stationary sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency and intensity of the source; wind speed and direction; and the sensitivity of receptors. Odor impacts should be considered for any proposed new odor sources located near existing receptors, as well as any new sensitive receptors located near existing odor sources. Generally, increasing the distance between the receptor and the source will mitigate odor impacts. BAAQMD provides examples of substantial odor sources which include wastewater treatments plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries and chemical plants. In Pleasanton, these operations generally include: (1) sand-and-gravel harvesting areas – including asphalt plants – along Stanley Boulevard; (2) the Dublin-San Ramon Services District sewage treatment plant on Johnson Drive and the treatment ponds and drying beds north of Stoneridge Drive; and (3) the solid waste transfer station on Busch Road. This is relevant to the proposed project, as these operations may be located near potential sites for rezoning.

¹ A health risk assessment is required for permitting approval if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. In these instances, a health risk assessment for the source in question must be prepared. Such an assessment generally evaluates chronic, long-term effects, calculating the increased risk of cancer as a result of exposure to one or more TACs.

Sensitive Land Uses

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions, and because the presence of pollution detracts from the recreational experience.

Pleasanton contains a wide range of residential, commercial, industrial, public, and open space land uses. This includes sensitive receptors such as residential, hospital, schools, and recreational areas. Beyond land already designated for residential development, the proposed Housing Element identifies potential locations where housing units may be developed (see Figure 3-4 in Chapter 3, Project Description) or locations that can accommodate future housing. Collectively, the sites are referred to as the potential sites for rezoning or "Sites" and are analyzed below.

Regulatory Setting

Federal

The Federal Clean Air Act requires the U.S. Environmental Protection Agency (USEPA) to identify National Ambient Air Quality Standards (NAAQS or "national standards") to protect public health and welfare. National standards have been established for ozone, CO, NO₂, SO₂, respirable particulate matter (PM10 and PM2.5), and lead. **Table 4.B-2**, below, presents current national and state ambient air quality standards, as well as the Bay Area attainment status and common sources for each pollutant.

Pursuant to the 1990 Federal Clean Air Act amendments, the USEPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutants, based on whether or not the national standards had been achieved. Table 4.B-2 shows the current attainment status of the Project vicinity.

The Federal Clean Air Act requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The Federal Clean Air Act amendments added requirements for states containing areas that violate the national standards to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA has responsibility to review all SIPs to determine if they conform to the mandates of the Federal Clean Air Act amendments and will achieve air quality goals when implemented. If the USEPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures. Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Pollutant	Averaging Time	State Standard	Bay Area Attainment Status for California Standard	Federal Primary Standard	Bay Area Attainment Status for Federal Standard	Major Pollutant Sources
Ozone	8 hour	0.070 ppm	Non-Attainment	0.075 ppm	Non-Attainment	Formed when ROG and NOx react in the
	1 hour	0.090 ppm	Non-Attainment			presence of sunlight. Major sources include on- road motor vehicles, solvent evaporation, and commercial/ industrial mobile equipment.
Carbon	8 hour	9.0 ppm	Attainment	9.0 ppm	Attainment	Internal combustion engines, primarily gasoline-
Monoxide	1 Hour	20 ppm	Attainment	35 ppm	Attainment	powered motor vehicles
Nitrogen Dioxide	Annual Average	0.030 ppm		0.053 ppm	Attainment	Motor vehicles, petroleum refining operations,
	1 Hour	0.180 ppm	Attainment	0.100 ppm	Unclassified	industrial sources, aircraft, ships, and railroads
Sulfur Dioxide	Annual Average			0.03 ppm	Attainment	Fuel combustion, chemical plants, sulfur recovery
	24 Hour	0.04 ppm	Attainment	0.14 ppm	Attainment	plants and metal processing
	1 Hour	0.25 ppm	Attainment	0.075 ppm	Attainment	
Particulate Matter (PM10)	Annual Arithmetic Mean	20 μg/m3	Non-Attainment			Dust- and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays)
	24 hour	50 μg/m3	Non-Attainment	150 μg/m3	Unclassified	
Particulate Matter (PM2.5)	Annual Arithmetic Mean	12 μg/m3	Non-Attainment	15 μg/m3	Attainment	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.
	24 hour			35 μg/m3	Non-Attainment	
Lead	Calendar Quarter			1.5 μg/m3	Attainment	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	30 Day Average	1.5 μg/m3	Attainment			
Hydrogen Sulfide	1 hour	0.03 ppm	Unclassified	No Federal Standard		Geothermal Power Plants, Petroleum Production and refining
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	Unclassified	No Federal Standard		See PM2.5.

 TABLE 4.B-2

 AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS

ppm=parts per million

µg/m3=micrograms per cubic meter

SOURCE: Bay Area Air Quality Management District (BAAQMD), 2011b, available at http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm as of June 3, 2011; California Air Resources Board (ARB), 2009a. ARB Fact Sheet: Air Pollution Sources, Effects and Control, http://www.arb.ca.gov/research/health/fs/fs2/fs2.htm, page last reviewed December 2009

Regulation of TACs, termed Hazardous Air Pollutants (HAPs) under federal regulations, is achieved through federal, State and local controls on individual sources. The 1977 Federal Clean Air Act amendments required the USEPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. These substances include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. There is uncertainty in the precise degree of hazard.

State

The ARB manages air quality, regulates mobile emissions sources, and oversees the activities of county Air Pollution Control Districts and regional Air Quality Management Districts. ARB establishes state ambient air quality standards and vehicle emissions standards.

California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants and include air quality standards for some pollutants for which there is no corresponding national standard. These are shown in Table 4.B-2. Under the California Clean Air Act patterned after the Federal Clean Air Act, areas have been designated as attainment or nonattainment with respect to the state standards. Table 4.B-2 summarizes the attainment status with California standards in the Bay Area.

Toxic Air Contaminants

The Health and Safety Code defines TACs as air pollutants which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner). A total of 243 substances have been designated TACs under California law; they include the 189 (federal) Hazardous Air Pollutants adopted in accordance with AB 2728. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. Toxic air contaminant emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings.

In August of 1998, ARB identified particulate emissions from diesel-fueled engines (diesel particulate matter, or DPM) as TACs. ARB subsequently developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (ARB, 2000). The document represents proposals to reduce diesel particulate emissions, with the goal of reducing emissions and associated health risks by 75 percent in 2010 and by 85 percent in 2020. The program aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra low sulfur diesel fuel on diesel-fueled engines. New diesel engines meeting the interim Tier 4 emissions standards, and Tier 2 or Tier 3 engines retrofitted with a Level 3 Verified Diesel Emissions Control System, can reduce diesel particulate by approximately 85 percent, compared to older equipment.

In April 2005, ARB published *Air Quality and Land Use Handbook: A Community Health Perspective* (ARB, 2005). This handbook is intended to give guidance to local governments in the siting of sensitive land uses, such as residences, schools, daycare centers, playgrounds, or medical facilities, near sources of air pollution.

Regional

The regional agency primarily responsible for developing air quality plans for the Bay Area is the BAAQMD, the agency with permit authority over most types of stationary emission sources of air pollutants in the Bay Area.

Air Quality Plans

The 1977 Federal Clean Air Act amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards specified in the Clean Air Act. The 1988 California Clean Air Act also requires development of air quality plans and strategies to meet state air quality standards in areas designated as non-attainment (with the exception of areas designated as non-attainment for the state PM standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment in order to ensure continued attainment of the standards. Air quality plans developed to meet federal requirements are referred to as State Implementation Plans.

Bay Area plans are prepared by the BAAQMD with the cooperation of the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). Currently, there are two plans for the Bay Area. These are:

- The *Bay Area 2010 Clean Air Plan* (BAAQMD, 2010) developed to meet planning requirements related to the state ozone standard using a multi-pollutant approach; and
- The 1996 Carbon Monoxide Redesignation Request and Maintenance Plan for Ten Federal Planning Areas, developed by the air districts with jurisdiction over the ten planning areas including the BAAQMD to ensure continued attainment of the federal carbon monoxide standard. In June 1998, the USEPA approved this plan and designated the ten areas as attainment. The maintenance plan was revised most recently in 2004 (ARB, 2004).

The Bay Area 2001 *Ozone Attainment Plan* was prepared as a proposed revision to the Bay Area part of California's plan to achieve the national ozone standard. The Bay Area addresses all requirements of the national eight-hour standard in the *Bay Area 2010 Clean Air Plan*.

For state air quality planning purposes, the Bay Area is classified as a serious non-attainment area for the 1-hour ozone standard. The "serious" classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that the Bay Area update the Clean Air Plan every three years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data. The Bay Area's record of progress in implementing previous measures must also be reviewed. Bay Area plans are prepared with the cooperation of MTC and ABAG. On September 15, 2010, the BAAQMD adopted the most recent revision to the Clean Air Plan - the *Bay Area 2010 Clean Air Plan* (BAAQMD, 2010). The *Bay Area 2010 Clean Air Plan* serves to:

- Update the *Bay Area 2005 Ozone Strategy* in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone;
- Consider the impacts of ozone control measures on particulate matter, air toxics, and greenhouse gases in a single, integrated plan;
- Review progress in improving air quality in recent years; and
- Establish emission control measures to be adopted or implemented in the 2010 2012 timeframe.

BAAQMD CEQA Guidelines

In December 1999, BAAQMD adopted its *CEQA Guidelines – Assessing the Air Quality Impacts* of *Projects and Plans*, as a guidance document to provide lead government agencies, consultants, and project proponents with uniform procedures for assessing air quality impacts and preparing the air quality sections of environmental documents for projects subject to CEQA. The *BAAQMD CEQA Guidelines* is an advisory document. The document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether projects would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts.

BAAQMD adopted an updated *CEQA Air Quality Guidelines*, including new thresholds of significance in June 2010 and revised in May 2011 (BAAQMD, 2011a), which advise lead agencies on how to evaluate potential air quality impacts with the adopted new thresholds of significance. The analysis herein uses the updated thresholds and methodologies from the BAAQMD *CEQA Air Quality Guidelines* to determine the project impact significance.

Local

City of Pleasanton General Plan

The *Pleasanton General Plan 2005 – 2025* was adopted in July 2009 and sets forth goals, policies and programs for guiding decisions and the City's growth and development. The following goals, policies and programs from the General Plan apply to air quality considerations associated with the proposed Housing Element.

Air Quality and Climate Change Element

Goal 1: Implement a proactive approach, and use available technology to maintain and improve air quality within Pleasanton and the region to protect the public health, safety, and welfare.

Goal 2:	Promote sustainable development and planning to minimize additional air emissions.
Policy 1:	Adhere to federal and State air quality standards for local pollutants of concern.
Program 1.1:	Incorporate measures in conditions of approval for development projects to reduce grading, construction, and operations-related air quality impacts.
Program 1.2:	Support State and federal legislation that promotes improvements in air quality.
Policy 2:	Support development plans that reduce mobile-source emissions by reducing vehicle trips and vehicle miles traveled.
	Implement programs from the Land Use Element to provide mixed-use developments, locate high-density uses near transit facilities, and provide neighborhood-serving retail uses convenient to residential neighborhoods. These programs would reduce vehicle trips and vehicle miles traveled, thus reducing air-pollutant emissions.
Policy 3:	Separate air pollution sensitive land uses from sources of air pollution.
Program 3.1:	Locate new air pollution point sources, such as manufacturing and extracting facilities, away from residential areas and other sensitive land uses following the California Air Resource Board's recommendations.
Program 3.2:	Locate new sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, and medical facilities away from point sources of air pollution and busy traffic corridors following the California Air Resource Board's recommendations.
Program 3.3:	Require site specific studies of air quality health risk for development that would place sensitive receptors closer than 500 feet from the edge of a freeway or close to a significant point source of air pollution.
Policy 4:	Reduce air pollution from motor-vehicle trips and vehicle-miles traveled.
	To reduce vehicle miles traveled with commensurate reductions in air pollution and climate change, implement Transportation Demand Management (TDM) programs from the Circulation Element, including the addition of local and regional bicycle lanes. Also implement Circulation Element measures to facilitate the free flow of vehicular traffic, including continually updating computer- control technology for traffic lights.
Policy 5:	Review proposed projects for their potential to impact air quality conditions.
Program 5.1:	Include air quality as a factor in the City's environmental review process. Encourage development plans which minimize negative impacts on air quality.
Policy 7:	Provide leadership to Pleasanton residents and businesses by implementing all technology-based air-pollutant reduction programs that are reasonable and feasible.

- Program 7.6: Adopt a measure requiring large vehicles (gross weight rating of greater than 14,000 pounds) and offroad equipment owned by the City and/or private contractors to restrict engine idling to less than 5 consecutive minutes and to prohibit engine idling in parking lots, where feasible.
- Policy 8: Minimize unpleasant odors in residential neighborhoods.
- Program 8.1: Continue efforts to have the asphalt plant relocated away from Vineyard Avenue residents.
- Program 8.2: Continue working with the Dublin-San Ramon Services District (DSRSD) to ensure that odors from the sewage-treatment plant are minimized and other air emissions meet all regulatory requirements.
- Policy 9: Strongly encourage citizen and business participation in reducing air pollution.

Implement measures from the Circulation Element to encourage public participation in Ride-Share and other public transportation programs.

- Program 9.2: Establish an air quality public awareness program which includes changes that people can make to minimize air pollution. This program would educate the public and encourage people to choose the cleanest paints and consumer products, and to purchase the most energy-efficient appliances, landscaping equipment, and gas cans. This program would further encourage the public to purchase more energy-efficient vehicles and to properly maintain them.
- Program 9.3: Develop incentives for the public to help reduce air pollution. This includes offering incentive programs for using non-motorized (i.e., pedestrian and bicycle) and low-polluting mobility alternatives.

Impacts and Mitigation Measures

Significance Criteria

Implementation of the proposed Housing Element and Climate Action Plan would be considered to have significant air quality impacts if it would:

- Conflict with or obstruct implementation of the applicable air quality plan(s);
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- 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;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

Approach to Analysis

The analysis of potential air quality impact methodologies are identified by the BAAQMD, the regional agency primarily responsible for developing air quality plans for the Bay Area, including the City of Pleasanton. This methodology is outlined in the BAAQMD document *CEQA Air Quality Guidelines*. In accordance with BAAQMD's *CEQA Air Quality Guidelines*, a proposed plan, such as the proposed Housing Element and Climate Action Plan, would have a significant plan-level air quality impact if it were to²:

- Fundamentally conflict with the *Bay Area 2010 Clean Air Plan* because the projected rate of increase in vehicle miles traveled (VMT) or vehicle trips is greater than the projected rate of increase in population;
- Fundamentally conflict with the *Bay Area 2010 Clean Air Plan* because the plan does not demonstrate reasonable efforts to implement control measures contained in the *Bay Area 2010 Clean Air Plan*;
- Not include special overlay zones containing goals, policies, and objectives to minimize potential TAC impacts in areas located (a) near existing and planned sources of TACs and (b) within 500 feet of freeways and high-volume roadways containing 100,000 or more average daily vehicle trips;³ or
- Not identify existing and planned sources of odors with policies to reduce potential odor impacts.

In addition, an overall discussion of potential impacts from construction activities is included below.

Construction Activities

Impact 4.B-1: Implementation of the General Plan Amendment and rezonings would result in increased long-term emissions of criteria pollutants associated with construction activities that could contribute substantially to an air quality violation. (Significant)

Housing Element

Implementation of the General Plan Amendment and rezonings would allow for the development of up to 3,900 multi-family homes on the potential sites for rezoning. Mixed-use development would be associated with some of the sites such as Site 1 (BART) and Site 10 (CarrAmerica). The developments could also include infrastructure improvements such as vehicle access, sidewalks, and utility connections. Such development would require demolition and removal of existing structures where applicable, grading, and site preparation and construction of new structures. Emissions generated during construction activities would include exhaust emissions from heavy duty construction equipment, trucks used to haul construction materials to and from sites, worker vehicle emissions, as well as fugitive dust emissions associated with earth disturbing activities.

² BAAQMD thresholds state that plan-level thresholds should be applied to long-range planning documents, such as general plans, redevelopment plans, specific plans, area plans, and community plans.

³ Pursuant to BAAQMD CEQA Guidelines (June 2010), the size of the overlay zones should be based upon the recommended buffer distances contained within the California Air Resources Board's (ARB's) 2005 Land Use Handbook.

The project-specific construction thresholds are 54 lbs per day of reactive organic gases, nitrogen oxides, and PM2.5 (exhaust only) and 82 pounds per day for PM10 (exhaust only).

Examples of projects that would be considered less than significant under BAAQMD's screening approach are presented in **Table 4.B-3** below. However, the screening thresholds do not consider the effects of demolition of existing structures, projects for which construction schedules call for overlapping construction phases (e.g., paving and building construction occurring simultaneously), simultaneous construction of more than one land use type, extensive site preparation, or extensive material transport (e.g., greater than 10,000 cubic yards of soil) that could result in greater emissions. Additionally, a project applicant may not know which construction phases (e.g., paving and building) may occur simultaneously until immediately prior to the issuance of a grading or building permit, when contractors and subcontractors are normally hired.

TABLE 4.B-3 BAAQMD ADOPTED CONSTRUCTION RELATED CRITERIA AIR POLLUTANT AND OZONE PRECURSOR SCREENING LEVEL SIZES

Land use Type	Construction-Related Screening Size
Single Family	114 dwelling units
Apartment, low-rise; Apartment, mid-rise; Condo/townhouse, general; Congregate care facility	240 dwelling units
Apartment, high rise	249 dwelling units
Condo/townhouse, high-rise	252 dwelling units
Mobile home park; Retirement community	114 dwelling units
Elementary school	277,000 square feet or 3904 students
Junior high school	277,000 square feet or 3261 students
High school; Junior college; University/College	277,000 square feet or 3012 students
Day-care center; Library; Place of worship; Racquet club; Racquetball/ health; Quality restaurant; High turnover restaurant; Fast food restaurant; Free standing discount store; Discount club; Regional shopping center; Electronic superstore; Home improvement store; Strip mall; Hardware/ paint store; Supermarket; Convenience market; Bank; General office building; Office park; Government office building; Pharmacy/drugstore; Medical office building	277,000 square feet
City park	67 acres
Hotel; Motel	554 rooms
Hospital	277,000 square feet or 337 beds
Warehouse	259,000 square feet or 11 acres
General light industry	259,000 square feet, 11 acres or 540 employees
General heavy industry	259,000 square feet or 11 acres
Industrial park	259,000 square feet, 11 acres or 577 employees
Manufacturing	259,000 square feet
SOURCE: BAAQMD, 2011a.	

Implementation of Mitigation Measure 4.B-1a would ensure that impacts from fugitive dust would be less than significant.

Implementation of **Mitigation Measure 4.B-1a** would also ensure that other emissions adhere to BAAQMD's requirements.

Mitigation Measure 4.B-1a: Prior to the issuance of a grading or building permit, whichever is sooner, the project applicant for a potential site for rezoning shall submit an air quality construction plan detailing the proposed air quality construction measures related to the project such as construction phasing, construction equipment, and dust control measures, and such plan shall be approved by the Director of Community Development. Air quality construction measures shall include Basic Construction Mitigation Measures (BAAQMD, May 2011) and, where construction-related emissions would exceed the applicable thresholds, Additional Construction Mitigation Measures (BAAQMD, May 2011) shall be instituted. The air quality construction plan shall be included on all grading, utility, building, landscaping, and improvement plans during all phases of construction.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using and generating renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. In addition to reducing GHGs, each of these elements would help to reduce criteria air pollutants. As such, of the impact of implementing the Draft CAP would be less than significant.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would affect air quality, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Consistency with the Clean Air Plan

Impact 4.B-2: Development facilitated by the General Plan Amendment and rezonings could fundamentally conflict with the *Bay Area 2010 Clean Air Plan* because the projected rate of increase in vehicle miles traveled (VMT) or vehicle trips is not greater than the projected rate of increase in population. (Less than Significant)

Housing Element

The proposed Housing Element identifies potential sites for rezoning to accommodate high density multi-family residential development. Development of the housing units would generate new sources of mobile and area source emissions. BAAQMD does not require a quantitative estimate of area and mobile source emissions that would result from development under a plan, such as the proposed Housing Element.

BAAQMD recommends that proposed plans be evaluated to determine if growth under the Housing Element would exceed growth anticipated in the air quality plan. The most recently adopted air quality plan in the Bay Area Air Basin is the *Bay Area 2010 Clean Air Plan* (2010 Clean Air Plan). The 2010 Clean Air Plan is a roadmap showing how the Bay Area will achieve compliance with the state's one-hour ozone standard as expeditiously as practicable, and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The control strategy includes stationary-source control measures to be implemented through BAAQMD regulations; mobile-source control measures to be implemented through incentive programs and other activities; and transportation control measures to be implemented through transportation programs in cooperation with the MTC, local governments, transit agencies, and others. The 2010 Clean Air Plan also represents the Bay Area's most recent triennial assessment of the region's strategy to attain the state one-hour ozone standard. In this, the 2010 Clean Air Plan replaces the 2005 Ozone Strategy.

Under BAAQMD's methodology, a determination of consistency with the most recently adopted Clean Air Plan, currently the 2010 Clean Air Plan, must demonstrate that a plan or project would not exceed the population or VMT assumptions contained in the 2010 Clean Air Plan and that the project or plan implements transportation control measures (TCMs) as applicable.

For a project to be consistent with the 2010 Clean Air Plan, BAAQMD requires that the projected increase in VMT associated with a proposed project be less than the projected population increase. Because project vehicle trips would be distributed not just to Pleasanton, percentage increases of VMT and population are compared on a countywide basis because available VMT estimates are inventories on a countywide basis, not a citywide basis. The VMT analysis is presented in full in Appendix D of this SEIR.

Full development of the proposed potential sites for potential rezoning would result in a population increase of 8,476 persons in comparison to the adopted General Plan projections.⁴

⁴ The impact analysis of the potential rezonings in this SEIR is based on development of all 17 of the potential sites for rezoning. However, it is in the intent of the Pleasanton City Council to rezone to allow multifamily development

This represents a county-wide population increase of 0.5 percent. However, development facilitated by the proposed project would decrease daily VMT in Alameda County by approximately 24,696 miles per day in comparison to the adopted General Plan projections for buildout in 2020 due to the proposed land use amendments and rezonings (the rezoning would replace higher trip generating uses, such as office and commercial, with residential, which generates less overall traffic, thus both creating fewer trips and placing homes near existing jobs). Since the BAAQMD 2010 Clean Air Plan is consistent with the Metropolitan Transportation Commission (MTC) inventory of VMT for the region (MTC, 2008) and ABAG projections, which incorporate growth projections from the respective cities and counties, the proposed rezoning included in the Housing Element would result in an overall increase in population and decrease in VMT versus the projections included in the adopted General Plan and 2010 Clean Air Plan. Consequently, the proposed project would not conflict with the *Bay Area 2010 Clean Air Plan* because the projected rate of increase in VMT is not greater than the projected rate of increase in population.

Climate Action Plan

The purpose of the Draft Climates Action Plan (CAP) is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations within the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using and generating renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. In addition to reducing GHGs, each of these strategies would help to reduce criteria air pollutants and would not conflict with or obstruct the Bay Area Air Quality Management District's Air Quality Plan. Implementation of the Draft CAP would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Consistency with Implementation Measures of the 2010 Clean Air Plan

Impact 4.B-3: Development facilitated by the General Plan Amendment and rezonings would not fundamentally conflict with the Clean Air Plan because the plans demonstrate reasonable efforts to implement control measures contained in the Clean Air Plan. (Less than Significant)

Housing Element

The 1988 California Clean Air Act, Section 40919(d) requires regions to implement "transportation control measures to substantially reduce the rate of increase in passenger vehicle trips and miles traveled." Consistent with this requirement, one of the goals of the 2010 Clean Air

on sites sufficient to meet the City's share of the regional housing need which is approximately 70 acres, rather than the total 112 acres.

Plan is to reduce the number of trips and vehicle miles Bay Area residents travel in singleoccupant vehicles through the implementation of five categories of TCMs. **Table 4.B-4** identifies those five categories of TCMs that local governments should implement through local plans to be considered in conformance with the 2010 Clean Air Plan.

TABLE 4.B-4 TRANSPORTATION CONTROL MEASURES IN THE 2010 CLEAN AIR PLAN

- 1. Improve Transit Services (TCM A)
- 2. Improve System Efficiency (TCM B)
- 3. Encourage Sustainable Travel Behavior (i.e., voluntary employer-based trip reduction program) (TCM C)
- 4. Support Focused Growth (Bicycle and Pedestrian friendliness) (TCM D)
- 5. Implement Pricing Strategies (TCM E)

A review of the TCM's in Table 4.B-4 indicates that these measures lend themselves to application to large scale land use development projects and would be addressed by implementation of policies included in the *Circulation Element* of the Pleasanton General Plan 2005-2025. Specific policies include the following:

Policy 3:	Facilitate the free flow of vehicular traffic on major arterials.
Policy 4:	In the Downtown, facilitate the flow of traffic and access to Downtown businesses and activities consistent with maintaining a pedestrian-friendly environment.
Policy 5:	At gateway intersections, facilitate the flow of traffic and access into and out of the City, consistent with maintaining visual character, landscaping, and pedestrian convenience.
Policy 8:	Maximize traffic safety for automobile, transit, bicycle users, and pedestrians.
Policy 9:	Work with other local jurisdictions and regional agencies such as the Metropolitan Transportation Commission (MTC), Alameda County Congestion Management Agency (ACCMA), Alameda County Transportation Improvement Authority (ACTIA), and Tri-Valley Transportation Council to plan and coordinate regional transportation improvements.
Policy 13:	Phase transit improvements to meet the demand for existing and future development.
Policy 14:	Encourage coordination and integration of Tri-Valley transit to create a seamless transportation system.
Policy 15:	Reduce the total number of average daily traffic trips throughout the city.
Policy 16:	Reduce the percentage of average daily traffic trips taken during peak hours.
Policy 17:	Support the continued and expanded operation of the Livermore Amador Valley Transit Authority (LAVTA).

Policy 18:	Encourage the extension of BART from Pleasanton to Livermore and beyond.
Policy 19:	Support the continued and expanded service of the Altamont Commuter Express
Policy 20:	Support paratransit services to elderly and disabled residents of Pleasanton.
Policy 21:	Support the use of alternative fuel vehicles.
Policy 22:	Create and maintain a safe, convenient, and effective bicycle system which encourages increased bicycle use.
Policy 23:	Create and maintain a safe and convenient pedestrian system which encourages walking as an alternative to driving.
Policy 24:	In cooperation with the Pleasanton Unified School District, explore ways to reduce automobile traffic related to schools.

Because implementation of the above policies would implement transportation control measures consistent with the 2010 Clean Air Plan, development facilitated by the proposed project would not fundamentally conflict with the 2010 Clean Air Plan and would therefore have a less-than-significant air quality impact with regard to TCM implementation.

Climate Action Plan

The purpose of the Draft Climate Action Plan (Draft CAP) is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations within the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using and generating renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. In addition to reducing GHGs, each of these strategies would help to reduce criteria air pollutants and would not conflict with or obstruct the 2010 Clean Air Plan. As such, the impact of implementing the Draft CAP would be less than significant.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would affect air quality, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Toxic Air Contaminants

Impact 4.B-4: Development facilitated by the General Plan Amendment and rezonings could potentially include residential or mixed-use developments that could expose sensitive receptors to substantial health risk from diesel particulate matter (DPM) and other TACs from mobile and stationary sources. (Significant)

Housing Element

Roadway traffic, especially on Interstates 580 and 680, would be the primary sources of TACs near the potential sites for rezoning. In addition, BAAQMD provides public source inventories of TAC emissions sources within its jurisdiction, including the recently released (May 2011) Google Earthbased inventory of stationary source risks and hazards. This source indicates that there are 40 permitted TAC sources within 1,000 feet of one or more potential sites for rezoning. These sources are predominantly associated with commercial and industrial uses in the area, such as gasoline dispensing facilities, automotive repair, and dry cleaning operations.

In some cases, ARB makes recommendations for specific buffer zones to protect sensitive receptors, such as residential uses, around certain types of TAC emitters of particular concern, as is the case for dry cleaners (500 feet) and chrome platers (1,000 feet). The BAAQMD Guidelines recommend special overlay zones containing goals, policies, and objectives to minimize potential TAC impacts in areas located within 1,000 feet of existing and planned TAC sources. Some of the potential sites for rezoning are within areas of concern from the TAC emissions from one or more of the stationary TAC sources. A full list of these sources is included in Table 4.B-5. In addition, potential mixed-use development on several of the sites could result in TAC sources near existing sensitive receptors, or near receptors to be included in the mixed-use.

On-road vehicular traffic on nearby highway segments and arterials could expose new residences on the potential sites for rezoning to TAC sources. Assuming that the PM peak hour data from the transportation analysis represents approximately 10 percent of the average daily trips (ADT), each of the modeled major roadways, as modeled in the traffic analysis, have segments with volumes that exceed the BAAQMD screening threshold of 10,000 vehicles per day.

Notably, in accordance with the BAAQMD Guidelines, when a residential development project is proposed within 1,000 feet of a stationary TAC source or high volume roadway, the potential health risk to the project residents would be evaluated using BAAQMD's recommended screening criteria. If the pollution source near the project exceeds the screening criteria, a project-specific health risk assessment (HRA) would be prepared to quantify the project-specific health risk; this requirement is incorporated in **Mitigation Measures 4.B-4** for development on the potential sites for rezoning. Projects to be developed under the Housing Element would be required to implement any project-specific recommendations to reduce the potential health risk.

B. Air Quality

Facility Plant		Facility Plant	
Number	Facility Name	Number	Facility Name
16393	JC Penny	19604	Applied Bio Systems
16801	Sears	G9211	Pleasanton (Coast) Station
16259	Macys	9648	Family Cleaners
20098	Kaiser Permanente	5601	Pleasanton Body Shop
20072	Kaiser Permanente	G11943	Delong Oil Inc.
14075	SF Bay Area Rapid Transit	17441	Miracle Auto Paint
4239	Hacienda Cleaners	G11297	Cresco Equipment Rentals
18671	Terremark Worldwide	12944	Pleasanton Metal and Paint Works
19892	Robert Half	8009	Advanced Printing
17686	Zantaz	3959	Pleasanton Ready Mix Concrete
14691	Verizon Wireless Pleasanton Switch	9511	Central Precast Concrete Inc
14839	AT&T	G8344	City of Pleasanton Service Center
5315	Bernal Cleaners	G7767	Pleasanton Garbage Services Inc
G10915	Bernal Corners	G7927	Central Petroleum Maintenance
16474	EMC Corp	18150	Gil's Body Works
16937	City of Pleasanton	18669	A&M Printing
G7854	Pleasanton Police Dept.	14553	City of Pleasanton
17285	Oak Hills Cleaners	10421	Diablo Auto Body Inc.
19191	Raleys	G11346	Pleasanton Gas
19553	Life Technologies Corp.	10655	Vintage Hills Cleaners

 Table 4.B-5

 stationary sources of tacs within 1,000 feet of the 17 sites for Rezoning

SOURCE: BAAQMD, 2011c

Mitigation Measure 4.B-4: Reduce Exposure to TACs. On project sites where screening thresholds are exceeded, the following measures shall be implemented for development on all the potential sites for rezoning to reduce exposure to TACs and improve indoor and outdoor air quality:

- Indoor Air Quality In accordance with the recommendations of BAAQMD, appropriate measures shall be incorporated into building design in order to reduce the potential health risk due to exposure to TACs to achieve an acceptable interior air quality level for sensitive receptors. The appropriate measures shall include one of the following methods:
 - 1) Project applicants shall retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the BAAQMD requirements to determine the exposure of project residents/occupants/users to air pollutants prior to issuance of a demolition, grading, or building permit. The HRA shall be submitted to the Community Development Department for review and approval. The applicant shall implement the approved HRA recommendations, if any.
 - 2) Project applicants shall implement all of the following features that have been found to reduce the air quality risk to sensitive receptors and shall be included in the project construction plans. These features shall be submitted to the Community Development Department for review and approval prior to the

issuance of a demolition, grading, or building permit and shall be maintained on an ongoing basis during operation of the projects.

- a) Redesign the site layout to locate sensitive receptors as far as possible from any freeways, major roadways, or other sources of air pollution (e.g., loading docks, parking lots).
- b) Incorporate tiered plantings of trees (redwood, deodar cedar, live oak, and/or oleander) to the maximum extent feasible between the sources of pollution and the sensitive receptors.
- c) Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets or exceeds an efficiency standard of MERV 13. The HV system shall include the following features: Installation of a high efficiency filter and/or carbon filter to filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85% supply filters shall be used.
- d) Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the pollutant sources.
- e) Install indoor air quality monitoring units in buildings.
- f) Project applicants shall maintain, repair and/or replace HV systems on an ongoing and as needed basis or shall prepare an operation and maintenance manual for the HV systems and the filters. The manual shall include the operating instructions and the maintenance and replacement schedule. This manual shall be included in the CC&Rs for residential projects and distributed to the building maintenance staff. In addition, the applicant shall prepare a separate homeowners manual. The manual shall contain the operating instructions and the maintenance and replacement schedule for the HV system and the filters.
- Outdoor Air Quality To the maximum extent practicable, individual and common exterior open space, including playgrounds, patios, and decks, shall either be shielded from the source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using and generating renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. In addition to reducing GHGs, each of these elements would help to reduce criteria air pollutants, thus not increasing potential exposure to TACs. As such, of the impact of implementing the Draft CAP would be less than significant.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would affect air quality, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Odors

Impact 4.B-5: Development facilitated by the proposed General Plan Amendment and rezonings could potentially include residential developments that expose occupants to sources of substantial odors affecting a substantial number of people. (Significant)

Housing Element

BAAQMD provides examples of the types of land uses that are potential odor sources, which include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries and chemical plants. Certain engines, including dieselpowered engines used for construction, can also generate objectionable odors. Development facilitated by the proposed project would not include these types of land uses.

As described in the setting above, existing odor sources in the City of Pleasanton include: (1) sandand-gravel harvesting areas – including asphalt plants – along Stanley Boulevard; (2) the Dublin-San Ramon Services District sewage treatment plant on Johnson Drive and the treatment ponds and drying beds north of Stoneridge Drive; and (3) the solid waste transfer station on Busch Road. Most of the potential sites for rezoning are within the BAAQMD-recommended buffer zones for these sources (two-miles for asphalt plants and wastewater treatment plants, and onemile for transfer stations). Specific rezoning areas outside of these buffer distances are Sites 7, 17, 18, 19, and 20. Odor buffer areas are considered a maximum screening distance from a particular source, and, as indicated in the setting discussion, the actual severity and area of impact would depend on factors such as the nature, frequency and intensity of the source; wind speed and direction; and the sensitivity of receptors. Notably, the City has indicated that there have not been any recent odor complaints associated with these sources.

BAAQMD requires that a plan document include policies to reduce potential odor impacts in the project area. Overall, the proposed project would expand the opportunity for residential development in Pleasanton, specifically on the potential sites for rezoning. While the Housing Element does not address specific land use policies, such as those to reduce potential odor impacts, it specifies that predominant land uses be consistent with the General Plan and the

Municipal Code, and includes objectives and actions that emphasize land use compatibility for residential development. In addition, there are several policies included in the *Air Quality Element* of the Pleasanton General Plan 2005-2025 that address odors. Specific policies and programs include the following:

- Policy 8: Minimize unpleasant odors in residential neighborhoods.
- Program 8.1: Continue efforts to have the asphalt plant relocated away from Vineyard Avenue residents.
- Program 8.2: Continue working with the Dublin-San Ramon Services District (DSRSD) to ensure that odors from the sewage-treatment plant are minimized and other air emissions meet all regulatory requirements.

However, because these programs do not address potential odors from the transfer station, the following mitigation is required for areas to be rezoned residential within the one-mile buffer distance (Sites 6, 8, 11, and 14).

Mitigation Measure 4.B-5: If odor complaints associated with the solid waste transfer station operations are received from future residences of the potential sites for rezoning (Sites 6, 8, 11, and 14), the City shall work with the transfer station owner(s) and operator(s) to ensure that odors are minimized appropriately.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. The Draft CAP does not propose strategies or measures that would directly or indirectly result in the creation of objectionable odors. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would affect air quality, it could create indirect impacts that result from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Therefore, there would be no impact other than those discussed as part of the Housing Element.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

The BAAQMD *CEQA Air Quality Guidelines* recommend that Plan-level impacts be assessed based on consistency with growth assumptions of the current Air Quality Plan for the purposes of assessing cumulative impacts.

Impact 4.B-6: Development proposed as part of the General Plan Amendment and rezonings, when combined with other foreseeable development in the vicinity, could potentially be inconsistent with the growth assumptions of the *Bay Area 2010 Clean Air Plan* resulting in a cumulative air quality impact. (Less than Significant)

CEQA requires that an EIR examine cumulative impacts. As discussed in CEQA Guidelines §15130(a)(1), a cumulative impact "consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." The analysis of cumulative impacts need not provide the level of detail required of the analysis of impacts from the project itself, but shall "reflect the severity of the impacts and their likelihood of occurrence" (CEQA Guidelines §15130(b)).

Housing Element

In order to assess cumulative impacts, the EIR must analyze either a list of past, present, and probable future projects or a summary of projections contained in an adopted general plan or related planning document. In conducting the analysis for this SEIR, ABAG population and employment projections for the City of Pleasanton were reviewed. It is important to note that the proposed General Plan Amendment and rezonings is essentially a set of projects, representing the cumulative development scenario for the reasonably foreseeable future in the City of Pleasanton that improves Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). Therefore, the analysis presented above represents a cumulative analysis. As described under Impact 4.B-2, the proposed General Plan Amendment and rezoning would result in an overall increase in population and decrease in VMT versus the projections included in the adopted General Plan and 2010 Clean Air *Plan* because the projected rate of increase in VMT is not greater than the projected rate of increase in population. This would be a less than significant cumulative impact.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations within the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using and generating renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. In addition to reducing GHGs, each of these strategies would help to reduce criteria air pollutants and would not conflict with the growth assumptions of the *Bay Area 2010 Clean Air Plan*. Implementation of the Draft CAP would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Air Quality

- Bay Area Air Quality Management District (BAAQMD), 2010. *Bay Area 2010 Clean Air Plan*, adopted September 15, 2010. Available at http://www.baaqmd.gov.
- Bay Area Air Quality management District (BAAQMD), 2011a. *Ambient Air Quality Standards and Bay Area Attainment Status*, http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm, as of June 3, 2011.
- Bay Area Air Quality Management District (BAAQMD), 2011b. CEQA Air Quality Guidelines, adopted May 2011. Available at http://www.baaqmd.gov.
- Bay Area Air Quality Management District (BAAQMD), 2011c. *Stationary Source Screening Analysis Tool*, updated April 29, 2011. Available at http://baaqmd.gov/Divisions/Planningand-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.
- California Air Resources Board (ARB), 1998. Fact Sheet, "The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines." October 1998. Available online at: http://www.arb.ca.gov/toxics/dieseltac/factsht1.pdf.
- California Air Resources Board (ARB), 2002. Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates. May 3, 2002.
- California Air Resources Board (ARB), 2004. 2004 Revisions to the California State Implementation Plan for Carbon Monoxide. July 22, 2004.
- California Air Resources Board (ARB), 2005. Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.
- California Air Resources Board (ARB), 2008. *Climate Change Scoping Plan*. December 11, 2008.
- California Air Resources Board (ARB), 2009a. ARB Fact Sheet: Air Pollution Sources, Effects and Control, http://www.arb.ca.gov/research/health/fs/fs2/fs2.htm, page last reviewed December 2009.
- California Air Resources Board (ARB), 2009b, *California Almanac of Emissions and Air Quality* - 2009 Edition, Table 5-44 and p. 5-44. Available on the internet at: http://www.arb.ca.gov/aqd/almanac/almanac09/pdf/chap509.pdf. Viewed January 6, 2011.
- California Air Resources Board (ARB), 2010. *Summaries of Air Quality Data, 2005-2009*; http://www.arb.ca.gov/adam/topfour/topfour1.php
- California Energy Commission, 2006. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report, December 2006.
- Dockery, D. W., and Pope, C.A., III. 2006. *Health Effects of Fine Particulate Air Pollution: Lines that Connect*. Journal Air & Waste Management Association, pp. 709–742. June.
- Governor's Office of Planning and Research (OPR), 2009. Preliminary Draft CEQA Guideline Amendments for Greenhouse Gas Emissions, January 8, 2009.
- Governor's Office of Planning and Research (OPR), 2010, Adopted Text of the CEQA Guidelines Amendments, adopted December 20, 2009, effective March 18, 2010.

4.C Biological Resources Introduction

This section describes the existing conditions for biological resources in the Planning Area and assesses potential impacts on biological resources resulting from the implementation of the proposed project. The section also presents regulations and guidelines relevant to biological resources and identifies mitigation measures for potentially significant impacts.

With the exception of the potential sites being rezoned for residential uses, impacts on biological resources within the City were previously addressed in the *City of Pleasanton General Plan* 2005-2025 *EIR* (City of Pleasanton, 2009a), which is hereby incorporated by reference in this SEIR. Therefore, for this SEIR, biological resources in the City were reviewed with a particular focus on the potential sites for rezoning and include plant and animal species that are listed as threatened or endangered, proposed for federal and/or state listing as threatened or endangered, and other species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS). Significant biological resources also include sensitive habitats, such as listed habitat or sensitive species, as well as, wetlands under the jurisdiction of the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act.

The information on natural communities, plant and animal species, and sensitive biological resources used in the preparation of this section was obtained from: the California Natural Diversity Database (CNDDB) (CDFG, 2011), California Native Plant Society Electronic Inventory (CNPS, 2011), the U.S. Fish and Wildlife Service (USFWS, 2011), the *City of Pleasanton General Plan 2005-2025* (City of Pleasanton, 2009b), and the *City of Pleasanton General Plan 2005-2025 FEIR* (City of Pleasanton, 2009a), the final draft *East Alameda County Conservation Strategy* (ICF International, 2010), and standard biological literature.

Setting

Regional Setting

Ecologically, the Pleasanton area encompasses a range of physical habitats including grassland/agriculture, mixed woodland/grassland, oak woodland, riparian corridor, urban/developed areas, quarries and gravel pits, and lakes.

Project Setting

The potential sites for rezoning are presented in Figure 3-4, in Chapter 3, Project Description. The potential sites for rezoning are mapped as occurring on urban/developed land, with the exception of Site 7 (Pleasanton Gateway), which is on grassland/agriculture (City of Pleasanton, 2009a). However, the small scale habitat mapping of the General Plan and Figure 4.C-1 of this SEIR, do not capture the fact that Sites 6, 8, and 18 are also composed primarily of grassland habitat. Biological resources within the developable area of the proposed project are described below.

C. Biological Resources

Wildlife

Native wildlife generally inhabits areas of minimally disturbed plant life such as in the Pleasanton, Main, and Sunol Ridges, in the Southeast Hills, and in the Arroyo del Valle and Arroyo de la Laguna, and other creeks. Mammals such as grey foxes, black-tail deer, striped skunks, raccoons, and opossums use arroyo channels as movement corridors; deer and badgers inhabit the hillsides; and foxes, coyotes, long-tailed weasels, moles, gophers, skunks, rabbits, squirrels, red foxes, wild pigs, rats, and mice live in both hilly and flat land. Species such as raccoons, opossums, moles, gophers, squirrels, bats, rats, and mice also live in the urban portion of the Planning Area as designated in the General Plan (City of Pleasanton, 2009b).

As with most urbanized environments, landscape features within the Planning Area, such as abandoned buildings, trees with hollows, palm trees, and parklands, could serve as temporary roosting and foraging habitat for special-status bat species.

Portions of the Planning Area that contain suitable roosting and foraging habitat for both common and special-status wildlife include the riparian area of creeks, abandoned or underutilized buildings, bridges with crevices, oak woodlands, parks, grasslands, agricultural fields, and wetlands. The San Joaquin kit fox (federal-listed endangered and state-listed threatened species) and the American badger (state species of special concern) would most likely be found in grassland and agricultural areas within the Planning Area boundaries. The San Francisco duskyfooted woodrat (state species of special concern) has been recorded in the Pleasanton Ridge area (City of Pleasanton, 2009a).

Reptiles in the Planning Area include western pond turtle (state species of concern), snakes (racers, gopher snakes, Gilbert's skink, common kingsnake, ringneck snake, western rattlesnake) and lizards (western fence, southern alligator, and western whiptail). Open hillsides and level areas provide habitat for the Alameda whipsnake, a state and federal-listed threatened species. The USFWS has proposed an area west of Foothill Road as "critical habitat," for the Alameda whipsnake. If this land were ultimately designated as critical habitat, it would limit development that might harm the snake's habitat (City of Pleasanton, 2009a).

Amphibians in the Planning Area include California tiger salamander and California red-legged frog (both of which are threatened and state species of concern), foothill yellow-legged frog (a state species of concern), California slender salamanders, arboreal salamanders, California newts, bullfrogs, western toads, and Pacific tree frogs. A comprehensive survey for wildlife has not been conducted; however, most of the potential sites for rezoning identified in the proposed Housing Element provide habitat for nothing more than common urban wildlife and birds since they are primarily developed sites.

Breeding Birds

Approximately 140 species of birds either forage within or inhabit the Planning Area (City of Pleasanton, 2009a). Of these, the bald eagle was federally delisted (removed from the Federal Endangered Species List on August 8, 2007), but remains on the State list as an endangered

species while the white-tailed kite is a California Fully Protected Animal.¹ Other special-status species in the Planning Area include the American bittern, a federal Species of Concern, and the California horned lark, loggerhead shrike, golden eagle, northern harrier, tricolored blackbird, and the burrowing owl, which are listed by CDFG as Species of Special Concern.² CDFG also considers all raptors – hawks, eagles, owls, falcons – to be sensitive, and prohibits removal or destruction of an active raptor or migratory bird nest. Birds may nest in trees, bushes, grasses, and in ruderal vegetation, under bridges, or on roofs in the Planning Area, and forage throughout. All native nongame birds and raptors are protected under the California Fish and Game Code §3503 and 3503.5, respectively.

Mallard, killdeer, spotted sandpiper, herons, egrets, and red-winged blackbirds are known to use the riparian and ponding areas of the Planning Area. Warbling vireo, woodpeckers, blue-gray gnatcatcher, warblers, plain titmouse, yellow-billed magpie, ruby-crowned kinglet, dark-eyed junco, towhees, sparrows, and California quail live in brushy and woodland areas. Other notable birds in the Planning Area are red-tail hawks, red-shouldered hawks, Cooper's hawks, sharpshinned hawks, house finches, and American robins (City of Pleasanton, 2009a).

Plant Communities

Due to extent of building and impervious surfaces, human activities, and domesticated animals, little native vegetation remains within urbanized portions of the Planning Area. However, a mixture of native trees, shrubs, and herbaceous species occurs along ridges to the west and in the Southeast Hills (see **Figure 4.C-1**). The eastern slopes of the Pleasanton, Main, and Sunol Ridges contain the greatest concentration of native plant life (City of Pleasanton, 2009).

Grasslands. Grasslands are the dominant vegetative community found in hilly areas. Due to livestock grazing, non-native annual species – barnyard grass, bromes, goat grass, nit grass, Italian rye, wild rye, wild oats, ripgut grass, barley, soft chess, fescue, oatgrass, and Kentucky bluegrass – have mostly replaced native grasses. Native grasses still growing in the Planning Area include perennial native bunchgrasses, such as purple needlegrass and nodding needlegrass. Common non-native herbaceous plants in grassland habitats include bur clover, fennel, filaree, a variety of thistles, prickly lettuce, mustards, and white clover. After winter rains, the blossoms of indigenous plants – the California buttercup, California poppy, lupine, common chickweed, miner's lettuce, clovers, and fuchsia – may be found in the grasslands. CDFG has identified purple needle grass grassland, dominated by a native grass species found within the Planning Area, as a special-status plant community.³ CDFG also considers the following plant species, known to occur in or near the Planning Area, as special-status species: San Joaquin spearscale, Diablo helianthella, and Congdon's tarplant (City of Pleasanton, 2009).

¹ The California Fully Protected Animals list was the first to protect rare animals or those faced with possible extinction. The more recent California Endangered Species Act sets forth procedures to protect rare, threatened, or endangered plant or animal species, and lists most of the original "fully protected animals."

² Species of Special Concern are those not listed under the federal or the State endangered species acts, but warrant special consideration and protection due to their limited distribution or numbers, declining population trends, etc.

³ Special-status plant communities are those that are of limited distribution, statewide or locally, that may be considered threatened by development or other environmental pressures, and are tracked by CDFG through the CNDDB.



SOURCE: City Of Pleasanton, 2011

Pleasanton General Plan: Housing Element EIR . 210016 Figure 4.C-1 Habitat Types Within and in the Vicinity of Housing Sites **Brushland**. This vegetation (also known as chaparral and scrub habitats) grows in patches on the sides and crests of ridges and near the bottoms of ravines and creeks. Common shrubs found in these areas include coyote brush, California toyon, bush monkey flower, poison oak, California sagebrush, California buckwheat, silver bush lupine, and coffee berry. Herbaceous plants – purple needlegrass, brome grasses, annual fescues, and hairy coyote mint – grow among the shrubs (City of Pleasanton, 2009).

Woodlands. Woodlands cover nearly the entire upper half of the western ridges and extend along stream channels and into the lower slope grassland areas, and are visible from many parts of the Planning Area. Trees in these woodlands consist predominantly of oaks, including coast live oak, valley oak, black oak, and blue oak. Commonly scattered among the oaks are California laurel, big-leaf maple, and California buckeye. Other shrubs, herbs, and grasses also grow in woodland areas. On steep, shaded, north-facing slopes herbaceous ground cover under tree canopies includes miner's lettuce, common chickweed, a variety of ferns, and California polypody (City of Pleasanton, 2009).

Oak Savannahs. Oak savannahs are found along the edges of woodlands and grasslands in the Planning Area and include blue oak, valley oak, coast live oak, and California buckeye intermixed with non-native annual grassland. In the Pleasanton area the savannah is a transitional ecosystem between grassland and woodland environments, so it is a relatively important habitat for both woodland and grassland animals and insect species. In contrast to woodland canopies which are generally closed, the savanna canopies tend to be 50 to 90 percent open (City of Pleasanton, 2009).

Wetlands. Wetlands are habitats found in and along the edges of lakes (referred to as lacustrine habitat), arroyos and canals (riparian habitat), as well as springs and other ephemeral water sources. Wetlands are those areas that are inundated by water at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Typical wetland vegetation in the Planning Area includes annual emergent species such as cattails, sedges, watercress, tules, and curly dock. Other species include rabbit's foot grass and water smartweed. Wetlands provide habitat for a number of wildlife species, including waterfowl and special-status amphibians, such as California tiger salamanders and California red-legged frog (City of Pleasanton, 2009).

Riparian Areas. Riparian vegetation grows along streams, arroyos, and drainage ditches. Riparian woodlands dominate some watercourses and include willows, white alders, big-leaf maples, and sycamores, all tolerant of saturated soils. Valley oak, California bay laurel, black walnut, black cottonwood, and California buckeye trees also grow in Pleasanton's riparian areas. Below the riparian tree canopy are native shrubs such as poison oak, California blackberry, California button-bush, coyote brush, mugwort, elderberry, snowberry, mulefat, and California rose. Native herbaceous species occurring in the riparian understory include sedges, ferns, seep monkeyflower, and stinging nettles. The herbaceous understory is often dominated by non-native grasses and ruderal species, such as wild oats, ryegrass, bromes, poison hemlock, bur clover, white sweetclover, wild radish, vetch, and mint. Riparian woodland is one of the most valuable native habitat types in California because it supports a diversity of wildlife species, many of C. Biological Resources

which are rare or uncommon (City of Pleasanton, 2009). Open canopied, low gradient streams in the area tend to support freshwater wetlands, as described above.

Arroyo del Valle, Arroyo Mocho, Arroyo de la Laguna, and other riparian corridors in the Planning Area are all tributaries of Alameda Creek, one of the largest creeks in the San Francisco Bay Area. They provide food, water, migration and dispersal corridors, breeding sites, and thermal cover for wildlife. Development adjacent to riparian habitat has degraded the habitat values of many stream reaches throughout the Planning Area through the introduction of human activity, feral animals, and contaminants that are typical of urban uses.

Heritage Trees. The City of Pleasanton designates trees over 55 inches in circumference or 35 feet in height as heritage trees subject to special regulations governing their removal (see *Regulatory Setting*, below). Many trees of this size grow on the Pleasanton, Main, and Sunol Ridges, on the Southeast Hills, in the Downtown area, along the western segment of Bernal Avenue and Stanley Boulevard near Reflections Drive, and in the Mohr-Martin neighborhood. The most common species include valley oak, Monterey pine, California black walnut, eucalyptus, sycamore, black locust, and California box elder (City of Pleasanton, 2009).

Wildlands Overlay

Lands adjacent to the Arroyo Mocho, Arroyo de la Laguna, Arroyo del Valle, and Alamo Canal waterways are designated as Wildlands Overlay⁴ by the General Plan. Wildlands Overlay areas contain valuable wildlife habitats and communities and can function as corridors for wildlife movement between major open space areas including regional parks, wilderness areas, and watershed lands (City of Pleasanton, 2009).

The purpose of the Wildlands Overlay is to retain the habitat and biological diversity that might otherwise be lost. To ensure long-term preservation of the Planning Area's biological diversity, a variety of habitat types need protection in areas large enough to include viable populations of species which may be present in low numbers. Therefore, wildlands include canyons, ridgetops, grasslands, woodlands, brushlands, riparian corridors, wetlands, arroyos, and streams.

Site 6 (Irby-Kaplan-Zia) and Site 21 (4202 Stanley) include a portion of the Arroyo del Valle riparian corridor and include a Wildlands Overlay land use designation. The southeast corner of Site 8 (Auf de Maur/Richenback) is adjacent to a maintenance road for the Arroyo del Valle which has a Wildlands Overlay land use designation. Site 9 (Nearon Site) and Site 10 (CarrAmerica) are adjacent to a maintenance road adjacent to Tassajara Creek. Site 13 (CM Capital Properties) is adjacent to a maintenance road adjacent to the Arroyo Mocho. Tassajara Creek and the Arroyo Mocho riparian corridors have a Wildlands Overlay land use designation.

Wildlife Movement Corridors

Wildlife movement corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or by areas of human disturbance or urban

⁴ Wildlands are wildlife corridors and valuable plant and wildlife habitats such as arroyos, the San Antonio Reservoir area, highly vegetated areas, and other natural areas necessary to maintain substantial populations of plant and animal species.

development. Topography and other natural factors in combination with urbanization can fragment or separate large open-space areas. The fragmentation of natural habitat creates isolated "islands" of vegetation that may not provide sufficient area to accommodate sustainable populations of animals or plants, and can adversely impact genetic and species diversity. Movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations.

While the Planning Area is primarily developed, the Alameda Creek Watershed linkage, mapped by the California Wilderness Coalition, provides a wildlife corridor through the Planning Area and within the Urban Growth Boundary, as it follows the riparian corridors of Arroyo del Valle and Arroyo de la Laguna, which feed into Alameda Creek (California Wilderness Coalition, 2000). This wildlife corridor is of regional importance as it serves as a connector beginning in the headwaters of Alameda Creek in Henry W. Coe State Park and extending to the mouth of this creek in the San Francisco Bay National Wildlife Refuge.

The lakes and creeks within the Planning Area provide a stop-over point for migrating avian (bird) species flying through the Pacific Flyway. The woodlands surrounding the city are an important element for many migratory species that use them as nesting habitat. Access upstream of Alameda Creek from the San Francisco Bay has been blocked by flood control features, and steelhead fish are no longer able to reach spawning habitat in the upper tributary creeks found in the Planning Area (City of Pleasanton, 2009). The San Francisco Public Utility Commission (SFPUC) recently removed two of these barriers, the Niles and Sunol Dams; however, even with removal of these dams, other barriers along Alameda Creek, including the BART (Bay Area Regional Transit) weir, still block anadromous fish passage.⁵ Occasionally, adult steelhead below the BART weir are captured and transported above the weir by volunteer groups; in 2008, successful spawning of a pair of transported adult steelhead was documented in Stonybrook Creek (ACA, 2008).

Special-Status Species

A number of species known to occur in the Planning Area are accorded "special-status" because of their recognized rarity or vulnerability to various causes of habitat loss or population decline. Some of these receive specific protection defined in federal or state endangered species legislation (see the "Regulatory Setting" sub-section below). Others have been designated as "sensitive" based on adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. The latter category is recognized by the California Environmental Quality Act (CEQA) *Guidelines*, §15380(b). This Section provides a definition of rare, endangered or threatened species that is broader than that included in federal and state endangered species regulations.⁶ These species are referred to

⁵ In 1972, a grade stabilization structure was constructed across the Alameda Creek Flood Control Channel, referred to as the BART Weir. The purpose of the structure is to protect the foundation elements of the Union Pacific Railroad and BART bridge crossings from scour and loss of stability.

⁶ For example, there is a general agreement among biologists, ecologists and other resource specialists, that vascular plants listed as List 1 or 2 by the CNPS meet the broader definition in CEQA Guidelines, §15380(b).

C. Biological Resources

collectively as "special-status species" in this SEIR, following a convention that has developed in practice but has no official sanction. The various categories encompassed by the term, and the legal status of each, are discussed in the Regulatory Setting component of this section below. For purposes of this SEIR, special-status species include:

- Plant and animal species designated as rare, threatened or endangered under the federal or state endangered species acts.
- Species that are candidates for listing under either federal or state law.
- Species designated by CDFG as Species of Special Concern.
- Species protected by the federal Migratory Bird Treaty Act (16 U.S.C. 703-711).
- Bald and golden eagles protected by the federal Bald Eagle Protection Act (16 U.S.C. 668).
- Species such as candidate species and CNPS List 1 and 2 species that may be considered rare or endangered pursuant to CEQA *Guidelines*, §15380(b).

The City's General Plan reports 30 special-status plant and wildlife species in the Pleasanton area. **Table 4.C-1** lists eight special-status plant species and 18 special-status animal species reported to occur in the vicinity of the potential sites for rezoning based on data in the CNDDB (CDFG, 2011), CNPS Electronic Inventory (2011), and special-status species information from the USFWS (2011).

Special-status plants and animals are evaluated in this document based on a plausible likelihood of habitat loss or project-related disturbance occurring during the implementation of the proposed project. The following descriptions are of species that have been documented within close proximity to the potential sites for rezoning.

Special-Status Plant Species

No special-status plant species are expected to occur within the potential sites for rezoning. Few of the potential sites for rezoning support intact natural communities and at those that do, habitat has been degraded due to long-standing agricultural and range land uses, as well as by urbanization and industrialization. Suitable habitat for the species listed in Table 4.C-1 either never occurred or no longer occurs at the potential sites for rezoning.

Special-Status Wildlife Species

As shown in Table 4.C-1, the special-status species identified as having potential to occur in or near the potential sites for rezoning, or that are otherwise considered of particular concern, include: California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana aurora draytonii*), Western burrowing owl (*Athene cunicularia*), American badger (*Taxidea taxus*), Cooper's hawk (*Accipter cooperi*), and pallid bat (*Antrozous pallidus*). No comprehensive surveys for any of these species have been conducted on the potential sites for rezoning, but they have either been documented as occurring within the Planning Area boundaries as shown on **Figure 4.C-2**, or potentially suitable habitat occurs at one or more of the potential sites for rezoning, and/or the species have been modeled as having potentially suitable habitat at one or more of the potential sites for rezoning, 2010).

TABLE 4.C-1 SPECIAL-STATUS SPECIES REPORTED OR WITH POTENTIAL TO OCCUR WITHIN THE PLEASANTON HOUSING ELEMENT SITES

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS	Habitat	Potential to Occur [®]
FEDERAL OR STATE SPECIES LISTED O	R PROPOSED FOR LISTING		
Invertebrates			
Callippe silverspot butterfly Speyeria callippe callippe	FT/-	Grasslands that support the California golden violet (<i>Viola pedunculata</i>).	Low. Potential presence within Callippe Preserve and surrounding areas. No known occurrences in project area, nor suitable habitat on housing sites to support the host plant.
Amphibians			
California tiger salamander Ambystoma californiense	FT/ST	Annual grasslands and valley foothill oak habitats for aestivation; vernal pools, seasonal wetlands, and stock ponds for breeding habitat.	Low. Nearby CNDDB occurrences. Potential upland grassland aestivation habitat on housing sites 8 (Auf de Maur/ Richenback), 6 (Irby-Kaplan-Zia), adjacent to Arroyo del Valle is disked on a regular basis. Habitat modeling for the EACCS also shows potential upland habitat at Site 7, however this site is also disked on a regular basis and there are few, if any, burrows present.
California red-legged frog Rana draytonii	FT/CSC	Slow-flowing portions of perennial streams, ephemeral streams, and hillside seeps that maintain pool environments.	Low. Upstream occurrences and potential upland grassland aestivation habitat on housing sites 8 (Auf de Maur/ Richenback) and 6 (Irby-Kaplan-Zia) adjacent to Arroyo del Valle, is disked on a regular basis. Habitat modeling for the EACCS also shows potential upland habitat at Site 7, however this site is also disked on a regular basis and there are few, if any, burrows present.
Reptiles			
Alameda whipsnake Masticophis lateralis euryxanthus	FT/ST	Scrub and chaparral habitats in Alameda and Contra Costa counties but may occur in grasslands, open woodlands, rocky slopes, and streams.	Low. Critical habitat present within General Plan boundary, however none within housing site boundaries. No suitable habitat within housing site boundaries.
Mammals			
San Joaquin kit fox Vulpes macrotis mutica	FE/ST/-	Species inhabits suitable grassland, scrubland, alkali meadows and playas, and agricultural landscapes in the San Joaquin Valley and in surrounding foothills.	Low. No suitable habitat present within housing site boundaries. Proposed housing sites are not within EACCS modeled potential habitat.
FEDERAL SPECIES OF CONCERN OR ST.	ATE SPECIES OF SPECIAL CONCE	RN	
Plants			
San Joaquin spearscale <i>Atriplex joaquiniana</i>	-/-/1B.2	Chenopod scrub; meadows and seeps; playas; valley and foothill grasslands (alkaline soils).	Low. Potential grassland habitat at housing sites 6 (Irby-Kaplan- Zia), 7 (Pleasanton Gateway), 8 (Auf de Maur/ Richenback) and 18 (Downtown SF site). However, modeling for the EACCS shows that the species is only expected to occur near Site 1 within the Planning Area. That site is fully developed, with no suitable habitat remaining.

C. Biological Resources

TABLE 4.C-1 SPECIAL-STATUS SPECIES REPORTED OR WITH POTENTIAL TO OCCUR WITHIN THE PLEASANTON HOUSING ELEMENT SITES

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS	Habitat	Potential to Occur [®]
FEDERAL SPECIES OF CONCERN OR STA	ATE SPECIES OF SPECIAL CONCE	RN (cont.)	
Plants (cont.)			
Chaparral harebell Campanula exigua	-/-/1B.2	Occurs in chaparral associated with Talus slopes, generally in serpentine soils	Low. No suitable habitat present within housing site boundaries.
Congdon's tarplant Centromadia parryi var. congdonii	-/-/1B.2	Valley and foothill grasslands (alkaline soils)	Low. Potential grassland habitat at housing sites 6 (Irby-Kaplan- Zia), 7 (Pleasanton Gateway), 8 (Auf de Maur/ Richenback) and 18 (Downtown SF site). However, modeling for the EACCS shows that the species is not expected to occur in the vicinity of any of these sites.
Diablo helianthella Helianthella castanea	-/-/1B.2	Occurs in broadleaf upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland and valley and foothill grassland.	Low. No suitable habitat present within housing site boundaries.
Robust monardella Monardella villosa ssp. globosa	-/-/1B.2	Occurs in broadleafed upland forest openings, chaparral openings, cismontane woodland, coastal scrub, and valley and foothill grassland.	Low. No suitable habitat present within housing site boundaries.
Hairless popcorn-flower Plagiobothrys glaber	-/-/1A	Meadows and seeps, marshes and swamps	Low. There is a historical occurrence within General Plan Boundary, south of I-580 at Livermore Blvd. within 500 feet from housing site 1 (BART). Believed extirpated from the area and Site 1 is already fully developed.
Most beautiful jewel-flower Streptanthus albidus ssp. peramoenus	-/-/1B.2	Chaparral, cismontane woodland, valley and foothill grasslands, often on serpentine soils.	Low. No suitable habitat present within housing site boundaries.
Saline clover Trifolium depauperatum var. hydrophilium	-/-/1B.2	Occurs in marshes and swamps, mesic (moist) grasslands in alkaline soil substrates, and vernal pools.	Low. Potential grassland habitat at housing sites 6 (Irby-Kaplan- Zia), 7 (Pleasanton Gateway), 8 (Auf de Maur/ Richenback) and 18 (Downtown SF site).
Reptiles			
Western pond turtle Actinemys marmorata	-/CSC	Permanent or nearly permanent water in a wide variety of aquatic habitats. Requires basking sites. Nests in sandy soils near aquatic features.	Low. While western pond turtle are known to occur in drainages throughout the planning area no suitable habitat is present within housing site boundaries. Although sites 6 (Irby-Kaplan-Zia) and 21 (4202 Stanley) include portions of the Arroyo del Valle riparian corridor the area to be developed is either disked regularly or already fully developed and existing riparian habitat will be protected by riparian setbacks.
Birds			
Cooper's hawk Accipiter cooperii	-/DFG WL/-	(Nesting) woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian deciduous trees and in live oaks.	Moderate. The Planning Area provides suitable oak woodland nesting and foraging habitat; recorded CNDDB within 2 miles of General Plan boundary, may occur on or adjacent to housing sites where there are large trees, especially those sites adjacent to riparian corridors.

TABLE 4.C-1 SPECIAL-STATUS SPECIES REPORTED OR WITH POTENTIAL TO OCCUR WITHIN THE PLEASANTON HOUSING ELEMENT SITES

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS	Habitat	Potential to Occur [®]
FEDERAL SPECIES OF CONCERN OR S	STATE SPECIES OF SPECIAL CONCE	RN (cont.)	
Birds (cont.)			
Tricolored blackbird Agelaius tricolor	-/CSC	Nests in cattail, tule, blackberry thickets, or thistle patches adjacent to freshwater sources.	Low. Suitable breeding habitat occurs within Chain of Lakes. The northeast corner of housing site 14 (Legacy Partners) is adjacent to a recorded CNDDB occurrence. However, this site is currently in semi-industrial land use and there is little vegetation to support nesting birds present. EACCS habitat modeling does not expect the species to occur in the vicinity of any of the housing sites.
Golden eagle Aquila chrysaetos	-/CFP/-	Rolling foothills with open grasslands, scattered trees, and cliff- walled canyons.	Low. Suitable nesting and foraging habitat present within the General Plan boundary. EACCS habitat modeling shows Sites 6, 7, and 8 as potential foraging habitat for the species. However, this seems unlikely given the proximity of the sites to development and to Highway 680 and the fact that they are all disked on a regular basis.
Great blue heron Ardea herodias	-/-/*	Colonial nester (rookeries) near freshwater marshes and swamps.	Low. Suitable freshwater marsh foraging habitat within the General Plan boundary. No rookeries documented within the General Plan area. No freshwater marsh within the housing sites.
Western burrowing owl Athene cunicularia hypugea	-/CSC/-	Found in grassland and ruderal habitats, sometimes in urban areas. Dependent on burrowing animals, e.g. ground squirrels, for nests.	Moderate. Potential grassland habitat at housing sites 6 (Irby- Kaplan-Zia), 7 (Pleasanton Gateway), 8 (Auf de Maur/ Richenback) is disked on a regular basis, destroying burrows that might be utilized by burrowing owl. Site 18 (Downtown SF site) contains mowed grassland with ground squirrels present. Site 20 also provides potential grassland habitat for burrowing owl.
Northern harrier <i>Circus cyaneus</i>	-/CSC/-	Breed and forage in a variety of open habitats, including marshes, wet meadows, grasslands, croplands, and along streams. Nest on the ground, within patches of dense, tall vegetation in undisturbed areas.	Low. Marginally suitable foraging habitat present at sites 6 (Irby-Kaplan-Zia), 7 (Pleasanton Gateway), and 8 (Auf de Maur/ Richenback). However, no suitable nesting habitat available at these housing sites because they are disked on a regular basis. No suitable habitat at the other sites due to their small size or developed character.
White-tailed kite Elanus leucurus	-/CFP/-	Nests in small trees and medium-sized shrubs adjacent to grassland foraging habitat.	Low. Suitable nesting and foraging habitat within the General Plan boundary, marginally suitable habitat along riparian corridors available in Planning Area.
California horned lark Eremophila alpestris actia	-/CSC/-	Open grassland and pasture habitat and nests on the ground.	Low. Suitable nesting and foraging habitat within the General Plan boundary, however most of the housing sites have been developed or previously disturbed and suitable habitat is not present.
Loggerhead shrike Lanius ludovicianus	-/CSC/-	Woodlands, savanna and riparian woodlands, scrub, and washes. Prefers open country for hunting.	Low. Suitable habitat occurs within the General Plan boundary, however most of the housing sites have been developed or previously disturbed and suitable habitat is not present.

C. Biological Resources

TABLE 4.C-1 SPECIAL-STATUS SPECIES REPORTED OR WITH POTENTIAL TO OCCUR WITHIN THE PLEASANTON HOUSING ELEMENT SITES

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS Habitat		Potential to Occur [®]
FEDERAL SPECIES OF CONCERN OR STA	TE SPECIES OF SPECIAL CONCE	ERN (cont.)	
Mammals			
Pallid bat Antrozous pallidus	-/CSC	Rocky, mountainous areas and near water. Also more open, sparsely vegetated grasslands. Nightime roosts in buildings, caves, and cliff overhangs.	Moderate. CNDDB occurrence (CDFG, 2011) within 0.3 miles from housing sites 3 (Stoneridge Shopping Center) and 4 (Kaiser). Pallid bat is most likely to occur at sites adjacent to riparian corridors.
San Francisco dusky-footed woodrat Neotoma fuscipes annectens	-/CSC/-	Builds nests of debris in riparian corridors, scrub and woodland habitats.	Low. No suitable habitat present within housing site boundaries.
American badger <i>Taxidea taxus</i>	-/CSC/-	Occurs primarily in grasslands, oak savannas, and mountain meadows; prey base consists of a wide variety of animals primarily rodents.	Low. EACCS habitat modeling shows potential for this species to occur at Site 7, however the site is disked on a regular basis, and there are few small burrows indicating presence of a prey base for the badger.
STATUS CODES:			
Federal Categories (USFWS) FE = Listed as endangered by the federal government FT = Listed as threatened by the federal government FPE = Proposed for listing as endangered FPT = Proposed for listing as threatened FC = Candidate for federal listing		CNPS List 1A = Plants presumed extinct in California. List 1B = Plants rare, threatened, or endangered in California and elsewhere. List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere. An extension reflecting the level of threat to each species is appended to each rarity category as follows: .1 – Seriously endangered in California. .2 – Fairly endangered in California.	
<u>State Categories (CDFG)</u> CE = Listed as endangered by the State of California ST = Listed as threatened by the State of California CSC = California Species of Special Concern CR = Listed as rare by the State of California *Rookeries only		.3 – Not very endangered in California.	
NOTES: a High Potential = Species is expected t	o occur and habitat meets special	requirements.	

Moderate Potential = Habitat is only marginally suitable or is suitable but not within species geographic range. Low Potential = Habitat does not meet species requirements as currently understood in the scientific community. Project site is outside species geographic range.

SOURCES: ICF International, 2010; CDFG, 2011; CNPS, 2011; USFWS, 2011 (Dublin and Livermore quadrangles).


General Plan Amendment and Rezonings . 210016 Figure 4.C-2 Special status Species Occurrences Within and in the Vicinity of Housing Sites

SOURCE: CDFG, 2011

California tiger salamander Ambystoma californiense

The California tiger salamander (CTS) is a federally and State threatened species. CTS are most commonly found in grasslands and open oak woodland that provide suitable aestivation⁷ (i.e., summer retreats known as "refugia") and/or breeding habitats. The species occurs from near Petaluma, Sonoma County, east through the Central Valley to Yolo and Sacramento counties and south to Tulare County, and from the vicinity of San Francisco Bay south at least to Santa Barbara County. Adults spend most of the year in subterranean refugia, especially burrows of California ground squirrels (Spermophilus beechevi) and occasionally man-made structures (Jennings, 1994). The primary cause of the decline of CTS populations is the loss and fragmentation of habitat from human activities and by encroachment of non-native predators. All of the estimated seven genetic populations of this species have been significantly reduced because of urban and agricultural development, land conversion, and other human-caused factors. Mortality by non-native predatory fish, bullfrogs, and crayfish has also contributed to overall population declines throughout its historic range. CTS occurrences have been documented at Shadow Cliffs Regional Recreation Area, south of Stanley Boulevard and north of Vineyard Avenue within 930 feet of Site 8 (Auf de Maur/Richenback). Grasslands on sites adjacent to Arroyo del Valle, at Site 6 (Irby-Kaplan-Zia) and Site 8 (Auf de Maur/ Richenback) are disked regularly, which renders the habitat unsuitable for CTS. Site 21 (4202 Stanley), also along Arroyo del Valle, includes a portion of the riparian corridor but is located greater than one mile from recorded occurrences (see Figure 4.C-2). In addition, site development would be restricted to the already developed portions of this site, which currently provide no suitable upland habitat for CTS due to the lack of grasslands and small mammal burrows. The EACCS (ICF International, 2010) models potentially suitable habitat for this species at Site 7 (Pleasanton Gateway). However, this site is also disked regularly, precluding the presence of CTS. The EACCS does not model potentially suitable habitat for CTS along Tassajara Creek in the vicinity of Sites 9 (Nearon Site) and 10 (CarrAmerica) or along Arroyo Mocho in the vicinity of Site 13 (CM Capital Properties). In addition, these three sites are already fully developed and provide no suitable aquatic or upland habitat for CTS. A remnant reach of Sycamore Creek appears to delineate the eastern border of site 20 (Sunol Blvd. and Sycamore Rd.), however this stream reach is mapped as a former creek (Sower and Richards, 2003) and its flow appears to have been largely diverted into city storm drains upstream from the site. While the former creek channel has some potential to support seasonal wetlands, any flows are expected to be ephemeral and would thus not likely provide wetland habitat of sufficient duration or depth to support CTS. In addition, this stream reach is isolated by a distance of more than 1 mile from known CTS breeding occurrences (EACCS, 2010; CNDDB, 2011).

California red-legged frog Rana draytonii

The California red-legged frog (CRLF) is federally listed as threatened and is a California Species of Concern. This large brown to reddish-brown frog historically occurred over much of the state from the Sierra Nevada foothills to the coast and from Mendocino County to the Mexican border.

Aestivation is the cessation or slowing of activity during the summer; especially slowing of metabolism in some animals during a hot or dry period. Amphibians in arid climates may use this strategy for survival when water sources are seasonal by retreating to burrows or other areas that remain cool and moister than the surrounding environment.

CRLF typically inhabit ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. Submerged root masses and undercut banks are important habitat features for this species. However, this species is capable of inhabiting a wide variety of perennial aquatic habitats as long as there is sufficient cover and bullfrogs or non-native predatory fish are not present. CRLF is known to survive in ephemeral streams, although only if deep pools with vegetative cover persist through the dry season. Factors that have contributed to the decline of CRLF include destruction of riparian habitat from development, agriculture, flood control practices, or the introduction of exotic predators such as bullfrogs, crayfish, and a variety of non-native fish. Grasslands on sites adjacent to Arroyo del Valle, Site 6 (Irby-Kaplan-Zia) and Site 8 (Auf de Maur/ Richenback) are disked on a regular basis, which destroys the small mammal burrows utilized by CRLF for aestivation. The EACCS (ICF International, 2010) models potentially suitable habitat for this species at Site 7. However, this site is also disked regularly, precluding the presence of aestivating CRLF due to a lack of burrows. The EACCS models potentially suitable habitat for CTS along Tassajara Creek in the vicinity of Sites 9 (Nearon Site) and 10 (CarrAmerica), and along Arroyo Mocho in the vicinity of Site 13 (CM Capital Properties). However, these three sites are already fully developed and provide no suitable aquatic or upland habitat for CRLF. A remnant reach of Sycamore Creek Site appears to delineate the eastern border of site 20 (Sunol Blvd. and Sycamore Rd.), however this stream reach is mapped as a former creek (Sower and Richards, 2003) and appears to have been diverted into the city storm drains. While the former creek channel has some potential to support seasonal wetlands, any flows would be ephemeral and would thus not likely provide wetland habitat of sufficient duration or depth to support CRLF. In addition, this stream reach is isolated by a distance of more than 2 miles from known CRLF breeding occurrences (CNDDB, 2011; EACCS, 2010).

Cooper's hawk Accipiter cooperi

Cooper's hawk ranges over most of North America and may be seen throughout California, most commonly as a winter migrant. Nesting pairs have declined throughout the lower-elevation, more populated parts of the state. Cooper's hawk generally forage in open woodlands and wooded margins and nests in tall trees, often in riparian areas. This species is known to nest locally in Bay Area urban neighborhoods. This species occasionally may forage and nest in larger trees in and around housing sites along Arroyo Mocho (Sites 9, 10, and 13) and Arroyo del Valle (Sites 6, 8, and 21). Large eucalyptus and open grasslands at Site 20 may also support the species. Cooper's hawk was a CDFG Species of Special Concern and is now on the CDFG watchlist. The species is also protected under California Fish and Game Code, §3503.5.

Western burrowing owl Athene cunicularia

The western burrowing owl is a California Species of Special Concern. Burrowing owls are yearlong residents in generally flat, open dry grasslands, pastures, deserts, and shrub lands, and in grass, forbs and open shrub stages of pinyon-juniper and ponderosa pine habitats. They use communal ground squirrel and other small mammal burrow colonies for nesting and cover, as well as artificial structures such as roadside embankments, levees, and berms. They prefer open, dry, nearly level grassland or prairie habitat and can exhibit high site fidelity, often reusing burrows year after year. Occupancy of suitable burrowing owl habitat can be verified at a site by observation of a pair of burrowing owls during their breeding season (March to August) or, alternatively, by the presence of molted feathers, cast pellets, prey remains (rodents, small reptiles, and large insects), eggshell fragments, or excrement (guano or must), near or at a burrow. Potentially suitable grassland habitat is disked regularly at Sites 6 (Irby-Kaplan-Zia), Site 7 (Pleasanton Gateway), and Site 8 (Auf de Maur/ Richenback). Regular disking generally precludes the presence of ground squirrels and other burrowing mammals and, therefore, the burrows utilized by the owl. Grasslands at Site 18 (Downtown SF site) are mowed, rather than disked, and ground squirrels are present. Grasslands at Site 20 may also support burrowing owl.

Pallid bat Antrozous pallidus

The pallid bat is a California Species of Special Concern. The pallid bat is common in arid regions with rocky outcroppings, particularly near water. This gregarious species usually roosts in small colonies of 20 or more individuals in rock crevices and buildings, but occasionally roosts in caves, mines, rock piles and tree cavities. They chiefly feed on large prey that is taken on the ground or, perhaps less frequently, in flight within a few meters of the ground or from the surfaces of vegetation. Prey items included scorpions, crickets, centipedes, ground beetles, grasshoppers, cicadas, katydids and are also known to eat lizards and rodents. A CNDDB occurrence is documented within 0.3 miles from Site 3 (Stoneridge Shopping Center) and Site 4 (Kaiser) east of the intersection of Foothill Road and Gold Creek, where seven adult males exited from a bridge roost in 2003; however, there is no suitable habitat for pallid bats available at these sites. This species would be most likely to occur along riparian corridors in the Planning Area and may be present at Sites 6, 8, 9, 10, 13, and 20.

American badger Taxidea taxus

The American badger is considered a species of special concern by the California Department of Fish and Game.

In North America, American badgers occur as far north as Alberta, Canada and as far south as central Mexico. In California, American badgers occur throughout the state except in humid coastal forests of northwestern California in Del Norte and Humboldt Counties and the species has been decreasing in numbers throughout California over the last century.

American badgers occur in a wide variety of open, arid habitats but are most commonly associated with grasslands, savannas, mountain meadows, and open areas of desert scrub. The principal habitat requirements for this species appear to be sufficient food (burrowing rodents), friable soils, and relatively open, uncultivated ground. American badgers are primarily found in areas of low to moderate slope.

The EACCS (ICF International, 2010) habitat modeling shows potentially suitable habitat for American badger at Site 7 (Pleasanton Gateway). However, this site is regularly disked, which destroys small mammal burrows, thereby reducing the prey base for badgers and rendering this site unsuitable for the species.

Regulatory Setting

This section briefly describes federal, state, and local regulations, permits, and policies pertaining to biological resources and wetlands as they apply to the proposed project.

Special-Status Species and Communities

Federal Endangered Species Act (FESA)

The USFWS, which has jurisdiction over plants, wildlife, and most freshwater fish, and the National Marine Fisheries Service (NMFS), which has jurisdiction over anadromous fish,⁸ marine fish, and mammals, both oversee FESA implementation. Section 7 of FESA mandates that all federal agencies must consult with the USFWS and NMFS to ensure that federal actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. FESA prohibits the "take"⁹ of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Critical Habitat. Under FESA, the Secretary of the Interior (or the Secretary of Commerce, as appropriate) formally designates critical habitat for certain federally listed species and publishes these designations in the Federal Register. Critical habitat is not automatically designated for all federally listed species; so, many listed species have no formally designated critical habitat.

Critical habitat is defined as the specific areas that are essential to the conservation of a federally listed species, and that may require special management consideration or protection. Critical habitat is determined using the best available scientific information about the physical and biological needs of the species. These needs, or primary constituent elements, include: space for individual and population growth and for normal behavior; food, water, light, air, minerals, or other nutritional or physiological needs; cover or shelter; sites for breeding, reproduction, and rearing of offspring; and habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species. There is no federally designated critical habitat in the Planning Area.

California Endangered Species Act

Under the California Endangered Species Act (CESA), the CDFG has the responsibility for maintaining a list of threatened and endangered species (California Fish and Game Code, §2070). The CDFG also maintains a list of "candidate species," which are species formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. In addition, the CDFG maintains lists of "species of special concern," which serve as

⁸ Anadromous fish hatch (rear) in freshwater, migrate to the ocean (saltwater) to grow and mature, and migrate back to freshwater to spawn and reproduce.

[&]quot;Take," as defined in Section 9 of FESA, is broadly defined to include intentional or accidental "harassment" or "harm" to wildlife. The USFWS further defines "harass" as an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding, and sheltering. "Harm" is defined as an act that actually kills or injures wildlife. This may include significant habitat modification or degradation that results in death or injury of wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

watch lists. Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the Planning Area and determine whether the proposed project could have a potentially significant impact on such species. In addition, the CDFG encourages informal consultation on any proposed project that could affect a candidate species.

California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed the CDFG to carry out the legislature's intent to "preserve, protect, and enhance endangered plants in this state." The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. CESA expanded on the original NPPA and enhanced legal protection for plants. CESA established threatened and endangered species categories, and grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, three listing categories for plants are employed in California: rare, threatened, and endangered.

Special-Status Natural Communities

Special-status natural communities are identified as such by the CDFG's Natural Heritage Division and include those that are naturally rare and those whose extent has been greatly diminished through changes in land use. The CNDDB tracks 135 such natural communities in the same way that it tracks occurrences of special-status species: information is maintained on each site in terms of its location, extent, habitat quality, level of disturbance, and current protection measures. The CDFG is mandated to seek the long-term perpetuation of the areas in which these communities occur. While there is no statewide law that requires protection of all special-status natural communities, CEQA requires consideration of the potential impacts of a project on biological resources of statewide or regional significance.

Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (United States Code, Title 16, §703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. For projects that would not result in the direct mortality of birds, the Migratory Bird Treaty Act is generally interpreted in CEQA analyses as protecting active nests of all species of birds that are included in the "List of Migratory Birds" published in the Federal Register in 1995.

California Fish and Game Code

Under California Fish and Game Code, §3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 of the code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Code §3511 (birds), § 4700 (mammals), § 5050 (reptiles and amphibians), and § 5515 (fish) allow the designation of a species as fully protected. This is a greater level of protection than is

afforded by CESA, since such a designation means the listed species cannot be taken at any time except, under certain circumstances, in association with a species recovery plan.

Oak Woodlands Conservation Act

The *Oak Woodlands Conservation Act* was added to the State of California Public Resources Code, § 21083.4, on February 18, 2004 and requires that a County determine whether a project in its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. A County must then require one or more alternatives to mitigate the significant effect of the conversion of oak woodlands. This Act exempts specified activities from its requirements, including:

- 1. Projects undertaken pursuant to an approved Natural Community Conservation Plan (NCCP) or approved sub-area plan within an approved Natural Community Conservation Plan that includes oaks as a covered species or that conserves oak habitat through natural community conservation preserve designation and implementation and mitigation measures that are consistent with this section.
- 2. Affordable housing projects for lower income households, as defined pursuant to Health and Safety Code, §50079.5, that are located within an urbanized area, or within a sphere of influence as defined pursuant to Government Code, §56076.
- 3. Conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes.
- 4. Projects undertaken pursuant to Public Resources Code, §21080.5.
 - a. provision of aquatic habitat that supports a traditional navigable water,
 - b. potential of wetlands to trap and filter pollutants or store flood waters, and

Jurisdictional Waters (Including Wetlands)

Definitions

Waters of the United States

The term "waters of the United States," as defined in the Code of Federal Regulations (33 C.F.R. § 328.3[a]; 40 C.F.R. § 230.3[s]), refers to:

- 1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- 2. All interstate waters including interstate wetlands;
- 3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
 - which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

- which are used or could be used for industrial purposes by industries in interstate commerce.
- 4. All impoundments of waters otherwise defined as waters of the United States under the definition;
- 5. Tributaries of waters identified in paragraphs (1) through (4);
- 6. Territorial seas; and
- 7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).
- 8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA (33 CFR 328.3[a][8]).

Wetlands are ecologically productive habitats that support a rich variety of both plant and animal life. The importance of wetlands has increased due to their value as recharge areas and filters for water supplies and to their widespread filling and destruction to enable urban and agricultural development. Examples of wetlands may include freshwater marsh, seasonal wetlands, and vernal pool complexes that are adjacent to waters of the U.S. In a jurisdictional sense, there are two commonly used wetland definitions, one adopted by the U.S. Environmental Protection Agency (EPA) and the Corps and a separate definition, originally developed by USFWS, which has been adopted by agencies in the State of California that have regulatory authority over wetlands. Both definitions are presented below.

Federal Wetland Definition

Under federal law, wetlands are a subset of "waters of the United States" and receive protection under §404 of the Clean Water Act (CWA). Wetlands are defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration that are sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland determination under the federal wetland definition adopted by the Corps requires the presence of three factors: (1) wetland hydrology; (2) plants adapted to wet conditions; and (3) soils that are routinely wet or flooded [33 C.F.R. § 328.3(b)]. In January 2001, the Supreme Court of the United States ruled that certain isolated wetlands do not fall under the jurisdiction of the CWA (*Solid Waste Agency of Northwestern Cook County v. United States Army Corps of Engineers et al.*).

California Wetland Definition

The CDFG and the California Coastal Commission (CCC) have adopted the USFWS Cowardin (1979) definition of wetlands. While the federal definition of wetlands requires three wetland identification parameters to be met, the Cowardin definition can be satisfied under some circumstances with the presence of only one parameter. Thus, identification of wetlands by State agencies may include areas that are permanently or periodically inundated or saturated and without wetland vegetation or soils, such as rocky shores, or areas that presume wetland hydrology based on the presence of at least one of the following: (a) a seasonal or perennial

dominance by hydrophytes¹⁰ or (b) the presence of hydric¹¹ soils. CDFG does not normally assert jurisdiction over wetlands unless they are subject to Streambed Alteration Agreements (Fish and Game Code, §1600–1616) or they support state-listed endangered species.

Other Waters of the U.S.

"Other waters of the U.S." refers to additional features that are regulated by the CWA but are not wetlands (33 CFR 328.4). To be considered jurisdictional, these features must exhibit a defined bed and bank and an ordinary high water mark. The term ordinary high water mark refers to a line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other means appropriate to the characteristics of the surrounding areas. Examples of other waters of the U.S. include rivers, creeks, ponds, and lakes.

U.S. Army Corps of Engineers and U.S. Environmental Protection Agency Regulations

The Corps and the EPA regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under §404 and § 401 of the CWA. Projects that would result in the placement of dredged or fill material into waters of the United States require a §404 permit from the Corps. Some classes of fill activities may be authorized under General or Nationwide permits if specific conditions are met. Nationwide permits do not authorize activities that are likely to jeopardize the existence of a threatened or endangered species (listed or proposed for listing under the FESA). In addition to conditions outlined under each Nationwide Permit, project-specific conditions may be required by the Corps as part of the §404 permitting process. When a project's activities do not meet the conditions for a Nationwide Permit, an Individual Permit may be issued.

Section 401 of the CWA requires an applicant for a Corps permit to obtain state certification that the activity associated with the permit will comply with applicable state effluent limitations and water quality standards. In California, water quality certification, or a waiver, must be obtained from the Regional Water Quality Control Board for both Individual and Nationwide Permits.

The Corps also regulates activities in navigable waters under Section 10 of the Rivers and Harbors Act. The construction of structures, such as tidegates, bridges, or piers, or work that could interfere with navigation, including dredging or stream channelization, may require a \$10 permit, in addition to a \$404 permit if the activity involves the discharge of fill.

Finally, the federal government also supports a policy of minimizing "the destruction, loss, or degradation of wetlands." Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

¹⁰ A *hydrophyte* is, literally, a water loving plant, i.e., one that is adapted to growing in conditions where the soil lacks oxygen, at least periodically during the year, due to saturation with water.

¹¹ A *hydric* soil is one that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile.

In recent years several Supreme Court cases have challenged the scope and extent of the Corps' jurisdiction over waters of the United States and have led to several reinterpretations of that authority. The most recent of these decisions are the case of *Solid Waste Agency of Northern Cook County* (SWANCC) *v. the Army Corps of Engineers* (January 9, 2001) and *Rapanos v. United States* (June, 2006). The SWANCC decision found that jurisdiction over non-navigable, isolated, intrastate waters could not be based solely on the use of such waters by migratory birds. The reasoning behind the SWANCC decision could be extended to suggest that waters need a demonstrable connection with a 'navigable water' to be protected under the CWA. The introduction of the term isolated has led to the consideration of the relative connectivity between waters and wetlands as a jurisdictionally relevant factor. The more recent Rapanos case further questioned the definition of "waters of the United States" and the scope of federal regulatory jurisdiction over such waters but resulted in a split decision which did not provide definitive answers but expanded on the concept that a 'significant nexus' with traditional navigable waters was needed for certain waters to be considered jurisdictional.

On June 5, 2007 the EPA and the Corps released guidance on CWA jurisdiction in response to the Rapanos Supreme Court decisions, which can be used to support a finding of CWA coverage for a particular water body when either a) there is a significant nexus between the stream or wetland in question and navigable waters in the traditional sense; or b) a relatively permanent water body is hydrologically connected to traditional navigable waters and/or a wetland has a surface connection with that water. According to this guidance the Corps and the EPA will take jurisdiction over the following waters:

- 1. Traditional navigable waters, which are defined as all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- 2. Wetlands adjacent to traditional navigable waters; including adjacent wetlands that do not have a continuous surface connection to traditional navigable waters;
- 3. Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months);
- 4. Wetlands adjacent to non-navigable tributaries as defined above; that have a continuous surface connection to such tributaries (e.g. they are not separated by uplands, a berm, dike, or similar feature).

The EPA and the Corps decide jurisdiction over the following waters, based on a fact-specific analysis to determine if there is a significant nexus, as defined below, to a traditional navigable water:

- 1. Non-navigable tributaries that are not relatively permanent;
- 2. Wetlands adjacent to non-navigable tributaries that are not relatively permanent;
- 3. Wetlands adjacent to, but that do not directly abut a relatively permanent non-navigable tributary.

The EPA and the Corps generally do not assert jurisdiction over the following features:

- 1. Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow);
- 2. Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The EPA and the Corps have defined the significant nexus standard as follows:

- 1. A significant nexus analysis assesses the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters;
- 2. Significant nexus analysis includes consideration of hydrologic and ecologic factors including:
 - a. volume, duration, and frequency of flow, including consideration of certain physical characteristics of the tributary,
 - b. proximity to a traditional navigable water,
 - c. size of the watershed,
 - d. average annual rainfall,
 - e. average annual winter snow pack,
 - f. potential of tributaries to carry pollutants and flood waters to traditional navigable waters,
 - g. maintenance of water quality in traditional navigable waters.

State Policies and Regulations

State regulation of activities in waters and wetlands resides primarily with CDFG and the State Water Resources Control Board (SWRCB). In addition, the California Coastal Commission has review authority for wetland permits within its planning jurisdiction. CDFG provides comment on Corps permit actions under the Fish and Wildlife Coordination Act. CDFG is also authorized under the California Fish and Game Code, §1600-1616, to enter into a Streambed Alteration Agreement with applicants and to develop mitigation measures when a proposed project would obstruct the flow or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams. The SWRCB, acting through the nine Regional Water Quality Control Boards, must certify that a Corps permit action meets state water quality objectives (§401, CWA).

Local Policies and Regulations

City of Pleasanton General Plan

The following policies and programs are most relevant to the biological resources within the Planning Area.

Conservation and Open Space Element

Goal 2:	Preserve and enhance the natural resources of the Planning Area, including plant and wildlife habitats, heritage trees, scenic resources, and watercourses.		
Policy 1:	Preserve and enhance natural wildlife habitats and wildlife corridors.		
Program 1.3:	Preserve and enhance the resource value of wetlands through project development design measures. These measures should be based in part on jurisdictional wetlands delineation in accordance with current Army Corps of Engineers criteria, for projects which are known to have or that may have wetlands present within their boundaries.		
Program 1.6:	Analyze potential impacts on wildlife populations and habitats before developing projects, using the <i>California Environmental Quality Act (CEQA)</i> process or other processes, as relevant.		
Program 1.9:	Plant native species wherever possible in public and private landscaping, and provide wildlife habitat in new landscaping, where appropriate.		
Program 1.10:	Design storm retention and drainage ponds, groundwater-recharge areas, and watercourses as wildlife habitats, when appropriate and environmentally sound.		
Program 1.12:	Support appropriate development intensity adjacent to areas designated as Wildlands Overlay.		
Policy 2:	Preserve heritage trees throughout the Planning Area.		
Program 2.1:	Strongly encourage preservation of heritage trees; where preservation is not feasible, the City will require tree replacement or a contribution to the Urban Forestry Fund. Allow no net loss of trees.		
Program 2.2:	Follow the provisions of the City's Heritage Tree Ordinance, Pleasanton Municipal Code Chapter 17.16, Tree Preservation, when reviewing future development projects.		
Policy 3:	Preserve and enhance streambeds and channels in a natural state.		
Goal 5:	Preserve and protect existing and proposed open space lands for public health and safety, recreational opportunities, natural resources (e.g., agriculture, sand and gravel mining), sensitive viewsheds, and biological resources.		
Policy 6:	Protect all large continuous areas of open space, as designated on the General Plan Map, from intrusion by urban development. (Measure QQ, Nov. 2008)		

Program 6.2:	Establish appropriate levels for the development of land adjacent to areas
	designated as Wildlands Overlay through studies which indicate the types of
	development posing the least potential negative impact on wildlife habitat.

- Program 6.3: Preserve large blocks of open space land by encouraging the clustering of development.
- Program 6.7: Continue to restrict private development in areas designated as Public Health and Safety and Wildlands Overlay to a single-family home on existing lots of record as of September 16, 1986.

Water Element

Goal 2:	Provide healthy water courses, riparian functions, and wetlands for humans,
	wildlife, and plants.

- Policy 2: Preserve and enhance streambeds and channels in a natural state.
- Program 2.4: Design projects adjacent to the arroyos to protect habitat areas.
- Program 2.5: Work with Zone 7 Water Agency to restore arroyos consistent with its Stream Management Master Plan.
- Program 2.7: Locate wetland buffers between a wetland and proposed, existing, or potential development. These buffers should be of sufficient width and size to protect species most sensitive to development and should be designed to complement the habitat value of the wetland resource.
- Program 2.8: Require that future developments result in no net loss of wetlands.

City of Pleasanton Tree Preservation Ordinance

The City also provides protection to trees in the City through enforcement of Chapter 17.16 of the Pleasanton Municipal Code. The intent of this ordinance is to preserve as many heritage trees as possible throughout Pleasanton, through staff review and the development review process. The City Code defines heritage trees as:

- 1. Any single-trunked tree with a circumference of fifty five inches (55") or more measured four and one-half feet (4 ¹/₂') above ground level;
- 2. Any multi-trunked tree of which the two (2) largest trunks have a circumference of fifty five inches (55") or more measured four and one-half feet (4 ¹/₂') above ground level;
- 3. Any tree thirty five feet (35') or more in height;
- 4. Any tree of particular historical significance specifically designated by official action;
- 5. A stand of trees, the nature of which makes each dependent upon the other for survival or the area's natural beauty.

Draft East Alameda County Conservation Strategy

The Final Draft East Alameda County Conservation Strategy (EACCS) was developed through a collaborative process including local agencies, conservation groups, and state and federal agencies. If the EACCS is adopted it is intended to streamline environmental permitting and mitigation implementation for projects with impacts to listed species, facilitate voluntary land stewardship conservation, as well as coordinate the connection of Tri-Valley open space and habitat in the Alameda Creek watershed with adjacent natural areas and watersheds in Contra Costa, San Joaquin, and Santa Clara Counties. The intent is to improve overall conservation of listed and unlisted species in East Alameda County. The Conservation Strategy is intended to enable local projects to comply with state and federal regulatory requirements within a framework of comprehensive conservation goals and objectives that are implemented through strategies that are based on consistent and standardized mitigation requirements. The final draft Conservation Strategy was completed in December 2010, and may be formally adopted as guidance by local agencies, including the City of Pleasanton, over the next several months.

The potential sites for rezoning are all located within Conservation Zone 2 of the EACCS, which recognizes this area as highly developed, yet still providing pockets of habitat for several special-status species. The EACCS describes the following conservation priorities for Conservation Zone 2:

- Protection of burrowing owl nesting and foraging habitat.
- Protection of and restoration opportunities in mixed willow riparian scrub along Arroyo del Valle and Arroyo Mocho.
- Protection of and restoration opportunities along Arroyo Seco and Arroyo Mocho to support California red-legged frog and future central California coast steelhead habitat.
- Surveys for San Joaquin spearscale and protection of extant populations.
- Surveys for Congdon's tarplant and protection of extant populations.
- Protection of vernal pool habitat.

Of these conservation priorities the only one applying to the potential sites for rezoning is the protection of burrowing owl habitat. There is no mixed willow riparian scrub in the vicinity of any of the Sites. All streams in the vicinity of the Sites are currently inaccessible to steelhead. Should downstream migratory barriers be removed in the future, Arroyo Mocho supports potential migratory habitat for the species but Arroyo del Valle does not (EACCS, 2010). Housing construction under the Housing Element would be required to be protective of riparian corridors and water quality, thereby minimizing future impacts to steelhead habitat. Because of these requirements protective of steelhead habitat and the fact that this species is not currently present within the Planning Area, it is not considered in the impacts analysis. As noted earlier in the environmental setting, there is no habitat available for San Joaquin spearscale or Congdon's tarplant at any of the housing sites. Finally, there is no vernal pool habitat at any of the potential sites for rezoning.

Impacts and Mitigation Measures

Significance Criteria

The following thresholds of significance are based on Appendix G of the CEQA *Guidelines*; the proposed project would have a significant impact if it were to:

- 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 CDFG or the USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFG or USFWS;
- 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;
- Substantially interfere 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Approach to Analysis

Data used for this analysis include the City of Pleasanton's General Plan and EIR, Municipal Code, aerial photographs, field visits, and the CNDDB database.

A list of special-status species that have the potential to occur in the Planning Area, due to the presence of basic habitat types that they inhabit was prepared. Species were designated as having a "low potential" for occurrence if: (1) their known current distribution or range is outside of the study area, (2) only limited or marginally suitable habitat is present within the study area, (3) their specific habitat requirements (e.g., serpentine grasslands, as opposed to grasslands occurring on other soils) are not present, or (4) they are presumed, based on the best scientific information available, to be extirpated from the study area or region. A species is designated as having a "moderate potential" for occurrence if there is low to moderate quality suitable habitat within the study area or immediately adjacent areas. A species would be designated as having a "high potential" for occurrence if (1) moderate to high quality habitat is present within the study area, and (2) the study area is within the known range of the species.

Based on existing site conditions and the established significance criteria, development facilitated by the proposed project has the potential to adversely impact special-status species, riparian corridors and wetlands, and heritage trees. General Plan goals and policies would generally contribute to avoiding and minimizing biological resources impacts within the Planning Area.

Impacts and Mitigation Measures

Impact 4.C-1: Development facilitated by the General Plan Amendment and rezonings could potentially have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG, or the USFWS. (Significant)

Housing Element

As discussed in Chapter 3, Project Description, residential development on the potential sites for rezoning could be facilitated by the adoption of the proposed Housing Element. As indicated by a review of the California Natural Diversity Database (CNDDB), summarized in Table 4.C-1, most special-status species associated with the Pleasanton area are unlikely to occur on the potential sites for rezoning. Many of the potential sites for rezoning provide habitat for nothing more than common urban wildlife and birds as they are currently developed and/or surrounded by existing residential or industrial development. Most documented special-status species occurrences are concentrated outside the City limits and none are known to occur within the potential sites for rezoning, most of which are already developed or disturbed and are unlikely to support significant vegetation or other habitat for special-status species. Figure 4.C-1 shows the proximity between the various housing sites and CNDDB documented special-status species occurrences. Several special-status species are of high concern in the city, even though they have low potential to occur within or adjacent to the sites. These are summarized below.

Amphibians

Construction on the potential sites for rezoning will not impact California red-legged frog and California tiger salamander. Grasslands representing potential upland aestivation habitat for California red-legged frogs and California tiger salamanders are present on the sites adjacent to Arroyo del Valle: Sites 8 (Auf de Maur/ Richenback) and 6 (Irby-Kaplan-Zia). In addition, the EACCS (ICF International, 2010) habitat modeling for California red-legged frog and California tiger salamander show potential upland dispersal and aestivation habitat for both species at Site 7. However, all grassland at these sites is disked on a regular basis and there are few small mammal burrows present to provide aestivation habitat for special-status amphibians. As described in the Environmental Setting, grasslands at Site 20 (Sunol Blvd. and Sycamore Rd.) are not expected to be utilized by CTS or CRLF due to the lack of suitable aquatic habitat adjacent to the site. Therefore special-status amphibians are not expected to occur at these sites.

Birds and Bats

Increases in noise and activity resulting from development facilitated by the proposed project may directly correlate to a rise in ambient noise levels and could cause nest abandonment and death of young or loss of reproductive potential at active nests located in the Project Area. However, since the Project Area is already developed and constitutes the CEQA baseline, and ambient noise levels are already fairly high relative to natural situations, it is unlikely that the new noise in the area would represent a significant increase. Therefore, the impacts of noise on migrating and breeding special-status birds, such as Cooper's hawk, and other special-status species would be less than significant. Scientific research has also shown that artificial lighting can significantly impact bird and bat behavior, potentially resulting in increased mortality. Increased lighting can influence normal activity (such as singing behaviors and foraging) and cause increased predation due to greater visibility of individual birds and bats (Longcore and Rich, 2004). Birds may nest greater distances away from lit areas to avoid predation, or some species may nest nearer to lights to prevent predation from owls (Longcore and Rich, 2004). Bird mortality due to lighting is greatest in migrating songbirds and shorebirds, which are often attracted to lit areas where they can collide with objects such as buildings, power lines, communication towers, and other large, man-made structures (Dewey and Campbell, 2000). Bats often prefer to feed on moths attracted to street lights, but not all species are able to exploit this resource equally, and night lights can alter natural competition for prey among bat species (Loncore and Rich, 2004). Lighting potentially required for the Planning Area could thus potentially impact bats and birds. However, streetlights and large, lit parking areas already exist within the Planning Area and in and around the proposed housing sites; therefore, birds and bats are already adjusted to a relatively high degree of artificial lighting and a significant increase in night lighting resulting from these relatively small, new pockets of development is not expected.

There is potentially suitable breeding and foraging habitat for Cooper's hawk at Sites 9, 10, and 13 along Arroyo Mocho, Sites 6, 8, and 21 along Arroyo del Valle, and at Site 20, along a remnant reach of Sycamore Creek Occurrences of Western burrowing owl are also documented in the CNDDB within the General Plan boundary. Potentially suitable grassland habitat required for Western burrowing owl is present at Site 6 (Irby-Kaplan-Zia), Site 7 (Pleasanton Gateway), and Site 8 (Auf de Maur/ Richenback) but is disked on a regular basis, precluding establishment of ground squirrel complexes used by burrowing owl for shelter and nesting. As an added precaution, however, the existing development approval for Site 7 (Pleasanton Gateway) includes a requirement for pre-construction surveys for active burrowing owl nest sites. Grassland habitat at Site 18 (Downtown SF site) is mowed and ground squirrels are present so this site may support burrowing owl. Grassland habitat at Site 20 (Sunol Blvd. and Sycamore Rd.) does not appear to be disked and may also support burrowing owl. Pallid bat has been documented within 0.3 miles from Site 3 (Stoneridge Shopping Center) and Site 4 (Kaiser), which propose to construct 210 and 183 units, respectively. While there is no suitable roosting or foraging habitat for pallid bat at these two sites, the species could potentially occur at other sites along riparian corridors (Sites 6, 8, 9, 10, 13, 20, and 21).

The removal of any trees or other vegetation associated with development under the Housing Element could result in direct losses of nesting habitat, nests, eggs, nestlings, or roosting special-status bats and demolition of unused or underutilized buildings could also impact bats through loss of habitat or by direct mortality. Such impacts on special-status birds and bats would be considered significant. These impacts would be avoided or mitigated at less-than-significant levels through the implementation of **Mitigation Measures 4.C-1a though 4.C-1d**.

Mitigation Measure 4.C-1a: Pre-construction Breeding Bird Surveys. The City shall ensure that prior to development of all potential sites for rezoning (Sites 1-4, 6-11, 13, 14, and 16-21) and each phase of project activities that have the potential to result in impacts

on breeding birds, the project applicant shall take the following steps to avoid direct losses of nests, eggs, and nestlings and indirect impacts to avian breeding success:

- If grading or construction activities occur only during the non-breeding season, between August 31 and February 1, no surveys will be required.
- Pruning and removal of trees and other vegetation, including grading of grasslands, should occur whenever feasible, outside the breeding season (February 1 through August 31).
- During the breeding bird season (February 1 through August 31) a qualified biologist will survey activity sites for nesting raptors and passerine birds not more than 14 days prior to any ground-disturbing activity or vegetation removal. Surveys will include all line-of-sight trees within 500 feet (for raptors) and all vegetation (including bare ground) within 250 feet for all other species.
- Based on the results of the surveys, avoidance procedures will be adopted, if necessary, on a case-by-case basis. These may include construction buffer areas (up to several hundred feet in the case of raptors) or seasonal avoidance.
- Bird nests initiated during construction are presumed to be unaffected, and no buffer would necessary except to avoid direct destruction of a nest or mortality of nestlings.
- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by nesting or other special-status birds may be pruned or removed.

Mitigation Measure 4.C-1b: Pre-Construction Bat Surveys. Conditions of approval for building and grading permits issued for demolition and construction on Sites 6, 8, 9, 10, 13, 20, and 21 shall include a requirement for pre-construction special-status bat surveys when large trees are to be removed or underutilized or vacant buildings are to be demolished. If active day or night roosts are found, the bat biologist shall take actions to make such roosts unsuitable habitat prior to tree removal or building demolition. A no-disturbance buffer of 100 feet shall be created around active bat roosts being used for maternity or hibernation purposes. Bat roosts initiated during construction are presumed to be unaffected, and no buffer would necessary.

Mitigation Measure 4.C-1c: Burrowing Owl Surveys. Conditions of approval for building and grading permits at Site 18 (Downtown SF site) and Site 20 (Sunol Blvd. and Sycamore Road)shall require the Project Applicant to implement the following measures prior to construction initiation.

• A qualified biologist¹² shall conduct a combined Phase I and Phase II burrowing owl habitat assessment and burrow survey according to accepted guidelines developed by the Burrowing Owl Consortium and accepted by CDFG. If suitable habitat, i.e. grasslands with short cover and burrows of a size usable by owls and/or owl sign, is not present at a site then the qualified biologist shall prepare a written report to be submitted to CDFG stating the reasons why the site is not considered to be burrowing owl habitat and no further surveys or mitigation are necessary.

¹² A qualified biologist shall have at least a bachelor's degree in a field related to wildlife ecology and shall be familiar with life history and habitats of target species for any pre-construction surveys.

- If the Phase I and II surveys find that suitable habitat and burrows are present at a site the qualified biologist will conduct Phase III surveys to determine presence or absence of burrowing owls. A minimum of four surveys will be conducted during the breeding season (April 15 to July 15). If owls are not observed then a minimum of four surveys will be conducted during the wintering season. If owls are not observed during either Phase III survey then no further mitigation is generally required, although CDFG may require pre-construction surveys. In either case a Phase IV survey report shall be prepared and submitted to CDFG.
- If required, pre-construction surveys for burrowing owl shall be conducted as follows:
 - A qualified biologist shall conduct a pre-construction survey for burrowing owl if construction occurs during the breeding season (February 1 through August 31). Surveyors shall walk transects no more than 100 feet apart to attain 100 percent visual coverage of all grassland habitats within the project site. Where possible, agricultural or grassland habitats within 300 feet of the project site shall also be surveyed. If owls are not detected during this survey, project work can move forward as proposed.
 - If owls are detected during this survey, no project activities shall occur within 250 feet of occupied burrows until the breeding season is over, unless owls have not begun laying eggs or juveniles are capable of independent survival.
 - If project activities will occur during the non-breeding season (September 1 through January 31), a second pre-construction survey shall be conducted for burrowing owl to document wintering owls that have migrated to the project site, as well as breeding owls that may have left the project site. If owls are not detected during this survey, project work can move forward as proposed.
 - If occupied burrows are detected during this survey and can be avoided, project activities shall not occur within 160 feet of occupied burrows.
 - If occupied burrows cannot be avoided, one-way doors shall be installed to passively relocate burrowing owls away from active work areas. Two natural burrows or one artificial burrow shall be provided in adjacent grassland habitat for each one-way door installed in an active burrow. One-way doors shall remain in place for 48 hours. The project site shall be monitored daily for up to one week to ensure owls have moved to replacement burrows.
 - Once unoccupied, burrows shall be excavated by hand and backfilled to prevent owl occupation. When feasible, other unoccupied burrows in ground disturbance area should also be excavated by hand and backfilled. Depending on the California red-legged frog and California tiger salamander Habitat Assessment results the project site may require a pre-construction survey for these species as well before burrows can be collapsed.

Mitigation Measure 4.C-1d: Compensatory mitigation for annual grassland habitat providing potentially suitable habitat for burrowing owl. Annual grasslands at the Site 18 may provide foraging, nesting, or wintering habitat for burrowing owl. If burrowing owls are found to be absent through the surveys prescribed above, then consistent with standard CDFG mitigations standards and ratios, annual grassland habitat at Sites 18 and Site 20 shall be compensated for at a ratio of 1:1. If burrowing owl are found to be occupying Site 18 or 20, then compensatory mitigation shall be required at a ratio of 3:1, acres replaced to acres lost. The project applicant may fulfill this obligation by purchasing annual grassland property suitable for, or occupied by, burrowing owl. Such land shall be protected in perpetuity through an endowed conservation easement. Alternatively, the project applicant may purchase credits in an approved mitigation bank for burrowing owl.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to nonresidential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect biological resources including candidate, sensitive, or specialstatus species or their habitat, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. For the most part, future projects that may occur as a result of implementing the Draft CAP measures would be located within the more urbanized portions of the city that do not support habitat for the important wildlife species. In addition to potential indirect impacts, the CAP achieves GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and to retrofit older buildings to be energy efficient. These measures will not result in physical alterations of land that could affect biological resources. Thus, implementation of the CAP would have a less than significant impact on candidate, sensitive, or special-status species or their habitat.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.C-2: Development facilitated by the General Plan Amendment and rezonings could potentially adversely affect wetlands, streams, or riparian habitat. (Significant)

Housing Element

No formal wetland delineation has been carried out in support of the proposed Housing Element since there are no wetlands or other waters present on any of the potential sites for rezoning. However, Arroyo Mocho, Tassajara Creek and Arroyo del Valle run through the Planning Area and the following potential sites for rezoning are adjacent to these watercourses: Site 6 (Irby-Kaplan-Zia), which proposes to construct 180 units; Site 8 (Auf de Maur/ Richenback), which proposes to construct 159 units; and Site 21(4202 Stanley), which proposes to construct 41 units, are adjacent to Arroyo del Valle. Site 6 (Irby-Kaplan-Zia) and Site 21 (4202 Stanley) include a portion of the Arroyo del Valle riparian corridor with a Wildlands Overlay land use designation. Site 13 (CM Capital Properties), which proposes to construct 378 units is adjacent to Arroyo Mocho; and Site 10 (CarrAmerica), which proposes to construct 52 units, and Site 9 (Nearon Site), which proposes to construct 168 units, are adjacent to Tassajara Creek. Site 20 (Sunol Blvd. and Sycamore Rd.), which proposes to construct 53 units, is adjacent to the historical channel of Sycamore Creek (Sowers and Richard, 2003). There is no documentation of seasonal wetlands at any of the undeveloped sites (Sites 6, 7, 8, 18, 19, and 20) and no evidence of wetlands was observed during site surveys conducted by an ESA biologist in July 2011 or through a review of

current or historical aerials. There may be wetlands present within the historical channel of Sycamore Creek, which forms the northern boundary of Site 20, and this channel may occasionally carry ephemeral flows. However, direct impacts to any wetlands within the historical Sycamore Creek channel and the Arroyo del Valle riparian corridor at Sites 6 and 21 will be avoided through the implementation of the riparian setbacks specified in **Mitigation Measure 4.C-2** below. Therefore, there will be no direct impacts on wetlands, other waters, or riparian habitat as a result of development facilitated by the Housing Element.

Potential significant impacts resulting from construction of the potential sites for rezoning include, but are not limited to, degradation of water quality and aquatic habitat; degradation of wetland habitat; and accidental discharge of sediment or toxic materials into wetlands.¹³ Projects that may indirectly impact wetlands or streams within the Planning Area would be required to comply with the City's General Plan policies. As discussed above under Regulatory Setting, the Conservation and Open Space Element and the Water Element of the General Plan include specific policies and programs intended to protect riparian and wetland resource areas. Adherence to these policies would provide protection for identified riparian habitat. As noted in Section 4.H Hydrology and Water Quality site plans, design, and BMPs for the potential sites for rezoning would be required to demonstrate proper compliance with applicable water quality regulations as project proponents apply for development permits and the applicable NPDES permits. Compliance will be ensured by the City and/or the San Francisco Bay RWQCB through their review and approval of applicable permits, and would insure that new development or redevelopment would not substantially worsen existing water quality. Development proposals, including grading and drainage plans will be reviewed by the City's Engineering Division of the Community Development Department for compliance with city ordinance codes regarding flooding and drainage. As specific residential development projects are proposed, these projects will require implementation of construction and design level measures to avoid and minimize potential impacts related to water quality.

Properties identified for development under the proposed Housing Element that are adjacent to creeks may contain mature and/or native trees that are part of the riparian corridor and that could serve as habitat for special-status species or other species of concern. Implementation of **Mitigation Measure 4.C-2** would require identification of a development setback in the riparian area to protect streams and any potential special species habitat within these riparian corridors from impacts.

Mitigation Measure 4.C-2: Riparian and Wetland Setbacks. Consistent with the Alameda County Watercourse Protection Ordinance, no new grading or development at Sites 6, 8, 9, 10, 13, 20, or 21 shall be allowed within 20 feet of the edge of riparian vegetation or top of bank, whichever is further from the creek centerline, as delineated by a qualified, City-approved biologist.

¹³ For hydrology and water quality specific avoidance measures in the form of local plans and General Plan Policies please refer to Section 4.H, Hydrology and Water Quality of this SEIR.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect biological resources, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. The Draft CAP proposes strategies and measures that would aid in reducing the City's emission of GHGs, and, thus, would not directly lead to development that would affect riparian areas or wetlands. To the extent that the Draft CAP achieves GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, retrofit older buildings to be energy efficient, implementation of the CAP would have a less than significant impact on riparian areas and wetlands.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.C-3: Development facilitated by the General Plan Amendment and rezonings could potentially interfere 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. (Significant)

Housing Element

While most of the Planning Area is developed and lacks habitat value, Arroyo Mocho, Tassajara Creek, and Arroyo del Valle, as well as smaller creeks, and landscaped areas within the vicinity, provide wildlife corridors for fish, waterfowl, other birds, bats, and mammals. Development facilitated under the Housing Element, is not anticipated to substantially modify established migration or dispersal corridors; however because some projects would be located near arroyos, impacts as a result of these projects may occur.

Impacts on the habitat of special-status species potentially present within the Planning Area would be avoided or mitigated to less-than-significant levels with the implementation of **Mitigation Measures 4.C-1a through 4.C-1d**. Impacts on the riparian corridors would be avoided or mitigated to less-than-significant levels with the implementation of **Mitigation Measure 4.C-2**. In addition, any new developments shall adhere to the following goals, policies and implementation programs within the General Plan aimed at protecting the movement of wildlife within corridors including: Conservation and Open Space Element Goal 2, Policy 1, Program 1.12; Policy 2, Program 2.1 and 2.2; Policy 3; Goal 5, Program 6.2, 6.3 and 6.7; and the Water Element Goal 2, Policy 2. With the mitigation measures outlined in this SEIR and the General plan policies protective of natural resources and already evaluated in the General Plan EIR, potential impacts on wildlife migratory corridors and native wildlife nursery sites will be less than significant.

Mitigation: Implement Mitigation Measures 4.C-1a through 4.C-1d and 4.C-2, described above.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to nonresidential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect the movement of any native resident or migratory fish or wildlife species, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. The Draft CAP also proposes strategies and measures that would aid in reducing the City's emission of GHGs (e.g., encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, retrofit older buildings to be energy efficient), but would not lead to physical changes that would affect the movement of any native resident or migratory fish or wildlife species. Achievement of GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient would therefore have a less than significant impact on the movement of any native resident or migratory fish or wildlife species.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.C-4: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant)

Housing Element

Future residential development on the potential sites for rezoning could include development on parcels within Pleasanton that support Heritage trees.

"Heritage tree" means any of the following:

- 1. Any single-trunked tree with a circumference of 55 inches or more measured four and one-half feet above ground level;
- 2. Any multi-trunked tree of which the two largest trunks have a circumference of 55 inches or more measured four and one-half feet above ground level;
- 3. Any tree 35 feet or more in height;
- 4. Any tree of particular historical significance specifically designated by official action;
- 5. A stand of trees, the nature of which makes each dependent upon the other for survival or the area's natural beauty.

Construction of some of the new units could occur in locations where Heritage trees could be adversely affected, through damage to root zones or tree canopy, or outright removal. Chapter 17.16 of the *Pleasanton Municipal Code* outlines the City's Tree Preservation Ordinance, which protects heritage trees, considered important resources by the City. It is the City's policy to preserve heritage trees, whenever possible. However, when circumstances do not allow for retention, the City requires permits to remove trees that are within its jurisdiction. The City's Municipal Code requires mitigation for the removal of trees as a result of new development, including replacement with new trees and payment to the City's Urban Forestry Fund. In addition, removal of, or construction around, trees that are protected by the heritage tree ordinance requires permission and inspection by the Director of Public Works and Utilities or the Director's designated representative.

This ordinance provides adequate protection for Heritage trees in the City of Pleasanton, and required compliance with it would avoid significant impacts to these trees that could result from new development facilitated by the Housing Element. As impacts would be less than significant with required adherence to the Tree Preservation Ordinance, mitigation would not be required.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect Heritage trees, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. The Draft CAP also proposes strategies and measures that would aid in reducing the City's emission of GHGs (e.g., encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, retrofit older buildings to be energy efficient), but not lead to physical modifications to the environment that could conflict with the City's Tree Preservation Ordinance. Achievement of GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient in mind, and retrofit older buildings to be energy efficient would, therefore, have a less than significant impact on the removal of trees.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.C-5: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. (Less than Significant)

Housing Element

Because none of the development facilitated by the proposed Housing Element on the potential sites for rezoning is within any habitat conservation or natural community conservation plan, no conflict with any habitat conservation or natural community conservation plan will result.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. As noted above, none of the sites proposed for rezoning are within any habitat conservation or natural community conservation plan, and no impact will result. In addition, the CAP proposes strategies and measures that would aid in reducing the City's emission of GHGs (e.g., encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient) that would not result in any physical modifications with any habitat conservation or natural community conservations plan as the Planning Area is not managed by a habitat conservation or natural community conservation plan.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

This analysis evaluates whether the impacts of development facilitated by the proposed Housing Element on the potential sites for rezoning and upon which the Climate Action Plan relies, together with the impacts of cumulative development, would result in a cumulatively significant impact on special-status species, wetlands and other waters of the U.S., or other biological resources protected by federal, state, or local regulations or policies (based on the significance criteria and thresholds presented earlier). This analysis then considers whether the incremental contribution of the Housing Element to this cumulative impact would be considerable. Both conditions must apply in order for a project's cumulative effects to rise to the level of significance.

Impact 4.C-6: Development facilitated by the General Plan Amendment and rezonings, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, could potentially have a cumulatively considerable impact on biological resources. (Less than Significant)

The geographic context for analysis of cumulative impacts to biological resources encompasses not only the potential sites for rezoning as identified in this EIR, but sites with existing residential zoning already analyzed in the City of Pleasanton General Plan and surrounding developed areas, as well as biologically linked (e.g., by bird movement) and ecologically similar areas throughout the City of Pleasanton and within a five mile radius of a potential site for rezoning.

Past projects, including the development of, residences, commercial and industrial areas, and infrastructure, have resulted in the conversion of much of the area's natural habitat to an urban setting, and has already caused substantial adverse cumulative changes to biological resources in Pleasanton and the Tri-Valley area. For example, many of the potential sites for rezoning have been converted from their original habitat types to residential or commercial development in the past. Those that remain undeveloped have undergone a variety of uses, such as grazing or agriculture, that have also led to a nearly complete loss of the original habitat types and many of the species that once occurred there.

Buildout of Pleasanton and surrounding cities, would include infill development or renovation of existing facilities. These types of projects are expected to have primarily temporary construction-related impacts on biological resources and are not expected to result in the conversion or removal of more than minor areas of existing habitat for plants and wildlife. These projects, when combined with past projects and proposed development under the proposed Housing Element, can be considered to have a cumulatively significant impact on biological resources as witnessed by the reduction of natural habitat and diversity of species throughout the Tri-Valley area.

Environmentally protective laws and regulations have been applied with increasing rigor since the early 1970s. These include the California Endangered Species Act, federal Endangered Species Act, and the Clean Water Act, as described under "Regulatory Framework," above. The project and other likely future projects within the vicinity of the project area would be required to comply with local, State, and federal laws and policies, and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Additionally, future projects within the cumulative geographic context described above but not covered under the General Plan would be required to demonstrate that they would not have significant effects on these biological resources, although it is possible that some projects may be approved even though they would have significant, unavoidable impacts on biological resources. These regulatory requirements should serve, in many cases, to reduce future contributions to cumulative impacts on biological resources in the project area.

The current impact analysis has shown that development of the potential sites for rezoning, within the context of General Plan policies protective of biological resources and after mitigation, would result in less-than-significant impacts on biological resources within and in the vicinity of the project sites. When considered relative to the existing state of biological resources in the

Pleasanton area, the project would add only a minor, incremental contribution to the cumulative impacts biological addressed in the City's General Plan EIR. In terms of habitat loss, development of the potential sites for rezoning would result in a minor loss of already degraded habitats, that, while they may provide relatively marginal habitat for wildlife, would not be considered integral to the survival and persistence of wildlife, whether special-status or common species, throughout the Tri-Valley area.

Further, implementation of the goals, policies and programs outlined in the General Plan would help to avoid, minimize, or mitigate impacts on natural resources so as to have no net loss of resources. Because of this, the contribution of development enabled by the proposed residential development on the potential sites for rezoning to regional reductions of natural habitat would not be cumulatively considerable. Compliance with the General Plan policies and with existing federal and State regulations would ensure that the Planning Area's cumulative contribution to the regional loss of special-status and sensitive plant and wildlife species and their habitats would not be cumulatively considerable and would be less than significant.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's emission of GHGs, and, thus, would not directly lead to development that would conflict have a cumulative effect on biological resources. To the extent that the Draft CAP achieves GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient, implementation of the CAP would have a less than significant impact on biological resources.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Biological Resources

- Alameda Creek Alliance (ACA), *Historic Hatching of Trout in Alameda Creek Tributary*, press release. May 2, 2008.
- California Native Plant Society (CNPS). 2011. Inventory of Rare and endangered Plants for the Dublin and Livermore USGS 7.5-minute topographic quadrangles. Available online at: <u>http://www.cnps.org/inventory</u>. Site accessed 2011 June 01.
- California Natural Diversity Data Base (CNDDB). Rarefind version 3.1.0 query of the Dublin and Livermore USGS 7.5-minute topographic quadrangles. Commercial version, May 3, 2011.
- California Wilderness Coalition. 2000. *Missing Linkages: Restoring Connectivity to the California Landscape*. November. Available online at http://www.calwild.org/linkages/index.html. Accessed on 26 May 2011.

General Plan Amendment and Rezonings Draft Supplement EIR

- City of Pleasanton, 2009a. *Pleasanton General Plan 2005-2025 Final Environmental Impact Report*, April 2009.
- City of Pleasanton, 2009b. Pleasanton General Plan 2005-2025, adopted July 21, 2009.
- City of Pleasanton, Municipal Code, Chapter 17.16 Tree Preservation,
- http://qcode.us/codes/pleasanton/view.php?topic=17-17_16&showAll=1&frames=on, accessed on May 24, 2011.
- Dewey, B.M., and Campbell, A.R., 2000, Lighting and Avian Mortality: A Literature Review, memorandum dated August 26th, 2000.
- ICF International. 2010. East Alameda County Conservation Strategy. Final Draft. October. San Jose, CA. Prepared for: East Alameda County Conservation Strategy Steering Committee, Livermore, CA, [http://eastalco-conservation.org/documents.html]. Jennings, M.R. and M.P. Hayes. Amphibian and Reptile Species of Special Concern in California. The California Dept. of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA. 1994.

Longcore, T. and Rich, C., *Ecological Light Pollution*. Front Ecol Environ, 2004. 2(4): 191-198.

- Sowers, J., Richard, C.M., Creek and Watershed Map of the Pleasanton and Dublin Area, Oakland Museum of California; Oakland, California, 2003, http://museumca.org/creeks/MapPls.html. Accessed September 21, 2011.
- U.S. Fish and Wildlife Service (USFWS), Federal Endangered and Threatened Species in the Dublin and Livermore USGS 7.5-minute topographic quadrangles, online database available at: www.fws.gov/sacramento/es/spp_lists/auto_list_form.cfm, dated June 1, 2011.

4.D Cultural Resources

This section addresses cultural resources, which are defined as prehistoric and historic sites, structures, and districts, or any other physical evidence associated with human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason. The evaluation focuses on the physical changes resulting from proposed residential development of the potential sites for General Plan land use designation revisions and rezoning. Impacts associated with these sites represent the part of the project that would alter the physical environment over and above what has already been identified and analyzed in the General Plan EIR.

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euro American occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

Historic resources are standing structures of historic or aesthetic significance that are generally 50 years of age or older (i.e., anything built in the year 1955 or before). In California, historic resources considered for protection tend to focus on architectural sites dating from the Spanish Period (1529-1822) through the early years of the Depression (1929-1930).

Contemporary Native American resources, also called ethnographic resources, can include archaeological resources, rock art, and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values.

Setting information in this section analysis primarily relies on information provided in the City of Pleasanton General Plan EIR (2009). Since this SEIR will serve as the only environmental documentation for the potential sites for rezoning identified in Table 3-3, in Chapter 3, Project Description, the analysis in this section focuses on those sites. Other residentially zoned sites that are identified in the Project Description as sites where housing will be developed under the proposed Housing Element will require subsequent environmental review and any impacts related to cultural impacts at those sites will be identified as part of those environmental review processes.

D. Cultural Resources

Setting

Prehistoric Setting

The city is situated in the area that was inhabited by the Ohlone Tribe. The eastern shore of San Francisco Bay in today's Alameda County was, at the time of Spanish contact, an area that was home to a number of different linguistic and cultural groups. Exact tribal boundaries have been difficult to reconstruct, although Milliken's (1995) analysis, based on linguistics and Mission records, appears to be the most well-informed.¹

Pleasanton is located within what was probably the ethnographic territory of the Chochenyo tribelet, which appears to have been centered in the Livermore Valley. This group apparently spoke one of the separate languages of the Costanoan language family.² This is a linguistic term derived from the Spanish word costaños or "coast people." No single native name was used by Costanoan speakers since they were not a unified political or cultural entity.³ The descendants of Costanoan-speakers today generally prefer the name Ohlone.

Within this broad linguistic group were a number of specific tribelets, which were relatively autonomous small tribes, with defined territories. They were composed of intermarried families, who cooperated in ceremonial and economic pursuits. Tribelets included permanently inhabited villages and a larger number of seasonal camps, with total territory often no more than eight to twelve miles across.⁴ Tribelet populations varied by ecological zone, but in the most densely populated areas of the South and North Bays were as many as six people per square mile.⁵ Tribelets may have averaged no more than about 200 persons. It is likely that the size of these groups contributed to the rapid loss of their cultural identity and, sometimes, physical extinction after Spanish missionization.

Tribelets were generally headed by male leaders, often with considerable power, although the degree of influence exercised may have varied by group. Women may have sometimes inherited leadership positions.⁶ Although there is little specific information available, we do know Costanoan/Ohlone speaking people of the San Francisco Bay region were successful intensive food collectors and hunters who utilized a range of resources in a favorable environment. In the vicinity of Pleasanton and other interior areas, the local people gathered plant foods that were in plentiful variety on a seasonal basis with acorns being the most important staple food, since they could be stored in quantity. The native people also gathered and ate numerous foods, such as seeds, tubers, and greens. Deer, elk, and antelope were the major game hunted, while rabbits and other small animals, game birds, waterfowl, and fish were also important.

¹ Milliken, R. A Time of Little Choice: The Disintegration of the Tribal Culture in the San Francisco Bay Area,

^{1769-1810.} Novato, CA: Ballena Press Anthropological Papers No. 43; Thomas C. Blackburn, series ed. 1994. *Ibid.*

³ Levy, R. Costanoan. Pages 485-495 in R. F. Heizer (ed.), Handbook of North American Indians. Volume 8. California. Smithsonian Institution. Washington, D.C. 1978.

⁴ Milliken, 1995.

⁵ *Ibid.*

⁶ Levy, 1978; Milliken, 1995.

Material culture, while relatively simple technologically, was sufficient for their needs. Stone, bone, and shell tools and ornaments were manufactured and the fiber crafts, especially basketry, were well developed. Costanoan/Ohlone speaking people built several types of structures, including a domed thatched dwelling, and obtained items that were not locally available through trade.⁷ These included obsidian for tools and foodstuffs.⁸

Historic Context

The Frontier Era

The Frontier Era began with the settlement of Hispanic and other Euro-American peoples. The Franciscan order of the Roman Catholic Church founded 21 missions between 1769 and 1822, supported by a relatively small military force with the Mission San Jose being the closest to Pleasanton. The Franciscans established these missions for the religious conversion of native peoples to Catholicism. The Franciscan order faced an increasing challenge to its control over California land resources and converted Native Americans after Mexican Independence in 1821. The mission system remained intact through 1834 amid substantial political and religious controversy. After that time, the Mexicans secularized the missions and phased out Franciscan control.

The Pioneer Era in Pleasanton

The Mexican-American War (1846-1848) ended with the conquest and occupation of California by the United States. The subsequent discovery of gold in the Mother Lode region of the Sierra Nevada accelerated population growth in California. The gold rush and the long-term success of mining encouraged the development of ranching, farming, trade and urban growth, beginning a cycle of development that has caused California's population to increase every decade at a higher rate than the national increase.

In Pleasanton, Augustin Bernal began the first European settlement in Pleasanton in 1850. The adobe house he built along Foothill Road still exists. Pleasanton was gradually transformed from a stagecoach stop in the 1850s to a homesteading settlement along the transcontinental railroad in the 1870s, to a thriving agricultural center for the production of grain, hay, and hops, well into the twentieth century. The City of Pleasanton was incorporated in 1894 and by 1900 had become home to the Bank of Pleasanton, Pleasanton Hop Company, Ruby Hill Vineyard, and three hotels. Beginning in the early 1900s, Henry Kaiser and others began quarrying the sand-and-gravel deposits, an industry still important to the region's economy.⁹

Cultural and Historic Resources/Sites

Cultural and historic resource sites are located throughout the city. Resources include prehistoric Native American archaeological resources and historic structures and neighborhoods. These

⁷ Ibid.

⁸ Davis, James T. Trade Routes and Economic Exchange Among the Indians of California. University of California Archaeological Survey Reports 54:1-71. Berkeley, 1961.

⁹ City of Pleasanton, General Plan 2005-2025, July 2009.

resources are summarized below and listed in **Table 4.D-1**. Figure 4.D-1 indicates the location of these structures.

Historic Site Number	Location	Name
1	220 East Angela Street	Home
2	248-262 West Angela Street	Building
3	219 Division Street	Pridemore Dentistry
4	386 Division Street	Home
5	624 Division Street	Home
6	Downtown	Commercial Neighborhood
7	First / Second / Third Streets	Residential Neighborhood
8	3988 First Street	Home
9	4432 First Street	Shamblin Home
10	4362 Second Street	Original School Building
11	4376 Second Street	Original Train Station
12	4397 Second Street	Joseph Arendt Home
13	4466 Second Street	Bessie Stover Wells Home & First City Telephone Pole
14	4467 Second Street	Home
15	4512 Second Street	Donahue Home
16	4636 Second Street	Zwissler Home
17	4672 Second Street	Charles Bruce Home
18	4698 Second Street	Home
19	4547 Third Street	A. Georgis Home
20	252 Main Street	Antiques Building
21	288 Main Street	Gay 90's Pizza Parlor
22	301 Main Street	Veterans Memorial Building
23	401 Main Street	Coffee Beans and Bistro Building
24	405 Main Street	Pastas Cafe Building
25	443 Main Street	Restaurant Building
26	450 Main Street	First Mercantile Store
27	459 Main Street	Pleasanton Antiques Building
28	465 Main Street	Johnson Building
29	500 Main Street	Arendt Building
30	511 Main Street	Pastime Pool Building
31	514 Main Street	Dentistry Building
32	515 Main Street	Pleasanton Jewelers Building
33	520 Main Street	Garden Court Antiques Building
34	521 Main Street	Fenders Cafe Building
35	525 Main Street	Bicycles! Pleasanton Building
36	531 Main Street	Antiques Building
37	560 Main Street	Commercial Building
38	600 Main Street	Original Kolln Hardware Building
39	601 Main Street	
40	603 Main Street	Original Town Hall (Livermore-Amador Valley Historical Museum)
41		Calipso's Building
42		Dean's Care Building
43	620 Main Street	Jerome Arenat Building
44	622 Main Street	Lack Room Building
45	DOD IVIAIN STIEET	Uninstensen's Building

TABLE 4.D-1 DOWNTOWN HISTORIC STRUCTURES AND NEIGHBORHOODS

TABLE 4.D-1 DOWNTOWN HISTORIC STRUCTURES AND NEIGHBORHOODS

Historic		
Site	Location	Namo
Number	Location	Name
46	649 Main Street	Strizzi's Restaurant
47	690 Main Street	New York Pizza Building
48	700 Main Street	Former Pleasanton First National Bank
49	706 Main Street	Amish Farm Furniture Building
50	707 Main Street	Coast Gasoline Station Site
51	722 Main Street	Fusion 3 Salonspa Building
52	728 Main Street	Pleasanton Liquors Building
53	800 Main Street	Gregory Frame Shoppe Building
54	824 Main Street	India Gate Building
55	828 Main Street	The Cheese Factory Building
56	855 Main Street	Pleasanton Hotel Site
57	30 Neal Street	Southern Pacific Railroad Station
58	62 Neal Street	Old Justice Court Building
59	100 Neal Street	Old Rectory
60	118 Neal Street	Amador Valley Baptist Church
61	122 Neal Street	Haps Restaurant
62	215 Neal Street	Bulford Hall Home
63	303 Neal Street	Benedict Home
64	4239 Pleasanton Ave.	Home (misaddressed as 4329 in source report)
65	4329 Railroad Avenue	Tom Pico Office Building
66	4417 Railroad Avenue	Contractors Fastener Building
67	4441 Railroad Avenue	Les Layer Home
68	4473 Railroad Avenue	Home
69	Ray Street/Spring Street	Neighborhood (Residential/Commercial)
70	200 Ray Street	Kottinger Barn
71	357 Ray Street	Home
72	339 Rose Avenue	American Legion Hall
73	469 Rose Avenue	Western Pacific Cafe & Salon
74	St. Mary Street and St. John Street	Residential Neighborhood
75	493 St. John Street	Home
76	648 St. John Street	Home
77	670 St. John Street	Home
78	692 St. John Street	Home
79	335 St. Mary Street	Retail Shop
80	336 St. Mary Street	Oddfellows Hall
81	431 St. Mary Street	Anton Peterson Home
82	443 St. Mary Street	Charles Graham Home
83	444 St. Mary Street	Apartment Building
84	462 St. Mary Street	Nerton Home
85	471 St. Mary Street	Home
86	565 St. Mary Street	Home
87	621 St. Mary Street	Magoffin Home
88	637 St. Mary Street	Hamilton Home
89	844 Division Street	Home (misaddressed as St. Mary Street in source report)
90	Little Stanley Boulevard	Residential Neighborhood
91	Alameda County Fairgrounds	Heathcote-MacKenzie House

SOURCE: Historic Resource Preservation Subcommittee of the Downtown Specific Plan Committee Final Recommendations Report, 2000.



SOURCE: Downtown Specific Plan Technical Supplement, August 2001; City of Pleasanton Department of Planning and Community Development - General Plan Amendment and Rezonings . 210016

Figure 4.D-1 Downtown Historic Neighborhoods and Structures

In addition to the historic resources in Downtown Pleasanton, other historic resources in the City include:

- Century House (2401 Santa Rita Road),
- Alviso Adobe (3465 Old Foothill Road),
- Joshua Neal home (431 Neal Street), and
- Heathcote-MacKenszie home (Alameda County Fairgrounds)

Prehistoric Resource Sites

A review of the City's cultural resources conducted by the Northwest Information Center found 24 recorded Native American archaeological resources and historic cultural resources listed with the Historical Resources Information System (City of Pleasanton, 2008). Native American archaeological sites that were identified range from large villages to small resource processing areas (e.g., for making acorn meal). These sites tend to be situated along ridges, on mid-slope benches, in valleys, and adjacent to intermittent and perennial watercourses. The city includes all of these environmental features. In addition, Pleasanton is situated atop a formerly extensive marsh and pond system. According to the Northwest Information Center's California Archaeological sites within the city (City of Pleasanton, 2008). These sites include a prehistoric camp or temporary village; a prehistoric occupation site with mortars, pestles, and arrowheads; two sites that contain chert tools and cranial fragments; and a historic farmhouse (City of Pleasanton, 2008). Due to the sensitive nature of some Native American sites present in the city, this EIR does not specifically provide their locations to protect the integrity of the resources. In addition, a Native American burial ground has been discovered at Site 7.

Prehistoric resources in the city include "lithic scatters" (remains from making arrowheads and other stone implements), campsites and villages, rock shelters, milling features, and burial sites. Many prehistoric villages also contain human remains. Historic sites and features that may exist in the area include graves and cemeteries, extant dwellings and outbuildings, structural remnants, ditches, canals, dams, fences, railroad grades, roadways, bridges, trails and trash deposits.

Historic Resource Sites

According to the records search conducted by the Northwest Information Center, there are two structures within the city that are listed on the National Register of Historic Places: the Heathcote- Mackenzie House and the Kottinger Adobe Barn. The Heathcote-Mackenzie House is located at 4501 Pleasanton Avenue (within the Alameda County Fairgrounds) and was constructed in approximately 1905.

For more than 75 years the Heathcote-Mackenzie house was the center of the historical horse racing activities in the Livermore-Amador Valley. The house is one of a few Craftsman style bungalows in the area (City of Pleasanton, 2008).

The Kottinger Adobe Barn is located at 200 Ray Street, and was constructed in approximately 1852. The Kottinger Barn was once owned by John W. Kottinger, one of the founders of

D. Cultural Resources

Pleasanton. Kottinger was known for his judicial activities as both Constable and Justice of the Peace. He also opened the first store in Pleasanton. During the 1850s and 60s, Kottinger's house and barn served as the center for Alameda County government. The barn is all that remains of the property. In the absence of public buildings, John W. Kottinger used the house and barn to perform his judicial duties as courthouse and jail respectively. It is one of few adobe barns in California and one of three adobe structures in the Pleasanton area (City of Pleasanton, 2008).

Further 14 properties (including the two on the National Register) are listed in the State Historic Properties Directory. Many of these structures are located in the Downtown area and date from the 19th and early 20th centuries. Table 4.D-1 lists historic structures and neighborhoods of Downtown and Figure 4.D-1 indicates their location. Outside of the Downtown area are the Alviso Adobe, which dates from 1844 and is located on the west side of Foothill Road, and the Century House at 2401 Santa Rita Road, which represents the architectural heritage of the Amador Valley. In 2002, the City adopted the Downtown Specific Plan which includes a section on Historic Preservation. It highlights five important structures on Main Street, including the:

- Johnston Building at 465 Main Street
- Original Kolln Hardware Store at 600 Main Street
- Pleasanton Arch Sign above Main Street near the original Town Hall
- Original Pleasanton Town Hall (now Livermore-Amador Valley Historical Museum) at 603 Main Street
- Pleasanton Hotel (formerly Farmer's Hotel) at 855 Main Street

The Downtown Specific Plan also identifies the following five heritage neighborhoods which are shown in Figure 4.D -1:

- Downtown Commercial Center
- First Street, Second Street, and Third Street (residential)
- "Little" Stanley Boulevard (south side, residential)
- Saint Mary Street and Saint John Street (residential)
- Spring Street and Ray Street (commercial and residential)

Pleasanton has inventoried all significant structures in the Downtown area, adopted design guidelines, which encourage sensitive improvement to Downtown commercial buildings, and adopted historic preservation objectives, polices, and programs. The City also plans to develop an historic landmark preservation ordinance.

Paleontological Resources

Fossil remains are found in the geologic deposits (sedimentary rock formations) within which they were originally buried. A paleontologically important deposit is one that has a high probability of producing unique, scientifically important fossils. This is determined by the abundance and densities of fossil specimens and/or previously recorded fossil sites exposed in
the deposit. Therefore, the potential paleontological sensitivity of the site can be assessed by identifying the paleontological importance of geologic deposits within the site.

Pleasanton is directly underlain by Quaternary Alluvium (see Section 4.F, Geophysical), which is unlikely to contain vertebrate fossils. However, it is possible that the city is also underlain by older Quaternary deposits that are known to contain vertebrate fossils. Fossils have been found within five miles of areas in similar deposits. Therefore, the city has moderate paleontological sensitivity. While shallow excavation or grading is unlikely to uncover paleontological resources, deeper excavation into older sediments may uncover significant fossils.

Regulatory Framework

Cultural Resources

Federal

The National Historic Preservation Act (NHPA), enacted in 1966, established the National Register of Historic Places, authorized funding for state programs with participation by local governments, created the Advisory Council on Historic Preservation and established a review process for protecting cultural resources. The NHPA provides the legal framework for most state and local preservation laws. The National Register is the Nation's official list of cultural resources worthy of preservation. It is part of a national program to coordinate and support public and private efforts to identify, evaluate and protect historic and archaeological resources.

The NHPA was amended in 1980 to create the Certified Local Government (CLG) program, administered through the California State Office of Historic Preservation (OHP). This program allows for direct local government participation and integration in a comprehensive statewide historic preservation planning process. Cities and counties with CLG status may compete for preservation funds allocated by the Congress and awarded to each state.

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture at the federal, state, or local levels. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (U.S. Department of the Interior, 1995):

- a. Are associated with events that have made a significant contribution to the broad patterns of our history;
- b. Are associated with the lives of persons significant in our past;
- c. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for National Register listing (U.S. Department of the Interior, 1995).

In addition to meeting the age and criteria of significance, a property must have integrity. Integrity is defined as "the ability of a property to convey its significance" (U.S. Department of the Interior, 1995). The National Register recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

An historical resource listed in or eligible for listing in the National Register that has been moved from its original historical setting is considered a resource that no longer retains sufficient integrity for listing in the National Register. Such cases would be considered an adverse effect on historical resources.

State

California Register of Historical Resources

The California Register of Historical Resources was established in 1992, through amendments to the Public Resources Code, as an authoritative guide to be used by state and local agencies, private groups and citizens to identify the State's historical resources and to indicate what properties are to be protected from substantial adverse change. The California Register includes resources that are formally determined eligible for, or listed in: (1) the National Register; (2) State Historical Landmarks numbered 770 or higher; (3) Points of Historical Interest recommended for listing by the State Historical Resources Commission (SHRC); (4) resources nominated for listing and determined eligible in accordance with criteria and procedures adopted by the SHRC; and (5) resources and districts designated as city or county landmarks when the designation criteria are consistent with California Register criteria.

A historic resource must be significant at the local, state, or national level under one or more of the following criteria defined in the California Code of Regulations (CCR), Title 14, Chapter 11.5, Section 4850.

- 1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- 2. It is associated with the lives of persons important to local, California, or national history; or
- 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
- 4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

State Office of Historic Preservation

The Office of Historic Preservation (OHP) implements preservation laws regarding historic resources, and is responsible for the California Historic Resources Inventory (CHRI), which uses the National Criteria for listing resources significant at the national, state, and local level.

Native American Heritage Commission

Section 50907.9 of the Public Resource Code and Section 7050 of the Health and Safety Code empower the Native American Heritage Commission (NAHC) to regulate Native American concerns toward the excavation and disposition of Native American cultural resources. Among its duties, the NAHC is authorized to resolve disputes relating to the treatment and disposition of Native American human remains and items associated with burials. Upon notification of the discovery of human remains by a county coroner, the NAHC notifies the Native American group or individual most likely descended from the deceased.

Senate Bill 18

Senate Bill 18 (SB 18), which went into effect January 1, 2005, sets forth new requirements for local governments (city and county) to consult with Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning, for the purpose of protecting or mitigating impacts to cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005. Because the proposed project would require an amendment to the General Plan, consultations per SB 18 must be conducted.

Local

City of Pleasanton General Plan

The *Conservation and Open Space Element*, of the Pleasanton General Plan 2005-2025 establishes the following policies and programs for protecting the City's cultural resources:

Goal 4:	Designate, preserve, and protect the archaeological and historic resources within the Pleasanton Planning Area.
Policy 5:	Preserve and rehabilitate those cultural and historic resources which are significant to Pleasanton because of their age, appearance, or history.
Program 5.1:	When reviewing applications for development projects, use information regarding known archaeological finds in the Planning Area to determine if an archaeological study, construction monitoring or other mitigations are appropriate. Require that archaeological studies meet the requirements of the California Environmental Quality Act Guidelines Section 15064.5 in identifying

D. Cultural Resources

mitigation measures if an archaeological site is encountered. Include provisions for the interpretation of cultural resources. Consult with the California Archaeological Inventory, Northwest Information Center, as necessary.

- Program 5.2: Follow the recommendations contained within archaeological and historical architecture studies regarding rehabilitation or preservation of archaeologically or historically significant structures and sites.
- Program 5.3: Continue to include a standard condition of project approval to require the cessation of all construction and grading activities within the vicinity of any discovered prehistoric or historic artifacts, or other indications of cultural resources, until any such find is evaluated by a qualified professional archaeologist, and appropriate mitigation is approved by the City.
- Program 5.4: Adopt an historic landmark preservation ordinance to protect individual buildings and sites of historic significance to Pleasanton.
- Program 5.5: Consider expanding the City's low interest Downtown commercial rehabilitation loan program.
- Program 5.6: Encourage the use of educational workshops, exhibits, and teaching materials that celebrate the city's history, ancestral heritage, and Native American contributions, and encourage participation by Native American groups in developing such programs.

Downtown Specific Plan

Policies included in the Downtown Specific Plan related to historic and cultural resources include the following:

Land Use

29. Develop and implement an archaeological research and mitigation program to establish City policy toward archaeological resources and the discovery of such resources. The program should identify important research issues to be addressed with regard to cultural materials and archaeological remains that could be uncovered in future development projects through implementation of the Specific Plan.

30. Because the presence or absence of subsurface archaeological deposits is typically unknown, construction or activities caused by development projects involving subsurface disturbance could uncover important buried archaeological deposits. If archaeological deposits are uncovered during construction activities, all work shall stop within a 100-foot radius of the find until a qualified archaeologist can assess the discovery. If the find is determined to be an important archaeological resource, the resource shall be avoided or recovered consistent with the requirements of Section 15126.4(b)(3) of the State CEQA Guidelines.

31. An archaeological treatment and monitoring plan shall be prepared and implemented for any development project site found to contain archaeological resources. The treatment plan shall include methods for test excavation to identify resources and the level of significance of subsurface prehistoric or historic archaeological items. The treatment plan shall further outline the level of mitigation necessary relative to the level of construction and potential impact on the specific resource. The monitoring plan shall be implemented if the construction area is deemed to be sensitive and the potential to uncover previously unrecorded archaeological remains appears to be high.

Historic Preservation

- 1. Identify all properties with buildings older than 50 years on a list to be updated every two years by the City.
- 2. Require the completion of the State of California Department of Parks and Recreation Survey Form-523 to develop and document a statement of historic significance prior to the issuance of demolition permits for any historic resource older than 50 years. Evaluate these properties using the State of California criteria for the California Register of Historic Resources.
- 3. Prohibit the demolition of any building found to be historically significant with regard to the California Register criteria unless such building is determined by the Chief Building Official to be unsafe or dangerous, and if no other reasonable means of rehabilitation or relocation can be achieved. A 45-day public notification period shall be implemented for buildings proposed to be demolished which do not pose an immediate safety hazard in order to assess alternatives and give the public an opportunity to make proposals for rehabilitation or relocation.
- 4. Prohibit the demolition of primary buildings located in the Ray Street/Spring Street Neighborhood unless such buildings are considered to be unsafe or dangerous and if no other feasible means of rehabilitation can be achieved. These buildings may be retained in residential use or may be converted to another permitted or conditionallypermitted use as long as the primary building's exterior is preserved.
- 5. New building design, including the design of replacement buildings for buildings older than 50 years which are approved for demolition, should draw upon the primary exterior features of the Downtown's traditional design character in terms of architectural style and materials, colors, details of construction, height, floor area, bulk, massing, and setbacks. These building elements should be consistent with those elements of buildings in the immediate neighborhood, and the design of new/replacement buildings should not represent a significant departure from the existing neighborhood character. Buildings should be designed to reflect, but not necessarily replicate, the architectural time period they represent.

- 6. Additions and other modifications to the exteriors of buildings exceeding 50 years in age should match the original building exterior in terms of architectural style and all other exterior design elements.
- 7. Future residential development should generally provide for the preservation and rehabilitation of existing on-site street frontage homes which exceed 50 years in age or which otherwise substantially contribute to the "small town" character of the neighborhood in terms of architecture and scale. Exceptions may be permitted to: (1) relocate such homes to other appropriate Downtown locations for permanent preservation and rehabilitation; or (2) demolish and replace such homes which are specifically found by the City to demonstrate minimal redeeming historic and/or architectural significance.
- 8. Permit historic houses to be relocated within the Downtown where: (1) the new neighborhood contains older homes; (2) the replacement home is consistent with the design quality of the relocated home; and (3) the replacement home is compatible with the neighborhood's architectural styles and scale.
- 9. Specify individual City staff representatives from the Building Inspection, Planning, and Fire Departments to review development permit applications relating to historic resources. These individuals should further be provided with the technical education adequate to perform high-level review.
- 10. City departments responsible for the review of projects involving modifications to historic buildings should prepare and distribute a public informational flyer that details the application submittal requirements, step-by-step review process, and available historic preservation incentive programs.

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist) the project could have a significant impact if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5,
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5,
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impacts and Mitigation Measures

Impact 4.D-1: Development facilitated by the General Plan Amendment and rezonings has the potential to adversely change the significance of historical resources. (Significant and Unavoidable)

Housing Element

Construction activities such as grading and excavation associated with development on the potential sites for rezoning identified in the proposed Housing Element could potentially affect known historic or cultural resources. Specifically, Site 6 is the location of an ice house and farmhouse complex (including other homes and outbuildings), that may be historic as they are more than 50 years old, Site 21 includes an early 20th century home within an historic neighborhood identified in the General Plan, and Site 17 is adjacent to a number of downtown historic resources (see Table 4.D-1 and Figure 4.D-1). These resources could be directly adversely affected by development on the potential sites for rezoning if they are demolished to make way for new housing, or indirectly, through incompatible design. Current federal, State, and local laws as well as the goals, policies, and programs included in the General Plan, described above, and policies contained within the Downtown Specific Plan, would reduce any potential impacts to the resources surrounding Site 17. **Mitigation measures 4.D-1a and 4.D-1b**, provided below, includes the requirement for a historic resource evaluation at Sites 6 and 21. However, demolition of these potential historic resources would remain significant and unavoidable even with implementation of mitigation.

Mitigation Measure 4.D-1a: Prior to demolition, the project applicant shall have a historic resource evaluation conducted for the homes and outbuildings on Site 6 and for the residence on Site 21. If it is determined that this structure is historic, Mitigation Measure 4.D-1b will be required. If the structure is not found to be historic, demolition of the structure will be considered a less than significant impact.

Mitigation Measure 4.D-1b: If the historic resources evaluation determines that Site 6 contains a historic resource, prior to demolition, the structure shall be documented according to Historic American Building Survey (HABS) standards. These standards include large format black and white photographs, an historical narrative describing the architectural and historical characteristics of the building, and measured drawings (or reproduced existing drawings if available). The HABS documentation shall be archived at the City of Pleasanton Planning Department and the City of Pleasanton Public Library.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, and thus would not directly lead to development that would affect cultural resources. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect historic resources, it could create indirect impacts resulting

from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion and mitigation to reduce these impacts has been provided.

The Draft CAP recommends retrofitting and renovation of older buildings to be more energy efficient and thus reduce GHGs associated with energy consumption. As all major alterations to structures within the city are reviewed through the City's established Design Review process, continued compliance with the City's established Design Review process would ensure a less than significant impact to historic resources.

Housing Element Significance after Mitigation: Significant and Unavoidable. Even with HABS documentation, demolition of a historic resource would remain a significant and unavoidable impact under CEQA.

Climate Action Plan Mitigation: None Required.

Impact 4.D-2: Development facilitated by the General Plan Amendment and rezonings has the potential to adversely affect archaeological resources. (Significant)

Housing Element

The known distribution of recorded sites is a reflection of where prior cultural resource surveys were conducted, rather than the actual distribution of historic and prehistoric sites. In general, it may be expected that portions of the city lying in the flat valley would reveal a low sensitivity for prehistoric sites, except along drainages. In contrast, the hills to the south and west, particularly around springs and creeks, would be expected to have a relatively high sensitivity for containing prehistoric sites. While the majority of the potential sites for rezoning identified in the proposed Housing Element are located in the flat valley area and on parcels that have had some level of previous development or disturbance, some sites, such as Sites 6 or 7 may have only been minimally disturbed in the past and, while they are located in the flat valley and are expected to reveal a low sensitivity for prehistoric sites, they may contain unknown archaeological resources. Site 7, for example, contains a Native American burial ground (see discussion under Impact 4.D-4).

Current federal, State, and local laws as well as the goals, policies, and programs included in the General Plan, specifically Programs 5.1 through 5.3 of the General Plan of the *Conservation and Open Space Element*, and Polices 29 through 31 of the Downtown Specific Plan address potential impacts to the archaeological resources that are discovered during implementation of the Housing Element, including previously undeveloped or minimally developed sites that have been identified in the Housing Element for future multi-family development. The City requires a standard condition of approval for projects requiring Planning Department approval that would require that all construction stop in the event that cultural resources were uncovered during excavation. With implementation of this standard condition, future projects in the Planning Area

would be expected to have a less-than-significant effect on unknown cultural resources. In addition to these policies, the mitigation measures outlined below will reduce any potential impacts to archaeological resources to less-than-significant levels.

Mitigation Measure 4.D-2: Prior to the issuance of grading permits for development on the potential sites for rezoning that have not been previously developed or have only experienced minimal disturbance, including Sites 6, 7, 8, and 18, the applicant shall submit to the City an archaeological mitigation program that has been prepared by a licensed archaeologist with input from a Native American Representative. The applicant shall implement the requirements and measures of this program, which will include, but not be limited to:

- Submission of periodic status reports to the City of Pleasanton and the NAHC.
- Submission of a final report, matching the format of the final report submitted for CA-Ala-613/H, dated March 2005, to the City and the NAHC.
- A qualified archaeologist and the Native American Representative designated by the NAHC will be present on site during the grading and trenching for the foundations, utility services, or other on-site excavation, in order to determine if any bone, shell, or artifacts are uncovered. If human remains are uncovered, the applicant will implement Mitigation Measure 4.D-4, below.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, and thus would not directly lead to development that would affect cultural resources. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect archaeological resources, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion and mitigation to reduce potential impacts has been provided. The City requires a standard condition of approval for projects requiring Planning Department approval that would require that all construction stop in the event that cultural resources were uncovered during excavation. With implementation of this standard condition, future projects in the Planning Area would be expected to have a less-thansignificant effect on unknown cultural resources.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.D-3: Development facilitated by the General Plan Amendment and rezonings may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Significant)

Housing Element

Paleontological resources represent a limited, non-renewable, and impact-sensitive scientific and educational resource. Paleontological resources include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities. If a paleontological resource is uncovered and inadvertently damaged, the impact to the resource could be substantial. As discussed in the Setting section above, the city has moderate paleontological sensitivity and it is possible that paleontological resources could be disturbed during construction activities. Therefore, implementation of the proposed Housing Element could result in significant impacts to paleontological resources. The City requires a standard condition of approval for projects requiring Planning Department approval that would require that all construction stop in the event that cultural resources were uncovered during excavation. With implementation of this standard condition, future projects in the Planning Area would be expected to have a less-than-significant effect on unknown cultural resources. In addition, implementation of **Mitigation Measure 4.D-3** would reduce this impact to less than significant.

Mitigation Measure 4.D-3: In the event that paleontological resources are encountered during the course of development, all construction activity must temporarily cease in the affected area(s) until the uncovered fossils are properly assessed by a qualified paleontologist and subsequent recommendations for appropriate documentation and conservation are evaluated by the Lead Agency. Excavation or disturbance may continue in other areas of the site that are not reasonably suspected to overlie adjacent or additional paleontological resources.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, and thus would not directly lead to development that would affect cultural resources. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect paleontological resources, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion and mitigation to reduce the significance of identified impacts has been provided. The City requires a standard condition of approval for projects requiring Planning Department approval that would require that all construction stop in the event that cultural resources were uncovered during excavation. With implementation of this standard condition, future projects in the Planning Area would be expected to have a less-than-significant effect on unknown cultural resources.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.D-4: Development facilitated by the General Plan Amendment and rezonings has the potential to disturb human remains, including those interred outside of formal cemeteries. (Significant)

Housing Element

Site 7 contains a Native American burial ground. As of the date of publication of this EIR, the remains of approximately 150 individuals have been relocated from the site to another location in the vicinity. The measures that have been taken to relocate these remains respectfully have reduced this impact.

There is no indication in the archaeological record that any other site identified in the Housing Element as a potential site for rezoning has been used for human burial purposes in the recent or distant past. However, in the unlikely event that human remains are discovered during project construction, including those interred outside of formal cemeteries, human remains could be inadvertently disturbed, which would be a significant impact. The City requires a standard condition of approval for projects requiring Planning Department approval that would require that all construction stop in the event that cultural resources were uncovered during excavation. With implementation of this standard condition, future projects in the Planning Area would be expected to have a less-than-significant effect on unknown cultural resources. In addition, with implementation of **Mitigation Measure 4.D-4**, construction activities associated with the proposed project would have a less than significant impact on previously unknown human remains.

Mitigation Measure 4.D-4: In the event that human remains are discovered during grading and construction of development facilities by the Housing Element, work shall stop immediately. There shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify the persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, and thus would not directly lead to development that would affect cultural resources. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would affect human remains resources, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these

indirect impacts is provided as part of the Housing Element discussion. The City requires a standard condition of approval for projects requiring Planning Department approval that would require that all construction stop in the event that cultural resources were uncovered during excavation. With implementation of this standard condition, future projects in the Planning Area would be expected to have a less-than-significant effect on unknown cultural resources.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Given the nature of the potential impacts analyzed for this topic, the geographic scope would generally include projects within Pleasanton.

Historic Architectural Resources

Impact 4.D-5: Development facilitated by the General Plan Amendment and rezonings, in combination with past, present, existing, approved, pending, and reasonably foreseeable future development that would adversely affect historical resources on or adjacent to cumulative project sites, could form a significant cumulative impact to historical resources. (Significant)

For CEQA purposes, it is conservatively assumed that development facilitated by the proposed Housing Element could result in the demolition of historical resources. Other past, present, existing, approved, pending, and reasonably foreseeable future projects in the City that have, or will have, resulted in the demolition of historical resources could combine with the Housing Element projects to form a significant cumulative impact to historical resources. Continuation of existing General Plan policies which call for the protection of historic resources, as well as the continued application of **Mitigation Measure 4.D-1a**, would further reduce the potential for significant cumulative impacts to historic resources be threatened in the future.

The Draft CAP would not have a significant impact on historic resources as it would not encourage development beyond what was addressed in the General Plan EIR.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Archaeological and Paleontological Resources and Human Remains

Impact 4.D-6: Construction resulting from development facilitated by the General Plan Amendment and rezonings, in combination with construction of other past, present, existing, approved, pending, and reasonably foreseeable future development in the vicinity, would cause a significant cumulative impact to currently unknown cultural resources at the site, potentially including an archaeological resource pursuant to CEQA *Guidelines* § 15064.5 or § 21083.2(g), or the disturbance of any human remains, including those interred outside of formal cemeteries, as well as paleontological resources. (Significant)

Although the proposed projects have the potential to impact known archaeological or paleontological resources, and because such resources may exist anywhere in the City, accidental damage to previously unknown resources may occur due to ground-disturbing activities from any or all of the construction projects. In the unlikely event that such impacts were to occur with all of the cumulative projects described in Chapter 6, Growth Inducing and Cumulative Effects, they could combine to form a significant cumulative impact to archaeological and paleontological resources. However, similar to the proposed Housing Element, these cumulative setting projects would also include mitigation measures similar to **Mitigation Measures 4.D-3** and **4.D-4**, described above, to reduce such impacts to a less-than-significant level. Therefore, cumulative impacts to archaeological or paleontological resources are anticipated to be less than significant.

The Draft CAP would not have a significant impact on archaeological or paleontological resources as it would not encourage development beyond what was addressed in the General Plan EIR.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

References—Cultural Resources

City of Pleasanton, 2008. Proposed Pleasanton General Plan 2005-2025 Draft Environmental Impact Report, SCH No. 2005122139, prepared for the City of Pleasanton by PBS&J, September 2008.

City of Pleasanton, 2009. Pleasanton General Plan 2005 – 2025, adopted July 21, 2009.

City of Pleasanton, Downtown Specific Plan, adopted March 5, 2002.

This section provides a discussion of global climate change, existing regulations pertaining to global climate change, and potential greenhouse gas (GHG) emissions resulting from the proposed Housing Element; Climate Action Plan; General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the Settlement Agreement; and rezoning of 17 sites for residential development.

Environmental Setting

Global warming is the term given to the increase in the average temperature of the Earth's nearsurface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal (IPCC, 2007) with global surface temperature increasing approximately 1.33 °F over the last one hundred years. Continued warming is projected to increase global average temperature between 2 and 11 °F over the next one hundred years.

The causes of this warming have been identified as both natural processes and as the result of human actions. The Intergovernmental Panel on Climate Change (IPCC) concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. However, after 1950, increasing GHG concentrations resulting from human activity such as fossil fuel burning and deforestation have been responsible for most of the observed temperature increase. These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all of the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

Increases in GHG concentrations in the Earth's atmosphere are thought to be the main cause of human induced climate change. GHGs naturally trap heat by impeding the exit of solar radiation that has hit the Earth and is reflected back into space. Some GHGs occur naturally and are necessary for keeping the Earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last hundred years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

The principal GHGs of concern are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFC), and hydrofluorocarbons (HFC). Each of the principal GHGs has a long atmospheric lifetime (one year to several thousand years). In addition, the potential heat trapping ability of each of these gases vary significantly from one another. CH₄ is 23 times as potent as CO₂, while SF₆ is 22,200 times more potent than CO₂. Conventionally, GHGs have been reported as CO₂ equivalents (CO₂e). CO₂e takes into account the relative potency of non-CO₂ GHGs and converts their quantities to an equivalent amount of CO₂ so that all emissions can be reported as a single quantity.

The primary man-made processes that release these gases include: burning of fossil fuels for transportation, heating, and electricity generation; agricultural practices that release CH_4 such as livestock grazing and crop residue decomposition; and industrial processes that release smaller amounts of high global warming potential gases such as SF_6 , PFCs, and HFCs. Deforestation and land cover conversion have also been identified as contributing to global warming by reducing the Earth's capacity to remove CO_2 from the air and altering the Earth's albedo or surface reflectance, allowing more solar radiation to be absorbed.

Global Climate Trends and Associated Impacts

The rate of increase in global average surface temperature over the last hundred years has not been consistent; the last three decades have warmed at a much faster rate – on average 0.32 °F per decade. Eleven of the twelve years from 1995 to 2006, rank among the twelve warmest years in the instrumental record of global average surface temperature (going back to 1850) (IPCC, 2007).

During the same period over which this increased global warming has occurred, many other changes have occurred in other natural systems. Sea levels have risen on average 1.8 millimeter per year (mm/yr); precipitation patterns throughout the world have shifted, with some areas becoming wetter and others drier; tropical cyclone activity in the North Atlantic has increased; peak runoff timing of many glacial and snow fed rivers has shifted earlier; as well as numerous other observed conditions. Though it is difficult to prove a definitive cause and effect relationship between global warming and other observed changes to natural systems, there is high confidence in the scientific community that these changes are a direct result of increased global temperatures (IPCC, 2007).

California Climate Trends and Associated Impacts

Maximum (daytime) and minimum (nighttime) temperatures are increasing almost everywhere in California, but at different rates. The annual minimum temperature averaged over all of California has increased 0.33 °F per decade during the period 1920 to 2003, while the average annual maximum temperature has increased 0.1 °F per decade (Moser et al., 2009).

With respect to California's water resources, the most significant impacts of global warming have been changes to the water cycle and sea level rise. Over the past century, the precipitation mix between snow and rain has shifted in favor of more rainfall and less snow (Mote et al., 2005; Knowles, 2006) and snow pack in the Sierra Nevada is melting earlier in the spring (Kapnick and Hall, 2009). The average early spring snowpack in the Sierra Nevada has decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage (DWR, 2008). These changes have significant implications for water supply, flooding, aquatic ecosystems, energy generation, and recreation throughout the state. During the same period, sea levels along California's coast rose seven inches (DWR, 2008). Sea level rise associated with global warming will continue to threaten coastal lands and infrastructure, increase flooding at the mouths of rivers, place additional stress on levees in the Sacramento-San Joaquin Delta, and will intensify the difficulty of managing the Sacramento-San Joaquin Delta as the heart of the state's water supply system.

In 2004, California emitted approximately 550 million tons of CO_2e , or about six percent of the U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. By contrast, California has one of the fourth lowest per capita GHG emission rates in the country, due to the success of its energy-efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of growth by more than half of what it would have been otherwise (California Energy Commission [CEC], 2007). Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states.

The California Environmental Protection Agency (Cal EPA) Climate Action Team stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO_2 equivalence) were as follows:

- Carbon dioxide (CO₂) accounted for 83.3 percent;
- Methane (CH₄) accounted for 6.4 percent;
- Nitrous oxide (N₂O) accounted for 6.8 percent; and
- Fluorinated gases (HFCs, PFC, and SF₆) accounted for 3.5 percent (CalEPA, 2006).

The CEC found that transportation is the source of approximately 41 percent of the State's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 23 percent, and industrial sources at 20 percent. Agriculture and forestry is the source of approximately 8.3 percent, as is the source categorized as "other," which includes residential and commercial activities (CEC, 2007).

Bay Area Emissions

In the Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of the Bay Area's GHG emissions, accounting for just over half of the Bay Area's 85 million tons of GHG emissions in 2002. Industrial and commercial sources were the second largest contributors of GHG emissions with about 25 percent of total emissions. Domestic sources (e.g., home water heaters, furnaces, etc.) account for about 11 percent of the Bay Area's GHG emissions, followed by power plants at seven percent. Oil refining currently accounts for approximately six percent of the total Bay Area GHG emissions (Bay Area Air Quality Management District (BAAQMD), 2008).

Pleasanton Emissions

The Pleasanton Draft Climate Action Plan includes a citywide GHG emissions inventory. This citywide GHG emissions inventory reflects all the energy used and waste produced within the Pleasanton city limits. As shown in **Table 4.E-1**, Pleasanton emitted approximately 770,844 million metric tons of CO_2e in 2005 from all major sources, more than half of which were from transportation sources.

GHG Emissions Source	Metric Tons of Carbon Dioxide Equivalent (CO ₂ e)	Percent of Total
Transportation (on-road)	401,550	52.1%
Transportation (off-road)	25,410	3.3%
Commercial/Industrial Electricity	105,107	13.6%
Commercial/Industrial Natural Gas	46,753	6.1%
Residential Natural Gas	66,684	8.7%
Residential Electricity	46,881	6.1%
Solid Waste Disposal	38,826	5.0%
Water and Wastewater Systems	34,264	4.4%
Municipal Operations	5,370	0.7%
Total	770,844	100%

 TABLE 4.E-1

 PLEASANTON COMMUNITY-WIDE GHG EMISSIONS BY SECTOR (CO2E MT) 2005

Construction and Development Emissions

The construction and operation of developments, such as those facilitated by the proposed Housing Element, cause GHG emissions. Operational phase GHG emissions result from energy use associated with heating, lighting and powering buildings (typically through natural gas and electricity consumption in Pleasanton), pumping and processing water, as well as fuel used for transportation and decomposition of waste associated with building occupants.

New development can also create GHG emissions in its construction and demolition phases including the use of fuels in construction equipment, creation and decomposition of building materials, vegetation clearing, natural gas usage, electrical usage (since electricity generation by conventional means is a major contributor of GHG emissions, discussed below), and transportation.

However, it is important to acknowledge that new development does not necessarily create entirely new GHG emissions. Since most of the persons who will visit or occupy new development will come from other locations where they were already causing such GHG emissions, new development tends to redistribute the location of emissions sources. Further, as discussed above, it has not been demonstrated that new GHG emissions caused by a local development project can affect global climate change, or that a project's net increase in GHG emissions, if any, when coupled with other activities in the region, would be cumulatively considerable.

Regulatory Setting

Global climate change is addressed through the efforts of various federal, State, regional, and local government agencies as well as national and international scientific and governmental conventions and programs. These agencies work jointly, as well as individually, to understand

and regulate the effects of greenhouse gas emissions and resulting climate change through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies, conventions and programs focused on global climate change are discussed below.

Federal

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, U.S. EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year (FY) 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), that required U.S. EPA to develop "… mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy…." The Reporting Rule will apply to most entities that emit 25,000 metric tons of CO₂e or more per year. Starting in 2010, facility owners are required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements in order for U.S. EPA to verify annual GHG emissions reports.

U.S. Environmental Protection Agency Endangerment and Cause and Contribute Findings

On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under section 202(a) of the federal Clean Air Act (CAA):

- Endangerment Finding: the current and projected concentrations of the six key wellmixed GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

State of California

California Environmental Quality Act and Climate Change

CEQA requires lead agencies to consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to: raise sea levels, affect rainfall and snowfall, and affect habitat.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed AB 1493, which required ARB to develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by ARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, the ARB approved amendments to the California Code of Regulations (CCR) in 2004, adding GHG emissions standards to California's existing standards

for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1), require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight [GVW] rating of less than 10,000 pounds and which is designed primarily for the transportation of persons), beginning with model year 2009. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for model year 2016 are approximately 37 percent lower than the limits for the first year of the regulations, model year 2009. For light-duty trucks with an LVW of 3,751 pounds to a GVW of 8,500 pounds, as well as for medium-duty passenger vehicles, GHG emissions will be reduced approximately 24 percent between 2009 and 2016.

Because the Pavley standards (named for the bill's author, state Senator Fran Pavley) would impose stricter standards than those under the federal CAA, California applied to the U.S. EPA for a waiver under the federal CAA; this waiver was denied in 2008. In 2009, however, the U.S. EPA granted the waiver.

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide GHG emissions would be progressively reduced: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 and the California Climate Change Scoping Plan

In 2006, the California legislature passed Assembly Bill 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires the ARB to design and implement emission limits, along with feasible and cost-effective regulations and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020.

Pursuant to AB 32, the ARB adopted a Scoping Plan in December 2008 (ARB, 2008), outlining measures to meet the 2020 GHG reduction target.¹ In order to achieve 1990 levels, California must reduce its GHG emissions by approximately 30 percent below projected 2020 business as usual emissions levels, or about 15 percent from 2008 levels. The Scoping Plan contains measures targeting GHG reductions in the transportation, energy, solid waste, agriculture, forestry and other sectors, amounting to an estimated reduction of 174 million metric tons of CO_2e (about 191 million U.S. tons). These measures summarized in **Table 4.E-2** below. The ARB has issued an implementation timeline for the GHG reduction strategies in the Scoping Plan. Some measures may require new legislation to implement, some will require subsidies,

¹ On January 24, 2011, a San Francisco Superior Court judge issued a proposed injunction against implementation of the Scoping Plan. No formal ruling has yet been issued. (Association of Irritated Residents et al v. California Air Resources Board, San Francisco Superior Court Case No. CPF-09-509562.)

Measure No.	Measure Description	GHG Reductions (Annual Million Metric Tons CO₂e)
Transporta		
T-1	Pavley I and II – Light Duty Vehicle Greenhouse Gas Standards	31.7
T-2	Low Carbon Fuel Standard (Discrete Early Action)	15
T-3 ¹	Regional Transportation-Related Greenhouse Gas Targets	5
T-4	Vehicle Efficiency Measures	4.5
T-5	Ship Electrification at Ports (Discrete Early Action)	0.2
T-6	Goods Movement Efficiency Measures.Ship Electrification at PortsSystem-Wide Efficiency Improvements	3.5
T-7	Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	0.93
T-8	Medium- and Heavy-Duty Vehicle Hybridization	0.5
T-9	High Speed Rail	1
Electricity	and Natural Gas	
E-1	 Energy Efficiency (32,000 GWh of Reduced Demand) Increased Utility Energy Efficiency Programs More Stringent Building & Appliance Standards Additional Efficiency and Conservation Programs 	15.2
E-2	Increase Combined Heat and Power Use by 30,000 GWh (Net reductions include avoided transmission line loss)	6.7
E-3	Renewables Portfolio Standard (33% by 2020)	21.3
E-4	 Million Solar Roofs (including California Solar Initiative, New Solar Homes Partnership and solar programs of publicly owned utilities) Target of 3000 MW Total Installation by 2020 	2.1
CR-1	 Energy Efficiency (800 Million Therms Reduced Consumptions) Utility Energy Efficiency Programs Building and Appliance Standards Additional Efficiency and Conservation Programs 	4.3
CR-2	Solar Water Heating (AB 1470 goal)	0.1
Green Bui	dings	
GB-1	Green Buildings	26
Water		
W-1	Water Use Efficiency	1.4†
W-2	Water Recycling	0.3†
W-3	Water System Energy Efficiency	2.0†
W-4	Reuse Urban Runoff	0.2†
W-5	Increase Renewable Energy Production	0.9†
W-6	Public Goods Charge (Water)	TBD†
Industry		
I-1	Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	TBD
I-2	Oil and Gas Extraction GHG Emission Reduction	0.2
I-3	GHG Leak Reduction from Oil and Gas Transmission	0.9
I-4	Refinery Flare Recovery Process Improvements	0.3

TABLE 4.E-2 LIST OF RECOMMENDED ACTIONS BY SECTOR

Measure No.	Measure Description	GHG Reductions (Annual Million Metric Tons CO₂e)			
I-5	Removal of Methane Exemption from Existing Refinery Regulations	0.01			
Recycling	and Water Management				
RW-1	Landfill Methane Control (Discrete Early Action)	1			
RW-2	Additional Reductions in Landfill MethaneIncrease the Efficiency of Landfill Methane Capture	TBD†			
RW-3	 High Recycling/Zero Waste Commercial Recycling Increase Production and Markets for Compost Anaerobic Digestion Extended Producer Responsibility Environmentally Preferable Purchasing 	9†			
Forests					
F-1	Sustainable Forest Target	5			
High Global Warming Potential (GWP) Gases					
H-1	Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Services (Discrete Early Action)	0.26			
H-2	${\rm SF}_6$ Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	0.3			
H-3	Reduction of Perfuorocarbons in Semiconductor Manufacturing (Discrete Early Action)	0.15			
H-4	Limit High GWP Use in Consumer Products Discrete Early Action (Adopted June 2008)	0.25			
H-5	 High GWP Reductions from Mobile Sources Low GWP Refrigerants for New Motor Vehicle Air Conditioning Systems Air Conditioner Refrigerant Leak Test During Vehicle Smog Check Refrigerant Recovery from Decommissioned Refrigerated Shipping Containers Enforcement of Federal Ban on Refrigerant Release during Servicing or Dismantling of Motor Vehicle Air Conditioning Systems 	3.3			
H-6	 High GWP Reductions from Stationary Sources High GWP Stationary Equipment Refrigerant Management Program: Refrigerant Tracking/Reporting/Repair Deposit Program Specifications for Commercial and Industrial Refrigeration Systems Foam Recovery and Destruction Program SF Leak Reduction and Recycling in Electrical Applications Alternative Suppressants in Fire Protection Systems Residential Refrigeration Early Retirement Program 	10.9			
H-7	Mitigation Fee on High GWP Gases	5			
Agriculture	2				
A-1	Methane Capture at Large Dairies	1.0†			

TABLE 4.E-2 LIST OF RECOMMENDED ACTIONS BY SECTOR

¹ This is not the SB 375 regional target. ARB recently adopted regional targets for reducing GHG emissions in 2020 and 2035 associated with passenger vehicle travel in the state's 18 Metropolitan Planning Organizations. For the Bay Area Region, these targets are 7 percent and 15 percent, respectively. .
 † GHG emission reduction estimates are not included in calculating the total reductions needed to meet the 2020 target.

some have already been developed, and some will require additional effort to evaluate and quantify. Additionally, some emissions reductions strategies may require their own environmental review under CEQA or the National Environmental Policy Act (NEPA).

AB 32 also anticipates that local government actions will result in reduced GHG emissions. ARB has identified a GHG reduction target for GHG emissions of 15 percent from current levels for local government operations themselves and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

The Scoping Plan relies on the requirements of Senate Bill 375 (discussed below) to implement the carbon emission reductions anticipated from land use decisions. SB 375 was enacted to align local land use and transportation planning to further achieve the state's GHG reduction goals. SB 375 requires regional transportation plans (RTPs), developed by Metropolitan Planning Organizations (MPOs), to incorporate a "sustainable communities strategy" that would achieve GHG emission reduction targets set by the ARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development. SB 375 would be implemented over the next several years. The Metropolitan Transportation Commission (MTC) is responsible for developing RTPs for the Bay Area. MTC's 2013 RTP will be its first plan subject to SB 375.

Executive Order S-1-07

Executive Order S-1-07, signed by then-Governor Schwarzenegger in 2007, proclaimed that the transportation sector is the main source of GHG emissions in California, at over 40 percent of statewide emissions. The order established a goal of reducing the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020. It also directed the ARB to determine whether this Low Carbon Fuel Standard could be adopted as a discrete, early-action measure after meeting the mandates in AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

Senate Bill 1078 and 107 and Executive Order S-14-08 and S-21-09

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investorowned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Portfolio Standard to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the ARB under its AB 32 authority to enact regulations to help the state meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. The 33 percent by 2020 goal was codified in April 2011 with Senate Bill X1-2, which was signed by Governor Edmund G. Brown, Jr. This new RPS preempts the ARB 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt

the new RPS goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by then-Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (PUC) to establish a GHG emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) was also required to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a baseload combined-cycle natural gas-fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Senate Bill 97

SB 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The California Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. On December 30, 2009, the Natural Resources Agency adopted the state CEQA Guidelines amendments, as required by SB 97. These state CEQA Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments were reviewed by the Office of Administrative Law and became effective March 18, 2010.

Senate Bill 375

In addition to policy directly guided by AB 32, the legislature in 2008 passed SB 375, which provides for regional coordination in land use and transportation planning and funding to help meet the AB 32 GHG reduction goals. SB 375 aligns regional transportation planning efforts, regional GHG emissions reduction targets, and land use and housing allocations. SB 375 requires RTPs developed by the state's 18 MPOs to incorporate a "sustainable communities strategy" (SCS) that will achieve GHG emission reduction targets set by the ARB.

City of Pleasanton

City of Pleasant General Plan

The *General Plan Air Quality and Climate Change Element* (City of Pleasanton, 2009) has Goals and Policies related to the project. Program 6.3 states best management practices (BMPs) for development approved prior to adoption of a Climate Action Plan, that include the following;

• BMP 1: Single and multi family residential and commercial development to comply with the City of Pleasanton's Green Building Ordinance. As far as feasible, residential projects should incorporate: resource efficient landscaping, energy efficient hot water distribution systems; high efficiency toilets and other low flow plumbing fixtures; high efficiency

heating and cooling systems; pre-plumbing for solar water heating; installation of wiring conduit for future photovoltaic systems; installation of Energy Star appliances; and Green Points in the Community Design and Planning category.

- BMP 2: Development shall incorporate energy efficient appliances and systems that meet Energy Star standards.
- BMP 3: Where feasible, incorporate solar roofs (or other alternative energy measures) into commercial development sufficient to meet 12.5 percent of the building's annual energy usage. Calculations of energy savings may be prepared at the construction drawing stage. Where feasible, residential development to be solar-ready, including proper solar orientation, electrical conduit installed for solar electric system wiring, plumbing installed for solar hot water system, and space provided for solar hot water storage tank.
- BMP 4: Require transit and bicycle/pedestrian connections in new development, where feasible.
- BMP 5: For commercial/industrial projects, prepare and implement a voluntary Trip Reduction Plan, using the resources available through the City of Pleasanton's Transportation Systems Management program as described in Chapter 17.24 of the Pleasanton Municipal Code. Trip reduction goal of 15 percent within five years and 25 percent within 10 years, compared to "business as usual."
- BMP 6: Require priority facilities for alternative-fueled vehicles, such as priority parking and recharging facilities, where feasible.
- BMP 7: Development and demolition to comply with the City's Construction and Demolition Debris Ordinance (ordinance currently in draft form)
- BMP 8: In new commercial and multifamily projects, include facilities to accommodate recycling consistent with the City's programs.
- BMP 9: Incorporate "heat island" treatments that include cool roofs, cool pavements, and/or strategically placed shade trees.

Impacts and Mitigation Measures

Significance Criteria

The proposed project would have a significant impact on the environment if it were to:

- 1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, specifically:
 - a. Produce more than 6.6 metric tons of CO_2e per service population annually² from new development; or

² The project's expected greenhouse gas emissions during construction should be annualized over a period of 40 years and added to the expected emissions during operation for comparison to the threshold. A 40-year period is used because 40 years is considered the average life expectancy of a building before it is remodeled with considerations for increased energy efficiency. The thresholds are based on the BAAQMD thresholds (BAAQMD, 2011). The BAAQMD thresholds were originally developed for project operation impacts only. Therefore,

- b. Prevent the City of Pleasanton from meeting its community-wide emissions reduction target, pursuant to the provisions of AB 32, as interpreted by BAAQMD; or
- 2. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing GHG emissions.

Approach to Analysis

The BAAQMD is responsible for improving air quality within the San Francisco Bay Area Basin. BAAQMD adopted updated *California Environmental Quality Act (CEQA) Air Quality Guidelines*, including new thresholds of significance in June 2010 (BAAQMD, 2011), which advise lead agencies on how to evaluate potential air quality impacts with the adopted new thresholds of significance. The analysis herein uses the updated thresholds and methodologies from the BAAQMD *CEQA Air Quality Guidelines*.

This SEIR discusses, for consideration by decision makers, estimated GHG emissions from development that would occur pursuant to the proposed Housing Element; Climate Action Plan; the existing General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement; and rezoning of 17 sites for residential development . Because details of subsequent site-specific development projects are not known, project design features that would avoid or minimize those emissions cannot be estimated. In addition, results of the CAP and associated GHG emissions reduction strategies are summarized as well.

Quantitative and Qualitative Approach

This SEIR uses both a quantitative and a qualitative approach. The quantitative approach is used to answer the first threshold: will development facilitated by the (1) proposed Housing Element; (2) Climate Action Plan; the existing General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement; and (3) rezoning of 17 sites for residential development, generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

The qualitative approach addresses the second threshold: will development facilitated by the (1) proposed Housing Element; (2) Climate Action Plan; the existing General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement; and (3) rezoning of 17 sites for residential development conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs, including AB 32 as interpreted by the BAAQMD. Theoretically, if a project implements reduction strategies identified in AB 32, the Governor's E.O. S-3-05, or other strategies to help toward reducing GHGs to the level proposed by the Governor and targeted by the City of Pleasanton, it could reasonably follow that the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of GHGs. Alternatively, a project could reduce a potential cumulative contribution to GHG emissions through energy efficiency features, density and locale

combining both the construction emissions and operation emissions for comparison to the threshold represents a conservative analysis of potential greenhouse gas impacts.

(e.g., compact development near transit and activity nodes of work or shopping) and by contributing to available mitigation programs, such as reforestation, tree planting, or carbon offsets.

However, the analysis in this SEIR considers that, because the quantifiable thresholds established in the BAAQMD Guidelines were formulated based on AB 32 reduction strategies, a project cannot exceed the numeric threshold without also conflicting with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, if a project does not meet the first significance criteria (numeric) it would also result in a significant cumulative impact under the second significance criteria (plan, policy or regulation consistency), even though the project may incorporate measures and have features that would reduce its contribution to cumulative GHG emissions.

In order to determine whether the GHG emissions resulting from the proposed General Plan Amendments would exceed the 6.6 metric tons of CO_2e per service population annually, emissions were estimated using a combination of URBEMIS2007 model and the Bay Area Greenhouse Gas Model (BGM) of the BAAQMD. GHG emissions from motor vehicle sources were calculated using the URBEMIS2007 model in conjunction with the BGM greenhouse gas model. Vehicle trips assumed default trip lengths for urban land uses, which are embedded in URBEMIS2007. BGM makes adjustments for implementation of Pavley vehicle standards and Low Carbon Fuel Standards. Development that would be facilitated by the proposed General Plan Amendments, specifically on the potential sites for rezoning, would generate GHG emissions from an increase in both stationary sources and mobile sources. Although specific characteristics of individual developments facilitated by the proposed project are not known, area and indirect sources associated with development of the potential sites for rezoning would primarily result from electrical usage, water and wastewater transport (the energy used to pump water and wastewater to and from a project site) and solid waste generation. GHG emissions from electrical usage are generated when energy consumed on the site is generated by fuel combustion. GHG emissions from water and wastewater transport are also indirect emissions resulting from the energy required to transport water from its source, and the energy required to treat wastewater and transport it to its treated discharge point. Solid waste emissions are generated when the increased waste generated by the project are taken to a landfill to decompose. GHG emissions from electrical usage, water and wastewater conveyance, and solid waste were estimated using the BGM GHG model.

The results and reduction strategies described in the Draft CAP are summarized below. Please refer to the Draft CAP for specific methodology and approach information.

GHG Effects on Flooding and Sea-level Rise

Pleasanton is not located in an area that may be subject to flooding resulting from climate change. As such, the potential effects of climate change (e.g., effects of flooding on the potential sites for rezoning due to sea level rise) on the proposed project are not discussed in this SEIR.

Impact 4.E-1: Development facilitated by the proposed Housing Element; Climate Action Plan; General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement; and rezoning of sites for residential

development could potentially produce greenhouse gas emissions that could exceed applicable quantitative thresholds. (Less than Significant)

Housing Element

Construction and operation of development facilitated on the potential sites for rezoning by the proposed Housing Element would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during operation. Overall, the following activities associated with development that would occur pursuant to the Housing Element could contribute to the generation of GHG emissions:

- <u>Motor Vehicle Use</u>. Transportation associated with development on the potential sites for rezoning would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.
- <u>Gas, Electric and Water Use</u>. Natural gas use results in the emissions of two GHGs: methane (the major component of natural gas) and carbon dioxide from the combustion of natural gas. Methane is released prior to initiation of combustion of the natural gas (as before a flame on a stove is sparked), and from the small amount of methane that is uncombusted in a natural gas flame. Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel.
- <u>*Removal of Vegetation*</u>. The net removal of vegetation for construction results in a loss of the carbon sequestration in plants.
- <u>Construction Activities</u>. Construction equipment typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide, methane and nitrous oxide. Furthermore, methane is emitted during the fueling of heavy equipment.

GHG Emission Inventory for Development Facilitated by the Housing Element

Emissions included in the BAAQMD Guidelines, and therefore included in the GHG emissions inventory for the development facilitated by the proposed Housing Element, specifically on the potential site for rezoning, are described below (and quantified in **Table 4.E-3**):

- <u>Area Source Emissions</u>. These are direct emissions from sources that include natural gas combustion for heating, cooking, fireplaces, or boilers, as well as emissions from landscape maintenance equipment.
- <u>*Transportation Emissions*</u>. These are direct emissions from mobile sources including automobiles, trucks, motorcycles, and buses.
- <u>Operational Electricity Consumption</u>. These are indirect emissions emitted off-site via non-renewable, non-nuclear electricity generators as a result of increased electrical demand.
- <u>Solid Waste Disposal Emissions</u>. These are indirect emissions associated with waste generation. A large percentage of waste from housing would be diverted from landfills by waste reduction, recycling, and composting. Landfills emit anthropogenic methane from the anaerobic breakdown of material.

- <u>Operational Fugitive (Direct) Emissions</u>. These direct emissions are most commonly associated with inadvertent emissions into the atmosphere due to leakage or inherent imperfections in a gas transport or collection system. Direct fugitive GHG emissions that may reasonably be expected to be generated by commercial buildings would consist of GHG refrigerants emitted from leaks or other imperfections in refrigeration or air cooling equipment.
- <u>Operational Water Emissions (embedded energy)</u>. These indirect emissions are associated with the electricity used to convey water, due to increased water demand from development facilitated by the proposed Housing Element.
- <u>Operational Wastewater (non-biogenic)</u>. These are indirect emissions from wastewater treatment associated with the electricity use in wastewater treatment (and not the biogenic CO₂ process emissions) (BAAQMD, 2011).

	Annual CO₂e Emissions (metric tons per year)ª
Transportation	29,229
Area Source	1,702
Electricity	4,426
Natural Gas	3,925
Water & Wastewater	390
Solid Waste	2,477
Total Operational Project GHG Emissions without Construction Emissions	42,149
Construction Emissions per Year (annualized over 40 years)	438
Total Operational Project GHG Emissions with Construction Emissions	42,587
Project GHG Emissions by Service Population (including Construction Emissions) ^b	5.0
Threshold of Significance ^c	6.6
Exceeds Threshold?	Νο

TABLE 4.E-3 HOUSING ELEMENT GHG EMISSIONS FOR DEVELOPMENT OF THE 17 SITES

NOTES:

a. Based on output data from both URBEMIS 2007 and the BGM Greenhouse Gas Calculator. Input data were defaults as well as 3,285 apartments. Please see **Appendix C** for model outputs and additional assumptions.

b. Total operational and construction GHG emissions, divided by estimated net population of 8,476 associated with development facilitated by the Housing Element.

c. Per BAAQMD Guidelines, which indicate a threshold of 6.6 metric tons of CO_2e per service population.

Emission sources that are not included in the BAAQMD Guidelines or relevant to development facilitated by the proposed Housing Element on the potential sites for rezoning are not included in the GHG emissions inventory. These sources include emissions generated from permitted stationary source equipment, vegetation sequestration change, fugitive refrigeration emissions, life cycle emissions, agricultural emissions; and off road equipment emissions.

Construction-generated GHG Emissions

The construction-generated GHG emissions of development facilitated by the proposed Housing Element, specifically on the potential sites for rezoning, were estimated based on potential land use development on the 17 identified sites and default construction equipment and area estimates

of the URBEMIS2007 model.³ An estimated total of approximately 5,836 metric tons (MT) of CO_2e would be emitted per year over the assumed construction period of years 2012 through 2014.

Construction emissions are annualized because the proposed operational GHG emissions thresholds are analyzed in terms of metric tons "per year." Assuming a 40-year development life of residential unit (until development is demolished or remodeled for energy efficiency- which is the common standard currently used in practice), total construction emissions represent approximately 438 MT CO₂e annually, over 40 years.

As previously discussed, the BAAQMD Guidelines do not include a specific threshold or methodology for assessing construction-related GHG emissions for CEQA analysis. However for a conservative analysis the 40-year annualized construction-related GHG emissions were added to the total operational-related emissions, to assess construction-related GHG emissions against the BAAQMD thresholds and the project's ability to meet AB 32 GHG reduction goals, as discussed below.

Equipment used during construction would be subject to the requirements of BAAQMD Regulation 2 (Permits), Rule 1 (General Requirements) with respect to portable equipment unless exempt under Rule 2-1-105 (Exemption, Registered Statewide Portable Equipment); BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings); and BAAQMD Regulation 8 (Organic Compounds), Rule 15 (Emulsified and Liquid Asphalts).

Long-Term Operational GHG Emissions

As introduced above, long-term operational GHG emissions associated with development facilitated by the rezonings include indirect emissions from mobile sources (motor vehicle trips), emissions from natural gas combustion used in non-residential buildings, emissions from electricity use in non-residential buildings (grid electricity), emissions from water conveyance and waste water treatment and conveyance, and emissions from area sources. Emissions from each of these sources, in addition to the construction-related emissions discussed above, are reported in Table 4.E-3.

As shown in Table 4.E-3, net emissions and service population (residents and employees) generated by development facilitated by the rezoning would result in approximately 5.0 MT CO_2e per service population annually.

Based on the project-level significance thresholds applicable to redevelopment plans, development facilitated by the rezonings would not have a significant impact because it would not exceed 6.6 MT of CO_2e per service population annually.

In addition, the Draft CAP includes the 17 potential sites for rezoning in its community-wide analysis of VMT and associated GHG emissions. Analysis prepared for the CAP demonstrates

³ This SEIR calculated impacts as they relate to all the potential sites for rezoning; however, the City intends to rezone only those sites necessary (approximately 70 acres) to meet our share of the regional housing need.

that the City of Pleasanton can meet a community-wide 2020 emissions reduction target that is consistent with the provisions of AB 32, as interpreted by BAAQMD. The Draft CAP is discussed below.

Climate Action Plan

As described in the Draft CAP, the City's target of 15 percent below 2005 baseline by 2020 equates to 655,218 MT CO₂e per year for community emissions, which is 115,626 MT CO₂e below the baseline, and 306,331 MT CO₂e below the projected 2020 business-as-usual emissions (a reduction of approximately 32 percent). Several high-impact state-wide measures included in the AB 32 Scoping Plan are expected to provide significant emissions reduction benefits for the City of Pleasanton, including the Low Carbon Fuel Standard (LCFS), the Pavley Bill for reducing passenger vehicle emissions (Assembly Bill 1493), and the Renewable Portfolio Standard (RPS). Two additional state-wide measures in the AB 32 Scoping Plan are expected to reduce emissions from passenger vehicles and heavy/medium-duty trucks because of efficiencies gains realized by manufacturers.

The collective impact of state-wide Scoping Plan measures (other than energy efficiency and renewable energy measures, which are incorporated at the local level for the City of Pleasanton) on the city-wide business-as-usual inventory projection is presented in **Table 4.E-4**. By 2020, these measures are expected to reduce city-wide GHG emissions by an estimated 20.2 percent; by 2025 that percentage increases to 22.7 percent.

Year	Total Unmitigated	Pavley Mitigation	LCFS Mitigation	RPS Miti- gation	Vehicle Efficiency Mitigation	Total Emissions with State Measures	Total Mitigation from State Measures	Percent Reduction Attributed to State Measures
2005	770,844	-	-	-	-	770,844	0	0%
2020	961,549	-95,221	-34,802	-41,215	-14,928	775,383	194,017	-20.2%
2025	1,032,990	-126,279	-37,387	-46,380	-15,605	807,339	234,485	-22.7%

TABLE 4.E-4 PREDICTED EFFECT OF STATE-WIDE MEASURES ON CITY-WIDE GHG EMISSIONS (MT CO2E/YR)

Note : Draft CAP, Table 2-5. See Chapter 2 of the CAP for a full and detailed description of these state-wide measure reductions.

The Draft CAP also includes an adjustment in emissions based on the impact of rising fuel prices on driving behavior. The analysis uses petroleum price projections published by The U.S. Energy Information Administration (EIA) in its Annual Energy Outlook for 2011 (EIA 2011). According to EIA, the global price of oil is expected to rise approximately 39 percent between 2005 and 2020, adjusted for inflation. Since the Draft CAP includes many demand-related measures that are expected to decrease VMT (such as the provision of additional affordable housing opportunities, improvements to the non-motorized transportation system, and potential expansions of transit service) a conservative estimate of VMT/fuel price elasticity is appropriate. As such, the impact of the projected 39 percent fuel price increase was estimated using an elasticity value of -0.10 (i.e., the

percent change in quantity demanded divided by the percent change in price)). For Pleasanton, this translates to a daily VMT reduction of 107,439 by 2020, equivalent to annual emissions reductions of 18,729 MT CO_2e .

After crediting emissions reductions of 194,017 MT CO₂e from the expected impact of state-wide measures included in the AB 32 Scoping Plan, and the projected impact of rising fuel prices on driving behavior described in the Draft CAP, Pleasanton's projected city-wide GHG emissions would be 93,585 MT CO₂e per year above the AB 32 target by 2020. As summarized in **Table 4.E-5** below, implementation of the measures set forth in the Draft CAP are expected to reduce city-wide emissions by 101,649 MT CO₂e per year by 2020. This would reduce city-wide emissions approximately 8,064 MT CO₂e beyond the AB 32 target. Thus, as the result of

	Strategy	Annual GHG Reduction Potential (MT CO₂e)
SW2	Increase recycling, organics diversion, and waste reduction associated with the entire community	29,605
EC2	Leverage outside programs to increase energy efficiency	17,394
EC4	Develop programs to increase energy efficiency	9,342
EC3	Establish and promote financing and financial incentive programs to support energy efficiency	7,416
LU1	Support infill and higher density development	6,898
TDM2	Promote alternatives to work and school commutes	6,558
LU2	Support mixed-use infill and new development near local-serving commercial areas	5,845
EC1	Use city codes, ordinances, and permitting to enhance green building and energy efficiency	3,773
TDM1	Use parking pricing/policy to discourage SOV travel	3,174
ER1	Implement local ordinances and permitting processes to support renewable energy	2,389
TR1	Improve transit system and ridership	2,377
LU3	Improve transportation efficiency through design improvements	2,202
ER2	Develop programs to promote on-site renewable energy to the community	1,519
NM1	Create and maintain a safe, convenient, and effective system for pedestrians and bicyclists	1,280
EG1	Promote green building and energy efficient development for government operations and city infrastructure	1,194
VE2	Develop a city fleet replacement program	312
WA1	Conserve community water through building and landscape design and improvements	272
WA3	Increase or establish use of reclaimed/grey water systems	98
WA2	Conserve municipal operations water	1
	Total	101,649

TABLE 4.E-5 PROJECTED EMISSIONS REDUCTIONS FROM PLEASANTON CLIMATE ACTION PLAN STRATEGIES

Note : This table is from the Draft CAP, Table 3-2. See Chapter 3 of the CAP for a full and detailed description of each of these strategies, and Appendix D for detailed information on methods and assumptions used to quantify emissions reductions. See Appendix B for Baseline and Future Year VMT Estimates, and Appendix C for VMT reduction associated with CAP implementation.

implementing the proposed Draft CAP, the City would achieve consistency with the provisions of AB 32 as interpreted by the BAAQMD by meeting the community-wide emissions reduction target of 15 percent below its 2005 baseline by the year 2020. Thus, impacts related to greenhouse gas emissions would be considered less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.E-2: The proposed Housing Element; Climate Action Plan; General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement; and rezoning of sites for residential development sufficient to meet Pleasanton's share of the regional housing need could potentially conflict with an applicable plan, policy or regulation of an appropriate regulatory agency adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)

As discussed above, the proposed Housing Element; Climate Action Plan; General Plan as it was adopted in 2009, amended in 2010, and proposed to be amended pursuant to the settlement agreement; and rezoning of sites for residential development would achieve the level of emissions reductions targeted in AB 32 as interpreted for local jurisdiction by the BAAQMD. Specifically, the proposed project would improve the local jobs-housing balance (resulting in VMT reductions) and provide for additional GHG emissions mitigation, such that buildout of the General Plan, as it is proposed to be amended, would not conflict with AB 32 or any other plan, policy or regulation regarding GHG emissions (as previously discussed in the Regulatory Setting)

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Greenhouse Gas Emissions

- Bay Area Air Quality Management District (BAAQMD), 2008. Source Inventory of Bay Area Greenhouse Gas Emissions. December, 2008.
- Bay Area Air Quality Management District (BAAQMD), 2011. *California Environmental Quality Act Air Quality Guidelines*, May 2011.
- California Air Resources Board (ARB), 2008. *Climate Change Scoping Plan*. December 11, 2008.
- California Department of Water Resources (DWR), 2008. *Managing an Uncertain Future: Climate Change Adaptation Strategies for California's Water.* http://www.water.ca.gov/climatechange/docs/ClimateChangeWhitePaper.pdf

- California Energy Commission (CEC), 2007. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 - Final Staff Report, publication # CEC-600-2006-013-SF, Sacramento, CA, December 22, 2006; and January 23, 2007 update to that report.
- California Environmental Protection Agency (Cal EPA), 2006. Climate Action Team, *Executive Summary. Climate Action Team Report to Governor Schwarzenegger and the California Legislature.* Sacramento, CA, March 2006.
- City of Pleasanton, 2009. *Pleasanton General Plan 2005 2025, Air Quality and Climate Change Element.* July 21, 2009.

City of Pleasanton, 2011. Draft Climate Action Plan, July 2011

- Intergovernmental Panel on Climate Change (IPCC), 2007. *Climate Change 2007 Synthesis Report.* http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_sy nthesis_report.htm
- Kapnick, S. and Hall, A. 2009. Observed Changes in the Sierra Nevada Snowpack: Potential Causes and Concerns. California Climate Change Center. (Draft Paper) CEC-500-2009-016-D.
- Knowles, N.; Dettinger, M.; Cayan, D. 2006. Trends in Snowfall Versus Rainfall in the Western United States. Journal of Climate. 2006, 19(18): 4545-4559.
- Moser, S.; Franco, G.; Pittiglio, S.; Chou, W.; Cayan, D. 2009. The Future is Now: An Update on Climate Change Science Impacts and Response Option for California. California Energy Commission Public Interest Energy Research Program, California Climate Change Center. CEC-500-2008-071 http://www.energy.ca.gov/2008publications/CEC-500-2008-071/CEC-500-2008-071.PDF
- Mote, P.; Hamlet, A.; Clark, M.; Lettenmaier, D. 2005. *Declining Mountain Snowpack in Western North America*. American Meteorological Society. January, 2005. 39p.
- U.S. Energy Information Administration (EIA), 2011. *Annual Energy Outlook 2011*. DOE/EIA-0383, April 2011. Available at http://www.eia.gov/forecasts/aeo/pdf/0383(2011).pdf

4.F Geology

This section describes existing geologic conditions in the City of Pleasanton, including geologic and seismic hazards; the applicable regulatory framework regarding geology, soils, and seismicity; and the potential geologic, soils, and seismic impacts of development in accordance with the proposed General Plan Amendment and rezonings.

With the exception of the potential sites being rezoned for residential uses, impacts on the geologic environment within the City were previously addressed in the City of Pleasanton General Plan 2005-2025 EIR (City of Pleasanton, 2009a), which is hereby incorporated by reference in this SEIR.

Setting

Pleasanton is located within the Coast Ranges Geomorphic Province¹ (Coast Ranges), characterized by northwest-trending mountain ridges and intervening valleys that have formed over millions of years due to movements along major regional faults. The bedrock of the Coast Ranges is primarily composed of ancient seafloor sediments and volcanic rocks. In most areas, these rocks have been significantly hardened, mineralized, folded and fractured by heat and pressure deep within the earth. This bedrock – broadly divided into the Franciscan Complex and Great Valley Sequence – forms most of the hills and mountains of the Bay Area. The city, encompassing the potential sites for rezoning, is located within Amador-Livermore Valley, which is part of a broad, flat-lying basin filled with Quaternary-age alluvium² that has been deposited by the regions' rivers and streams.

Regional Faulting and Seismic Hazards

Earthquake Terminology and Concepts

Earthquake Mechanisms and Fault Activity

Faults are planar features within the earth's crust that have formed to release stresses caused by the dynamic movements of the earth's major tectonic plates. An earthquake on a fault is produced when these stresses overcome the inherent strength of the earth's crust, and the rock ruptures. The rupture causes seismic waves to propagate through the earth's crust, producing the ground-shaking effect known as an earthquake. The rupture also causes variable amounts of slip along the fault, which may or may not be visible at the earth's surface. It is important to note that faults are pervasive features in rocks and alluvial deposits, and occur even in areas of little-to-no earthquake activity. This is because over geologic time scales, the areas where tectonic stresses build up are always changing; thus, faults are more often evidence of past tectonic activity than indicators of current earthquake hazards.

¹ A geomorphic province is an area that possesses similar bedrock, structure, history, and age. California has 11 geomorphic provinces.

Quaternary Alluvium is a general term that refers to geologically-recent (i.e. last 1.8 million years) deposits of gravel, sand, silt and clay that are basin or valley-forming.

Geologists commonly use the age of offset as evidence of fault activity—the younger the displaced rocks, the more recent seismic events have occurred. To evaluate the likelihood that a fault will produce an earthquake, geologists examine the magnitude and frequency of recorded earthquakes and evidence of past displacement along a fault. An *active* fault is defined by the State of California as a fault that has had surface displacement within Holocene time (last 11,000 years). For the purpose of delineating fault rupture zones, the California Geological Survey defined a *potentially active* fault as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years). However, attempting to zone potentially active faults for fault rupture was discontinued because it became apparent that there are so many Quaternary-age faults in the state that it would be meaningless to zone all of them (Bryant and Hart, 2007). In late 1975, the State Geologist made a policy decision to zone only those faults that have a relatively high potential for ground rupture. It was decided that a fault should only be considered for zoning if it is "sufficiently active"³ and "well-defined."⁴ Blind faults do not show surface evidence of past seismic activity, even if they occurred in the recent past; and faults that are confined to pre-Quaternary rocks (more than 1.6 million years old) are considered inactive and incapable or at least unlikely of generating an earthquake.

Earthquake Magnitude

When an earthquake occurs along a fault, a characteristic way to measure its size is to measure the energy released during the event. When an earthquake occurs, a network of seismographs records the amplitude and frequency of the seismic waves it generates. The Richter Magnitude (M) for an earthquake represents the highest amplitude measured by the seismograph at a distance of 100 kilometers from the epicenter. Richter magnitudes vary logarithmically with each whole number step representing a ten-fold increase in the amplitude of the recorded seismic waves. While Richter Magnitude was historically the primary measure of earthquake magnitude, seismologists now use Moment Magnitude as the preferred way to measure earthquakes. The Moment Magnitude scale (Mw) is related to the physical characteristics of a fault, including the rigidity of the rock, the size of fault rupture, and the style of movement or displacement across the fault. Although the formulae of the scales are different, they both contain a similar continuum of magnitude values, except that Mw can reliably measure larger earthquakes and can do so from greater distances.

Peak Ground Acceleration

A common measure of ground motion during an earthquake is the peak ground acceleration (PGA). The PGA for a given component of motion is the largest value of horizontal acceleration obtained from a seismograph. PGA is expressed as the percentage of the acceleration due to gravity (g), which is approximately 980 centimeters per second squared. In terms of automobile accelerations, one "g" of acceleration is equivalent to the motion of a car traveling 328 feet from rest in 4.5 seconds. For comparison purposes, the maximum peak acceleration value recorded during the Loma Prieta

³ A fault is deemed sufficiently active if there is evidence of Holocene surface displacement along one or more of its segments or branches. Holocene surface displacement may be directly observable or inferred; it need not be present everywhere along a fault to qualify that fault for zoning.

⁴ A fault is considered well-defined if its trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The fault may be identified by direct observation or by indirect methods (e.g., geomorphic evidence). The critical consideration is that the fault, or some part of it, can be located in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

earthquake was in the vicinity of the epicenter, near Santa Cruz, at 0.64g. Unlike measures of magnitude, which provide a single measure of earthquake energy, PGA varies from place to place, and is dependent on the distance from the epicenter and the character of the underlying geology (e.g., hard bedrock, soft sediments or artificial fills).

The Modified Mercalli Intensity Scale

The Modified Mercalli Intensity Scale (**Table 4.F-1**) assigns an intensity value based on the observed effects of ground-shaking produced by an earthquake. Unlike measures of earthquake magnitude and PGA, the Modified Mercalli (MM) intensity scale is qualitative in nature (i.e., it is based on actual observed effects rather than measured values). Similar to PGA, MM intensity values for an earthquake at any one place can vary depending on its magnitude, the distance from its epicenter, the focus its energy, and the type of geologic material.

The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from IV to X could cause moderate to significant structural damage. Because the MM is a measure of ground-shaking effects, intensity values can be related to a range of PGA values, also shown in Table 4.F-1.

Seismic Context

Pleasanton lies within a region of California that contains many active and potentially active faults and is considered an area of high seismic activity. The USGS along with the California Geological Survey and the Southern California Earthquake Center formed the 2007 Working Group on California Earthquake Probabilities to summarize the probability of one or more earthquakes of magnitude 6.7 or higher occurring in the state of California over the next 30 years. Accounting for the wide range of possible earthquake sources, it is estimated that the Bay Area has a 63 percent chance of experiencing such an earthquake (Working Group on California Earthquake Probabilities, 2008). According to the working group, the individual faults posing the greatest threat to the Bay Area are the Hayward, the San Andreas, and the Calaveras (including the related Verona fault) faults. Other principal active faults capable of producing large earthquakes in the Bay Area include the Concord–Green Valley, Marsh Creek–Greenville, San Gregorio and Rodgers Creek faults.

Table 4.F-2 lists the above mentioned faults, their distance and directions from the city limits, and their maximum credible earthquake magnitude. Due to a combination of proximity and future earthquake probability of these faults, the Calaveras, Hayward, and San Andreas are most likely to produce the greatest level of ground shaking in the area and are thus briefly described below.
F. Geology

TABLE 4.F-1
MODIFIED MERCALLI INTENSITY SCALE

Intensity Value	Intensity Description	Average Peak Ground Acceleration ^a
I	Not felt except by a very few persons under especially favorable circumstances.	< 0.0017 g
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	0.0017-0.014 g
111	Felt noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly, vibration similar to a passing truck. Duration estimated.	0.0017-0.014 g
IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	0.014–0.039g
V	Felt by nearly everyone, many awakened. Some dishes and windows broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles may be noticed. Pendulum clocks may stop.	0.035 – 0.092 g
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; and fallen plaster or damaged chimneys. Damage slight.	0.092 – 0.18 g
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	0.18 – 0.34 g
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.	0.34 – 0.65 g
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	0.65 – 1.24 g
Х	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	> 1.24 g
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	> 1.24 g
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.	> 1.24 g
NOTE: a. Value is e accelerati	xpressed as a fraction of the acceleration due to gravity (g). Gravity (g) is 9.8 meters per second squa	red. 1.0 g of

SOURCE: ABAG, 2003a

Fault	Closest Distance and Direction	Regency of Movement ^a	Future Earthquake Probability ^b	Historical Seismicity	Maximum Moment Magnitude Earthquake (Mw) ^c
Calaveras (including Verona fault)	Intersects city limits	Historic	7%	M 5.6–M 6.4 in 1861 M 6.2, 1911 in 1984	6.8
Mt. Diablo Thrust	4 miles north	Quaternary (possibly Holocene)	3%	n/a	6.7
Hayward	3 miles west	Historic	31% (combined with Rodgers Creek Fault)	M 6.8 in 1868 Many <m 4.5<="" td=""><td>7.1</td></m>	7.1
Marsh Creek– Greenville	7 miles east	Historic	3%	M 5.6 in 1980	6.9
Concord– Green Valley	14 miles north	Historic	3%	Historic active creep	6.7
San Andreas	21 miles southwest	Historic	21%	M 7.1 in 1989 M 8.25 in 1906 M 7.0 in 1838 Many <m 6<="" td=""><td>7.9</td></m>	7.9
Rodgers Creek	~35 miles northwest	Holocene	31 % (combined with Hayward fault)	M 6.7 in 1898 M 5.6 and 5.7 in 1969	7.0

TABLE 4.F-2 ACTIVE FAULTS IN THE REGION

NOTES:

a From Jenning and Bryant (2010), historic refers to the post-colonial era (after 1775), the Holocene is from 11,000 years ago to present.

b Probability of one or more earthquakes of magnitude 6.7 or greater in the next 30 years from the Working Group on California Earthquake Probabilities (2008). The Working Group estimates the probability of a "background" earthquake not from one of the seven major faults studied to be 9%.

c The Maximum Moment Magnitude Earthquake is derived from the joint CDMG/USGS Probabilistic Seismic Hazard Assessment for the State of California (Peterson et al., 1996).

SOURCES: Bryant and Hart, 2007; Jennings and Bryant, 2010; Working Group on California Earthquake Probabilities (2008); Peterson et al., 1996.

Calaveras Fault

The Calaveras fault, running through the City of Pleasanton and within one mile of many of the potential sites for rezoning, is a major right-lateral strike-slip fault that has been active during the last 11,000 years. The Calaveras fault is located in the eastern San Francisco Bay region and generally trends from north to south along the eastern side of the Oakland Hills into the western Diablo Range, eventually joining the San Andreas Fault Zone south of Hollister. The northern extent of the fault zone is somewhat speculative and could be linked with the Concord fault.

North of Calaveras Reservoir, where Pleasanton is located, the fault is characterized by a relatively low slip rate of 5-6 mm/yr and sparse seismicity (Bryant, 2009). South of Calaveras Reservoir, the fault zone is characterized by a higher rate of surface fault creep that has been evidenced in historic times. The Calaveras fault has been the source of several moderate magnitude earthquakes, and the probability of a large earthquake (greater than M 6.7) is much lower than on the San Andreas or Hayward faults. The USGS Working Group on California Earthquake Probabilities (2008) identifies the Calaveras fault as having a 7 percent chance of

generating one or more earthquakes of magnitude 6.7 or greater by approximately 2037. The Verona fault, considered related to the Calaveras fault, is northwest trending and enters the southern boundary of the Pleasanton City limits.

Hayward Fault

The Hayward Fault Zone, located as close as three miles west of the City, extends for 60 miles from San Pablo Bay in Richmond south to the San Jose area. The Hayward fault has historically generated one sizable earthquake, in 1868, when a Richter magnitude 7 earthquake on its southern segment ruptured the ground for a distance of about 30 miles (Bryant, 2005). Lateral ground surface displacement during this event was at least 3 feet. A characteristic feature of the Hayward fault is its well-expressed and relatively consistent fault creep. Although large earthquakes on the Hayward fault have been rare since 1868, slow fault creep has continued to occur and has caused measurable offset. Fault creep on the East Bay segment of the Hayward fault is estimated at 9 millimeters per year (mm/yr) (Peterson, et al., 1996). However, a large earthquake could occur on the Hayward fault with an estimated moment magnitude of about Mw 7.1 (Table 4.F-2). The USGS Working Group on California Earthquake Probabilities (2008) identifies the Hayward–Rodgers Creek Fault Systems as having a 31 percent chance of generating one or more earthquakes of magnitude 6.7 or greater by approximately 2037.

San Andreas Fault

The San Andreas Fault Zone, located as close as 21 miles southwest from the City Area, is a major structural feature that forms at the boundary between the North American and Pacific tectonic plates. It is a strike-slip⁵ fault, extending from the Salton Sea in Southern California near the border with Mexico to north of Point Arena, where the fault trace continues out into the Pacific Ocean. The main trace of the San Andreas Fault through the Bay Area trends northwest from the Santa Cruz Mountains to the western side of the San Francisco Peninsula.

In the San Francisco Bay Area, the San Andreas Fault Zone was the source of the two major earthquakes in recent history that affected the San Francisco Bay region. The 1906 San Francisco earthquake was estimated at M 7.9 and resulted in approximately 290 miles of surface fault rupture, the longest of any known continental strike slip fault. Horizontal displacement along the fault approached 17 feet near the epicenter (Bryant, 2011). The 1989 Loma Prieta earthquake, with a magnitude of Mw 6.9, was centered in the Santa Cruz Mountains and resulted in widespread damage throughout the Bay Area. The USGS Working Group on California Earthquake Probabilities (2008) identifies the San Andreas Fault as having a 21 percent chance of generating one or more earthquakes of magnitude 6.7 or greater by approximately 2037.

Seismic Hazards

Surface Fault Rupture

Seismically-induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude, sense, and nature of fault rupture can

⁵ Refers to relative motion on either side of a fault which is primarily horizontal (as opposed to vertical).

vary for different faults or even along different strands of the same fault. Ground rupture is considered more likely along active faults, which are referenced in Table 4.F-2. The Calaveras fault and its associated Alquist-Priolo Earthquake Fault Zone intersect the city limits along the western boundary of the city but more than a mile from any of the potential sites for rezoning. Since no potential sites for rezoning are crossed by an Alquist-Priolo Earthquake Fault Zone, as designated by the Alquist-Priolo Earthquake Fault Zoning Act, the risk of ground rupture in the area is low.

Ground Shaking

As discussed above, a major earthquake is likely to affect Pleasanton within the next 30 years, and would produce strong ground-shaking effects throughout the region. Earthquakes on active or potentially active faults, depending on magnitude and distance from the city, could produce a range of ground-shaking intensities. Historically, earthquakes have caused strong ground-shaking and damage in the San Francisco Bay Area, the most recent being the M 6.9 Loma Prieta earthquake in October 1989.

A primary tool that seismologists use to describe ground-shaking hazard is a probabilistic seismic hazard assessment (PSHA). The PSHA for the State of California takes into consideration the range of possible earthquake sources (including such worse-case scenarios as described above) and estimates their characteristic magnitudes to generate a probability map for ground-shaking. The PSHA maps depict values of peak ground acceleration (PGA) that have a 10 percent probability of being exceeded in 50 years (a 1 in 475 chance in any one year). This probability level allows engineers to design buildings for ground motions that have a 90 percent chance of *not* occurring in the next 50-years, making buildings safer than if they were simply designed for the most likely events. The PSHA indicates that in the city, there is a 10 percent chance of exceeding PGA values of approximately 0.68g over the next 50 years (Peterson et al., 1996). As indicated in Table 4.F-1, these PGAs could result in considerable damage even in specially designed structures, causing partial collapse of some buildings and damaging underground utilities. The potential hazards related to ground-shaking are discussed further in the Impacts and Mitigation Measures section, below.

Liquefaction

Liquefaction is a transformation of soil from a solid to a liquefied state, during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose- to medium-density sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Four kinds of ground failure commonly result from liquefaction: lateral spread, flow failure, ground oscillation, and loss of bearing strength. *Lateral spreading* is the horizontal displacement of surficial blocks of sediments resulting from liquefaction in a subsurface layer that occurs on slopes ranging between 0.3 and 3 percent and commonly displaces the surface by several meters to tens of meters. *Flow failures* occur on slopes greater than 3 degrees and are primarily liquefied soil or blocks of intact material riding on a liquefied subsurface zone. *Ground oscillation* occurs on gentle slopes when liquefaction occurs at depth and no lateral displacement takes place. Soil units that are not liquefied may pull apart from each other and oscillate on the liquefied zone. The *loss of bearing pressure* can occur beneath a structure when the underlying

soil loses strength and liquefies. When this occurs, the structure can settle, tip, or even become buoyant and "float" upwards. Liquefaction and associated failures could damage foundations, roads, underground cables and pipelines, and disrupt utility service.

The depth to groundwater influences the potential for liquefaction, in that sediments need to be saturated to have a potential for liquefaction. In general, areas where the depth to groundwater is less than 50 feet below ground surface can be susceptible to liquefaction. The California Geological Survey (2008), in accordance with the requirements of the Seismic Hazards Mapping Act, has placed large portions of the city within a liquefaction hazard zone, including many of the potential sites for rezoning (City of Pleasanton, 2011b). The implications of this designation are discussed under the regulatory setting and impact analysis below. See **Figure 4.F-1**, below, for more detail.

Earthquake-Induced Landslides

The type and occurrence of slope failure hazards have been discussed earlier in this chapter; however, landslides are also a secondary effect of earthquakes and a major earthquake-induced hazard. Pleasanton is surrounded by hills to the south and west, which have high potential for landslides. However, most of the city exists on flat ground distant from hillsides. Landsliding is expected to occur around the edges of the city, but not within it, based on city topography. Accordingly, the potential for landslides affecting one or more of the potential sites for rezoning is minimal. See **Figure 4.F-2** for more detail, below.

Earthquake-Induced Settlement

Settlement of the ground surface can be accelerated and accentuated by earthquakes. During an earthquake, settlement can occur as a result of the relatively rapid compaction and settling of subsurface materials (particularly loose, uncompacted, and variable sandy sediments above the water table) due to the rearrangement of soil particles during prolonged ground-shaking. Settlement can occur both uniformly and differentially (i.e., where adjoining areas settle at different amounts). Areas underlain by artificial fill or relatively loose alluvial sediments would be susceptible to this type of settlement. Given the geologic setting of the City, this area could be subjected to earthquake-induced settlement, discussed further in the impact analysis to follow.

Soils

Expansive or Corrosive Soils

Expansive soils possess a "shrink-swell" behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time, usually as a result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Normally, soils that are expansive contain a significant clay fraction. The actual presence and extent of expansive soils could only be determined as part of site specific geotechnical evaluations for development facilitated by the proposed Housing Element.



Source:1. California Geological Survey Seismic Hazards Zonation Program, August 2008 2. William Lettis and Associates, USGS, "Liquefaction Susceptibility Level of the San Francisco Bay Area," 2000. - General Plan Amendment and Rezonings . 210016 Figure 4.F-1 Liquefaction Susceptiblity Level



Source: 1. California Geological Survey Seismic Hazards Zonation Progarm, August 2008 2. San Francisco Bay Landslide Inventory, "Landslides in Alameda County" (USGS, OFR 99-504) by S. Roberts, M.A. Roberts and E.M. Brennan, from preliminary photo-interpretation maps of surficial deposits by T.H. Nilsen (USGS, 1997; OFR 75-277). General Plan Amendment and Rezonings . 210016
Figure 4.F-2
Landslide Zones

Soil Erosion

Erosion is the wearing away of soil and rock by processes, such as mechanical or chemical weathering, mass wasting, and the action of waves, wind and underground water. Excessive soil erosion can eventually lead to damage of building foundations and roadways. Areas that are susceptible to erosion are those that would be exposed during the construction phase of projects and activities facilitated by the proposed Housing Element. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures, asphalt, or slope protection. The potential for substantial or accelerated soil erosion could only be determined as part of site specific evaluations for development facilitated by the proposed Housing Element.

Settlement

Settlement can occur from immediate settlement, consolidation, or shrinkage of expansive soil. Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs quickly and is typically complete after placement of the final load. Consolidation settlement occurs in saturated clay from the volume change caused by squeezing out water from the pore spaces. Consolidation occurs over a period of time and is followed by secondary compression, which is a continued change in void ratio under the continued application of the load. Rapid settlement can occur if soil is liquefied during an earthquake, an effect which is addressed later in the discussion of Seismic Hazards.

Soils tend to settle at different rates and by varying amounts depending on the load weight or changes in soil properties over an area, which is referred to as differential settlement. The southern and eastern portions of the city are underlain by artificial fills, which vary in thickness and are known to experience consolidation settlement and secondary compression. The potential hazard of settlement and differential settlement can only be determined on a site by site basis from a site-specific study of underlying materials.

Regulatory Setting

This section provides a brief overview of the federal, State, and local regulations related to geology, seismicity, and mineral resources.

State

The statewide minimum public safety standard for mitigation of earthquake hazards (as established through the California Building Code (CBC), Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act) is that the minimum level of mitigation for a project should reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy, but in most cases, is not required to prevent or avoid the ground failure itself. It is not feasible to design all structures to completely avoid damage in worst-case earthquake scenarios. Accordingly, regulatory agencies have generally defined an "acceptable level" of risk as that which provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of a project [CCR Title 14, Section 3721(a)].

California Building Code

The California Building Code (CBC), which is codified in CCR Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, egress facilities, and general building stability. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all building and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable.

The CBC is based on the International Building Code (IBC), formerly known as the Uniform Building Code (UBC). The 2010 CBC is based on the 2009 IBC published by the International Code Conference, and is updated every three years with the most current edition of the IBC.. In addition, the CBC contains necessary California amendments that are based on reference standards obtained from various technical committees and organizations such as the American Society of Civil Engineers (ASCE), the American Institute of Steel Construction, and the American Concrete Institute. ASCE Minimum Design Standard 7-05 provides requirements for general structural design, and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, all of which are used to determine a seismic design category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site; SDC ranges from A (very small seismic vulnerability) to E/F (very high seismic vulnerability and near a major fault). Seismic design specifications are determined according to the SDC.

CCR Title 24 also includes the California Residential Code (based on the International Residential Code) and the California Green Building Code, which have been adopted as separate documents (CCR Title 24, Part 2.5 and 11, respectively). The California Residential Code includes structural design standards for residential one and two family dwellings and covers all structural requirements for conventional construction. All other structures including multi-family residential projects are found in the CBC.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code, Chapter 7.8, Section 2690-2699.6) was developed to reduce the threat to public safety and to minimize the loss of life and property by identifying and mitigating ground failure caused by strong earthquakes, namely liquefaction and slope failure. While this Act pertains to seismic hazards, they are not the same as the fault surface rupture hazard regulated by the Alquist-Priolo Special Studies Zone Act of 1972.

The Seismic Hazards Mapping Act requires the State Geologist to delineate seismic hazard zones, also known as "zones of required investigation", where regional (that is, not site-specific) information suggests that the probability of a hazard requiring mitigation is great enough to warrant a site-specific investigation. The fact that a site lies outside a zone of required investigation does not necessarily mean that the site is free from seismic or other geologic hazards. Where a project-defined by the act as any structures for human occupancy or any subdivision of land that contemplates the eventual construction of structures for human occupancy—is within a zone of required investigation, lead agencies must apply minimum criteria for project approval. The most basic criteria for project approval are that the owner/developer adequately demonstrates seismic hazards at the site have been evaluated in a geotechnical report, that appropriate mitigation measures have been proposed, and that the lead agency has independently reviewed the adequacy of the hazard evaluation and proposed mitigation measures. Both the geotechnical report and the independent review must be performed by a certified engineering geologist or registered civil engineer. These criteria, along with seismic hazard evaluation and mitigation standards, are outlined in California Geological Survey Special Publication 117A, revised and re-adopted in September of 2008 by the State Mining and Geology Board.

Local

City of Pleasanton General Plan

The City of Pleasanton General Plan, developed in 2005, outlines the policies and programs that provide a long-term plan for addressing the physical development of the City through 2025. Projects must be generally consistent with the relevant guidelines outlined in the General Plan. The Public Safety Element of the General Plan describes programs and policies relevant to the mitigation of geological hazards.

The following goals, policies, and programs address potential impacts related to geology, soils, and seismicity:

Public Safety Element

Goal 1:	Minimize the risks to lives and property, and minimize the potential for liability to the City due to seismic activity within the Planning Area.
Policy 1:	Restrict development in areas prone to seismic safety hazards.
Program 1.1:	Comply with the <i>Alquist-Priolo Act</i> and other seismic safety criteria established by the City of Pleasanton.
Program 1.2:	Prohibit construction of habitable structures within at least 50 feet of an identified active fault trace where the fault has been specifically located in site-specific geologic studies.
Program 1.3:	Prohibit construction of a habitable structure within at least 100 feet of the most likely line of the fault trace, if the active fault trace is approximately located,

F. Geology

concealed or inferred. The applicant's geologist (with concurrence from the City's peer review geologist) shall identify the most likely line of the fault trace. This program applies only to new development approved after date of adoption and does not make non-conforming those structures approved under policies and regulations allowing structures at least 50 feet from a fault trace.

- Program 1.4: Prohibit construction of facilities and systems vital to the public health and safety (e.g., water facilities, fire stations, hospitals, communication facilities, etc.) within the Alquist-Priolo Earthquake Fault Zones.
- Policy 2: Investigate the potential for seismic hazards during the development review process, and implement soils engineering and construction standards which minimize potential danger from earthquakes.
- Program 2.1: Require site-specific soils, geologic, and/or geotechnical engineering studies prior to development approval of structures for human occupancy for any project proposed within areas shown on current Alquist-Priolo Earthquake Fault Zones Maps. For development within areas identified as severe through violent seismic shaking amplification (Figure 5-3: Relative Intensity of Ground Shaking) outside of the Alquist-Priolo Earthquake Fault Zone, the site-specific soils and/or geotechnical report shall address the impacts of seismic ground shaking on proposed structures, infrastructure, and ground stability.
- Program 2.2: Design and construct all structures to address potential seismic and geologic hazard conditions according to the California Uniform Building Code (CBC) standards or more stringent standards. All structures and facilities not addressed by the CBC shall be designed and constructed to mitigate potential seismic and geologic hazards as recommended by site-specific soils, geologic, and/or geotechnical engineering studies.
- Program 2.3: Design new utility lines that cross an active fault trace with appropriate engineering and design mitigations as recommended by site-specific soils, geologic, and/or geotechnical engineering studies.
- Program 2.4: Design new bridges and retrofit existing bridges with appropriate engineering and design mitigations in accordance with CALTRANS standards.
- Program 2.5: Require technical review and analysis of soils, geologic, and geotechnical studies by a qualified consulting engineering geologist reporting to the City of Pleasanton. Incorporate the recommendations of the City's consulting engineer into the project design.
- Program 2.6: Require professional inspection of foundations, piers, excavation, earthwork, and other aspects of site development during construction. Ensure that all mitigations

recommended by the City's consulting engineer are incorporated into the project construction.

- Goal 2: Minimize the risks to lives and property, and to minimize potential liability to the City, due to geologic hazards within the Planning Area.
- Policy 5: Investigate the potential for geologic hazards as part of the development review process, and maintain this information for the public record.
- Program 5.1: Require site-specific soils studies for all new development prior to the issuance of building permits and prior to the approval of final improvement plans. Where there is risk of geologic hazards, the soil study should address seismic shaking, lateral spreading, differential settlement, lurch cracking, liquefaction, erosion, and expansive soils.
- Program 5.2: Require site-specific geologic and/or geotechnical engineering studies prior to development approval where there is risk of the following geologic hazards: surface fault rupture, bank failures, rock falls, landslides, and for areas with slopes equal to or greater than 20 percent.
- Program 5.3: Require measures to mitigate potential geologic safety hazards during adverse conditions such as saturated soils and groundshaking, and during grading of the site for roads, installation of infrastructure, and creation of building pads. Mitigation measures identified by the site engineering studies shall be incorporated into the project design.
- Program 5.4: Require technical review and analysis of geotechnical studies by a qualified consulting geotechnical engineer reporting to the City. Incorporate the recommendations of the City's consulting engineer into the project design.
- Program 5.5: Discourage development in areas with a high risk of geologic hazards as identified by a California-licensed engineering geologist representing the City. Allow development only when geologic and soils investigations demonstrate that hazards can be mitigated by accepted engineering and construction techniques. Mitigation measures identified by the investigations shall be incorporated into the project design and subject to approval by the City's reviewing geologist/engineer.
- Policy 6: Restrict new development of sites with structures intended for human occupancy in any landslide prone or unstable area.
- Program 6.1: Prohibit new development of sites with structures intended for human occupancy in any landslide-prone areas unless the landslide risk can be eliminated. Permit development in landslide prone areas only when sites can be shown to be stable during adverse conditions such as saturated soils, groundshaking, and during

F. Geology

grading of the site for roads, installation of infrastructure, and creation of building pads. Engineering studies shall demonstrate that structures in landslide prone areas would sustain no more damage due to slope instabilities than damage sustained by a similar building in the Pleasanton Planning Area constructed to current CBC standards and located on soils with a low susceptibility to failure when exposed to moderate groundshaking.

- Program 6.2: Require developers to include drainage, erosion, and landslide mitigation measures to reduce landslide potential.
- Program 6.3: Design irrigation systems to minimize the potential for soil saturation, excessive run-off, and other factors deemed to contribute to slope instability.
- Program 6.4: Design grading plans to minimize earth moving activity and site grading in areas of potential land instability and in areas identified as having "Mostly landslides," as shown on Figure 5-1.
- Program 6.5: Establish Geologic Hazard Abatement Districts (GHADs) in areas of new development where landslide risks or other geologic hazards are known to exist, to assure that ongoing monitoring and maintenance of slopes and drainage facilities occurs. GHADs should be considered for hillside development such as west of Foothill Road and other areas prone to seismic, landslide, and other geologic hazards.
- Program 6.6: In unstable areas, prohibit major grading where existing slopes are 25 percent or greater.
- Policy 7: Implement standards to assist City decision-makers in the evaluation of development proposals and management of geologic hazard areas.
- Program 7.1: Maintain a list of pre-qualified geologic, geotechnical, soils, and structural engineering firms acceptable to the City as reviewing consultants.
- Program 7.2: Review and update as necessary the City's "Standards for Geotechnical and Engineering Reports."
- Program 7.3: Adopt updates to the California Building Code and other safety standards in a timely manner.
- Program 7.4: Develop a grading ordinance which establishes criteria for evaluating and controlling grading due to development.

City of Pleasanton Building Code

The City of Pleasanton has adopted the 2010 California Building Code as the City Building Code (Title 20 of the Pleasanton Municipal Code) together with additions, amendments and repeals that

reflect building conditions and structural requirements in the City. Chapter 18 of the California Building Code requires a geotechnical foundation investigation during the project planning phase for new construction intended for human occupancy. The recommendations of the foundation and structural reports prepared for the construction of the project or equivalent measures are incorporated in the final design of each structure. Earthquake-resistant design and materials must meet or exceed current seismic engineering standards.

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist) the project could have a significant impact if it would:

- 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 known fault (refer to Division of Mines and Geology Special Publication 42);
 - Strong seismic ground shaking;
 - o Seismic-related ground failure, including liquefaction; or
 - o Landslides
- Result in substantial soil erosion or the loss of topsoil;
- Be located on 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;
- Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Approach to Analysis

The City geotechnical characteristics determine the potential for geotechnical hazards that could occur within its boundaries. Available U.S. and California Geological Survey maps, the City's General Plan, and other studies and reports were consulted in order to determine the potential for geological hazard that would occur from the proposed developments.

Impacts and Mitigation Measures

Impact 4.F-1: Development facilitated by the General Plan Amendment and rezonings would expose people or structures to rupture of a known earthquake fault. (Less than Significant)

Housing Element

Pleasanton is located in a seismically active region with one of the major active faults, the Calaveras, passing through the City. The fault is situated near the western portion of the city, east of and parallel to I-680. Site 2 (Sheraton), Site 3 (Stoneridege Shopping Center, and Site 4 (Kaiser) exist west of I-680 and closest to the fault. However, none of the potential sites for rezoning exist within the Alquist-Priolo Earthquake Zone for the Calaveras fault

Regardless, under the Earthquake Hazards Reduction Act, the Alquist-Priolo Earthquake Fault Zoning Act, and under Programs 1.2 and 1.3 of Policy 1 of the Public Safety Element of the General Plan, construction of habitable structures within at least 50 feet of a fault trace and within 100 feet of the most likely of the fault trace is prohibited. The Public Safety Element of the General Plan (under Goal 1, Policies 1 and 2; see the Regulatory Setting section above) also describes additional strategies for reducing the risk of fault rupture to life and property, including requirements for seismic investigation to more accurately locate fault trace locations by qualified engineers prior to construction. Therefore, development facilitated by the proposed Housing Element would result in less-than-significant exposures of people and structures to surface rupture on a known earthquake fault.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. The Draft CAP proposes strategies and measures that would aid in reducing the City's emission of GHGs. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would increase exposure to geologic harzards, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

The Draft CAP does not result in any new development potential or construction of facilities that would be impacted by these conditions beyond what the General Plan EIR considered. Implementation of policies and programs under the Draft CAP would be subject to all of the City development standards regarding seismic and geologic stability. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.F-2: Development facilitated by the General Plan Amendment and rezonings could potentially expose people or structures to adverse effects of strong seismic groundshaking or seismic-related ground failure. (Less than Significant)

Housing Element

The Working Group on California Earthquake Probabilities estimates that the City of Pleasanton is likely to be subjected to a major earthquake by 2037. The resulting ground shaking could cause significant damage to housing units developed on the potential sites for rezoning if not engineered appropriately. Moreover, ground failures caused by secondary effects such as liquefaction might occur on alluvium soils or poorly compacted fill areas, where they exist.

Much of the city is underlain by alluvial soils that could respond poorly to loading under seismic shaking or ground failure. 'Violent' or 'severe to violent' ground shaking is expected to occur throughout the city (City of Pleasanton General Plan, Figure 5-3, 2005). As such new residential development on the potential sites for rezoning would be subject to 'violent' or 'severe to violent' ground shaking.

The Public Safety Element of the General Plan (Goal 2, Policies 5, 6, and 7) describes policies that would minimize the risk from groundshaking, including a requirement for site-specific soil and geological studies that include recommendations for minimizing seismic hazards. Therefore, impacts regarding exposing people or structures to seismic groundshaking would be less-than-significant. Based on an existing regulatory framework that addresses earthquake safety issues and adherence to the requirements of the CBC, seismically induced groundshaking would not be a substantial hazard to the sites described in the proposed Housing Element.

Seismic-related ground failure is a risk that exists throughout much of the city, including risk from liquefaction. The CGS estimates that much of Pleasanton, including the potential sites for rezoning, are in liquefaction zones (see Figure 4.F-1). Potential sites for rezoning within a liquefaction zone include Sites 1, 2, 3, 4, 6, 7, 8, 10, 17, 18, and 21. Liquefaction can occur on water-saturated alluvial soils. Such unstable soils may exist at some sites, but they can be removed or modified during building construction, as specified in the CBC. Adherence to the soil and foundation support parameters in Chapters 16, and 18 of the CBC and the grading requirements in Chapter 18 of the CBC, as required by City and State law, ensures the maximum practicable protection available from ground failure under static or dynamic conditions for structures and their associated trenches, temporary slopes and foundations. In addition, areas located within Seismic Hazard Zones for liquefaction would be required to adhere to the requirements of Special Publication 117 in accordance with the Seismic Hazards Mapping Act. Moreover, the Public Safety Element of the General Plan (under Goal 2, Policy 5; see the Regulatory Setting section above) describes strategies for reducing the risk from ground failure. In light of these precautions, the proposed Housing Element will have a less than significant impact on people and structures related to seismic ground shaking or related ground failure.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing

balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would increase exposure to geologic harzards, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards regarding seismic and geologic stability. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.F-3: Development facilitated by the General Plan Amendment and rezonings could potentially expose people or structures to landslides or mudflows. (Less than Significant)

Housing Element

The City of Pleasanton is primarily located in a relatively flat valley surrounded by hills that are subject to landslide hazards. According to USGS mapping and based on the known topography of the potential sites for rezoning, development facilitated by the proposed General Plan Amendment and rezonings would not expose people or structures on to landslides or mudflows (City of Pleasanton, Figure 5-1, 2005). Additionally, adherence to the foundation support parameters in Chapters 16 and 18 of the CBC and grading requirements therein, in addition to the Pleasanton Municipal Code, would ensure that future development (by State and City law) and associated trenches, temporary slopes, and foundations would minimize potential landslide hazards. General Plan policies also prohibit development in landslide-prone areas and otherwise mitigate their potential effects. Therefore, the potential impact of landslides or mudflows would be less than significant.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would increase exposure to landslides or mudflows, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards related to exposure to landslides or mudflows. These impacts are less than significant. Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.F-4: Development facilitated by the General Plan Amendment and rezonings could potentially be subject to risk from settlement and/or subsidence of land, lateral spreading, or expansive soils, creating substantial risks to life or property. (Less than Significant)

Housing Element

Expansive soils are typically found within the upper five feet of ground surface, and are often found in low-lying alluvial valleys such as the valley in which Pleasanton is located. Potentially compressible, corrosive, and expansive soils in the city make it necessary to ensure that foundations for improvements are placed on soils capable of providing adequate support. Building on unsuitable soils would have the potential for causing significant damage to foundations of residential structures constructed under the proposed Housing Element over the long term. When weak soils are re-engineered or replaced with engineered fill in accordance with building code requirements, these potential effects can be minimized or eliminated. An acceptable degree of soil stability would be achieved for expansive and compressible soils by the required incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the design plans to address site-specific soil conditions. Expansive soils are common throughout the city, but industry standard design and construction measures have proven effective in minimizing the potential hazards of expansive soil conditions at construction sites.

As part of the construction permitting process, the City requires geotechnical tests and reports at the specific construction sites to identify the suitability of soils. The evaluations must be conducted by registered design professionals, and measures to minimize unsuitable soil conditions must be applied. The design of foundation support must conform to the analysis and implementation criteria described in the California Building Code, Chapters 16 and 18. Adherence to the City's codes and policies would ensure maximum practicable protection available for potential inhabitants. Development facilitated by the proposed Housing Element would therefore have a less-than-significant impact regarding exposing property or people to the hazards of unstable geologic soils.

Finally, the Public Safety Element of the General Plan (Goal 2, Policies 5 and 7) describes policies that also reduce the risk of settlement or subsidence, lateral spreading, and expansive soils.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan

Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would increase exposure to expansive soils, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards related to exposure to expansive soils. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.F-5: Development facilitated by the General Plan Amendment and rezonings could potentially result in substantial soil erosion. (Less than Significant)

Housing Element

Grading for buildout of the city is likely to be relatively minimal; however the potential sites for rezoning greater than one acre (Sites 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 14, 16, 18, 20, and 21) would be required to adhere to the NPDES General Construction Permit which contains requirements for erosion control of exposed soils. The Regional Water Quality Control Board through the administration of the NPDES permit process for ground disturbing activities during construction requires implementation of nonpoint source control of stormwater runoff through the application of Best Management Practices, described in the Storm Water Prevention Plan. Additionally, policies in the Public Safety Element of the General Plan minimize the risk of soil erosion and mitigate its effects further (Goal 1, Policy 2; Goal 2, Policy 5). Therefore, the impact due to soil erosion would be less than significant.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would increase exposure to soil erosion, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards related to exposure to soil erosion. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.F-6: Development facilitated by the General Plan Amendment and rezonings in combination with past, present and future development in the surrounding region could potentially result in cumulative impacts to geologic and seismic hazards. (Less than Significant)

Housing Element

The provisions in the California Building Code (CBC) would reduce the potential hazards associates with seismic ground shaking and ground failure. During small or moderate seismic events, the impacts of seismic ground shaking would be reduced to less than cumulatively considerable for new residential development consistent with the proposed project. These measures would require specific standards for the development of residential and other uses that are close to seismic faults

Climate Action Plan

The Draft CAP does not result in any new development potential or construction of facilities that would be impacted by these conditions beyond what the General Plan EIR considered. Implementation of policies and programs under the Draft CAP would be subject to all of the City development standards regarding exposure to geologic and seismic hazards. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Geology

- Association of Bay Area Governments (ABAG), Modified Mercalli Intensity Scale, available at http://www.abag.ca.gov/bayarea/eqmaps/doc/mmi.html, February 16, 2011.
- Bryant, W.A. and Hart, E. W., Fault-Rupture Hazard Zones in California: Alquist-Priolo Special Studies Zones Act of 1972 with Index to Earthquake Fault Zones Maps, Interim Revision, California Division of Mines and Geology, Special Publication 42, 1990, revised and updated 2007.
- Bryant, W. A. (compiler), *Digital Database of Quaternary and Younger Faults from the Fault Activity Map of California, version 2.0*, California Geological Survey Web Page, http://www.consrv.ca.gov/CGS/information/publications/QuaternaryFaults_ver2.htm, accessed 05/25/2011.

- City of Pleasanton General Plan 2005-2025, Figure 5-3 Relative Intensity of Groundshaking, 2011(a)
- City of Pleasanton General Plan 2005-2025, Figure 5-4 Liquefaction Susceptibility Level, 2011(b)
- Jennings, C. W. and Bryant, W.A., 2010 Fault Activity Map of California, California Department of Conversation Map No. 6, 1:750,000, 2010.
- Peterson, M.D., Bryant, W.A., Cramer, C.H., *Probabilistic Seismic Hazard Assessment for the State of California*, California Division of Mines and Geology Open-File Report issued jointly with U.S. Geological Survey, CDMG OFR 96-08 and USGS OFR 96-706, 1996 (updated in 2003).
- San Francisco Bay Landslide Inventory,"Landslides in Alameda County" (USGS, OFR 99-504) by S. Roberts, M.A. Roberts and E.M. Brennan, from preliminary photo-interpretation maps of surficial deposits by T.H. Nilsen (USGS, 1997; OFR 75-277).
- Working Group on California Earthquake Probabilities, Earthquake Probabilities in the San Francisco Bay Region: 2001 to 2032 - A Summary of Findings, United States Geological Survey Open File Report 03-214, Online Version updated 17 June 2005.
- Working Group on California Earthquake Probabilities, *The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2)*, U.S. Geological Survey Open-File Report 2007-1437 and California Geological Survey Special Report 203, http://pubs.usgs.gov/of/2007/1437/, 2008.

4.G Hazards and Hazardous Materials

This section describes the types of hazardous materials that may have been historically used or currently are used on or adjacent to land that could be developed for residential use under the proposed General Plan Amendment and rezonings; the applicable regulatory framework; and the potential impacts to safety and health due to hazardous materials associated with development facilitated by the proposed General Plan Amendment and rezonings.

With the exception of the potential sites being rezoned for residential uses, impacts on the hazards and hazardous materials within the City were previously addressed in the City of Pleasanton General Plan 2005-2025 EIR (City of Pleasanton, 2009), which is hereby incorporated by reference in this SEIR.

Setting

Regional Setting

Definition of Hazardous Materials and Wastes

A number of properties may cause a substance to be considered hazardous, including toxicity, ignitability, corrosivity, or reactivity. A substance is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency, or if it has characteristics defined as hazardous by such agency.

The California Department of Toxic Substances Control (DTSC) defines the term hazardous material as a substance or combination of substances that, because of its quantity, concentration or physical, chemical or infectious characteristics, may either: (1) cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed.

A hazardous waste is any hazardous material that is abandoned, discarded, or recycled (California Health and Safety Code, §25124). The same criteria that render a material hazardous make a waste hazardous: toxicity, ignitability, corrosivity or reactivity.

Toxic, ignitable, corrosive, and reactive materials are subsets of hazardous materials and wastes. For example, if a material is toxic, it is hazardous, but not all hazardous materials are toxic. Specific tests for toxicity, ignitability, corrosivity and reactivity are set forth in Title 22, California Code of Regulations, § 66693-66708.

Hazardous Materials Use and Transport

The most common industrial hazardous wastes in Pleasanton are generated from gasoline service stations, dry cleaners, automotive mechanics, auto body repair shops, machine shops, printers and photo processing facilities which could be located adjacent to land that could be developed for residential uses under the proposed Housing Element on the potential sites for rezoning. Most of the

G. Hazards and Hazardous Materials

wastes produced from these facilities and operations are petroleum hydrocarbon-based but also can include solvents and heavy metals. In addition, medical wastes, defined as potentially infectious waste from sources such as laboratories, clinics and hospitals, are among the hazardous wastes produced in Pleasanton.

Along with the hazards of exposure and accidental release of stored hazardous materials, there are hazards associated with the transport of chemicals into and through an area. Most hazardous materials are regularly carried on freeways and major roads that are regulated by the California Department of Transportation (Caltrans) and the Highway Patrol. The Union Pacific/Southern Pacific and Western Pacific Railroads, which operate in Pleasanton, carry cargoes that include hazardous materials and wastes. Pipelines used to carry fuels are also located within Pleasanton.

Environmental Database Review

A database review was conducted to identify relevant hazardous materials and hazardous waste sites in the vicinity of the potential sites for rezoning. A number of the sites were identified and are present in **Table 4.G-1**, below. This search meets the requirements of the Environmental Protection Agency's Standards and Practices for all Appropriate Inquiries (40 Code of Federal Regulations Part 312). The purpose of the database review was to identify recognized hazardous materials conditions that may exist in the vicinity of the potential sites for rezoning related to current and past use of Pleasanton properties. This includes the presence or likely presence of any hazardous substance or petroleum product in the vicinity of the potential sites for rezoning under conditions indicating an existing release, a past release, or a material threat of release into a structure, or the ground, groundwater, or surface water on a property.

California Government Code, § 65962.5 requires the California Environmental Protection Agency (CalEPA) to prepare an annual Hazardous Waste and Substances Sites List, commonly referred to as the Cortese List. CalEPA does not maintain the Cortese List as a centralized list, but refers interested parties to other federal and State hazardous site databases. Thus, all site entries in each of the included databases are included by reference on the Cortese List. To prepare a full Cortese inquiry, data must be retrieved from multiple hazardous materials and waste databases maintained by the State Water Resources Control Board (SWRCB), the DTSC, and other agencies. CalEPA has designated the following databases and listings as the components of the current Cortese List (Cortese List, 2011):

- SWRCB's Geotracker database, which includes listings of hazardous spills or sites that could potentially affect water resources
- DTSC's EnviroStor database, which includes a wide variety of hazardous materials sites
- SWRCB's listing of Solid Waste Disposal Sites, which includes sites with waste constituents above hazardous waste levels outside the waste management unit
- SWRCB's listing of active Cease and Desist Orders and Cleanup and Abatement Orders, which includes sites that have land use restrictions due to a court or agency order
- DTSC's listing of hazardous waste facilities subject to corrective action pursuant to Health and Safety Code, §25187.5

TABLE 4.G-1
PROPERTIES IN THE VICINITY OF POTENTIAL RESIDENTIAL SITES ON THE CORTESE LIST

Name	Address	Contaminant	Order/Case Number	Cleanup Status
Geotracker				
Hanson Aggregates Legacy Radum Facility/Hanson Aggregates Radum Plant	3000 Busch St, Pleasanton	Not Available	SL0600101555/ SLT19719376	OPEN - SITE ASSESSMENT
Hanson Aggregates Mid Pacific Inc.	3000 Busch St., Pleasanton	Not Available	T06019765846	COMPLETED - CASE CLOSED
Kaiser Sand and Gravel	3000 Busch St., Pleasanton	Not Available	T0600100778	COMPLETED - CASE CLOSED
Pleasanton Truck and Equipment	3110 Busch St., Pleasanton	Not Available	T0600101091	COMPLETED - CASE CLOSED
Nuodex	5555 Sunol Blvd., Pleasanton	Not Available	T0600191469	COMPLETED - CASE CLOSED
B&J Trucking	3742 Valley St., Pleasanton	Not Available	T0600101128	COMPLETED - CASE CLOSED
Utility Vault Company	3786 Valley St., Pleasanton	Not Available	T0600101905	COMPLETED - CASE CLOSED
Pleasanton Ready Mix Concrete	3400 Boulder St., Pleasanton	Not Available	T0600102087	COMPLETED - CASE CLOSED

http://www.calepa.ca/gov/SiteCleanup/CoreteseList/default.htm (accessed June 7, 2011)

Hazardous materials and waste sites included on the Cortese List are monitored and recorded by responsible agencies such as CalEPA, SWRCB, and DTSC pursuant to various federal and State policies.

Regulatory Agencies

Livermore-Pleasanton Fire Department. Jointly operated by the cities of Livermore and Pleasanton, the Livermore-Pleasanton Fire Department (LFPD) responds to hazardous materials calls and prepares emergency preparedness plans in addition to performing other emergency response responsibilities. The LFPD is not responsible for overseeing cleanup of contaminated sites, but permits and oversees hazardous materials facilities and the removal and installation of Underground Storage Tanks. The LFPD is responsible for implementing the local Unified Program (see Regulatory Setting, below) and for enforcing provisions of the Fire Code and Building Code pertaining to hazardous materials. The LFPD keeps a list of businesses that handle hazardous materials and conducts periodic inspections of these facilities.

Airport Hazards

The Livermore Municipal Airport is approximately one mile east of Pleasanton. Pleasanton is in the flight paths for planes taking off and arriving at the Livermore Airport. The Alameda County Airport Land Use Commission (ALUC) reviews local public agency referrals of General Plan changes, specific plan changes, and rezonings within its General Referral, Height and Safety zones. The potential sites for rezoning are not in the adopted ALUC safety zone (as shown in Figure 5-10

G. Hazards and Hazardous Materials

in the Public Safety Element of the proposed General Plan). However, several of the sites for rezoning are in the ALUC's General Referral and/or Height Referral zones (as shown in Figure 5-10 in the Public Safety Element of the proposed General Plan). The Livermore Municipal Airport has defined an Airport Protection Area (APA) which was established to prohibit new residential land uses or intensification of existing residential land uses near the airport in order to ensure continued safety in the airport region and to avoid potential noise incompatibilities between the airport and encroaching uses.

Wildfire Hazards

According to the California Department of Forestry and Fire Protection, much of the outer areas of Pleasanton are located in wildland-urban interface threat areas (CDFFP, 2003). Risks associated with wildfires vary according to land use, environmental conditions, and availability of fire protection services. Areas of Pleasanton that pose high risks due to fuel loading and topography are in the hills west of I-680 and in the hills to the south of most developed areas of the city. However, the central core of Pleasanton is not considered to be an area of high risk, which includes the potential sites for rezoning.

Other Health and Safety Considerations

A Pacific Gas and Electric (PG&E) natural gas pipeline in a 30-foot easement parallels the northern edge of the city, adjacent to I-580 (PHMSA, 2007). Two hazardous liquid transmission lines run through the city. One cuts across Site 1 and then running relatively close to Sites 10, 11, 6, and 17; the second runs along the southeast border of the city, north of the San Antonio Reservoir and well away from any of the potential sites for rezoning. Excavation in the vicinity of pipelines is regulated under the Natural Gas Pipeline Safety Act.

Regulatory Setting

Federal and State

Key federal agencies with responsibility for regulating hazardous materials include the U.S. Environmental Protection Agency (EPA), the U.S. Department of Labor Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation. Applicable federal regulations and guidelines are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations; lead exposure guidelines are available from the U.S. Department of Housing and Urban Development.

The CalEPA has oversight authority over state hazardous materials management programs. Within CalEPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. However, enforcement of regulations has been delegated to local jurisdictions that enter into agreements with the DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law (CHSC, 2011). Certain State agencies govern specific hazardous materials and waste programs; for example, the groundwater contamination program is managed by the RWQCB.

The California Emergency Management Agency (Cal EMA) was established as part of the Governor's Office on January 1, 2009 – created by Assembly Bill 38 (Nava), which merged the duties, powers, purposes, and responsibilities of the former Governor's Office of Emergency Services with those of the Governor's Office of Homeland Security. Cal EMA is responsible for the coordination of overall state agency response to major disasters in support of local government. This agency is responsible for assuring the state's readiness to respond to and recover from all hazards – natural, manmade (e.g., toxic spills), war-caused emergencies and disasters – and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. Cal EMA also maintains a 24-hour toll-free toxic release hotline, and relays spill reports to a number of other state and federal response and regulatory agencies, as well as local governments.

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations in California. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the CFR. Cal/OSHA standards are generally more stringent than federal regulations.

Cal/OSHA regulations (8 CCR) concerning the use of hazardous materials in the workplace require employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces hazard communication program regulations, which contain training and information requirements, including procedures for identifying and labeling hazardous substances, and communicating hazard information relating to hazardous substances and their handling. The hazard communication program also requires that Materials Safety Data Sheets (MSDS) be available to employees, and that employee information and training programs be documented. These regulations also require preparation of emergency action plans (escape and evacuation procedures, rescue and medical duties, alarm systems, and training in emergency evacuation).

Local

The Alameda County Hazardous Waste Management Plan governs hazardous waste management programs in Pleasanton. The Alameda County Disaster Plan is a coordinated, countywide approach for managing debris generated in Alameda County in the event of earthquakes, fires, floods, accidents, or civil unrest.

City of Pleasanton Comprehensive Emergency Management Plan

The Comprehensive Emergency Management Plan addresses the City of Pleasanton's responsibilities in emergencies associated with natural disaster, human-caused emergencies, and technological incidents. It conforms to the State-mandated Standardized Emergency Management System and the National Incident Management System and provides a framework for coordination of response and recovery efforts within the city in coordination and with local, State, and federal

G. Hazards and Hazardous Materials

agencies. The Plan establishes an emergency organization to direct and control operations during a period of emergency by assigning responsibilities to specific personnel.

City of Pleasanton Municipal Code

The Pleasanton Municipal Code contains numerous regulations related to hazards and hazardous materials and fire safety. These ordinances are summarized below.

Hazardous Materials/Hazardous Waste Ordinances

Chapter 9.16 deals with the implementation of SB 1082 Certified Unified Program Agency programs (see discussion of this above). Such programs include hazardous materials release response plans and inventories; the California accidental release prevention program; underground and aboveground storage tanks storage tanks oversight; and hazardous waste generators and on-site treatment oversight. Pursuant to this Ordinance, the Livermore-Pleasanton Fire Department assumes authority, responsibility, and enforcement authority as the Certified Unified Program Agency for the City of Pleasanton.

Fire Safety Ordinances

The Pleasanton Municipal Code contains three sections that bear directly on fire safety. The Building Code, Chapter 20.08, provides minimum standards for design, construction, materials, occupancy, location, and maintenance of all buildings within the city. The Fire Code, Chapter 20.24, regulates how a building is used, how machines and equipment are maintained, how hazardous materials are handled and stored, and how access to and from a site is provided. The Subdivision Ordinance, Chapter 19.36, establishes standards for roadway dimensions, subdivision layout, and public improvements needed to protect public safety. In addition, all new developments are reviewed by City departments for their potential effects on public safety, and conditions are attached to minimize those effects and inspections conducted to ensure proper installation. Developments which are located outside the five-minute response time areas are required to provide additional fire mitigation measures, which include, at a minimum, automatic fire sprinkler systems.

City of Pleasanton General Plan

The City of Pleasanton General Plan outlines the policies and programs that provide a long-term plan for addressing the physical development of the City through 2025. Projects must be generally consistent with the relevant guidelines outlined in the General Plan. The Public Safety Element of the General Plan describes programs and policies relevant to the mitigation of geological hazards.

The following goals, policies, and programs address potential impacts related to hazards:

Public Safety Element

Goal 5:

Minimize the risks to lives and property due to potential exposure to hazardous materials.

- Policy 16: Regulate the transportation, delivery, use, and storage of hazardous materials within the city limits.
- Policy 17: Ensure that hazardous materials are not released as a result of construction activities and that any existing hazardous materials and potential contamination are remediated prior to development.
- Policy 18: Continue to encourage the reduction of solid and hazardous wastes generated within the city, in accordance with Countywide plans.
- Policy 19: Ensure convenient access for Pleasanton residents for the disposal of household hazardous wastes.
- Goal 6: Minimize the risks to lives and property due to air navigation hazards generated by the Livermore Municipal Airport.
- Policy 20: Deny any development plan that would create any air navigation hazards due to electrical interference, smoke, glare, lighting, or other navigational hazard in the General Referral Area.
- Policy 21: Work with the City of Livermore to address air navigation hazards.
- Goal 7: Protect the public in the event of a natural or human-caused disaster.
- Policy 22: Provide an adequate level of supplies at all critical facilities.
- Policy 23: In partnership with the Pleasanton Unified School District, prepare and keep current City emergency procedures in the event of potential natural or human-caused disaster.
- Policy 24: Promote public safety through public education programs.
- Policy 22: Partner with the business and non-profit communities for emergency preparedness to ensure continuity of business and service operations and the safety of employees immediately following an emergency.
- Goal 3: Minimize the risks to lives, property, and the environment due to fire hazards within the Planning Area, and provide the highest quality of emergency response service feasible.
- Policy 8: Provide an adequate level of fire and emergency medical equipment and personnel to protect the community.
- Policy 10: Strive to respond to all emergency calls within seven minutes of the time the call for service is received 90 percent of the time.
- Policy 11: Maintain or improve the City's existing Insurance Services Office fire-protection rating of three.
- Policy 12: Upgrade the level of fire resistivity in all new and remodeled structures.
- Policy 13: Require fire mitigation measures in new and existing developments that reduce the fire threat to the structure and occupants. Require development outside the five-minute travel time and in Special Fire Protection Areas to provide effective fire prevention measures.

G. Hazards and Hazardous Materials

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines*, Appendix G (Environmental Checklist) the project could have a significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evaluation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Approach to Analysis

The potential for hazardous impacts on sites within the city are determined by a thorough review of its hazardous materials and hazardous wastes that currently exist or have previously existed within the vicinity of the site. Available Cortese List data, the City General Plan, and other studies and reports were reviewed in order to determine the potential for hazardous impacts that would occur from development facilitated by the proposed General Plan Amendment and rezonings, specifically on the potential sites for rezoning.

Impacts and Mitigation Measures

Impact 4.G-1: Development facilitated by the General Plan Amendment and rezonings could create a potentially significant hazard to the public through routine transport, use, or disposal of hazardous materials. (Less than Significant)

Housing Element

Implementation of the proposed Housing Element would facilitate new construction of residences, which would involve demolition activities, and use of construction equipment and other vehicles. Hazardous materials, like fuel or solvents, could accidently spill into the environment, creating hazards that may degrade groundwater quality or contaminate soils, which may cause a potentially significant impact to the public and/or environment. However, development facilitated by the proposed Housing Element would comply with all applicable regulations for management of hazardous materials during the construction phase of development. These policies include Title 22 and 26 of the California Code of Regulations governing hazardous material transport, Title 8 Standards for handling asbestos and lead during demolition/construction, and Title 19 of the California Code of Regulations and Chapter 6.95 of the Health and Safety Code for site remediation.

The proposed General Plan Amendment and rezonings would allow for residential development on the potential sites for rezoning. New residential development may routinely use commonly available hazardous substances, like fuels, lubricants, and household cleaners. However, home use of common household hazardous materials typically consists of limited quantities and is generally considered to be an acceptable risk to the environment. Moreover, the Alameda County Department of Environmental Health administers the Certified Unified Program Agency with the LPFD, which follows an emergency management plan for dealing with the release of hazardous materials in the event of a significant leak or spill.

Demolition of any existing structures on the potential sites for rezoning, especially older structures where hazardous building materials (e.g., asbestos containing materials [ACMs] and lead-based paint), were commonly used in construction, could be released during demolition activities and expose construction workers, the public, or the environment. The level of potential impact is dependent upon the age, construction, and building materials in each building and the protocols employed for demolition. However, there are established measures that certified contractors are required to use to contain, store, and dispose of these hazardous materials in a manner which limits exposure. The first step towards appropriate handling and demolition is conducting thorough surveys to identify the presence of these materials. ACMs are regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal/OSHA. Cal/OSHA also regulates worker exposure to lead-based paint. Potential exposure to these hazardous building materials can be reduced through appropriate use of personal protective equipment, isolation and containment of work areas, and placement of waste in approved transport containers.

Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb lead-based paint. The Interim Final Rule found in 29 CFR 1926.62 covers

G. Hazards and Hazardous Materials

construction work in which employees may be exposed to lead during such activities as demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance. The OSHA-specified compliance includes respiratory protection, protective clothing, housekeeping, special high-efficiency filtered vacuums, hygiene facilities, medical surveillance, and training. No minimum level of lead is specified to activate the provisions of this regulation.

Due to a limited potential for exposure of the people or the environment to hazardous materials, largely as a result of compliance with federal, State and local Regulations, impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant.

The following goals and policies of the Public Safety Element of the General Plan relate to hazardous materials use, transport, or disposal that would further reduce impacts:

Goal 5:	Minimize the risks to lives and property due to potential exposure to hazardous materials.
Policy 16:	Regulate the transportation, delivery, use, and storage of hazardous materials within the city limits.
Policy 17:	Ensure that hazardous materials are not released as a result of construction activities and that any existing hazardous materials and potential contamination are remediated prior to development.
Policy 18:	Continue to encourage the reduction of solid and hazardous wastes generated within the city, in accordance with Countywide plans.
Policy 19:	Ensure convenient access for Pleasanton residents for the disposal of household hazardous wastes.

As noted above, the General Plan contains a number of policies which would establish minimum standards for handling hazardous materials. Further, transportation routes for hazardous materials would be identified and regulated to minimize the potential adverse effects from accidental upset conditions. Public awareness programs would also provide an increased knowledge base for the control of household hazardous waste products. Therefore, compliance with continued regulations and General Plan policies would ensure that this hazards and hazardous materials impact is less than significant.

Climate Action Plan

The Draft CAP and the future programs or projects that could potentially result from implementation of the Draft CAP would not result in the routine transport, use, or disposal of hazardous materials. It is possible that construction activities associated with new mixed-use or transit-oriented development projects or residential and commercial retrofit and renovation projects recommended by the Draft CAP would require use of construction materials, such as paints and solvents, but not in large enough quantities to cause adverse effects.

The Draft CAP relies on improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs) to meet its key objective of reducing GHG emissions. This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would result in the transport, use or disposal of hazardous materials, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. This would be a less than significant impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.G-2: Development facilitated by the General Plan Amendment and rezonings could accidentally release hazardous materials into the environment, creating a potentially significant hazard to the public or environment. (Significant)

Housing Element

Construction of residences on the potential sites for rezoning expected to result from implementation of the proposed Housing Element would disturb soils, which could be contaminated from past releases of hazardous substances into the soil or groundwater. Sites 11 and 14 are located near, the Chain of Lakes gravel pits but would not extend into documented release sites on and near Busch Road (Cal EPA, 2011). All former hazardous properties were fully remediated according to standard procedure, except for the Hanson Aggregates Legacy Radum Facility and Plant that previously existed at 3000 Busch Road in Pleasanton. An investigation overseen by the ACEH and LPFD found that various contaminants, including petroleum hydrocarbons, motor oil, diesel fuel, and additives, had been detected in the subsurface at various locations across their site. A portion of the Hanson Aggregates site is currently owned by Legacy Partners and coincides with potential rezoning Site 14. Site 11 is located immediately adjacent to the Hanson site where several areas of concern have been identified at the property boundary.¹ Construction at both Site 14 and Site 11 would likely involve ground disturbing activities which have the potential to expose workers, the public or the environment to any contaminated soil or groundwater, if present. In general, as part of industry standard procedure, areas that are intended for future development may require a Phase I environmental site assessment which is performed to determine the potential for underlying contamination either from past site usage or neighboring site activities. In the event a Phase I investigation finds reason for suspected contamination, additional environmental analysis, including laboratory analysis of site soils and/or groundwater, is often performed. Therefore, any future construction at Sites 11 and 14, with appropriate due diligence, would receive site specific investigation for the potential

¹ The Hanson site is relatively large and due to the various activities that occurred on the site over the years, the environmental investigation identified 9 different Areas of Concern where the investigative work contained different objectives based on past uses and releases of hazardous materials.

of encountering subsurface contamination and, if present, would be required to incorporate remediation of any contamination determined by the overseeing agency to be a threat to human health or the environment. This industry protocol is reinforced through Goal 5 and Policy 17 of the Public Safety Element of the General Plan, relating to exposure of hazardous materials:

Goal 5:	Minimize the risks to lives and property due to potential exposure to hazardous
	materials.

Policy 17: Ensure that hazardous materials are not released as a result of construction activities and that any existing hazardous materials and potential contamination are remediated prior to development.

Considering the potential for contamination at Sites 11 and 14, implementation of **Mitigation Measure 4.G-2**, below, would ensure that appropriate measures are taken to prevent potential exposure of hazardous materials. Therefore, with adherence to the General Plan Policy 17 and Mitigation Measure 4.G-2, the potential for exposure to subsurface contamination would be less than significant.

Excavation involved in construction and maintenance of development facilitated by the Housing Element could lead to the rupture of a PG&E or other pipeline. In the city, PG&E natural gas pipelines run alongside Interstate 580 (relatively close but outside of Site 1), along Santa Rita Road to First Street (near Sites 21 and 6), and along the Sunol Boulevard – First Street – Stanley Boulevard roadways (Sites 20, 19, 6, 8, 11, and 14) (PG&E, 2011). Prior to commencement of construction activities, developers and their contractors would be required to coordinate with the City's Public Works Department and utility owners through notification of the Underground Service Alert system to precisely locate any subsurface utilities. Therefore, impacts associated with pipeline rupture would be less than significant.

Mitigation Measure 4.G-2: The City shall ensure that each project applicant retain a qualified environmental consulting firm to prepare a Phase I environmental site assessment in accordance with ASTM E1527-05 which would ensure that the City is aware of any hazardous materials on the site and can require the right course of action. The Phase I shall determine the presence of recognized environmental conditions and provide recommendations for further investigation, if applicable. Prior to receiving a building or grading permit, project applicant shall provide documentation from overseeing agency (e.g., ACEH or RWQCB) that sites with identified contamination have been remediated to levels where no threat to human health or the environment remains for the proposed uses.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would release hazardous materials into the environment, it could create indirect impacts resulting from the residential development of

proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Implementation of the Draft CAP would likely result in rehabilitation and renovation of older residential and commercial structures within the city. Structures built prior to 1978 may contain asbestos-containing building materials and lead paint. If not properly handled and released into the environment in large enough quantities, these materials could pose a threat to construction workers and public safety. However, these renovations would primarily be small-scale and would no single renovation would likely result in releases large enough to pose a health hazard to the general public. Construction workers working in close proximity to these materials may have a higher chance of exposure to these materials. However, demolition and construction activities involving hazardous materials removal are heavily regulated, and construction workers must comply with applicable federal and state safety regulations. Compliance with such regulations would ensure a less than significant impact.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.G-3: Development facilitated by the General Plan Amendment and rezonings could potentially result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant)

Housing Element

As discussed under Impacts 4.G-1 and 4.G-2, development facilitated by the proposed Housing Element would not result in the handling of significant quantities of hazardous materials, substances, or wastes. Although, residential land uses do involve the handling, storage, and disposal of limited quantities of hazardous materials, they are generally not associated with any releases that would adversely affect any schools located within a quarter mile of a school. Therefore, risk of hazardous material releases within the vicinity of schools would be less than significant.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. The Draft CAP would not result in the development or construction of new sources of hazardous emissions or uses that would handle hazardous materials, wastes, or substances within one-quarter mile of an existing or proposed school. This would be a less than significant impact.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment

G. Hazards and Hazardous Materials

and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would result in exposure to wildfires, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.G-4: Development facilitated by the General Plan Amendment and rezonings could potentially be located on one or more sites that are included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5, resulting in a hazard to the public or the environment. (Significant)

Housing Element

Development of sites known to be contaminated by hazardous materials or wastes could occur on both land currently zoned for residential, as well as the potential sites for rezoning. As described in Impact 4.G-2, of the identified potential residential development sites, Site 14 is on a site with identified releases of hazardous materials and Site 11 is near to a site known to be contaminated by hazards that have not been fully remediated. Additionally, several former hazardous waste sites exist near Sites 11 and 14 that have been fully remediated include the former Kaiser Sand and Gravel, Pleasanton Truck and Equipment, Nuodex, B&J Trucking, Utility Vault Company, Pleasanton Ready Mix Concrete, and others as presented above in Table 4.G-1.

However, as discussed above, development on sites that have been identified as requiring further site characterization and/or remediation work would be required to ensure that construction activities would not expose people or the environment to adverse effects. As a result, land uses and structures for human occupancy would not be permitted by the overseeing agency (e.g., ACEH or RWQCB) on sites where the potential threat to human health or the environment is present. Therefore, with **Mitigation Measure 4.G-2** and adherence to General Policy 17, the impact would be less than significant.

Mitigation: Implement Mitigation Measure 4.G-2.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would expose hazardous sites, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further,

implementation of policies and programs under the Draft CAP would be subject to all of the City development standards regarding exposure to hazardous sites. These impacts are less than significant.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.G-5: Development facilitated by the General Plan Amendment and rezonings could potentially be affect the operations at the Livermore Municipal Airport or present a safety hazard to people residing or working in the vicinity. (Significant)

Housing Element

The Livermore Municipal Airport is approximately one mile east of El Charro Road near the I-580. The Alameda County Airport Land Use Policy Plan (ALUPP) contains plans and policies intended to provide guidance to the Alameda County Airport Land Use Commission (ALUC) for its review of proposed local agency actions (such as General Plan changes and rezonings) to determine whether the changes are compatible with current and anticipated airport operations. In general, the most pressing ALUC concerns and important policies regard physical obstacles to air navigation; exposure of persons on the ground to accidents and flight hazards (such as smoke, glare, electrical interference, etc.); and noise. Several of the potential sites for rezoning are located within the boundaries of the Alameda County Airport Land Use Policy Plan's General Referral Area, which is coterminous with the Alameda County Airport Land Use Commission Hazard Prevention Zone. Sites 11 (Kiewit) and 14 (Legacy Partners) are located in the General Referral Area otherwise known as the "airport influence area" where General Plan changes, specific plan changes, and rezonings are referred to the Airport Land Use Commission for its review and determination of consistency with the Airport Land Use Policy Plan. In addition, the ALUC's Height Referral Area includes Sites 6 (Irby-Kaplan-Zia), 8 (Auf de Maur/Richenback), 10 (CarrAmerica), 16 (Vintage Hills Shopping Center), 17 (Axis Community Health), and 21 (4202 Stanley). The adopted ALUC safety zone, which defines compatible and incompatible land uses, extends to the east side of El Charro Road. The potential sites for rezoning are all located outside the ALUC's safety zone.

The City of Livermore established the Airport Projection Area (APA) for the Livermore Municipal Airport in 1991. The APA and associated policies were included as an amendment to the ALUPP in 1993 and prohibit new residential land use designations or the intensification of existing land use designations within the APA. The APA is defined in the plan as an area 5,000 feet north, east, and south of the airport runways, and 7,100 feet west of the airport runways. The protection area was established to ensure continued safety in the airport region and to avoid potential noise incompatibilities between the airport and encroaching uses. The potential sites for rezoning are all located outside the APA.
G. Hazards and Hazardous Materials

The Airport Land Use Commission has adopted Federal Aviation Regulation Part 77, *Objects Affecting Navigable Air Space*, which defines areas where height restrictions apply to natural and man-made objects. Development projects that are within FAR Part 77 areas are subject to review by the FAA (Form 7460) for their potential effects on aircraft safety.

The California Department of Transportation Division of Aeronautics publishes the California Airport Land Use Planning Handbook to provide compatibility planning guidance to ALUCs, their staff and consultants, the counties and cities having jurisdiction over airport area land uses, and airport proprietors. The handbook includes guidance for ALUCs on establishing airport safety compatibility policies for airports. The handbook was completed in January 2002 and has not been adopted by the Alameda County ALUC in its adopted airport safety zones. However, ALUC staff has submitted preliminary drafts of a revised ALUPP to the ALUC for review. A revised draft ALUPP is anticipated to be released later this year. In general, ALUC staff is proposing a revised ALUPP which includes a series of safety zones, similar to the Caltrans safety zones, which extend farther from the Livermore Airport than the current safety zone, and additional land use guidance. A copy of the Draft Housing Element and Draft CAP has been provided to the ALUC for its review.

The following goals and polices from the *Public Safety Element* of the General Plan are relevant to airport safety.

Goal 6:	Minimize the risks to lives and property due to air navigation hazards generated by the Livermore Municipal Airport.
Policy 20:	Deny any development plan that would create any air navigation hazards due to electrical interference, smoke, glare, lighting, or other navigational hazard in the General Referral Area.
Policy 21:	Work with the City of Livermore to address air navigation hazards.

A land use conflict between the draft ALUPP and the potential sites for rezoning is not anticipated. However, since the revised draft ALUPP has not been adopted, and specific project details for Sites 1-21 are not available, additional analysis in this regard would be speculative. It is anticipated that projects on the potential sites for rezoning would not exceed 50 feet in height. However, some sites, such as Site 14 (Legacy Partners), may require fill for the site to be removed from the 100 year flood zone, thus altering the final project elevation and limiting any meaningfull ALUC-related height analysis. Likewise, the height of the construction equipment needed for a particular project is unknown, limiting any FAA-related analysis. As such a height analysis related to ALUC and FAA guidance would be speculative without additional development details. Therefore, with implementation of **Mitigation Measure 4.G-5**, this would be a less than significant impact.

Mitigation Measure HAZ-4.G-5:

a. Prior to PUD approval for Sites 11 (Kiewit), 14 (Legacy Partners), 6 (Irby-Kaplan-Zia), 8 (Auf de Maur/Richenback), 10 (CarrAmerica), 16 (Vintage Hills Shopping Center), 17

(Axis Community Health), and 21 (4202 Stanley): 1) the project applicant shall submit information to the Director of Community Development demonstrating compliance with the ALUPP, as applicable, including its height guidance; and 2) the Director of Community Development shall forward this information and the proposed PUD development plans to the ALUC for review.

b. Prior to any use permit approval for Sites 11 (Kiewit), and 14 (Legacy Partners): the project applicant shall submit information to the Director of Community Development demonstrating compliance with the ALUPP, as applicable; and 2) the Director of Community Development shall forward this information and the proposed use permit to the ALUC for review.

c. The following condition shall be included in any PUD development approval for all the potential sites for rezoning: Prior to the issuance of a grading permit or building permit, whichever is sooner, the project applicant shall submit verification from the FAA, or other verification to the satisfaction of the City Engineer or Chief Building Official, of compliance with the FAA Part 77 (Form 7460 review) review for construction on the project site.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. The Draft CAP proposes strategies and measures that would aid in reducing the City's emission of GHGs. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would increase hazards associated with the Livermore Airport, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards regarding proximity to the airport. These impacts are less than significant.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.G-6: Development facilitated by the General Plan Amendment and rezonings could potentially result in a safety hazard for people residing or working in the vicinity of a private airstrip. (No Impact)

No private airstrips exist in the vicinity of the City. Therefore, there would be no safety hazards related to the use of a private airstrip and no impact would occur related to the General Plan Amendment and rezonings.

G. Hazards and Hazardous Materials

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.G-7: Development facilitated by the General Plan Amendment and rezonings could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

Housing Element

The Pleasanton Comprehensive Emergency Management Plan sets standards for policies and procedures during emergencies. The buildout of the proposed Housing Element would not interfere with current guidelines set forth in the Pleasanton Comprehensive Emergency Management Plan, as the Plan establishes an emergency organization to direct and control operations during a period of emergency by assigning responsibilities to specific personnel, which would not altered by residential development. Therefore, impacts with respect to this plan would be less than significant.

Development resulting from implementation of the proposed Housing Element would be expected to comply with the Alameda County Disaster Plan in whole, and impacts would be less than significant.

The following goal, policies, and programs of the *Public Safety Element* of the General Plan are relevant to emergency response and would further reduce impacts:

- Goal 7: Protect the public in the event of a natural or human-caused disaster.
- Policy 22: Provide an adequate level of supplies at all critical facilities.
- Policy 23: In partnership with the Pleasanton Unified School District, prepare and keep current City emergency procedures in the event of potential natural or human-caused disaster.
- Policy 24: Promote public safety through public education programs.
- Policy 22: Partner with the business and non-profit communities for emergency preparedness to ensure continuity of business and service operations and the safety of employees immediately following an emergency.

Therefore, with continued adherence to agency plans and implementation of the above-listed General Plan policies, this impact would be less than significant related to the implementation of the proposed Housing Element.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. It does not include any recommendations that would physically interfere with the City's Emergency Operations Plan or any established emergency evacuation plan. However, a key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would physically interfere with emergency plans, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. There would be no impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.G-8: Development facilitated by the General Plan Amendment and rezonings could potentially expose people or structures to a significant risk of loss, injury or death involving wildland fires, including wildlands adjacent to urbanized areas or residences intermixed with wildlands. (Less than Significant)

Housing Element

All of the potential sites for rezoning are located outside of the designated wildland-urban interface threat areas within Pleasanton. Construction due to development facilitated by the proposed Housing Element within these areas would not pose a potentially significant risk of loss, injury or death to the public.

Residential developments that are constructed under the proposed Housing Element that are highoccupancy structures, structures without fire protection, and those that are outside of the fiveminute fire response area, could potentially expose occupants to a high level of fire-related risk. Policy 13 of the *Public Safety Element* of the City of Pleasanton General Plan sets standards for building sprinklers and fire response systems, and requires the City to work with the California Department of Forestry and the Fire Prevention and Firewise Communities to develop additional protection measures. The Pleasanton Building Code and LPFD currently require built-in fire protection systems in new developments outside the five-minute response area. These protections reduce the potential impact from wildland fires to less than significant.

The following goal, policies, and programs of the *Public Safety Element* of the General Plan are relevant to fire hazards and would further reduce this impact:

Goal 3:	Minimize the risks to lives, property, and the environment due to fire hazards within the Planning Area, and provide the highest quality of emergency response service feasible.
Policy 8:	Provide an adequate level of fire and emergency medical equipment and personnel to protect the community.
Policy 10:	Strive to respond to all emergency calls within seven minutes of the time the call for service is received 90 percent of the time.
Policy 11:	Maintain or improve the City's existing Insurance Services Office fire-protection rating of three.
Policy 12:	Upgrade the level of fire resistivity in all new and remodeled structures.
Policy 13:	Require fire mitigation measures in new and existing developments that reduce the fire threat to the structure and occupants. Require development outside the five-minute travel time and in Special Fire Protection Areas to provide effective fire prevention measures.

Therefore, with continued adherence and implementation of the above-referenced General Plan policies, this impact would be less than significant related to the implementation of the proposed Housing Element.

Climate Action Plan

The Draft CAP recommends strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would result in exposure to wildfires, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect is provided as part of the Housing Element discussion. Implementation of policies and programs under the Draft CAP would be subject to all of the City development standards regarding exposure to wildfires. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.G-9: Development facilitated by the General Plan Amendment and rezonings, combined with other past, present, existing, approved, pending, and reasonably foreseeable future projects in the vicinity, and could potentially result in cumulative hazards or hazardous materials impacts. (Less than Significant)

Housing Element

As discussed above, the proposed Housing Element would result in less-than-significant hazards and hazardous material impacts related to construction activities and the operation phase. Hazards and hazardous material impacts typically occur in a local or site-specific context versus a cumulative context combined with other past, present, and future development projects. Implementation of policies outlined in the General Plan combined with regulatory requirements of agencies such as DTSC, RWQCB, Caltrans, and Cal EMA would similarly address site-specific hazards and emergency access and operation for all other existing projects and projects in the foreseeable future. Anticipated development projects (e.g., residential, commercial, and retail land uses) that would occur in the city and surrounding region would not significantly increase human health or safety risks, as existing City policy and regulatory requirements would address such issues.

This impact is considered less than cumulatively considerable with the implementation of the policy provisions and regulatory requirements identified above that include measures for the safe transport, storage, use, and disposal of hazardous materials and wastes for the protection of human health and the environment.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would increase exposure to hazardous materials, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards and would have a less than significant impact on hazards and hazardous materials.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

G. Hazards and Hazardous Materials

References—Hazards and Hazardous Materials

- Cal EPA, 2008. Cortese List Data Resources. Accessed online June 7, 2011 at: http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm.
- California Department of Forestry and Fire Protection, 2003, Wildland-Urban Interface (WUI) Wildfire Threat Maps, posted by Association of Bay Area Governments. Accessed June 7, 2011 at: http://www.abag.ca.gov/bayarea/eqmaps/wildfire/
- Pipeline and Hazardous Materials Safety Administration, 2007. National Pipeline Mapping System, Accessed June 7, 2011 at: http://www.npms.phmsa.dot.gov/
- California Health and Safety Code, Division 20. Miscellaneous Health and Safety Provisions, Chapter 6.5. Hazardous Waste Control, Article 8. Enforcement, Section 25180. (a) (1).
- City of Pleasanton General Plan, 2009. Available at: http://www.ci.pleasanton.ca.us/business/planning/genplan-090721-final.html
- Pacific Gas & Electric, *Gas Transmission Pipelines*, <u>http://www.pge.com/myhome/edusafety/systemworks/gas/transmissionpipelines/</u>, accessed July 29, 2011.

4.H Hydrology and Water Quality

This section identifies impacts to local and regional hydrology, surface and groundwater quality, and, if necessary, appropriate mitigation measures.

Setting

Regional Setting

The City of Pleasanton is located in the San Francisco Bay Area, an area characterized by a cool, Mediterranean climate with wet winters and dry summers. Pleasanton is situated in an alluvial valley surrounded by foothills. The climate is semi-arid; and the mean annual precipitation is approximately 16-24 inches per year (Alameda County Flood Control and Water Conservation District (Western Regional Climate Data Center, 2011). Pleasanton is within the Alameda Creek Watershed, a drainage basin of approximately 675 square miles (City of Pleasanton, 2009).

The Alameda County Flood Control and Water Conservation District, Zone 7 (ACFCWCD) provides water and flood control to the Livermore-Amador Valley. The water is supplied by several different sources, including:

- The State Water Project provided from the San-Joaquin Sacramento River Delta, and other State water sources.
- Local surface water provided from surrounding foothills and groundwater from the Livermore-Amador Valley groundwater basin.
- Supplemental water provided from the Byron Bethany Irrigation District.
- Supplemental water provided from the Cawelo Water District.

The Planning Area encompasses the potential sites for rezoning as well as all other land that could be affected by the proposed General Plan Amendments.

Surface Water

Pleasanton is within Alameda Creek Hydrologic Subarea of the South Bay Hydrologic Unit. The Planning Area is relatively flat and drainage patterns vary with local topography. There are many seasonal and perennial¹ surface water bodies within the Planning Area, including:

- The Arroyo Las Positas is a perennial drainage creek, located to the northeast of the Planning Area.
- Tassajara Creek crosses through the City of Dublin and connects to the Arroyo Mocho in the City
- The Chabot Canal runs south, meeting the Arroyo Mocho within the City.
- The Arroyo Mocho is a seasonal body that flows east to west through the Chain of Lakes Area.

¹ Continuing during all seasons of the year.

- The Arroyo del Valle is a riparian stream that flows east to West through the City, running through the Planning Area.
- The Alamo Canal is a flood control channel that runs in a southerly direction through the City, near to I-680.
- The Arroyo del la Laguna runs in a southerly direction, and begins at the confluence of the Arroyo del Valle and the Alamo Canal, and eventually joins up with Alameda Creek in Sunol.
- The Chain of Lakes is an area of former gravel pits that is undergoing improvement to act as a stormwater retention and groundwater recharge zone.

Pleasanton is largely developed and surface runoff is generally captured by urban drainage systems and delivered to the nearest creek or canal. The ACFCWCD constructs, operates, and maintains major trunk lines and flood-control facilities in Planning Area, and the City of Pleasanton (City) is responsible for construction and maintenance of the local storm drainage system within Pleasanton's public areas and roads. Stormwater runoff is conveyed in Pleasanton through onsite pavement gutters, surface drains, parking lots, and roof drains that discharge to local storm water system before discharging into surface waterways.

Water Quality

The quality of surface water is largely dependent on pollution levels in stormwater runoff, which further depends on topography, surrounding land uses, level of impervious terrain, and rainfall intensity. The most common sources of stormwater pollution in urban areas are construction sites, streets, parking lots, large landscaped areas, and household and industrial materials discharged into storm drains. In some urban areas, rooftops can also contribute stormwater pollution. Grading and earthmoving activities associated with new construction can accelerate soil erosion, even in flat areas. Grease, oil, hydrocarbons, and heavy metals deposited by vehicles and heavy equipment accumulate on streets and paved parking lots and are carried into storm drains by runoff. Pesticides, herbicides, and fertilizers used for landscape maintenance are washed into storm drains by over-watering (irrigation in excess of soil infiltration rates and plant uptake). Paints, solvents, soap products, and other toxic materials may be inadvertently or deliberately deposited in storm drains in residential and industrial areas. Deposition of particulate matter and dissolution of roofing material can also contribute pollutants to urban stormwater. The federal Clean Water Act requires local municipalities to implement measures to eliminate these types of pollutants from entering their storm drainage systems. Further discussion of federal and local regulations and compliance is presented below in the Regulatory Setting section.

The quality of the stormwater runoff in the City, which encompasses both sites zoned for residential uses and the potential sites for rezoning, is typical of urban watersheds with similar land uses and may contain constituents such as landscaping chemicals (e.g., nitrates, phosphates, herbicides, and pesticides), automobile and traffic pollutants (e.g., oil, grease, and metal brake dust), gross pollutants (e.g., trash and debris), pathogens (from wildlife and pet waste), failed septic systems (e.g., nutrients and pathogens), and sediment with associated attached pollutants from soil erosion or aerial deposition of dust. Alameda Creek, Arroyo Mocho, Arroyo de la Laguna, Arroyo del Valle, and Arroyo Las Positas are all listed as impaired by diazinon (a pesticide), from urban runoff,

and by storm sewers (RWQCB, 2006); these waters eventually discharge into the Lower San Francisco Bay. The Lower San Francisco Bay is listed as impaired by chlordane, DDT, dieldrin, and mercury from nonpoint sources; by dioxin compounds, furan compounds, and mercury from atmospheric deposition; by exotic species from ballast water; and by PCBs and dioxin-like PCBs from unknown nonpoint sources (RWQCB, 2006). Industrial and municipal point sources, resource extraction, and natural sources contribute to mercury degradation of the Lower San Francisco Bay.

Flood Hazards

Flooding is inundation of normally dry land as a result of rapid accumulation of stormwater runoff or rise in the level of surface waters. Flooding becomes a hazard when the flow of water exposes people or structures to a significant risk of loss, injury, or death. Flooding generally occurs due to excess runoff due to heavy snowmelt or rainfall, but it can also result from the interaction with natural hazards, such as tsunamis, seiches, or failure of dams.

The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Map (FIRM) program, designates areas where flooding could occur during a one percent annual chance (100-year) or a 0.2 percent annual chance (500-year) flood events. Portions of the Planning Area are currently located within a Federal Emergency Management Agency (FEMA) flood hazard area for both the 100-year and the 500-year flood (FEMA, 2009). With some exceptions, the 100-year flood zone within the City of Pleasanton is contained within major flood control channels.

Places where a 100-year flood is expected to inundate developed parts of the City including sites zoned for residential use and the potential sites for rezoning, include narrow zones upstream of the Alamo Canal at the confluence of Arroyo Del Valle, on either side of I-680. In addition, a large area east of the city limits, in the Chain of Lakes Area, is expected to flood in a 100-year storm. None of the sites proposed for rezoning are located in the 100-year flood zone. Potential sites for rezoning located within a 500-year flood zone include Site 1 (BART), Site 7 (Pleasanton Gateway), and Site 13 (CM Capital Properties).

Flooding could also occur due to dam failure. The California Department of Water Resources, Division of Safety of Dams (DSOD) oversees the construction of dams that are over 25 feet high and impound over 15 acre-feet of water, or those that are over six feet high and impound over 50 acre-feet of water. The DSOD requires dam owners to develop maps designating potential dam failure. The entire City would be at risk of inundation in the event of a failure on the Del Valle Dam (City of Pleasanton, 2005). Most of the City is designated to be flooded within 5-40 minutes of failure, while the southern portion of the City is subject to 40-140 minutes, and the far northwest corner not subject to inundation whatsoever.

Pleasanton is located several miles inland, so there is no risk of flooding due to tsunamis or large sea waves. Seiches are waves caused by oscillations of lakes and other confined bodies of water that inundate or otherwise damager lower-lying areas. Del Valle Reservoir is the closest body of water with potential seiche activity, but it exists several miles away from the City and therefore would not be expected to reach the City, and therefore poses no expected risk. Seiche activity

from the Chain of Lakes is expected to first flow into the Arroyo Mocho Channel, which has adequate capacity for a 100-year storm event.

Groundwater

A groundwater basin is a hydrogeologic unit containing several connected and interrelated aquifers or one large aquifer. The Planning Area lies in the Livermore Valley Groundwater Basin, which extends through Alameda and Contra Costa counties. The basin extends from the Pleasanton Ridge east to the Altamont Hills and from the Livermore Upland north to the Orinda Upland (DWR, 2006). The entire floor of the Livermore Valley overlay ground-water bearing materials (DWR, 2006). The basin is identified as a significant water source for urban use, with evaporation due to mining operations accounting for large additional outflows (DWR, 2006).

Water chemistry is highly varied around the basin. Total dissolved solids ranges from 300 mg/L to 550 mg/L with an average of 450 mg/L based on analyses from 27 municipal wells. Some areas have boron concentrations exceeding 2 mg/L (16 wells of approximately 137 wells sampled in 1982). Boron is generally highest in shallow wells because of marine sediments adjacent to the basin. The most laterally extensive elevated boron concentrations occur in the northeast part of the basin (DWR, 2006).

Regulatory Setting

Responsibility for water resources and flood protection in Pleasanton is distributed among many agencies at various levels of government. At the federal level, the primary agencies are the EPA, FEMA, and U.S. Army Corps of Engineers (Corps). At the state level, the primary agencies are the California Emergency Management Agency (formerly the California Office of Emergency Services), State Water Resources Control Board (SWRCB), and the Regional Water Quality Control Board (RWQCB). At the local level, agencies include the ACFCWCD, the Pleasanton Clean Water Program and the City of Pleasanton Operation Services Department.

Federal Regulations

Federal Clean Water Act (CWA) of 1972

The Clean Water Act (CWA) of 1972 is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands, and is administered by the EPA. It operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; permit review is the primary regulatory tool of the CWA.

The following sections of the CWA are particularly relevant to the implementation of the General Plan:

- Section 303 Water Quality Standards and Implementation Plans
- Section 401 Dredge/Fill and Wetlands Certification Program
- Section 402 National Pollutant Discharge Elimination System
- Section 404 USACE Fill or Dredge Discharge Permits

With the exception of the 404 permits, the EPA has delegated its authority to implement and enforce the provisions of these sections to the individual states. In California, the provisions are enforced by nine RWQCBs under the auspices of the SWRCB. Additional information on the requirements imposed by CWA §303, 401, and 402 is provided below.

CWA Section 402—National Pollutant Discharge Elimination System Program

CWA § 402, enacted as an amendment to the original act in 1972, regulates construction-, industrial-, and municipal-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program provides for general permits and individual permits. In California, the State Water Resources Control Board is authorized by the EPA to oversee the NPDES program through the Regional Water Quality Control Boards via the Porter-Cologne Act, as described below.

Stormwater runoff can entrain pollutants from a variety of sources. Many types of human activity, including new construction projects, industrial activity, agriculture, and urbanization, can result in discharge of pollutants to surface waters. The NPDES program contains several sub-programs: the construction, industrial, and municipal stormwater runoff programs, as discussed under "State Regulations", below.

CWA Section 303(d)—Total Maximum Daily Load Program

Section 303(d) of the CWA requires that the states make a list of waters that are not attaining water quality standards after the technology-based limits on point sources are put into place. For impaired waters on this list, the states must develop total maximum daily loads (TMDLs). A TMDL is a written plan that describes how an impaired water body will meet water quality standards. The plan must which contain:

- A measurable feature to describe attainment of the water quality standard(s);
- A description of required actions to remove the impairment; and
- An allocation of responsibility among dischargers to act in the form of actions or water quality conditions for which each discharger is responsible.

A TMDL must account for all sources of the pollutants that caused the water to be listed. Federal regulations require that the TMDL, at a minimum, account for contributions from point sources (federally permitted discharges) and contributions from non-point sources (such as agricultural runoff). The impaired water body list and TMDLs must be approved by the EPA prior to final Basin Plan amendment by the SWRCB and RWQCB.

On May 16, 2007, the EPA approved a Basin Plan amendment incorporating a TMDL and water quality attainment strategy for Diazinon and Pesticide-Related Toxicity in Urban Creeks. The amendment was adopted by the San Francisco Bay RWQCB on November 16, 2005, and the SWRCB on November 15, 2006. The final EPA approved TMDL is incorporated into the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), the region's master planning document for protecting water quality. The Municipal Regional Stormwater Permit (MRP)

requires permittees to implement a pesticide toxicity control program that addresses their own use of pesticides within their jurisdictions and to encourage residents to avoid using pesticides that pose a threat to water quality.

CWA Section 401—Dredge/Fill and Wetlands Certification

Section 401 of the CWA grants each state the right to ensure that the state's interests are protected in any federally permitted activity occurring in or adjacent to "Waters of the State." If a proposed project requires a USACE CWA Section 404 permit, or involves dredge or fill activities that may result in a discharge to "Waters of the State," the project proponent is required to obtain a CWA Section 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects) from the State Water Resources Control Board, to verify that the project activities will comply with state water quality standards. Section 401 of the CWA gives the State Water Resources Control Board the authority to consider the impacts of the entire project and require mitigation for volume, velocity, and pollutant load of the discharge from new outfalls to surface waters, when issuing certifications.

Federal Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. FEMA manages the NFIP. FEMA creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a one in 100 (one-percent) chance of being flooded in any one year based on historical data. Relevant flood management requirements for the City are discussed under "Local Regulations," below.

State Regulations

Porter-Cologne Act and State Implementation of Clean Water Act Requirements

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Water Quality), promulgated in 1969, implements the federal CWA. It established the State Water Resources Control Board and divided the state into nine hydrologic regions, each overseen by a RWQCB. The State Water Resources Control Board is the primary state agency responsible for protecting the quality of the state's surface water and groundwater resources, but much of its daily implementation authority is delegated to the nine RWQCBs. The relevant regional board for the Planning Area is the San Francisco Bay RWQCB.

The Porter-Cologne Act also provides for the development and tri-annual review of Water Quality Control Plans (Basin Plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives to protect the beneficial uses of those waters. Basin Plans are primarily implemented through NPDES permits, waste discharge requirements, TMDLs, discharge prohibitions, and watershed management efforts. Basin Plans provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The Porter-Cologne Act assigns responsibility for implementing the NPDES and TMDL programs to the SWRCB and the RWQCBs. The City is located within the San Francisco Bay Basin Plan region.

Drinking Water Standards

Maximum contaminant levels (MCLs) for various contaminants are identified and are made enforceable regulatory standards under the federal Safe Drinking Water Act. Title 22 of the California Code of Regulations (CCR) outlines drinking water standards for California. MCLs must be met by all public drinking water systems to which they apply. At a minimum, surface water and groundwater with a designated beneficial use as domestic or municipal supply in the Basin Plan shall not contain concentrations of constituents in excess of the MCLs or secondary MCLs specified in Title 22, which are incorporated by reference into the Basin Plan.

Construction General Permit

Construction activities on one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activity Activities, Order No. 2009-0009-DWQ (Construction General Permit). To obtain coverage under the Construction General Permit, the discharger must provide via electronic submittal, a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The permit also covers linear underground and overhead projects such as pipeline installations.

The Construction General Permit exercises a new risk-based permitting approach and mandates certain requirements based on the risk level of the project (Level 1, Level 2, or Level 3). The risk level of the project is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on the project location and timing (i.e., wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water, defined by the beneficial uses of the receiving water in the Basin Plan (e.g., cold freshwater habitat), a listing on the 303(d) list due to sediment impairment, or having a TMDL in place to address excessive sedimentation.

The performance standard in the Construction General Permit is that dischargers shall minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and management practices that achieve Best Available Technology (BAT) for treatment of toxic and non-conventional pollutants and Best Conventional Technology (BCT) for treatment of conventional pollutants.² The permit also imposes numeric action levels (Level 2 and Level 3 projects) and numeric effluent limits (Level 3 projects) for pH and turbidity, as well as minimum Best Management Practices (BMPs) that must be implemented at all sites.

A SWPPP must be prepared by a Qualified SWPPP Developer that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is to (1) help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. BMPs must be overseen by a Qualified SWPPP Practitioner that meets the requirements in the permit. For Level 2 and Level 3 projects, the discharger must also prepare a Rain Event Action Plan as part of the SWPPP that must be designed to protect all exposed portions of the construction site within 48 hours prior to any likely precipitation event.

The SWPPP must also include a construction site monitoring program. Depending on the project risk level, the monitoring program will include visual observations of site discharges, water quality monitoring of site discharges (pH, turbidity, and non-visible pollutants, if applicable), and receiving water monitoring (pH, turbidity, suspended sediment concentration, and bioassessment).

Local oversight is provided by the San Francisco Bay RWQCB.

Municipal Stormwater Permit

California's municipal stormwater permitting program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). MS4 Permits were issued in two phases. Under Phase I, which was initiated in 1990, the Regional Water Quality Control Boards adopted individual NPDES stormwater permits for medium municipalities (serving between 100,000 and 250,000 people) and large municipalities (serving 250,000 people). Most of these permits were issued to a group of co-permittees encompassing an entire metropolitan area. The City of Pleasanton is regulated under a regional Phase I General Permit, encompassing incorporated and unincorporated parts of Alameda County. These co-permittees together form the Alameda County Stormwater Management Program; more details are provided under "Local Regulations" below. Local oversight is provided by the Regional Water Quality Control Board.

State Water Board Low Impact Development Policy

On January 20, 2005, the SWRCB adopted the Low Impact Development (LID) Policy which, at its core, promotes the idea of "sustainability" as a key parameter to be considered during the

² As defined by U.S. EPA, Best Available Technology (BAT) is a technology-based standard established by the CWA as the most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable. Best Conventional Technology (BCT) is a technology-based standard that applies to treatment of conventional pollutants, such as total suspended solids.

design and planning process for future development. The SWRCB has directed its staff to consider sustainability in all future policies, guidelines, and regulatory actions.

The sustainability practice promotes LID to benefit water supply and contribute to water quality protection. LID has been a proven approach in other parts of the country and is seen in California as an alternative to conventional stormwater management. The RWQCBs are advancing LID in California in various ways, including provisions for LID requirements in renewed Phase I municipal stormwater NPDES permits.

Dam Inundation Mapping Requirement and Dam Oversight

Section 8589.5 of the California Code of Regulations requires that dam owners submit flood routing information, land surveys to delineate the floodplain, and a technical report to support a dam failure inundation map to the California Office of Emergency Services. The purpose of the program is to provide decision support for emergency preparedness planning, mitigation, and response to and recovery from potential damage to life and property from dam inundation flood waves. Based upon approved inundation maps (or the delineated areas), cities and counties with territory in the mapped areas are required to adopt emergency procedures for the evacuation and control of populated areas below the dams.

The Del Valle Dam – the active dam with failure inundation zones within the City of Pleasanton – is overseen by the California Department of Water Resources, Division of Safety of Dams (DOSD). DOSD engineers and engineering geologists review and approve plans and specifications for the design of dams and oversee their construction to ensure compliance with the approved plans and specifications. Reviews include site geology, seismic setting, site investigations, construction material evaluation, dam stability, hydrology, hydraulics, and structural review of appurtenant structures. In addition, DOSD engineers inspect over 1,200 dams annually to ensure the dams are performing and being maintained in a safe manner.

California Assembly Bill 2140 (2006)

Assembly Bill 2140, enacted in September 2006, allows cities and counties to adopt a local hazard mitigation plan as a part of the safety element of the general plan. The hazard mitigation plan must include (1) an initial earthquake performance evaluation of public facilities that provide essential services, shelter, and critical governmental functions; (2) an inventory of private facilities that are potentially hazardous, including multi-unit, soft story, concrete tilt-up, and concrete frame buildings, and (3) a plan to reduce the potential risk from private and governmental facilities in the event of a disaster. Hazards are to include an evaluation of tsunami, seiche, and dam failure risks. Assembly Bill 2140 is not a mandate, and compliance is optional. Local jurisdictions that have not adopted a local hazard mitigation plan shall be given preference by the California Office of Emergency Services to receive FEMA funding to assist in developing such a mitigation plan.

California Assembly Bill 162 (2007)

Assembly Bill 162, enacted in October 2007, calls for flood safety planning to be better integrated into local general plans. Specifically, Assembly Bill 162 includes the following requirements related to flood risks:

- The land use element of the general plan must identify and annually review those areas covered by the general plan that are subject to flooding, as identified by floodplain mapping prepared by FEMA or the California Department of Water Resources.
- Upon the next revision of the housing element, on or after January 1, 2009, the conservation element of the general plan must identify rivers, creeks, streams, flood corridors, riparian habitat, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management.
- A city or county general plan must contain a safety element for the protection of the community from any unreasonable risks associated with the effects of seismically-induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure, slope instability leading to mudslides and landslides, subsidence, liquefaction, and other seismic, geologic, and fire hazards.

Local Regulations

Alameda County Clean Water Program

The ACFCWCD and the City share responsibility for maintaining drainage facilities in the Planning Area. The Planning Area lies within the jurisdiction of Zone 7 of the ACFCWCD (ACFCWCD, 2010). Project developers would comply with the requirements of ACFCWCD during construction and operation of projects facilitated by the proposed Housing Element.

Alameda Countywide Clean Water Program

The Alameda Countywide Clean Water Program (ACCWP) includes 17 member agencies that work together to protect creeks, wetlands and San Francisco Bay. The City and ACFCWCD are two of the agencies that participate in the ACCWP. The member agencies have developed performance standards to clarify the requirements of the stormwater pollution prevention program, adopted stormwater management ordinances, conducted extensive education and training programs, and reduced stormwater pollutants from industrial areas and construction sites. In the Planning Area, the ACCWP administers the stormwater program to meet CWA requirements by controlling pollution in the local storm drain system.

The ACCWP and the City of Pleasanton are part of the Municipal Regional Stormwater NPDES Permit (MRP) that was adopted by the RWQCB on October 14, 2009. The new NPDES permit (Order R2-2009-0074 Permit No. CAS612008) issued by the RWQCB is designed to enable the ACCWP agencies to meet CWA requirements. The permit addresses the following major program areas: regulatory compliance, focused watershed management, public information/participation, municipal maintenance activities, new development and construction controls, illicit discharge controls, industrial and commercial discharge controls, monitoring and special studies, control of specific pollutants of concern, and performance standards. The permit also includes performance standards for new development and construction activities also referred to as Provision C.3 requirements. The C.3 requirements include measures for Permittees to use in planning appropriate source controls in site designs to include stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges. An additional goal is to prevent increases in runoff flows primarily accomplished through implementation of LID techniques such as source Control, site design measures, infiltration and rain water harvesting reuse. ACCWP is developing feasibility worksheets for its member agencies use for Rainwater infiltration and harvesting. New development that is required to adhere to C.3 provisions includes any project that collectively would introduce 10,000 square feet or more of impervious surfaces for development and redevelopment projects or 5,000 square feet of impervious surfaces of special land use categories projects (e.g. auto service facilities, auto gasoline facilities, restaurant and uncovered parking lots).

"Redevelopment" is defined as a project on a previously developed site that results in the addition or replacement of impervious surface. According to the C.3 provision in the ACCWP NPDES permit, some of the potential actions under the proposed Housing Element would fall within the "significant redevelopment projects" category Projects. A significant redevelopment project is defined as a project on a previously developed site that results in addition or replacement of total of 10,000 square feet or more of impervious surface. The permit requires that in the case of a significant redevelopment project that would result in an increase of, or replacement of, more than 50 percent of the impervious surface of a previously existing development, and the existing development was not subject to stormwater treatment measures, the entire project be included in the treatment measure design.

The C.3 provision also requires preparation of a hydrograph modification management plan (HMP) in cases where the changes in the amount and timing of runoff would increase stormwater discharge rates and/or duration and increase the potential for erosion or other significant adverse impacts to beneficial uses in downstream stormwater channels. The actions under the proposed Housing Element would be subject to provisions of the State NPDES Permit.

The City has jurisdiction over and/or maintenance responsibility for its municipal separate storm drain systems and/or watercourses in the city. Construction activities associated with development facilitated by the proposed Housing Element would be subject to the NPDES General permit (for Storm Water Discharges Associated with Construction and Land Disturbance Activities) Order No 2009-0009-DWQ, NPDES No CAS000002 requirements for stormwater management and discharges.

City of Pleasanton Municipal Code

The City has incorporated stormwater and stormwater quality regulations into its municipal code included in the following code chapters: Chapter 9.14 Storm Water Management and Discharge Control, Chapter 9.30 Water Conservation Plan, Chapter 13.04 Encroachments, Chapter 15.16 Connections to Sewerage Systems, Chapter 15:24 Sewer Service Regulations, Chapter 15.28 Sewer Use Regulations, Chapter 15.36 Wastewater Discharge Permits, Chapter 17.08 Flood

Damage Protection, and Chapter 19.40 Improvements. These municipal codes ensure that projects seeking development permits abide by stormwater, water quality and flood protection policies described above.

City of Pleasanton General Plan 2005-2025

The City of Pleasanton General Plan, developed in 2005, outlines the policies and programs that provide a long-term plan for addressing the physical development of the city through 2025. Projects must be generally consistent with the relevant guidelines outlined in the General Plan. The Water Element of the General Plan describes programs and policies relevant to the mitigation of water impacts.

The following goals and policies address water quality and supply, and flood hazards:

Water Element

Goal 1:	Preserve and protect water resources and supply for long-term sustainability.
Policy 1:	To ensure sustainability, promote the conservation of water resources.
Program 1.1:	Prohibit water supply production policies and practices which would deplete groundwater resources below existing sustainable levels.
Program 1.2:	Foster water conservation practices which do not allow depletion of groundwater and surface water resources to the extent that they cannot be replaced within the same "water season."
Program 1.3:	Support Zone 7 Water Agency in water supply production, treatment, and procurement practices that do not negatively impact the environment.
Program 1.7:	Require the installation of water conservation devices in new construction and additions.
Program 1.10:	During construction or reconstruction of public facilities, institute water conservation measures such as hot-on-demand water faucets, low-flush toilets, low water-using appliances, and low water-using irrigation devices and/or water-conserving landscaping.
Program 1.11:	Retrofit existing public facilities, as feasible, to institute water conservation measures.
Program 1.13:	Plant drought-tolerant landscaping in appropriate locations. All landscaping aspects from plant selection to irrigation methods should be designed to reduce water demand, decrease runoff, and minimize impervious surfaces.

- Goal 3: Ensure a high level of water quality and quantity at a reasonable cost, and improve water quality through production and conservation practices which do not negatively impact the environment.
- Policy 3: Protect the quality and quantity of surface water and groundwater resources in the Planning Area.
- Program 3.1: Do not utilize water reclamation techniques, including reverse osmosis, which could adversely affect or have potentially negative impacts on drinking water quality, surface waters, or groundwater resources.
- Program 3.2: Work with Zone 7 to monitor water-quality levels and test for pollution, including diazinon, of arroyos and aquifers to ensure that Pleasanton's drinking water is not contaminated with pollutants.
- Program 3.3: Continue to monitor water quality in existing business-park monitoring wells.
- Program 3.4: To preserve areas with prime percolation capabilities, do not permit projects that use toxic chemicals including herbicides in water recharge areas, such as adjacent to arroyos.
- Program 3.5: Coordinate with Zone 7 to control pollutant discharges and increase public education regarding the use of pesticides, such as diazinon, and the use of herbicides.
- Program 3.6: Prohibit new septic systems, automobile dismantlers, waste disposal facilities, industries utilizing toxic chemicals, and other potentially polluting uses in areas where pollution could impact flood waters, groundwater, streams, creeks, or reservoirs.
- Program 3.9: Support the policies and programs contained in the Water Quality Control Plan for the San Francisco Bay Basin to the extent they are consistent with the City's policies for water quality.
- Program 3.12: Conserve Pleasanton's urban forest, including trees in parks and on private property as well as street trees, so as to continue and enhance surface water filtration and community character. Pervious ground surfaces and the trees' root systems help in the filtration of surface water below the ground level.
- Goal 4: Provide sufficient water supply and promote water safety and security.
- Policy 4: Ensure an adequate water system and a high quality water supply for existing and future development, and maintain an adequate reserve of water in storage facilities.

- Program 4.1: Require new development to pay for its fair share of the City's water system master plan improvements.
- Program 4.2: Develop a contingency plan for potential water shortages including groundwater management and water conservation.
- Program 4.3: Work with Zone 7 to establish and monitor acceptable ranges of underground water levels and recharge when necessary.
- Program 4.5: Utilize water reclamation methods to the fullest extent feasible, where safe and nonpolluting.
- Program 4.9: In anticipation of planned future growth in Pleasanton, continue working with Zone 7 to plan and provide for sufficient future water supplies.
- Program 4.10: Continue to work with Zone 7 to ensure that use of the groundwater basin by Zone 7 does not result in deterioration of water quality.
- Program 4.11: Encourage water retailers to continue to work with Zone 7 on water conservation and quality issues.
- Goal 7: Reduce stormwater runoff and maximize infiltration of naturally-occurring rainwater so as to improve surface and subsurface water quality.
- Policy 10: Encourage a built environment that minimizes impervious surfaces.
- Policy 11: Implement stormwater runoff requirements, as required by the State Regional Water Quality Control Board and the Alameda County-wide Clean Water Program, with as little impact on development and business costs as possible.

Public Safety Element

Goal 1:	Minimize the risks to lives and property due to flood hazards.
Policy 14:	Inform the Public of the Del Valle Dam evacuation System.
Program 14.1:	Conduct public meetings and issue press releases regarding public evacuation procedures, as outlined in the City's Comprehensive Emergency Management Plan.
Policy 15:	Prohibit all development within the 100-year flood zone unless mitigation measures that meet Federal Insurance Administration criteria are provided.
Program 15.1:	Abide by the regulations of the National Flood Insurance Program, and continuously update related City ordinances.

- Program 15.2: Support Zone 7's efforts to improve the drainage system in conformance with its Stream Management Master Plan for the Planning Area in order to remove properties from flood hazard zones.
- Program 15.3: Cooperate with Zone 7 to preserve riparian corridors and recreation potential when making flood-protection improvements.
- Program 15.4: Cooperate with Zone 7 in the development of an arroyo maintenance plan, including those areas in private ownership.
- Program 15.5: Improve the City's Community Rating System classification for the National Flood Insurance program by implementing required flood-related activities.

Impacts and Mitigation Measures

Significance Criteria

Based on Appendix G of the CEQA *Guidelines*, development facilitated by the proposed Housing Element would have a significant effect on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- 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 that would not support existing land uses or planned uses for which permits have been granted);
- 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 site or off site;
- 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 that would result in flooding on site or off site;
- Create or contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- 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;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;
- 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;
- or result in inundation by seiche, tsunami or mudflow.

Approach to Analysis

Potential impacts to hydrology and water quality are analyzed within the context of existing plans and policies, permitting requirement, and local ordinances. Impacts that would be substantially reduced or eliminated by compliance with these policies or requirements are found to be less than significant. Mitigation measures are proposed for potential impacts that would not be reduced by these policies and requirements. Additional discussion of potential erosion impacts is presented in Section 4.F, Geology, of this SEIR. Analysis of potential impacts due to the use of hazardous materials is presented in Section 4.G, Hazardous Materials, of this SEIR. Potential impacts to stormwater infrastructure and capacity are discussed in Section 4.L, Utilities and Service Systems, of this SEIR.

Several of the significance criteria presented above would not be applicable to the proposed General Plan Amendments. These are briefly discussed below and will not be further addressed in this section:

• *Inundation by seiche, tsunami or mudflow*: Because the Planning Area is inland from the ocean, there would be no impact that would expose people or structures in Pleasanton to significant loss, injury, or death involving seiche or tsunami. In addition, since the Planning Area largely occurs in flat areas, the proposed Housing Element would be unaffected by mudflows, which are confined to hillside areas.

Impacts and Mitigation Measures

Impact 4.H-1: Development facilitated by the General Plan Amendments could have potential impacts on water quality, flooding, and could create additional sources of polluted runoff. (Less than Significant)

Housing Element

Development projects facilitated by the Housing Element, specifically those on the potential sites for rezoning, could affect drainage patterns and create new impervious surfaces that cause changes to stormwater flows and water quality. However, compliance with the ACCWP NPDES Permit and implementation of the Construction SWPPP would require future development at potential sites for rezoning to incorporate BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. Further, the C.3 provision of the ACCWP NPDES Permit requires that there be no net increase in stormwater rates and runoff at a potential site for rezoning after project construction through preparation of a hydromodification and stormwater management plan. Common methods to control stormwater runoff rates and protect water quality, among many, include drainage lines that can rapidly percolate water (such as rock lined ditches or vegetated swales), minimizing impervious surfaces (using pervious pavement and draught tolerant landscaping), and proper waste management practices. Developers of new projects must install adequately-sized storm drains to connect to the City's existing underground storm drain network. The City has required new developments to size their storm drains to accommodate major rainfalls.

Site plans, design, and BMPs for residential projects facilitated by the Housing Element will be required to demonstrate proper compliance with applicable water quality regulations as project

proponents apply for development permits and the applicable NPDES permits. Compliance will be ensured by the City and/or the San Francisco Bay RWQCB through their review and approval of applicable permits, and would insure that new development or redevelopment would not substantially worsen existing water quality problems. Development proposals, including grading and drainage plans will be reviewed by the City's Engineering Division of the Community Development Department for compliance with city ordinance codes regarding flooding and drainage (including properly sized storm sewers and building within FEMA flood hazard zones). As discussed above, as specific residential development projects are proposed in response to the proposed Housing Element, these projects will require implementation of construction and design level measures to minimize potential impacts related to water quality and quantity changes.

For these reasons, the proposed Housing Element would have a less than significant impact on water quality and flooding.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would result in degraded water quality or flooding, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

The Draft CAP recommends mixed-use and transit-oriented development and energy efficiency renovations. Construction associated with projects in the Draft CAP could increase erosion and adversely affect urban runoff. However, the City and regulatory agencies (outlined above) enforce erosion control for new construction to prevent sediment and pollutants from entering creeks and storm drain. As such, water quality is not likely to be greatly affected by construction activities associated with these projects. Thus, implementation of the Draft CAP would have a less than significant impact on water quality and flooding.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.H-2: Development facilitated by the General Plan Amendments could potentially deplete groundwater supplies or interfere with groundwater recharge. (Less than Significant)

Housing Element

As described under Impact 4.H-1, above, development of residences in Pleasanton would increase the area of impervious surfaces, which would potentially reduce groundwater infiltration. The addition of new housing would also result in an increase in residential connections to the municipal water supply, which could potentially increase demand on groundwater supplies. As described under Impact 4.L-2 in Section 4.L, Public Services and Utilities, the City has already planned for this growth by supporting Zone 7's capital improvement projects to secure more water, and the proposed Housing Element includes policies to protect water supplies and to ensure a sustainable water service for the future. *Program 44.1* of the proposed Housing Element refers to programs in the Water Element that should be adopted to reduce impacts on water supply to less than significant levels. As discussed in Impact 4.L-2, with the inclusion of these programs and Zone 7's existing plans for the build-out of several general plans, the proposed Housing Element significant impact on water supply.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would result in ground water depletion, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

The Draft CAP recommends numerous water conservation measures, which may result in reduced demand for water supplies, including potential groundwater supplies. The Draft CAP does not recommend any strategy or measure that requires additional water supply that would be attained from groundwater supplies, and would not result in any future projects that would substantially interfere with groundwater recharge. There would be no impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.H-3: Development facilitated by the General Plan Amendment and rezoning could potentially alter runoff characteristics on sites proposed for residential development which could lead to onsite and off-site erosion or flooding. (Less than Significant)

Housing Element

Implementation of the proposed Housing Element would involve construction activities, which may disturb soils and result in alteration of site topography. Individual development projects with the potential to disturb more than one acre of surface area during construction include the potential sites for rezoning (Sites 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, and 21) and other sites currently zoned for residential development which would be subject to the NPDES Construction General Permit requirements, including preparation of a SWPPP. Improperly managed construction activities could increase impervious surfaces and result in an increase in surface runoff. However, compliance with the NPDES Construction Permit, which covers construction-related erosion, would ensure that runoff from the site is protective of the beneficial uses of receiving waters and does not worsen existing water quality impairments.

Once constructed, the C.3 requirements for new development that would introduce 10,000 square feet of new impervious surfaces include source control measures in site designs to address both soluble and insoluble stormwater runoff pollutant discharges. Such stormwater quality measures are also required for Regulated Projects-Special Land Use Category (uncovered parking structures, restaurants, auto service, and auto gasoline facilities) that would construct 5,000 square feet of uncovered parking lots that are stand-alone or part of any other development project. In addition, provision C.3 of the ACCWP NPDES permit requires that projects with more than one acre of impervious surface submit a HMP to demonstrate that development would not increase long-term runoff rates on a property beyond existing conditions. Goal 6 of the *Public Facilities and Community Programs Element* of the General Plan directs the City to ensure that development minimize stormwater runoff and provide adequate stormwater facilities to protect property from flooding. Therefore, adherence to existing regulatory requirements and for the same reasons described in Impact 4.H-1, the proposed Housing Element would have less than significant impacts with respect to onsite and off-site erosion or flooding.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would increase soil erosion, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. Further, implementation of policies and programs under the Draft CAP would be subject to all of the City development standards related soil erosion. These impacts are less than significant.

The Draft CAP does not recommend any strategy or measure that would directly alter drainage patterns. No streams or rivers are anticipated to be altered. Projects encouraged by the Draft CAP could indirectly result in slight alterations to drainage patterns; however, the changes would not be substantial, and any changes that would occur would be subject to existing federal and state regulations. Compliance with existing regulations would result in a less than significant impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.H-4: Development facilitated by the General Plan Amendment and rezonings could potentially result in construction of residences within a FEMA 500-year flood hazard area. (Less than Significant)

Housing Element

Large portions of the City is in a 500-year flood zone. There are residentially zoned sites and potential sites for rezoning near several water bodies, including the Chabot Canal, Alamo Canal, and the Arroyo Mocho. One of the potential sites for rezoning, Site 14 (Legacy Partners), is partially within in a 100-year flood zone. FEMA considers 100-year flood areas to be subject to one to three feet of flooding during a 100-year storm event (FEMA, 2009). Chapter 17.08 of the *Pleasanton Municipal Code* requires elevation of new residential structures to be above base flood elevation or at least two feet if the base flood elevation is unknown. Further, all proposed development in Special Flood Hazard Areas must be inspected by a registered professional engineer or architect prior to permit issuance to ensure that structures meet building requirements. Developers of new projects must install adequately-sized storm drains to connect to the City's existing underground storm drain network. Development proposals, including grading and drainage plans would be reviewed by the City's Engineering Division of the Community Development for compliance with city ordinance codes regarding flooding and drainage (including properly sized storm sewers and building within FEMA flood hazard zones). Impacts associated with the development of hazard zones would therefore be less than significant.

The following goals, policies, and programs of the General Plan's *Safety Element* further reduce potential impacts due to flooding to a less than significant level:

- Goal 1: Minimize the risks to lives and property due to flood hazards.
- Policy 14: Inform the Public of the Del Valle Dam evacuation System.
- Program 14.1: Conduct public meetings and issue press releases regarding public evacuation procedures, as outlined in the City's Comprehensive Emergency Management Plan.

- Policy 15: Prohibit all development within the 100-year flood zone unless mitigation measures that meet Federal Insurance Administration criteria are provided.
- Program 15.1: Abide by the regulations of the National Flood Insurance Program, and continuously update related City ordinances.
- Program 15.2: Support Zone 7's efforts to improve the drainage system in conformance with its Stream Management Master Plan for the Planning Area in order to remove properties from flood hazard zones.
- Program 15.3: Cooperate with Zone 7 to prese4rve riparian corridors and recreation potential when making flood-protection improvements.
- Program 15.4: Cooperate with Zone 7 in the development of an arroyo maintenance plan, including those areas in private ownership.
- Program 15.5: Improve the City's Community Rating System classification of 8 for the National Flood Insurance program by implementing required flood-related activities.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development in the flood zone, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP, in and of itself, does not site residences in the flood zone. Further, the policies outlined in the General Plan would apply to future development. This is a less than significant impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.H-5: Development facilitated by the General Plan Amendment and rezonings could potentially expose people and structures to flooding as a result of a levee or dam failure. (Less than Significant)

Housing Element

People and structures could be subject to inundation from failure of the Del Valle Dam. Most of the City is within the 5 to 40 minute inundation area in the event of the Del Valle Dam failure (City of Pleasanton, 2005). Dam inundation zones are based on the unlikely scenario of a total catastrophic dam collapse, occurring in a very short time frame (i.e., seconds). The scenario is considered highly unlikely but provides a worst case for planning purposes. While such an event would be highly unlikely, the inundation area would be widespread and the flood arrival time would leave inadequate time for evacuation of residential and commercial uses.

However, existing state and local regulations are sufficient to address the potential for flood hazards as a result of dam failure. The Del Valle Dam is under the jurisdiction of the California Department of Water Resources, Division of Safety of Dams (DOSD) (DWR, undated). DSOD inspectors review all aspects of dam safety and may require dam owners to perform work, maintenance, or implement controls if issues are found that could compromise the structural integrity of the dam structure. DSOD engineering requirements and required annual inspections greatly reduce the potential for catastrophic dam failure in California. The Del Valle Dam is owned, operated, and maintained by the Department of Water Resources and is subject to the Director's Safety Review Board for review every five years.

Further, under the Stream Management Master Plan, flood retention facilities throughout the Tri-Valley area, including Pleasanton, will be updated and maintained to protect residents against the 100- and 500-year floods. Such updates include replacement and repair of aging levees. For example, levees on the Arroyo las Positas were replaced in 2004. In accordance with local policies (e.g., Chapter 17.08 of the Pleasanton Municipal Code) and implementation of the proposed Housing Element, residential development would not be allowed within levee failure flood zones without being constructed to designated flood protection standards. Due to the unlikely nature of dam failure, the regulatory oversight of the DSOD, and local regulations requiring new developments to meet flood protection standards, the impact from flooding as a result of the failure of a levee or dam is considered less than significant.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would site residences in the flood zone, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP, in and of itself, does not site residences in the flood zone. Further, the policies outlined in the Pleasanton Municipal Code would apply to future development. This is a less than significant impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.H-6: Development facilitated by the General Plan Amendment and rezonings, in conjunction with past, present and future projects, could potentially have a cumulative adverse impact with respect to hydrology and water quality. (Less than Significant)

Housing Element

The geographic context used for the cumulative assessment of surface water quality and hydrology impacts is the Arroyo de la Laguna watershed, which encompasses the whole of the Livermore Valley. In addition, the geographic context used for the cumulative assessment of groundwater impacts in the Livermore Valley Groundwater Basin as identified by DWR.

As discussed above, the development of potential sites for rezoning and existing sites designated for residential development under the proposed Housing Element would require conformance with State and local policies that would reduce hydrology and water quality impacts to less-than-significant levels. Specifically, potential changes related to stormwater quality, stormwater flows, drainage, impervious surfaces, and flooding would be minimized via the implementation of stormwater control measures, stormwater retention measures, stormwater quality control measures, and project-specific environmental review that would integrate measures to reduce potential flooding impacts.

Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. Cumulative projects that could combine with the less-than-significant incremental impacts of the development of residentially zoned sites and the potential sites for rezoning under the proposed Housing Element to compound or increase any existing hydrology or water-quality-related cumulative impacts include, for example, potential cumulative reductions in the water quality in downstream watercourses, or degradation of urban stormwater quality. Other projects resulting in construction occurring within or nearby the Planning Area could result in similar or greater impacts to those caused by development planned in the proposed Housing Element. However, like the proposed Housing Element, all cumulative projects would be subject to similar permit requirements and would be required to comply with City of Pleasanton ordinances and General Plan policies, as well as numerous water quality regulations that control

both construction-related and long-term discharge of pollutants in stormwater. The water quality regulations implemented by the San Francisco Bay RWQCB take a basin-wide approach, and consider water quality impairments in a regional context, tailoring NPDES permit requirements accordingly. For example, the Construction General Permit ties receiving water limitations and basin plan objectives to the terms and conditions of the permit, and the Municipal Regional Stormwater NPDES Permit implemented by the ACCWP works with all municipalities to manage stormwater systems to be collectively protective of water quality.

For the reasons above, impacts of residential development under the proposed Housing Element on hydrology and water quality are not cumulatively considerable when viewed in connection with the effects of the other past, present, and reasonably foreseeable probable future projects within the Planning Area and in the vicinity of the Planning Area.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would result in cumulative water quality or hydrology impacts, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Recommendations within of the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. Construction projects enabled under the Draft CAP would not alter hydrology or water quality in a cumulatively considerable way, as projects would be required to adhere to local, state, and federal regulations. This is a less than significant impact.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Hydrology and Water Quality

California Department of Water Resources (DWR), *California's Groundwater, Bulletin 118, Livermore Valley Groundwater Basin,* last updated January 20, 2006.

- California Regional Water Quality Control Board (RWQCB), 2006 CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLS, http://www.swrcb.ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/r2_06_303d _reqtmdls.pdf, accessed June 3, 2011.
- California Regional Water Quality Control Board San Francisco Bay Region (RWQCB). 2007. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).
- City of Pleasanton, The Pleasanton General Plan V. Public Safety Element. Figure V-8. Del Valle Dam Inundation Area. 2005.
- City of Pleasanton, General Plan, 2009.
- Department of Water Resources (DWR), undated, *Dams Within the Jurisdiction of the State of California*, accessed at http://www.water.ca.gov/damsafety/damlisting/index.cfm on June 20, 2011, undated web listing.
- Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, Alameda County Unincorporated and Incorporated Areas, Community Panel Numbers 06001C0316G, 06001C0308G, 06001C0309G, 06001C0317G, 06001C0319G, and 06001C0336G, August 3, 2009.
- Western Regional Climate Data Center. Livermore, California NCDC 1971-2000 Monthly Normals. Accessed June 2, 2011 at www.wrcc.dr.edu.

4.I Land Use and Planning

This section includes a description of the existing land uses in City and an analysis of the effects that the proposed General Plan Amendment and rezonings would have on land use in the city; however, the analysis is specific to the potential sites for rezoning. This section also includes an analysis of the project's consistency with relevant, local policies, most of which are part of the General Plan.

With the exception of the potential sites being rezoned for residential uses, impacts on land use within the City were previously addressed in the *City of Pleasanton General Plan 2005-2025 EIR* (City of Pleasanton, 2009a), which is hereby incorporated by reference in this EIR.

Setting

Physical Setting

The City's current residential land use pattern is largely defined by its distinct neighborhoods and topographic features. The geography of the City reflects the evolving architectural and site design trends of the past 150 years of the City's development. The core of the City is its historic downtown, a walkable grid-based district comprised of numerous buildings that are over 100 years old. The residential neighborhoods that have been built since 1960 comprise much of the City, outside the downtown area; these neighborhoods are situated on a curvilinear network of streets and cul-desacs. The names and locations of these various neighborhoods are respectively shown in Table 2-1 (Residential Neighborhoods) and Figure 2-1 (Neighborhood Locations) in the Land Use Element of the General Plan.

The existing land use distribution in the City is dominated by residential uses. Medium and highdensity residential uses are located throughout the central areas of the City with low-density and rural density uses along the Urban Growth Boundary on the west, east, and south sides of the City. A total of 77 residential neighborhoods exist within the City, with Downtown being the oldest. Within the Planning Area, almost 21 percent of all land is devoted to residential uses. All residential landuse designations are within the City's sphere of influence. (See Figure 1-1 in the Introduction to the proposed General Plan.)

Potential Sites for Rezoning

The City has identified 17 potential sites for rezoning, located in various locations throughout the city, to help it meet its RHNA requirements. (see Figure 3-4 in Chapter 3, Project Description). A list of these sites is provided in Table 3-3 of Chapter 3, Project Description. The potential sites for rezoning located in the north part of the City adjacent to or near I-580 include sites in business parks and commercial areas. Specifically, Sites 1, 9, 10, and 13 are located within the Hacienda Business Park. Sites 2 through 4 are located within the Stoneridge Mall area. Site 7, which is east of I-680 and south of Bernal Avenue, is located within the Bernal Office Park. Site 8 is within the Stanley Business Park. Sites 11 and 14, which are located in the eastern portion of the city, north of

Stanley Boulevard are former sand and gravel quarries, but were reclaimed and are now vacant. Site 17 is located within the downtown historic district adjacent to historic properties.

As outlined in Table 3-3, the majority of the potential sites for rezoning (Sites 2 through 4, portions of Site 6, Sites 7, 8, 16, and 20) currently are wholly or partially designated as Retail/Highway Service/Commercial, Business, and Professional Offices on the General Plan. Several sites, including Sites 1, 9, 10, and 13 include the Mixed Use/Business Park designation. Two of the sites (11 and 14) are located within the East Pleasanton Specific Plan Area. Site 17 is designated for Retail/Highway/ Service Commercial, Business & Professional Offices.

Regulatory Setting

This section provides a brief description of the documents and regulations that pertain to the proposed General Plan Amendment and rezonings.

City of Pleasanton General Plan

The Pleasanton General Plan 2005 – 2025 was adopted in July 2009 and sets forth land use goals, policies and programs for guiding land use decisions and the City's growth and development. The following goals, policies and programs from the General Plan apply to the proposed Housing Element.

Land Use Element

Program 1.2:	When reviewing development projects (especially in areas where there is likely to be the most change and the greatest impact can be made), consider how the following will impact energy use: density, neighborhood design, proximity to transit, proximity to shopping/employment, walkability, street layout, and construction techniques (Green Building). Develop new measures of sustainability based on these factors and adopt minimum sustainability scores for typical projects.
Program 1.7:	Use the City's housing programs to encourage people who work in Pleasanton to live in Pleasanton.
Program 2.1:	Reduce the need for vehicular traffic by locating employment, residential, and service activities close together, and plan development so it is easily accessible by transit, bicycle, and on foot.
Program 2.2:	Encourage the reuse of vacant and underutilized parcels and buildings within existing urban areas.
Program 2.3:	Require transit-compatible development near BART stations, along transportation corridors, in business parks and the Downtown, and at other activity centers, where feasible.
Program 2.4:	Require higher residential and commercial densities in the proximity of transportation corridors and hubs, where feasible.

- Program 5.1: When evaluating development proposals or changes in land use consider General Plan and Specific Plan policies, Zoning and Subdivision Ordinance standards, existing land uses, environmental impacts, safety, aircraft noise, and resident, merchant and property owner concerns.
- Program 5.2: Consider surrounding land uses and potential impacts when changing land-use designations.
- Program 6.1: Prepare a Specific Plan for East Pleasanton as a coordinated effort between property owners, major stakeholders, and the Pleasanton community, including residents of East Pleasanton. Although the General Plan map indicates several types of land use that may be considered in the specific planning process, this General Plan confers no entitlement to any future development of land in East Pleasanton.
- Program 6.2: Work with the Hacienda Owners Association and other stakeholders to prepare a comprehensive planned unit development amendment for the Hacienda Business Park.
- Program 8.1: Enforce the provisions of the City's Zoning Ordinance and related planning ordinances to maintain the character of existing residential neighborhoods.
- Program 8.2: Use the City's development review procedures to minimize intrusions into existing neighborhoods.
- Program 9.1: Zone vacant infill sites at densities to facilitate development, which includes affordable housing, while respecting the character of surrounding uses.
- Program 10.1: Use planned unit development (PUD) zoning for residential properties that have unique characteristics or to accommodate development that does not fit under standard zoning classifications.
- Program 12.3: In the Downtown, implement mixed-use development which incorporates higher density and affordable residential units consistent with the Downtown Specific Plan., where feasible.
- Program 12.4: Encourage second-floor apartments above first-floor commercial uses and livework units in the Downtown. Also allow mixed-use development in the Downtown where residences are located behind commercial uses.
- Program 15.3: Generally discourage the redesignation of commercial, business park, and industrial land to residential use, except for the area surrounding the BART Stations. Encourage the designation of land as mixed use where impacts can be mitigated, and where there is potential to reduce traffic and facilitate affordable housing.
- Policy 16: Encourage mixed-use development which encompasses any combination of commercial development, housing units, or community facilities in an integrated

development. In areas served by transit, encourage mixed use and residential densities that support affordable housing and transit.

- Policy 17: The specific location of land uses, appropriate floor area ratios, and residential densities in mixed-use areas will be determined by the City Council through the planned unit development process or through the preparation of specific plans. In any case, the number of housing units in the Pleasanton Planning Area may not exceed 29,000.
- Program 18.1: Work with the Hacienda Owners Association to prepare a comprehensive planned unit development amendment for the Hacienda Business Park with special emphasis on creating a mixed-use, pedestrian-friendly area around the East Pleasanton/Dublin BART Station. This General Plan confers no additional development entitlement above what is currently entitled in Hacienda.
- Program 18.2: Provide land use flexibility for the Hacienda Business Park, portions of Stoneridge Mall area, and other areas through the Mixed Use/Business Park, and Mixed Use land use designations. The intent is to plan for a mixed use area sufficient to accommodate the City's Regional Housing Needs Determination.
- Program 18.3: Use the development review process to reduce or mitigate any potential adverse impacts (noise, odor, parking, light and glare, etc.) related to allowing a mix of land uses in Hacienda.
- Program 21.3: Ridgelines and hillsides shall be protected. Housing units and structures shall not be placed on slopes of 25 percent or greater, or within 100 vertical feet of a ridgeline. No grading to construct residential or commercial structures shall occur on hillside slopes 25 percent or greater, or within 100 vertical feet of a ridgeline. Exempt from this policy are housing developments of 10 or fewer housing units on a single property. Splitting dividing, or subdividing a "legal parcel" to approve more than 10 housing units is not allowed (Measure PP, Nov. 2008).
- Program 22.4: Encourage lower intensity uses immediately inside the Urban Growth Boundary, as necessary, to prevent potential land use conflicts with outlying non-urban uses.
- Program 22.6: Reevaluate Urban Growth Boundary locations in East Pleasanton at such time as comprehensive land use designation changes are considered for the reclaimed quarry lands.
- Policy 23: Regulate the number of housing units approved each year to adequately plan for infrastructure and assure City residents of a predictable growth rate.
Air Quality and Climate Change Element

- Policy 2: Support development plans that reduce mobile-source emissions by reducing vehicle trips and vehicle miles traveled. Implement programs from the Land Use Element to provide mixed-use developments, locate high-density uses near transit facilities, and provide neighborhood-serving retail uses convenient to residential neighborhoods. These programs would reduce vehicle trips and vehicle miles traveled, thus reducing air-pollutant emissions.
- Program 3.1: Locate new air pollution point sources, such as manufacturing and extracting facilities, away from residential areas and other sensitive land uses following the California Air Resource Board's recommendations.
- Program 3.2: Locate new sensitive receptors, such as residences (including residential care and assisted living facilities for the elderly), childcare centers, schools, playgrounds, and medical facilities away from point sources of air pollution and busy traffic corridors following the California Air Resource Board's recommendations.
- Program 3.3: Require site specific studies of air quality health risk for development that would place sensitive receptors closer than 500 feet from the edge of a freeway or close to a significant point source of air pollution.

Community Character Element

- Program 18.1: When evaluating development proposals or changes in land use consider General Plan and Specific Plan policies, Zoning and Subdivision Ordinance standards, existing land uses, environmental impacts, safety, and resident, merchant and property owner concerns.
- Program 18.2: Require appropriate buffers, edges, and transition areas between dissimilar land uses and neighborhoods.
- Program 18.3: Through the City's review process, address issues of privacy, proximity and orientation.

Noise

- Program 5.1: Locate new noise-sensitive land uses away from noise sources unless development plans include appropriate mitigation measures.
- Program 5.2: Locate new noise sources away from noise-sensitive land uses unless development plans include appropriate mitigation measures.

Conservation and Open Space

Policy 2: Preserve heritage trees throughout the Planning Area.

- Program 2.1: Strongly encourage preservation of heritage trees; where preservation is not feasible, the City will require tree replacement or a contribution to the Urban Forestry Fund. Allow no net loss of trees.
- Program 2.2: Follow the provisions of the City's Heritage Tree Ordinance, Pleasanton Municipal Code Chapter 17.16, Tree Preservation, when reviewing future development projects.

Specific Plans

Downtown Specific Plan

The City adopted the latest Specific Plan for this area on March 5, 2002. The overall goal of the Specific Plan is to improve upon the commercial and residential viability of the Downtown area while preserving the traditions of its small-town character and scale.

Bernal Property Specific Plan (Phase I and Phase II)

The City adopted the Phase I Specific Plan on August 21, 2000 for the 198-acre "private" development portion of the entire 516-acre property. Phase II, the 318 acres that were dedicated to the City by the Phase I developer, was adopted on May 16, 2006. Phase I consisted of 571 mixed-density housing units, a "village common" and roads. It also allows the development of 750,000 square feet of commercial/office-building floor space. Phase II provides for community uses including parks and open space, a youth and community center, as well as an amphitheater and agricultural uses.

North Sycamore Specific Plan

The City adopted this 135-acre Specific Plan in 1992 with the objective of providing guidance for annexation and development while retaining the area's rural character. Land use designations include low-density residential, agricultural, and some commercial and medium-density residential near Sunol Boulevard. As of 2006, residential development of the area is mostly complete, although some commercial development is yet to be constructed.

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist) the project could have a significant impact if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan,

local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

• Conflict with any applicable habitat conservation plan or natural community conservation plan.

Approach to Analysis

The methodology for this analysis included surveying the potential sites for rezoning locations for their existing uses and land use designations. The City's General Plan 2005 - 2025, as well as other pertinent plans, was reviewed for policies related to the potential sites for rezoning and for housing in general and a consistency analysis with existing plans and policies was conducted. Habitat conservation plans were also considered in this evaluation.

Impacts and Mitigation Measures

Impact 4.I-1: Development facilitated by the General Plan Amendment and rezonings could potentially physically divide an established community. (Less than Significant)

Housing Element

The proposed Housing Element would allow for the construction of residential units on various locations throughout the city, including sites currently zoned residential as well as on the potential sites for rezoning. The locations chosen by the City for the potential sites for rezoning met certain criteria established by the City as being suitable for multi-family housing development. These criteria included, among others, location within existing neighborhoods, compatibility with surrounding residential development and consistency with General Plan themes such as preserving and enhancing Pleasanton's character and quality of life. Thus, these housing developments would be integrated into, and would not divide, any established neighborhood within the city. In addition, the proposed Housing Element contains the following policies and programs that would ensure that the proposed housing units would not divide established communities (City of Pleasanton, 2011a):

- Policy 35: Disperse high-density housing throughout the community, especially in the Downtown and in other areas near public transit, major thoroughfares, shopping and employment centers.
- Program 35.1: Provide sites for multi-family housing, especially in locations near existing and planned transportation and other services.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, including numerous land use planning initiatives and recommendations that the City revise existing development standards and design guidelines to promote high-quality mixed-use and transit-oriented development projects. Actions under these initiatives would be required to be in compliance with the Pleasanton Municipal Code and General Plan policies. The

implementation of the Draft CAP would not divide an established community, and impacts would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.I-2: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with applicable land use plans and policies. (Less than Significant)

Housing Element

To provide for consistency with the City's General Plan, Program 44.1 has been incorporated into the 2007-2014 Housing Element. Specifically, the proposed Housing Element it is consistent with General Plan policies that encourage infill, mixed use, and transit-oriented development as well as higher density residential development that support affordable housing near transit and transportation corridors and in downtown. It is also consistent with Program 18.2, which encourages land use flexibility for the Hacienda Business Park and Stoneridge Mall to help accommodate the RHNA requirements.

However, several of the potential sites for rezoning are located in areas that could result in conflicts with General Plan policies related to air quality and noise due to their proximity to point sources of air pollution and to noise sources, if not properly addressed (see Sections 4.B, Air Quality and 4.J, Noise for impact analysis and mitigation measures specific to air quality and noise). These include Sites 1 through 4 and 7, which are adjacent to BART, I-580, and I-680.

The following proposed Housing Element policies would ensure that the proposed housing developments would remain consistent with the General Plan:

- Program 9.1: Conduct a review of the Growth Management Program and amend as necessary to assure the rate of residential development is consistent with the City's current and new infrastructure capacities, including roadways, water, sewer, and facilities.
- Policy 11: Strive toward meeting Pleasanton's share of regional housing needs, as defined by the Regional Housing Needs Determination (RHND).
- Program 11.1: Complete any and all rezoning and General Plan amendments necessary to accommodate the City's full RHNA allocation for the fourth housing element revision period, as assigned to the City by ABAG in or about May 2008, comprising 3,277 total units, including 1,076 very-low income units, 728 lowincome units, 720 moderate-income units, and 753 above-moderate income units.

- Program 11.3: Strive to construct, rehabilitate, and conserve the City's regional share of housing within the constraints of available infrastructure, air quality, and financial limits, by the conclusion of the current Regional Housing Needs Determination period in 2014.
- Program 11.4: In order to increase affordability, encourage innovation in housing design, local regulations, and construction consistent with Pleasanton's heritage and community character.
- Policy 14: Make appropriate modifications to the Land Use Element of the General Plan, Zoning Ordinance, and other City ordinances, programs, and policies to facilitate the provision of housing, especially housing affordable to moderate-, low-, and very-low-income households.
- Program 14.1: Fund the infrastructure improvements contained in the General Plan to accommodate projected housing growth.
- Program 14.6: Assess the level of effort to overcome infrastructure constraints to affordable housing on a periodic basis.
- Goal 11: Manage residential growth in an orderly fashion while enabling Pleasanton to meet its housing needs.
- Policy 28: Retain flexibility in the growth management process in order to accommodate housing affordability.
- Policy 29: Encourage substantial private development of affordable housing through the Growth Management Program.
- Program 29.1: Continue to use the Growth Management Report to monitor the numbers and types of units built at all income levels. Use this information to facilitate the issuance of sufficient numbers of permits to meet the regional housing needs throughout the planning period.
- Program 29.2: Review and amend the Growth Management Ordinance to reflect current housing and infrastructure conditions and current housing needs.
- Goal 14: Provide adequate locations for housing of all types and in sufficient quantities to meet Pleasanton's housing needs.
- Goal 15: Adopt land use changes from non-residential to residential designations where appropriate.
- Policy 35: Disperse high-density housing throughout the community, especially in the Downtown and in other areas near public transit, major thoroughfares, shopping and employment centers.

- Program 35.1: Provide sites for multi-family housing, especially in locations near existing and planned transportation and other services.
- Policy 39: Increase housing in the commercial portion of the Downtown area by permitting three-story construction in the Downtown area pursuant to the Downtown Specific Plan, with one or two stories of residential over commercial in mixed-use buildings.
- Policy 44: Preserve and enhance environmental quality in conjunction with the development of housing, including additions and remodels.
- Program 44.1: Implement the applicable housing related air quality, climate change, green building, water conservation, energy conservation, and community character programs of the Pleasanton General Plan, including:
 - Policy 6 and programs 6.1 and 6.3 of the Air Quality and Climate Change Element
 - Programs 1.5, 1.7, 1.8, 1.12, 1.13, 1.14, and 3.12 of the Water Element
 - Program 9.1 of the Community Character Element
 - Policies 2,3, 4, 6 and 7 and programs 2.1-2.7, 3.1-3.5, 4.1-4.3, 6.1-6.4, 7.1-7.3, and 7.6 of the Energy Element

Finally, the City's development review process would ensure that the projects that are proposed within the various specific plans are consistent with the design guidelines and policies established in those specific plans. This impact would be less than significant and no mitigation is required.

Climate Action Plan

The Draft CAP includes numerous land use planning initiatives, including recommendations that the City revise existing development standards and design guidelines to promote high-quality mixed-use and transit-oriented development projects. Strategies to reduce GHGs include supporting infill and higher density development, and locating mixed-use infill near local-serving commercial areas. The Draft CAP also proposes modifications to city codes, ordinances, and permitting procedures to enhance green buildings, renewable energy generation, and energy efficiency. Actions under these initiatives would be required to be in compliance with the Pleasanton Municipal Code and General Plan policies. The adoption of the Draft CAP would amend the current General Plan. Amending the General Plan to achieve greenhouse gas goals would not conflict with the overall goals of the General Plan land use policies. The impact would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.I-3: Development facilitated by the General Plan Amendment and rezonings could potentially conflict with adopted habitat conservation plans. (No Impact)

Housing Element

As discussed in more detail in Section 4.C, Biological Resources, the Planning Area is not in a habitat conservation or natural community conservation plan and would, therefore, not conflict with any habitat conservation or natural community conservation plan. Adoption and implementation of the Housing Element would have no impact on this issue area.

Climate Action Plan

As discussed in Section 4.C, Biological Resources, the Draft CAP proposes strategies and measures that would aid in reducing the City's emission of GHGs, and, do not directly lead to development that would conflict with any habitat conservation or natural community conservation plan. Implementation of the Draft CAP would have no impact since the Planning Area is not in a habitat conservation or natural community conservation plan.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impact

Impact 4.I-4: Development facilitated by the General Plan Amendment and rezonings, combined with other past, present, existing, approved, pending, and reasonably foreseeable future plans or projects in the area, could potentially result in a significant adverse cumulative land use impact. (Less than Significant)

Housing Element

Cumulative development in the City of Pleasanton includes the residential development that would be facilitated under the proposed General Plan Amendment and rezonings, as well as buildout of the General Plan. This cumulative development could result in changes and additional density in Pleasanton. However, continued required project consistency with the City's General Plan policies discussed above would reduce land use impacts to less-than-significant-levels. Therefore, cumulative land use and planning impacts would be less than significant.

Climate Action Plan

The Draft CAP includes numerous land use planning initiatives, including recommendations that the City revise existing development standards and design guidelines to promote high-quality mixed-use and transit-oriented development projects. Strategies to reduce GHGs include supporting infill and higher density development, and locating mixed-use infill near local-serving commercial areas. The Draft CAP also proposes modifications to city codes, ordinances, and permitting procedures to enhance green buildings, renewable energy generation, and energy efficiency. Actions under these initiatives would be required to be in compliance with the Pleasanton Municipal Code and General Plan policies. The implementation of the Draft CAP would not conflict with current land use plans or policies, and impacts would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Land Use and Planning

City of Pleasanton, 2009. Pleasanton General Plan 2005-2025, adopted July 21, 2009.

City of Pleasanton, 2011b. Draft Housing Element Background, prepared June 2011.

City of Pleasanton, 2011a. Draft Housing Element, Chapter 4 of the City of Pleasanton General *Plan*, prepared June 2011.

4.J Noise

This section evaluates the potential noise impacts resulting from implementation of the proposed General Plan Amendment and rezonings within the City of Pleasanton. This includes the potential for the project to create a substantial temporary and/or permanent increase in noise exposure relative to "no project" conditions in the vicinity of the potential sites for rezoning. Additionally, the following addresses project-related noise exposure in excess of applicable noise exposure limits established by the City of Pleasanton General Plan and other applicable standards.

Setting

Fundamentals of Sound

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that human hearing can detect. Sound, traveling thru the air as waves, creates sound pressure level offsets relative to ambient air pressure.

The number of sound pressure peaks travelling past a given point in a single second is referred to as the pitch or frequency, expressed in cycles per second or Hertz (Hz). Most sounds consist of a band of frequencies audible to the human ear within a range of 20 Hz and 20,000 Hz (20 kHz).

Another characteristic of sound is its amplitude. Sound level is the amplitude of the sound pressure most often measured in decibels (dB).

Figure 4.J-1 illustrates sound levels associated with common sound sources. The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental sound levels, perception of loudness is relatively predictable, and can be approximated by frequency filtering using the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard descriptor for environmental noise assessment. All noise levels reported in this section are in terms of A-weighting.

Loudness is the intensity of sound waves as received by the human ear. The intensity or loudness of sound is the amount of sound pressure that the human ear feels above and below atmospheric pressure. Research into the human perception of changes indicates the following:

- a 3 dBA change is barely detectable to the human ear
- a 5 dBA change is readily noticeable
- a 10 dBA increase is perceived as being twice as loud¹

¹ Source: City of Pleasanton General Plan adopted July 2009.

PUBLIC REACTION		NOISE LEVEL (dBA, L _{eq})	COMMON INDOOR NOISE LEVELS	COMMON OUTDOOR NOISE LEVELS
		 110	Rock Band	
				Jet Flyover at 1000 Ft.
LOCAL COMMITTEE ACTIVITY WITH INFLUENTIAL OR LEGAL ACTION		- 100 -	Inside Subway Train (New York)	
LETTERS OF PROTEST	4 Times As Loud —		Food Blender at 3 Ft.	
	Twice As Loud —		Garbage Disposal at 3 Ft	Noisy Urban Daytime
COMPLAINTS LIKELY	Twice As Loud		Shouting at 3 Ft.	
	REFERENCE -	70	Vacuum Cleaner at 10 Ft.	Gas Lawn Mower at 100 Ft
COMPLAINTS POSSIBLE				Commercial Area
COMPLAINTS RARE	1/2 As Loud —	60	Large Business Office	Heavy Traffic at 300 Ft
ACCEPTANCE	1/4 As Loud —	→ → 50 <u>−</u>	- —Dishwasher Next Room— — — —	— — - Quiet Urban Daytime — — — — —
		4 0	- — Small Theater. Large — — — — — —	Quiet Urban Nighttime
			Conference Room (Background) Library	Quiet Suburban Nighttime
			Concert Hall (Background) 	Quiet Rural Nighttime
			Broadcast and Recording Studio	
		0	Threshold of Hearing 	

SOURCE: ESA, 2007

General Plan Amendment and Rezonings . 210016
 Figure 4.J-1
 Effect of Noise on People

The decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but combine logarithmically. For example, two noise sources of 50 dB generally combine to produce a total sound pressure level of 53 dB, not 100 dB.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent sound level (L_{eq}), which can be used to describe any time period.

The day/night average sound level (L_{dn}) is based on the average sound level over a 24-hour period, with a +10 dB weighting (penalty) applied to sounds during nighttime hours (10 p.m.-7 a.m.). The nighttime penalty is based on the assumption that people react to nighttime noise exposures as though they are twice as loud as daytime exposures.

Because the L_{dn} represents a 24-hour average, it can disguise short-term variations in the noise environment. For this reason, the City of Pleasanton (City) and many other jurisdictions in California utilize other statistical noise level objectives for non-transportation noise sources. Specifically, standards in terms of L_{eq} and L_{max} are used. The descriptions of acoustical terminology used throughout this section are presented in **Table 4.J-1**, below.

CNEL	Community Noise Equivalent Level is a 24 hour measure of noise level with a 5 dBA "penalty" added to noise levels during the hours of 7:00 p.m. to 10:00 p.m. and a 10dBA penalty added to noise levels during the hours of 10:00 p.m. to 7:00 a.m.
L _{dn}	Is a 24-hour average L_{eq} with a 10 dBA "penalty" added to noise levels during the hours of 10:00 p.m. to 7:00 a.m. to account for increased sensitivity that people tend to have to nighttime noise.
L _{eq}	Equivalent sound level. No "penalties" are added to any noise levels during the exposure time.
L _{max}	The highest sound level measured over a given period of time.
SEL	Single-Event Noise Level (SEL) is the constant noise that would deliver the same acoustical energy to the ear of a listener during a one-second exposure as the real and variable noise would deliver over its entire time of occurrence.

TABLE 4.J-1 ACOUSTICAL DESCRIPTORS

Transportation Noise Sources

Transportation noise sources are commonly considered as traffic on public roadways, main-line train operations, or aircraft over-flights. The City utilizes standards presented in the Noise Element of the General Plan to assess noise impacts associated with transportation sources.

Non-Transportation Noise Sources

Non-transportation noise sources are commonly considered to be any source of noise on private property. In addition to guidance in the Noise Element of the General Plan, the City also has

adopted a Noise Ordinance which regulates the level of noise emanating from residential, commercial, and industrial properties.

General Effects of Noise

The effects of noise on people can be placed into three categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, learning; and
- Physiological effects such as hearing loss or sudden startling.

For the average person, environmental noise typically produces effects in the first two categories. Workers in industrial plants or others exposed to high noise exposure for extended periods may also experience physiological effects. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Long-term exposure to levels exceeding 70dBA can cause hearing loss. In addition, brief periods of noise that exceed a sound pressure level of 140 decibels are a health hazard.²

Vibration

Vibration is an oscillatory motion through a solid medium that may be described in terms of particle amplitude, velocity, or acceleration. The Peak Particle Velocity (PPV) is defined as the maximum instantaneous velocity of the vibrating medium. It is frequently used to describe vibration in buildings. The Root Mean Square (RMS) velocity is most frequently used to address the response and affects of vibration on the human body, and is defined as the average of the squared velocity amplitude. Vibration velocity is generally expressed in decibel notation (VdB) relative to a reference of 1×10^{-6} in./sec. (1 µin./sec.).

Existing Noise Environment

Pleasanton includes a wide range of residential, commercial, industrial, public, and open-space land uses. Of these, residential, hospital, school, worship, library, and recreational uses are considered to be noise sensitive.

The City has identified potential sites for rezoning where additional housing units and/or mixeduse development could be constructed under the proposed Housing Element. These sites are illustrated in Figure 3-2 of Chapter 3, Project Description. For a majority of the proposed sites, noise from traffic on neighboring highways and local roadways would be expected to dominate the noise environments. However, a number of the potential sites for rezoning would be subject to

² Source, City of Pleasanton General Plan, July 2009. Source cited in General Plan is Cynthia Yee and Gregg Fleming, US Department of Transportation, "General Health Effects of Environmental Noise," Final Report, June 2002.

noise exposure from train operations (i.e., from Union Pacific Railroad [UPRR]), commercial/industrial uses, and schools, as determined via an aerial photo review of the project locations. Although it is not expected to be a dominant source of noise at potential sites for rezoning, aircraft operations in the vicinity (i.e., from Livermore Municipal Airport) may also affect future noise-sensitive uses. The following describes the dominant sources of noise in the vicinity of the potential sites for rezoning.

Interstate Highways

Several potential sites for rezoning (i.e., Sites 1, 2, 3, and 7) are directly adjacent to I-580 or I-680. Existing (2006) noise exposure in these areas generally ranged from 71-77 dB L_{dn} , depending on existing noise barriers and the distance from the given highway. Refer to noise level measurement sites 20, 35, and 37 in **Table 4.J-2**.

Local Roadways

Primary arterial and collector roadways expected to affect the noise environments at the potential sites for rezoning (i.e., Sites 1, 6, 7, 8, 9, 10, 11, 13, 14, 16, 18, 19, and 20) include Owens Drive, West Las Positas Boulevard, Stanley Boulevard, Bernal Avenue, First Street, Sunol Boulevard, and Valley Avenue. Existing (2006) noise exposure in the vicinity of these roadways ranged from approximately 63-71 dB L_{dn} , with levels at locations directly adjacent to Vineyard Avenue and Stanley Boulevard between 71-79 dB L_{dn} . Again, the existence of noise barriers and the distance from the roadways directly affects traffic noise exposure.

Bay Area Rapid Transit

Bay Area Rapid Transit (BART) train events along the median of I-580, adjacent to Sites 1, 2 and 3, would be a source of noise exposure in these areas during pass-by events. However, this noise exposure is not expected to be significant with respect to the day-night average noise exposure relative to I-580 traffic noise.

Trains/Railroad

Several of the potential sites for rezoning (i.e., Sites 8, 11, 14, 18, and 21) are in close proximity to the UPRR tracks in southeast Pleasanton. Noise exposure in these areas would likely be in the range of 75-79 dB L_{dn} , with individual train events producing noise exposure of approximately 90 dB SEL at 100 feet from the tracks.

Noise exposure from warning horns at grade crossing may be as high as 105 dB L_{max} at neighboring receivers (within 100 feet), with noise exposure of approximately 80-85 dB L_{max} and 70-70 dB L_{max} from engines and wheel/rail sources, respectively.

Ground-borne vibration is a concern at proposed housing areas directly adjacent to the UPRR tracks (i.e., Sites 11, 14, and 18). Vibration levels associated with train events should comply with the applicable Federal Transit Administration (FTA)/Federal Railroad Administration (FRA) criteria.

Noise Measurement Site from the General Plan	Location	Noise Level, dB L _{dn}
3	Front of 2329 Foothill Road in Laguna Village; 45 feet from centerline of Foothill Road	63
5	Pleasanton Hills Association open space south of Bernal Avenue, west of Puerto Vallarta, 50 feet from centerline of Bernal Avenue	65
6	Park south of 3661 Bernal Avenue, 65 feet from centerline of Bernal Avenue	63-64
12	Front of 3041 Santa Rita Road; 85 feet from centerline of Santa Rita Road	68-69
19	Front yard of 6340 Arlington Drive, 88 feet from centerline of Sunol Boulevard	68
20	Rear yard fence setback of homes on Sullivan Court/adjacent to I-680.	71-73
26	First Street south of Arroyo Del Valle; 89 feet from the centerline of First Street	66
28	40 feet from the centerline of Vineyard Avenue in front of Smoketree Commons Drive	71
31	84 feet from the centerline of Stoneridge Drive	65-68
33	Rear yard of 3916 Alma Court, 12 feet from sound wall along W. Las Positas Boulevard.	61-63
34	60 feet from the centerline of W. Las Positas Boulevard	67-69
35	Near 7650 Canyon Meadow Circle, approximately 252 feet from the center of I-580	74-77
37	Rear yard of 3590 Brent Court, 45 feet from 12-foot high sound wall	72-73
40	Rear yard of 6203 Gibson Court, 16 feet from 7-foot sound wall.	58-60
43	End of Street John Street, 60 feet from the UPRR tracks	76
44	118 feet from the center of Sunol Boulevard at Arlington Drive	66-67
46	Front of 4552 First Street, 30 feet to the centerline	71
47	60 feet from Stanley Boulevard near easternmost City Limits	75-79

 TABLE 4.J-2

 SUMMARY OF RELEVANT AMBIENT NOISE LEVEL MEASUREMENTS (2006)

SOURCE: City of Pleasanton Noise Element of the General Plan, 2009

Aircraft

Livermore Municipal Airport is located approximately one mile east of the closest city of Pleasanton boundary and approximately three miles east of the closest potential site for rezoning (Site 14). Airport noise exposure contours presented in the General Plan show that aircraft-related noise exposure within Pleasanton does not exceed 60 dB L_{dn} . At Site 14, the closest potential sites for rezoning, aircraft-related noise exposure would not be expected to exceed 50 dB L_{dn} . Although individual aircraft operations associated with Livermore Municipal Airport may be audible at the site, this noise exposure is not expected to contribute substantially to the overall noise environment.

Stationary Sources

Stationary noise sources at the potential sites for rezoning would be related to neighboring commercial/industrial uses and schools. Stationary noise sources should be considered for potential nuisance to Sites 6, 8, 10, 11, 13, 14, 17, 19, and 20. Noise exposure from stationary sources would be subject to the standards of the City of Pleasanton Municipal Code criteria.

Ambient Noise Level Measurement Results

Measured ambient noise exposure levels within the City of Pleasanton, in the vicinity of potential sites for rezoning, are summarized in Table 4.J-2. This data was collected in 2006 as part of the General Plan and associated EIR. As shown, existing noise exposure at potential sites for rezoning is expected to be in the range of 61-79 dB L_{dn} . Some of these noise levels are affected by existing noise attenuating structures such as sound walls.

Existing Traffic Noise Exposure

The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to describe existing noise levels due to traffic within Pleasanton. The Model is based on the Calveno reference noise factors for automobiles, medium trucks, and heavy-trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The Model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. The hourly traffic volume input to the Model was adjusted to reflect the weighted day/night distribution of traffic in order to more accurately estimate noise exposure in terms of the L_{dn} . A day/night traffic distribution of 83 percent/17 percent was assumed for the computation of traffic noise levels in terms of L_{dn} .

It is noted that the following traffic noise modeling does not account for shielding from existing noise barriers or other structures, and is specific to a roadway centerline (C.L.) to receiver distance of 100 feet.

Traffic volumes for existing conditions were obtained from the traffic analysis prepared for the project by Fehr and Peers (July 2011). Truck usage on the area roadways were estimated based on roadway type, and were assumed to be 2%/2% medium/heavy trucks for arterial roadways, 1%/1% medium/heavy trucks for collector roadways, and 2%/5- 6% medium/heavy trucks for highways (5% HT for I-680 and 6% HT for I-580). Traffic speeds were assumed to be 25-35 mph for collector roadways, 40-45 mph for arterial roadways, and 65 mph for highways. The data within the traffic analysis is in the form of AM/PM peak-hour intersection turning movements, which was converted to ADT assuming ADT is equal to five times of the sum of the AM and PM peak hour traffic.

Table 4.J-3 shows the existing traffic noise levels in terms of L_{dn} at a reference distance of 100 feet from the centerlines of existing project-area roadways. Table 4.J-3 also includes the distances to existing traffic noise level contours.³

Regulatory Setting

City of Pleasanton General Plan

The General Plan serves as the overall guiding policy document for land use, development, and environmental quality for the City. The General Plan Noise Element contains noise standards for transportation noise sources. The transportation noise standards described below apply to traffic, train, and aircraft noise exposure within the City of Pleasanton.

Traffic

Noise exposure associated with traffic is "normally acceptable" up to a level of 60 dB L_{dn} for single-family residential uses and 65 dB L_{dn} for multi-family uses. A "conditionally acceptable" noise exposure level of 75 dB L_{dn} may be allowed given a detailed analysis of all reasonable noise mitigation and compliance with the interior noise exposure criterion. Exterior traffic noise exposure is generally evaluated at typical recreation areas (e.g., backyards, patios, pool areas).

Interior noise exposure associated with traffic should not exceed 45 dB L_{dn} within habitable rooms. This standard is generally applied within bedrooms.

- Goal 1: Reduce noise to acceptable levels throughout the community.
- Policy 1: Require new projects to meet acceptable exterior noise level standards.
- Program 1.1: Use the normally acceptable designation and text description contained in Table 11-5 "Noise and Land-Use Compatibility Guidelines," to determine the acceptability of new development and to determine when noise studies are required. For new single-family residential development, maintain a maximum day/night average noise level standard of 60 dB L_{dn} for exterior noise in private or shared outdoor use areas excluding front yards. For new multi-family residential development, maintain a maximum standard of 65 dB L_{dn} in community outdoor recreation areas. Noise standards are not applied to balconies or front yards. In the Downtown, the City Council will evaluate the requirement to achieve these standards on a case-by-case basis.
- Program 1.3: Use noise guidelines and contours to determine the need for noise studies, and require new developments to construct or pay for noise attenuation features as a condition of approving new projects. An exterior increase of more than 4 dB (i.e., 5+ dB) is considered significant.

³ Typically, 50 feet or 100 feet from the roadway centerline is used for noise analysis. A distance of 100 feet was chosen since it better represents the distance from a given roadway centerline to the interior of a residential parcel.

Roadway	Segment	Noise Level, dB L _{dn} (100 Feet from C.L.)	60 dB L _{dn} , Feet (From C.L.)	65 dB L _{dn} , Feet (From C.L.)	70 dB L _{dn} , Feet (From C.L.)
Foothill Road	North of Canyon Way	68	360	167	36
Foothill Road	South of Canyon Way	66	255	118	26
Canyon Way	East of Foothill Road	60	102	47	10
Dublin Canyon	West of Foothill Road	58	76	35	8
BART Entrance	North of Owens Drive	55	44	20	4
Willow	South of Owens Drive	56	55	25	5
Owens Drive	East of Willow	63	147	68	15
Owens Drive	West of Willow	63	156	72	16
East of BART	North of Owens Drive	53	32	15	3
East of BART	South of Owens Drive	43	7	3	1
Owens Drive	East of East Bart	63	156	73	16
Owens Drive	West of East Bart	62	145	67	14
Hacienda	North of Owens Drive	67	285	132	28
Hacienda	South of Owens Drive	64	184	85	18
Owens Drive	East of Hacienda	65	213	99	21
Owens Drive	West of Hacienda	63	163	76	16
Santa Rita	North of Rosewood	68	365	169	36
Santa Rita	South of Rosewood	68	342	159	34
Rosewood	West of Santa Rita	61	116	54	12
Santa Rita	North of Pimlico	69	388	180	39
Santa Rita	South of Pimlico	68	359	167	36
Pimlico	East of Santa Rita	59	87	40	9
I-580 EB Off-ramp	West of Santa Rita	61	124	57	12
Foothill Road	North of Stoneridge	65	205	95	20
Foothill	South of Stoneridge	63	166	77	17
Stoneridge	East of Foothill	61	118	55	12
Laurel Creek Drive	West of Foothill	50	20	9	2
Springdale	North of Stoneridge	55	48	22	5
Springdale	South of Stoneridge	54	39	18	4
Stoneridge	East of Springdale	64	177	82	18
Stoneridge	West of Springdale	62	128	59	13
Stoneridge Mall	North of Stoneridge	61	110	51	11
Stoneridge	East of Stoneridge Mall	66	267	124	27
Stoneridge	West of Stoneridge Mall	64	185	86	18
Johnson	North of Stoneridge	59	89	41	9
Johnson	South of Stoneridge	49	17	8	2
Stoneridge	East of Johnson	67	291	135	29
Stoneridge	West of Johnson	67	311	144	31

TABLE 4.J-3 SUMMARY OF TRAFFIC NOISE MODELING CALCULATIONS (EXISTING) a,b

Roadway	Segment	Noise Level, dB L _{dn} (100 Feet from C.L.)	60 dB L _{dn} , Feet (From C.L.)	65 dB L _{dn} , Feet (From C.L.)	70 dB L _{dn} , Feet (From C.L.)
Hopyard	North of Stoneridge	66	267	124	27
Hopyard	South of Stoneridge	67	305	141	30
Stoneridge	East of Hopyard	65	212	99	21
Stoneridge	West of Hopyard	66	267	124	27
Hacienda	North of Stoneridge	61	116	54	12
Hacienda	South of Stoneridge	58	74	34	7
Stoneridge	East of Hacienda	63	158	73	16
Stoneridge	West of Hacienda	64	179	83	18
Owens Drive	North of West Las Positas	62	128	59	13
West Las Positas	East of Owens Drive	64	194	90	19
West Las Positas	West of Owens Drive	63	161	75	16
Santa Rita	North of West Las Positas	68	346	160	35
Santa Rita	South of West Las Positas	68	366	170	37
West Las Positas	East of Santa Rita	63	154	72	15
West Las Positas	West of Santa Rita	65	207	96	21
Foothill Road	North of West Las Positas	64	174	81	17
Foothill Road	South of West Las Positas	65	200	93	20
West Las Positas	East of Foothill Road	61	123	57	12
Hopyard	North of West Las Positas	67	284	132	28
Hopyard	South of West Las Positas	68	367	171	37
West Las Positas	East of Hopyard	64	196	91	20
West Las Positas	West of Hopyard	64	198	92	20
Hacienda	North of West Las Positas	58	76	35	8
Hacienda	South of West Las Positas	49	19	9	2
West Las Positas	East of Hacienda	63	155	72	15
West Las Positas	West of Hacienda	63	169	79	17
West Las Positas	North of Stoneridge	64	190	88	19
West Las Positas	South of Stoneridge	64	195	91	20
Stoneridge	East of West Las Positas	62	144	67	14
Stoneridge	West of West Las Positas	62	134	62	13
Santa Rita	North of Stoneridge	69	371	172	37
Santa Rita	South of Stoneridge	70	437	203	44

TABLE 4.J-3 (Continued) SUMMARY OF TRAFFIC NOISE MODELING CALCULATIONS (EXISTING)^{a,b}

Roadway	Segment	Noise Level, dB L _{dn} (100 Feet from C.L.)	60 dB L _{dn} , Feet (From C.L.)	65 dB L _{dn} , Feet (From C.L.)	70 dB L _{dn} , Feet (From C.L.)
Stoneridge	East of Santa Rita	63	155	72	15
Stoneridge	West of Santa Rita	63	164	76	16
Santa Rita	North of Mohr Avenue	70	431	200	43
Santa Rita	South of Mohr Avenue	69	428	199	43
Mohr Avenue	East of Santa Rita	54	41	19	4
Mohr Avenue	West of Santa Rita	53	33	15	3
Santa Rita	North of Valley	69	418	194	42
Santa Rita	South of Valley	67	301	140	30
Valley	East of Santa Rita	65	205	95	20
Valley	West of Santa Rita	62	143	66	14
Busch	North of Valley	55	48	22	5
Valley	East of Busch	64	191	89	19
Valley	West of Busch	64	195	90	19
I-680 NB Off-ramp	North of Bernal	64	171	80	17
I-680 NB Off-ramp	South of Bernal	58	79	36	8
Bernal	East of I-680 NB offramp	of I-680 NB offramp 66 269		125	27
Bernal	West of I-680 NB offramp	65	209	97	21
Koll Center Drive	North of Bernal	54	42	19	4
Bernal	East of Koll Center Drive	66	246	114	25
Bernal	West of Koll Center Drive	66	270	125	27
Valley	North of Bernal	61	124	57	12
Valley	South of Bernal	57	62	29	6
Bernal	East of Valley	65	210	210 97	
Bernal	West of Valley	66	245	114	25
Santa Rita	North of Stanley Boulevard	65	216	100	22
Main Street	South of Stanley Boulevard	58	79	37	8
Stanley Boulevard	East of Santa Rita	59	85	39	9
Stanley Boulevard	West of Santa Rita	45	10	5	1
Stanley Boulevard	North of Residence Driveway	63	159	74	16
First Street	South of Residence Driveway	59	91	42	9
Stanley Boulevard	West of First Street	59	89	42	9
Valley	North of Stanley Boulevard	65	200	93	20
Bernal	South of Stanley Boulevard	63	164	76	16
Stanley Boulevard	East of Valley	66	235	109	23

TABLE 4.J-3 (Continued) SUMMARY OF TRAFFIC NOISE MODELING CALCULATIONS (EXISTING)^{a,b}

Noise Level, dB L_{dn} 60 dB L_{dn}, Feet 65 dB L_{dn}, Feet 70 dB L_{dn}, Feet Roadway Segment (100 Feet from C.L.) (From C.L.) (From C.L.) (From C.L.) Stanley Boulevard West of Valley 63 156 73 16 North of Vineyard 62 140 Bernal 65 14 Bernal South of Vineyard 62 137 64 14 Vineyard East of Bernal 61 121 56 12 Bernal North of Vineyard 62 144 67 14 Bernal South of Vineyard 61 121 56 12 Tawny East of Bernal 53 33 16 3 Vineyard West of Bernal 56 54 25 5 North of Valley 63 78 Sunol 168 17 Sunol South of Valley 64 185 86 18 Junipero Street East of Sunol 54 17 38 4 Valley West of Sunol 57 67 31 7

TABLE 4.J-3 (Continued) SUMMARY OF TRAFFIC NOISE MODELING CALCULATIONS (EXISTING)^{a,b}

^a Noise levels were calculated using the FHWA-RD-77-108 Traffic Noise Prediction Model for peak-hour conditions derived from average daily traffic levels. Noise levels were calculated at 100 feet from the centerline of the roadway.

^b The average vehicle speed varies for individual segments between 25 mph and 45 mph, depending on roadway classification. The vehicle mix consists of 98 percent automobiles, 1 percent medium trucks, and 1 percent heavy trucks for neighborhood arterial roads and 96 percent automobiles, 2 percent medium trucks, and 2 percent heavy trucks for major arterial roads.

SOURCE: Environmental Science Associates, 2011

Policy 3:	Ensure that noise does not exceed interior noise levels of 45 dB L_{dn} for residential uses and those levels specified in noise studies for other uses.
Program 3.2:	Require noise-attenuation measures when necessary to ensure that interior noise levels for new single- and multi-family residences do not exceed 45 dB L_{dn} . Interior noise levels shall not exceed 45 dB L_{dn} in any new residential units (single- or multi-family).
Policy 4:	Control noise at its source to maintain existing noise levels, and in no case to exceed acceptable noise levels as established in the Noise and Land Use Compatibility Guidelines, Table 11-5.
Program 4.4:	Explore opportunities to reduce noise-impacted areas through alternative street paving methods and materials.

Trains

Noise exposure associated with train events is acceptable up to a level of 70 dB L_{dn} for new residential projects.

Interior noise exposure from train events is limited to 50 dB L_{max} within project bedrooms. A maximum level of 55 dB (L_{max}) is acceptable for other habitable rooms within residential uses (e.g., living rooms, kitchens).

- Goal 1: Reduce noise to acceptable levels throughout the community.
- Policy 1: Require new projects to meet acceptable exterior noise level standards.
- Program 1.2: Where high noise levels are the result of railroad trains, an exterior noise level of up to 70 dB L_{dn} would be considered compatible with most residential development recognizing that day-night average noise levels are controlled by intermittent, loud events. Vibration-sensitive land uses located near the Union Pacific Railroad tracks should demonstrate compatibility with the Federal Transit Administration's vibration impact criteria by completing site-specific vibration analyses.
- Policy 3: Ensure that noise does not exceed interior noise levels of 45 dB L_{dn} for residential uses and those levels specified in noise studies for other uses.
- Program 3.3: New residential development affected by noise from railroad trains and aircraft shall be designed to limit typical maximum instantaneous noise levels to 50 dB (L_{max}) in bedrooms and 55 dB (L_{max}) in other rooms.

Aircraft

Residential construction is strongly discouraged within the 60 dB L_{dn} (DNL or CNEL) noise exposure contour or the neighboring airport. The City of Pleasanton, including all potential sites for rezoning, are located outside of the current Livermore Municipal Airport (2020) 60 dB L_{dn} noise exposure contour.

For residential uses within the 55 dB L_{dn} (DNL or CNEL) noise exposure contour for a given airport, interior noise exposure should be limited to 50 dB L_{max} and 45 dB L_{dn} within bedrooms, and 55 dB L_{max} within other habitable spaces.

Goal 1:	Reduce noise to acceptable levels throughout the community.
Policy 3:	Ensure that noise does not exceed interior noise levels of 45 dB L_{dn} for residential uses and those levels specified in noise studies for other uses.
Program 3.3:	New residential development affected by noise from railroad trains and aircraft shall be designed to limit typical maximum instantaneous noise levels to 50 dB (L_{max}) in bedrooms and 55 dB (L_{max}) in other rooms.

Construction

Goal 1:	Reduce noise to acceptable levels throughout the community.
Policy 1:	Require new projects to meet acceptable exterior noise level standards.
Program 1.6:	Require a vibration study, prepared by a qualified vibration consultant, with a site-specific engineering assessment for any proposed construction project that

would require pile-driving or similar vibration-causing impacts. The assessment would minimize potential vibration impacts through such measures as predrilling pile holes, driving piles hydraulically or enclosing sheet piles with rubber aprons. The City Engineer would review and approve all vibration studies.

City of Pleasanton Municipal Code (Title 9 Health and Safety)

Code 9.04.030 Noise Limits – Residential Property establishes an exterior noise exposure limit of 60 dB L_{max} on residential property due to outside stationary sources. It is assumed, based on our interpretation of the Ordinance language, that this standard is designed to limit noise from continuous or repetitive sources, and not single or infrequent sources.

Code 9.04.070 *Daytime Exceptions* specifies that any source which does not produce a level exceeding 70 dB L_{max}/L_{eq} at a distance of 25 feet under its most noisy condition of operation shall be exempt from Code 9.04.030 between 8:00 a.m. and 8:00 p.m. Monday through Friday (except holidays) and 10:00 a.m. to 6:00 p.m. on Sundays and holidays.

Code 9.04.100 Construction provides construction noise exposure limits. No individual piece of construction equipment shall produce a noise level exceeding 83 dB L_{eq} at a distance of 25 feet. Noise exposure from construction shall not exceed 86 dB L_{eq} outside of the property plane.

Impacts and Mitigation Measures

The following evaluates the potential adverse noise and vibration impacts related to development facilitated by the proposed Housing Element on the potential sites for rezoning. Noise and vibration impacts are grouped into two categories: temporary impacts associated with construction of housing on the potential sites for rezoning, and permanent impacts associated with occupation of those housing units.

Significance Criteria

Consistent with CEQA *Guidelines*, Appendix G (Environmental Checklist) the project could have a significant impact if it would:

- Expose persons to or generate noise levels in excess of standards established in the local General Plan or Municipal Code, or applicable standards of other agencies;
- Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels;
- Create a substantial permanent increase in noise exposure above ambient noise levels in the project vicinity;
- Create a substantial temporary or periodic increase in noise exposure above ambient noise levels in the project vicinity;

- A project located within an airport land use plan or within 2-miles of a public airport or public use airport would expose people residing or working in the project area to excessive aircraft/airport noise levels; or
- A project located in the vicinity of a private airstrip would expose people residing or working in the project area to excessive aircraft/airstrip noise levels.

Thresholds of Significance

Transportation Noise Exposure

The Noise Element of the General Plan establishes exterior traffic noise exposure limits of 60 dB L_{dn} and 65 dB L_{dn} for single-family and multi-family residential uses. These limits are applied at common recreation areas (e.g., backyards, patios, pool areas), and may be increase to as high as 75 dB L_{dn} given a detailed analysis of all reasonable noise mitigation and compliance with the interior noise exposure criterion. The General Plan's noise exposure limit applicable to train/railroad noise exposure (pass-bys) is 70 dB L_{dn} . This level is set higher than that for traffic noise given the relatively infrequent nature of the source. Additionally, residential construction is discouraged inside the 60 dB L_{dn} contour for the Livermore Municipal Airport.

All land uses in the City, such as office, retail, parks and schools, have similar noise exposure limits which are outlined in the City's Noise Compatibility Guidelines.

Interior traffic noise exposure would be considered significant if it exceeds 45 dB L_{dn} in bedrooms. Train/railroad event noise exposure is limited to 50 dB L_{max} and 55 dB L_{max} within bedrooms and other habitable spaces, respectively. Additionally, aircraft noise exposure is limited to 50 dB $L_{max}/45$ dB L_{dn} and 55 dB L_{max} within bedrooms and other habitable spaces, respectively. The L_{max} standards applied to train and aircraft noise events are designed to mitigate interruption and sleep disturbance.

Goal 1, Policy 1, Program 1.3 of the City's General Plan also establishes an exterior noise exposure increase of 5 dB or higher as significant.

Transportation Vibration Exposure

For transportation-related vibration levels, especially from train pass-by events, the Federal Transit Administration's (FTA) thresholds presented in the FTA Guidance Manual (FTA, 2006) are applicable. Specifically, the applicable Category 2 criterion assuming frequent train events is 72 VdB (VdB re. 1 μ in./sec.). Category 2 represents residences and buildings where people would normally sleep.

Non-transportation Noise Exposure (Stationary Sources)

The City of Pleasanton Municipal Code limits noise exposure from stationary/non-transportation sources to 60 dB L_{max} at any point outside of the property plane, unless otherwise specified in the Municipal Code (Section 9.04.030). Sources of noise that do not produce noise exposure in excess of 70 dB L_{max}/L_{eq} at a distance of 25 feet are exempt from this criterion between the hours of 8:00 a.m. and 8:00 p.m. Monday through Friday (except holidays) and 10:00 a.m. and 6:00 p.m. on Sundays and holidays.

Project Construction-related Noise

The City of Pleasanton Municipal Code (Section 9.04.100) limits noise exposure from individual construction equipment/tools to a level of 83 dB L_{eq} at a distance of 25 feet. Alternatively, cumulative construction noise from a given project site may not exceed 86 dB L_{eq} outside of the project boundary.

Project Construction-related Vibration

Goal 1, Policy 1, Program 1.6 requires a construction vibration study where pile driving or similar vibration-producing activities would be performed. For construction-related vibration levels, Caltrans thresholds presented in its *Transportation- and Construction-Induced Vibration Guidance Manual* (Caltrans, 2004) are appropriate and applicable. These criteria are summarized in **Table 4.J-4**.

	PPV, in./sec.		
Structure and Condition	Transient Sources	Continuous/Frequent Intermittent Sources	
New residential construction Human Response	1.0	0.5	
Barely perceptible	0.04	0.01	
Distinctly perceptible	0.25	0.04	
Strongly perceptible	0.9	0.1	
Severe	2.0	0.4	

TABLE 4.J-4 SUMMARY OF CONSTRUCTION VIBRATION CRITERIA (CALTRANS 2004)

SOURCE: Transportation- and Construction-Induced Vibration Guidance Manual, Caltrans, 2004

Impacts and Mitigation Measures

Impact 4.J-1: Development facilitated by the General Plan Amendment and rezonings could potentially increase construction noise levels at sensitive receptors located near construction sites. (Significant)

Housing Element

Construction activities for housing units developed on the potential sites for rezoning, pursuant to the proposed Housing Element, would include, for the most part, demolition for sites that would be redeveloped, site preparation, paving, and building construction, in addition to construction for off-site improvements such as roadways, storm drainage, and utilities. Construction would involve the use of heavy equipment (e.g., front loader, graders, haul trucks) in addition to small power tools, generators, and hand tools that would be sources of noise. Each phase of construction would involve a different mix of construction tools and/or sources, and resulting noise exposure would vary based on construction location (relative to receptors), and type and quantity of construction equipment.

Table 4.J-5, below, illustrates reference noise exposure levels generated by various construction equipment and tools. Assuming application and compliance with Municipal Code 9.04.100, individual project construction equipment would not produce a noise level in excess of 83 dB (L_{eq}) at a distance of 25 feet, nor would total construction noise exposure exceed 86 dB (L_{eq}) outside of the project boundary. **Mitigation Measure 4.J-1** would reduce construction noise to a less than significant level.

Type of Equipment	L _{max} , dB	Hourly L _{eq} , dB/% Use
Backhoe	78	74/40%
Concrete Mixer Truck	79	75/40%
Dump Truck	77	73/40%
Front End Loader	79	75/40%
Pneumatic Tools	85	82/50%
Air Compressor	78	74/40%

 TABLE 4.J-5

 REFERENCE CONSTRUCTION EQUIPMENT NOISE LEVELS AT 50 FEET

NOTES: % used during the given time period (usually an hour - Hourly Leq).

SOURCE: Federal Highway Administration, 2008.

Mitigation Measure 4.J-1: In addition to requiring that all project developers comply with the applicable construction noise exposure criteria established within the City's Municipal Code 9.04.100, the City shall require developers on the potential sites for rezoning to implement construction best management practices to reduce construction noise, including:

- a. Locate stationary construction equipment as far from adjacent occupied buildings as possible.
- b. Select routes for movement of construction-related vehicles and equipment so that noise-sensitive areas, including residences, and outdoor recreation areas, are avoided as much as possible. Include these routes in materials submitted to the City of Pleasanton for approval prior to the issuance of building permits.
- c. All site improvements and construction activities shall be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Saturday. In addition, no construction shall be allowed on State and federal holidays. If complaints are received regarding the Saturday construction hours, the Community Development Director may modify or revoke the Saturday construction hours. The Community Development Director may allow earlier "start-times" for specific construction activities (e.g., concretefoundation/floor pouring), if it can be demonstrated to the satisfaction of the Community Development Director that the construction and construction traffic noise will not affect nearby residents.
- d. All construction equipment must meet DMV noise standards and shall be equipped with muffling devices.

e. Designate a noise disturbance coordinator who will be responsible for responding to complaints about noise during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site and shall be provided to the City of Pleasanton. Copies of the construction schedule shall also be posted at nearby noise-sensitive areas.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development near an existing rail line (exposing residents to vibration from train pass-by events), it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.J-2: Construction associated with development facilitated by the General Plan Amendment and rezonings could potentially generate ground-borne vibration at neighboring sensitive uses. (Significant)

Housing Element

Vibration exposure at neighboring sensitive uses, which are expected to be greater than 100 feet removed from the construction sites, would not be expected to exceed the applicable criteria (see **Table 4.J-4**) except in situations where pile driving occurs. Goal 1, Policy 1, Program 1.6 of the City's Noise Element requires a vibration study to address site-specific construction vibration impacts associated with pile driving or similar vibration-producing activities. **Mitigation Measure 4.J-2** would reduce construction-related vibration to a less than significant level.

Mitigation Measure 4.J-2: The City shall require developers on the potential sites for rezoning to conduct a vibration study which will estimate vibration levels at neighboring sensitive uses, and if required, provide mitigation efforts needed to satisfy the applicable construction vibration level limit established in **Table 4.J-4**. It is expected that vibration mitigation for all project sites will be reasonable and feasible.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. Construction activity associated with recommended energy efficiency retrofits in residential or commercial buildings, new mixed-use or transit-oriented development projects, expansion of bicycle and pedestrian facilities, and installation of distributed renewable energy systems could possibly result in temporary increases in vibration levels. Adherence to the City's Noise Element policies related to vibration (outlined above) would ensure that this impact is less than significant and would reduce construction noise to a less than significant level.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would generate excessive amounts of vibration, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.J-3: Development facilitated by the General Plan Amendment and rezonings could potentially locate residential uses near an existing rail line. Future residents could potentially be exposed to excessive exterior and interior noise exposure from train noise events. (Significant)

Housing Element

Train-related noise exposure at Sites 8, 11, 14, 18, and 21, which are in close proximity to the UPRR mainline tracks, may exceed the applicable 70 dB L_{dn} exterior noise exposure limit and 50 dB $L_{max}/55$ dB L_{max} criteria within habitable rooms. As a result, this impact would be potentially significant. However, implementation of **Mitigation Measure 4.J-3** would reduce this impact to a less-than-significant level.

Mitigation Measure 4.J-3: The City shall require project applicants (Sites 8, 11, 14, 18, and 21) to conduct site-specific acoustical assessments to determine train-related noise exposure, impact, and mitigation. Recommendations in the acoustical assessment shall be sufficient to satisfy the applicable City of Pleasanton 70 dB L_{dn} and 50/55 dB L_{max} exterior and interior noise exposure criteria, respectively, using appropriate housing site design and building construction improvements.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP does not, in and of itself, site future residence near existing rail lines. There is no impact.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development near an existing rail line (exposing residents to excessive noise exposure from train pass-by events), it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.J-4: Development facilitated by the General Plan Amendment and rezonings could potentially locate residential uses near an existing rail line. Future residents would be exposed to substantial vibration from train pass-by events. (Less than Significant)

Housing Element

Train-related vibration exposure at Sites 8, 11, 14, and 18, which are in close proximity to the UPRR mainline tracks, may be substantial. Goal 1, Policy 1, Program 1.2 of the City's Noise Element requires a site-specific vibration analysis to address the applicable FTA vibration impact criteria. As a result, compliance with Program 1.2 of the City's Noise Element would ensure that this impact is less than significant. Additionally, project buildings sited more than 100 feet from the centerline of the UPRR tracks would substantially decrease the likelihood of significant vibration impact.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations within of the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP does not, in and of itself, site future residence near existing rail lines. There is no impact.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development near an existing rail line (exposing residents to vibration from train pass-by events), it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.J-5: Development facilitated by the General Plan Amendment and rezonings could potentially generate additional traffic on local area roadways and associated increases in traffic noise exposure relative to existing conditions. (Significant)

Housing Element

Traffic noise levels were predicted in terms of the Day/Night Average Level (L_{dn}) at a representative distance of 100 feet from the centerline of the studied roadways for the Existing plus Project condition using the FHWA Model. This prediction used the same modeling methodology used for the existing scenario described earlier in this section. Results of this analysis are summarized in **Table 4.J-6**.⁴

As shown in **Table 4.J-6**, project-related traffic noise level increases from traffic pattern changes due to the land use changes on the potential sites for rezoning would be expected in the range of 1-3 dB along some roadway segments. Along many analyzed roadway segments, implementation of the project would not be expected to increase traffic noise exposure or would be expected to reduce traffic noise exposure. As shown, a potentially significant, project-related traffic noise level increase of 1 dB is established along Hopyard Road between West Las Positas Boulevard and Valley Avenue and Stoneridge Drive between West Las Positas Boulevard and Santa Rita Road. In this case, the project-related increase, although not in excess of the established City of Pleasanton General Plan significance threshold (5+ dB), may increase traffic noise exposure to above 60 dB L_{dn} within single-family residential backyards.

⁴ The impact analysis of the potential rezonings in this SEIR is based on development of all 17 of the potential sites for rezoning. However, it is in the intent of the Pleasanton City Council to rezone to allow multifamily development on sites sufficient to meet the City's share of the regional housing need which is approximately 70 acres, rather than the total 112 acres.

TABLE 4.J-6
SUMMARY OF TRAFFIC NOISE MODELING RESULTS (EXISTING/EXISTING PLUS PROJECT)
NOISE EXPOSURE (L _{DN}) AT 100 FEET FROM ROADWAY CENTERLINE ^{a,b}

Roadway	Segment	Existing (A)	Existing plus Project (B)	Change (B-A)	Significant?
Foothill Road	North of Canyon Way	68	68	0	No
Foothill Road	South of Canyon Way	66	66	0	No
Canyon Way	East of Foothill Road	60	60	0	No
Dublin Canyon	West of Foothill Road	58	58	0	No
BART Entrance	North of Owens Drive	55	56	1	Maybe
Willow	South of Owens Drive	56	57	1	Maybe
Owens Drive	East of Willow	63	63	0	No
Owens Drive	West of Willow	63	63	0	No
East Bart	North of Owens Drive	53	53	0	No
East Bart	South of Owens Drive	43	44	1	No
Owens Drive	East of East Bart	63	63	0	No
Owens Drive	West of East Bart	62	63	1	Maybe
Hacienda	North of Owens Drive	67	67	0	No
Hacienda	South of Owens Drive	64	64	0	No
Owens Drive	East of Hacienda	65	65	0	No
Owens Drive	West of Hacienda	63	63	0	No
Santa Rita	North of Rosewood	68	68	0	No
Santa Rita	South of Rosewood	68	68	0	No
Rosewood	West of Santa Rita	61	61	0	No
Santa Rita	North of Pimlico	69	69	0	No
Santa Rita	South of Pimlico	68	68	0	No
Pimlico	East of Santa Rita	59	59	0	No
I-580 EB Off-ramp	West of Santa Rita	61	61	0	No
Foothill Road	North of Stoneridge	65	65	0	No
Foothill	South of Stoneridge	63	64	1	Maybe
Stoneridge	East of Foothill	61	61	0	No
Laurel Creek Drive	West of Foothill	50	50	0	No
Springdale	North of Stoneridge	55	56	1	Maybe
Springdale	South of Stoneridge	54	54	0	No
Stoneridge	East of Springdale	64	64	0	No
Stoneridge	West of Springdale	62	62	0	No
Stoneridge Mall	North of Stoneridge	61	61	0	No
Stoneridge	East of Stonridge Mall	66	67	1	Maybe
Stoneridge	West of Stonridge Mall	64	64	0	No
Johnson	North of Stoneridge	59	59	0	No
Johnson	South of Stoneridge	49	49	0	No
Stoneridge	East of Johnson	67	67	0	No

TABLE 4.J-6 (Continued)SUMMARY OF TRAFFIC NOISE MODELING RESULTS (EXISTING/EXISTING PLUS PROJECT)NOISE EXPOSURE (LDN) AT 100 FEET FROM ROADWAY CENTERLINE^{a,b}

Roadway	Segment	Existing (A)	Existing plus Project (B)	Change (B-A)	Significant?
Stoneridge	West of Johnson	67	67	0	No
Hopyard	North of Stoneridge	66	67	1	Maybe
Hopyard	South of Stoneridge	67	67	0	No
Stoneridge	East of Hopyard	65	65	0	No
Stoneridge	West of Hopyard	66	66	0	No
Hacienda	North of Stoneridge	61	61	0	No
Hacienda	South of Stoneridge	58	59	1	Maybe
Stoneridge	East of Hacienda	63	63	0	No
Stoneridge	West of Hacienda	64	64	0	No
Owens Drive	North of West Las Positas	62	62	0	No
West Las Positas	East of Owens Drive	64	64	0	No
West Las Positas	West of Owens Drive	63	63	0	No
Santa Rita	North of West Las Positas	68	67	-1	No
Santa Rita	South of West Las Positas	68	68	0	No
West Las Positas	East of Santa Rita	63	63	0	No
West Las Positas	West of Santa Rita	65	65	0	No
Foothill Road	North of West Las Positas	64	64	0	No
Foothill Road	South of West Las Positas	65	65	0	No
West Las Positas	East of Foothill Road	61	61	0	No
Hopyard	North of West Las Positas	67	67	0	No
Hopyard	South of West Las Positas	68	69	1	Yes
West Las Positas	East of Hopyard	64	64	0	No
West Las Positas	West of Hopyard	64	64	0	No
Hacienda	North of West Las Positas	58	59	1	Maybe
Hacienda	South of West Las Positas	49	52	3	No
West Las Positas	East of Hacienda	63	63	0	No
West Las Positas	West of Hacienda	63	64	1	Maybe
West Las Positas	North of Stoneridge	64	64	0	No
West Las Positas	South of Stoneridge	64	64	0	No
Stoneridge	East of West Las Positas	62	63	1	Yes
Stoneridge	West of West Las Positas	62	62	0	No
Santa Rita	North of Stoneridge	69	69	0	No
Santa Rita	South of Stoneridge	70	70	0	No
Stoneridge	East of Santa Rita	63	63	0	No
Stoneridge	West of Santa Rita	63	64	1	Yes
Santa Rita	North of Mohr Avenue	70	68	-2	No
Santa Rita	South of Mohr Avenue	69	68	-1	No

Roadway	Segment	Existing (A)	Existing plus Project (B)	Change (B-A)	Significant?
Mohr Avenue	East of Santa Rita	54	51	-3	No
Mohr Avenue	West of Santa Rita	53	50	-3	No
Santa Rita	North of Valley	69	68	-1	No
Santa Rita	South of Valley	67	65	-2	No
Valley	East of Santa Rita	65	63	-2	No
Valley	West of Santa Rita	62	61	-1	No
Busch	North of Valley	55	57	2	No
Valley	East of Busch	64	63	-1	No
Valley	West of Busch	64	63	-1	No
I-680 NB Off-ramp	North of Bernal	64	63	-1	No
I-680 NB Off-ramp	South of Bernal	58	57	-1	No
Bernal	East of I-680 NB offramp	66	64	-2	No
Bernal	West of I-680 NB offramp	65	62	-3	No
Koll Center Drive	North of Bernal	54	51	-3	No
Bernal	East of Koll Center Drive	66	63	-3	No
Bernal	West of Koll Center Drive	66	64	-2	No
Valley	North of Bernal	61	60	-1	No
Valley	South of Bernal	57	57	0	No
Bernal	East of Valley	65	62	-3	No
Bernal	West of Valley	66	63	-3	No
Santa Rita	North of Stanley Boulevard	65	63	-2	No
Main Street	South of Stanley Boulevard	58	56	-2	No
Stanley Boulevard	East of Santa Rita	59	56	-3	No
Stanley Boulevard	West of Santa Rita	45	41	-4	No
Stanley Boulevard	North of Residence Driveway	63	59	-4	No
First Street	South of Residence Driveway	59	57	-2	No
Stanley Boulevard	West of First Street	59	56	-3	No
Valley	North of Stanley Boulevard	65	63	-2	No
Bernal	South of Stanley Boulevard	63	61	-2	No
Stanley Boulevard	East of Valley	66	62	-4	No
Stanley Boulevard	West of Valley	63	59	-4	No
Bernal	North of Vineyard	62	60	-2	No
Bernal	South of Vineyard	62	60	-2	No
Vineyard	East of Bernal	61	60	-1	No
Bernal	North of Vineyard	62	60	-2	No
Bernal	South of Vineyard	61	59	-2	No
Tawny	East of Bernal	53	50	-3	No

$\label{eq:summary} \begin{array}{l} \text{TABLE 4.J-6 (Continued)} \\ \text{SUMMARY OF TRAFFIC NOISE MODELING RESULTS (EXISTING/EXISTING PLUS PROJECT)} \\ \text{NOISE EXPOSURE (L_{DN}) AT 100 FEET FROM ROADWAY CENTERLINE^{a,b}} \end{array}$

Roadway	Segment	Existing (A)	Existing plus Project (B)	Change (B-A)	Significant?
Vineyard	West of Bernal	56	55	-1	No
Sunol	North of Valley	63	61	-2	No
Sunol	South of Valley	64	61	-3	No
Junipero Street	East of Sunol	54	51	-3	No
Valley	West of Sunol	57	56	-1	No

^a Noise levels were calculated using the FHWA-RD-77-108 Traffic Noise Prediction Model for peak-hour conditions derived from average daily traffic levels. Noise levels were calculated at 100 feet from the centerline of the roadway.

The average vehicle speed varies for individual segments between 25 mph and 45 mph, based on roadway classification. The vehicle mix consists of 98 percent automobiles, 1 percent medium trucks, and 1 percent heavy trucks for neighborhood arterial roads and 96 percent automobiles, 2 percent medium trucks, and 2 percent heavy trucks for major arterial roads.

The thresholds of significance include a 5+ dB increase in project-related traffic noise exposure or a project-related increase in traffic noise exposure that would cause overall traffic noise levels to exceed the applicable $60dBL_{dn}$ standard for single-family land uses or $65dBL_{dn}$ standard for multi-family land uses. Each roadway segment was reviewed via aerial photo to identify the existence of residential uses, existing noise-mitigating construction (i.e., noise barriers) for these uses, and to determine if project-related noise increases could exceed the established significance criteria. A significant noise impact was established for those roadway segments where project-related noise increases would be 5+ dB or where the project-related increase could cause noise exposure to exceed the applicable 60/65 dB L_{dn} noise exposure limit in residential recreasion areas.

SOURCE: Environmental Science Associates, 2011

The City is expected to repave all arterial roadways with noise-attenuating pavement in the future. It is expected that the sections of Hopyard Road and Stoneridge Drive highlighted in Table 4.J-6 would be included for this treatment. However, the timing of this paving is unknown, and existing noise-sensitive uses on these roadway segments may be impacted prior to its completion. Therefore, this impact is considered potentially significant. **Mitigation Measure 4.J-5a** would mitigate impacts of the rezoning to off-site sensitive receptors to a less than significant level.

Methods for reducing off-site noise from project related traffic may include repaying with noise attenuating pavement, new windows at existing sensitive receptors, sound walls, or other measures. Studies have found that the application of noise-attenuating pavements produces typical noise level reduction in the range of 3-5 dB over traditional asphalt paving (Bollard and Brennan, 1999). This effort would more than account for the 1 dB increase produced by implementation of the project.

Mitigation Measure 4.J-5a: Prior to prior to PUD approval a potential site for rezoning would add traffic noise in exceed of 55dBA described in Table 4.J-6, the project applicant shall conduct an off-site noise study to determine the project contribution to off-site roadway noise and contribute its fair-share to mitigate the established noise impact.

Further, as shown in **Table 4.J-6**, developments adjacent to several of the studied roadways may experience traffic noise exposure in excess of 65 dB. Given a worst-case exterior-to-interior noise level reduction of 20 dB provided by project buildings, interior noise exposure could be 45 dB L_{dn} or higher within some project building. Development on the potential sites for rezoning would be subject to Title 24 of the *California Code of Regulations*, which requires an interior noise exposure of 45 dB L_{dn} /CNEL or less within any habitable room and requires an acoustical

analysis demonstrating how dwelling units have been designed to meet this interior standard. To allow the project to meet the City and state interior noise requirement of 45 dB L_{dn} (or less) sound-rated building assemblies may be required at the exterior facades of project buildings. A project developer shall implement **Mitigation Measure 4.J-5b**. Implementation would ensure that interior noise levels are reduced to 45 dB L_{dn} or less, and are less than significant.

Additionally, to assure that outdoor recreation spaces associated with the potential sites for rezoning are reduced to acceptable noise exposure levels, a project developer shall implement **Mitigation Measure 4.J-5c**. This would reduce outdoor noise exposure to a less than significant level.

Mitigation Measure 4.J-5b: Any residential or office buildings shall be built to California's interior-noise insulation standard so that interior traffic noise exposure does not exceed 45 dB L_{dn} . Before building permits are issued, the project applicant shall be required to submit an acoustical analysis demonstrating that the buildings have been designed to limit interior traffic noise exposure to a level of 45 dB L_{dn} /CNEL or less.

Mitigation Measure 4.J-5c: Any locations of outdoor activity for sensitive uses associated with the project site shall be designed so that the noise exposure from traffic does not exceed 65 dB L_{dn} at these activity areas. This shall be done thru site orientation (i.e., location of activity areas away from roadways or shielded by project buildings) or with the inclusion of appropriate noise barriers. Before building permits are issued, the project applicant shall be required to submit an acoustical analysis demonstrating that outdoor activity spaces associated with sensitive uses do not exceed 65 dB L_{dn} within these spaces.

Climate Action Plan

No increase in local traffic volumes is anticipated as a result of implementing the Draft CAP, as the GHG strategies, including the General Plan Amendments and rezoning, would reduce overall vehicle miles traveled (VMT) from residents and employees in the City. Thus, no increase in ambient noise levels related to travel activity is expected beyond what is identified from the potential sites for rezoning under the Housing Element. Conversely, the Draft CAP includes numerous recommendations designed to reduce the number and length of vehicle trips, which could lead to a decrease in ambient noise levels. This would be a less than significant impact.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.J-6: Development facilitated by the General Plan Amendment and rezonings could potentially be affected by existing, stationary (non-transportation) noise sources that would exceed the applicable City of Pleasanton Municipal Code criteria. (Significant)

Housing Element

Noise from stationary (non-transportation) sources in the vicinity of potential sites for rezoning could exceed the applicable 60 dB L_{max} exterior noise exposure limit established within the City

Municipal Code. Some areas adjacent to industrial/commercial areas could be subject to loading noise and late or 24-hour operations noise. As a result, this impact would be significant without mitigation. However, implementation of **Mitigation Measures 4.J-6a though 4.J-6c** would reduce this noise impact to a less than significant level.

Mitigation Measure 4.J-6a: For all of the potential sites for rezoning the City shall require site-specific acoustical assessments to determine noise exposure, impact, and mitigation regarding non-transportation sources. Noise exposure shall be mitigated to satisfy the applicable City Code criterion using appropriate housing site design.

Mitigation Measure 4.J-6b: For Site 14 the City shall require a site-specific acoustical assessment to determine noise from quarrying noise sources. Recommendations in the acoustical assessment shall be sufficient to satisfy the applicable City of Pleasanton 70 dB L_{dn} and 50/55 dB L_{max} exterior and interior noise exposure criteria, respectively.

Mitigation Measure 4.J-6c: For all of the potential sites for rezoning, the City shall require a noise disclosures and noise complaint procedures for new residents at the project site. The requirement shall include a) a disclosure of potential noise sources in the project vicinity; b) establish procedures and a contact phone number for a site manager the residents can call to address any noise complaints.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations in the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP does not, in and of itself, site future residence near existing stationary noise sources. There is no direct impact.

However, a key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development near existing stationary (non-transportation) noise sources that exceed the applicable City of Pleasanton Municipal Code criteria, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.J-7: Development facilitated by the General Plan Amendment and rezonings could potentially be exposed to aircraft noise associated with the closest airport which would exceed the applicable noise exposure criteria. (Significant)

Housing Element

Aircraft/airport noise exposure associated with Livermore Municipal Airport is expected to be well below 60 dB L_{dn} at the closest potential site for rezoning (Site 14) within the City of Pleasanton based on the CY 2020 noise exposure map presented in the General Plan. Additionally, interior aircraft-related noise exposure is not expected to exceed the applicable 45 dB L_{dn} criterion. However, maximum noise levels from aircraft departures to the west may exceed the applicable 50/55 dB L_{max} criteria within habitable rooms. As a result, this impact would be significant without mitigation. Implementation of Mitigation Measure 4.J-7, below, would reduce potential aircraft/airport noise impacts to a less-than-significant level.

Mitigation Measure 4.J-7: For residential developments at Sites 9, 10, 11, 13, and 14 near the extended centerline of Runway 25R (Livermore Municipal Airport) or the left-hand pattern of Runway 25L, the City shall require a site-specific acoustical assessments to determine noise exposure, impact, and mitigation regarding aircraft single events. The assessments shall include the collection of aircraft single-event noise level data for no less than 48-hours on or in the vicinity of the given housing areas. If needed, aircraft-related single-event noise exposure may be mitigated to satisfy the applicable City of Pleasanton Code criteria of 50 dB L_{max} (bedrooms) and 55 dB L_{max} (other habitable rooms) using acoustically rated construction materials/systems.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to reduce the effects of climate change. Recommendations within of the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP does not, in and of itself, site future residence near the Livermore Municipal Airport. There is no direct impact.

However, a key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the CAP would not directly lead to development near an airport, it could create indirect noise impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.
Cumulative Impacts

Impact 4.J-8: Development facilitated by the General Plan Amendment and rezonings could potentially generate construction activity at sites zoned for residential development, in combination with cumulative buildout in the City of Pleasanton could have cumulative noise effects at noise-sensitive uses. (Less than Significant)

Housing Element

Construction activities associated with other development projects in the City of Pleasanton may occur simultaneously with construction of development at sites currently zoned for residential development and the identified potential sites for rezoning. However, substantial construction-related noise and vibration would affect only areas in close proximity to each of the individual construction sites. It is unlikely that construction noise or vibration from these other construction sites would jointly affect the same noise-sensitive receptors. Therefore, the contribution of development facilitated by the proposed Housing Element to potential cumulative construction noise impacts at sensitive receptors near a residential development under construction would be less than significant.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations within of the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure.

However, cumulative construction-related noise and vibration would affect only areas in close proximity to each of the individual construction sites. It is unlikely that construction noise or vibration from these other construction sites would jointly affect the same noise-sensitive receptors. Therefore, the contribution of construction noise generate by projects under the Draft CAP to potential cumulative construction noise impacts at sensitive receptors near a residential development under construction would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.J-9: Development facilitated by the General Plan Amendment and rezonings, in combination with other foreseen projects in the city could potentially produce a significant cumulative increase in traffic noise exposure under the project scenario. (Significant)

Housing Element

Traffic noise levels were predicted in terms of the Day/Night Average Level (L_{dn}) at a representative distance of 100 feet from the center of the roadways for the Cumulative (2035) and

Cumulative (2035) plus Project conditions using the FHWA Model. These predictions used the same modeling methodology presented above. Results of this analysis are summarized in **Table 4.J-7**.

As shown in **Table 4.J-7**, cumulative traffic noise level increases would be significant along Busch Road north of Valley Avenue and Valley Avenue south of Bernal Avenue. Also shown in **Table 4.J-7**, a project-related traffic noise level increase of 1 dB would be expected along some roadway segments. Along many analyzed roadway segments, implementation of the project would not be expected to increase traffic noise exposure or would be expected to reduce traffic noise exposure relative to the no-project condition. As shown, a potentially significant, cumulatively considerable, project-related traffic noise level increase of 1 dB is established along Stoneridge Drive between Johnson Drive and Hopyard Road, and Hopyard Road between Stoneridge Drive and West Las Positas Boulevard In these cases, the project-related increases, although not in excess of the established City of Pleasanton General Plan significance threshold (5+ dB), may increase traffic noise exposure to above the City's 60 dB L_{dn} limit within neighboring single-family residential backyards.

The City is expected to repave all arterial roadways with noise-attenuating pavement in the future. It is expected that the sections of Hopyard Road and Stoneridge Drive highlighted in **Table 4.J-7** would be included for this treatment. However, the timing of this paving is unknown, and existing noise-sensitive uses on these roadway segments may be impacted prior to its completion. Therefore, this impact is considered potentially significant. **Mitigation Measure 4.J-5b** would mitigate impacts of the rezoning to off-site sensitive receptors to a less than significant level.

Methods for reducing off-site noise from project related traffic may include repaving with noise attenuating pavement, new windows at existing sensitive receptors, sound walls, or other measures. Studies have found that the application of noise-attenuating pavements produces typical noise level reduction in the range of 3-5 dB over traditional asphalt paving (Bollard and Brennan, 1999). This effort would more than account for the 1 dB increase produced by implementation of the project.

Mitigation Measure 4.J-9: Prior to prior to PUD approval a potential site for rezoning would add traffic noise in exceed of 55dBA described in Table 4.J-7, the project applicant shall conduct an off-site noise study to determine the project contribution to off-site roadway noise and contribute its fair-share to mitigate the established noise impact.

Climate Action Plan

No increase in cumulative traffic volumes is anticipated as a result of implementing the Draft CAP, as the GHG strategies, including the General Plan Amendments and rezoning, would reduce overall vehicle miles traveled (VMT) from residents and employees in the City. Thus, no increase in ambient noise levels related to travel activity is expected. Conversely, the Draft CAP includes numerous recommendations designed to reduce the number and length of vehicle trips, which could lead to a decrease in ambient noise levels. This would be a less than significant impact.

TABLE 4.J-7
SUMMARY OF TRAFFIC NOISE MODELING RESULTS - CUMULATIVE (2035)
NOISE EXPOSURE (L _{DN}) AT 100 FEET FROM ROADWAY CENTERLINE ^{a,b}

Roadway	Segment	Existing (A)	Cum. (2035) + Project (B)	Change (B-A)	Cumulatively Significant? (Yes or No) ³
Foothill Road	North of Canyon Way	68	70	2	Maybe
Foothill Road	South of Canyon Way	66	69	3	Maybe
Canyon Way	East of Foothill Road	60	62	2	Maybe
Dublin Canyon	West of Foothill Road	58	59	1	Maybe
BART Entrance	North of Owens Drive	55	57	2	Maybe
Willow	South of Owens Drive	56	59	3	Maybe
Owens Drive	East of Willow	63	63	0	No
Owens Drive	West of Willow	63	64	1	Maybe
East Bart	North of Owens Drive	53	55	2	Maybe
East Bart	South of Owens Drive	43	45	2	No
Owens Drive	East of East Bart	63	64	1	Maybe
Owens Drive	West of East Bart	62	63	1	Maybe
Hacienda	North of Owens Drive	67	68	1	Maybe
Hacienda	South of Owens Drive	64	65	1	Maybe
Owens Drive	East of Hacienda	65	66	1	Maybe
Owens Drive	West of Hacienda	63	64	1	Maybe
Santa Rita	North of Rosewood	68	69	1	Maybe
Santa Rita	South of Rosewood	68	68	0	No
Rosewood	West of Santa Rita	61	61	0	No
Santa Rita	North of Pimlico	69	69	0	No
Santa Rita	South of Pimlico	68	69	1	Maybe
Pimlico	East of Santa Rita	59	59	0	No
I-580 EB Off-ramp	West of Santa Rita	61	61	0	No
Foothill Road	North of Stoneridge	65	67	2	Maybe
Foothill	South of Stoneridge	63	66	3	Maybe
Stoneridge	East of Foothill	61	62	1	Maybe
Laurel Creek Drive	West of Foothill	50	52	2	No
Springdale	North of Stoneridge	55	57	2	Maybe
Springdale	South of Stoneridge	54	55	1	Maybe
Stoneridge	East of Springdale	64	65	1	Maybe
Stoneridge	West of Springdale	62	63	1	Maybe
Stoneridge Mall	North of Stoneridge	61	62	1	Maybe
Stoneridge	East of Stonridge Mall	66	67	1	Maybe
Stoneridge	West of Stonridge Mall	64	65	1	Maybe
Johnson	North of Stoneridge	59	59	0	No
Johnson	South of Stoneridge	49	50	1	No

TABLE 4.J-7 (Continued)
SUMMARY OF TRAFFIC NOISE MODELING RESULTS – CUMULATIVE (2035)
NOISE EXPOSURE (L _{DN}) AT 100 FEET FROM ROADWAY CENTERLINE ^{a,b}

Roadway	Segment	Existing (A)	Cum. (2035) + Project (B)	Change (B-A)	Cumulatively Significant? (Yes or No) ³
Stoneridge	East of Johnson	67	68	1	Maybe
Stoneridge	West of Johnson	67	68	1	Maybe
Hopyard	North of Stoneridge	66	67	1	Maybe
Hopyard	South of Stoneridge	67	68	1	Maybe
Stoneridge	East of Hopyard	65	66	1	Maybe
Stoneridge	West of Hopyard	66	67	1	Maybe
Hacienda	North of Stoneridge	61	62	1	Maybe
Hacienda	South of Stoneridge	58	60	2	Maybe
Stoneridge	East of Hacienda	63	65	2	Maybe
Stoneridge	West of Hacienda	64	65	1	Maybe
Owens Drive	North of West Las Positas	62	63	1	Maybe
West Las Positas	East of Owens Drive	64	66	2	Maybe
West Las Positas	West of Owens Drive	63	65	2	Maybe
Santa Rita	North of West Las Positas	68	69	1	Maybe
Santa Rita	South of West Las Positas	68	69	1	Maybe
West Las Positas	East of Santa Rita	63	63	0	Maybe
West Las Positas	West of Santa Rita	65	66	1	Maybe
Foothill Road	North of West Las Positas	64	66	2	Maybe
Foothill Road	South of West Las Positas	65	66	1	Maybe
West Las Positas	East of Foothill Road	61	62	1	Maybe
Hopyard	North of West Las Positas	67	67	0	No
Hopyard	South of West Las Positas	68	69	1	Maybe
West Las Positas	East of Hopyard	64	65	1	Maybe
West Las Positas	West of Hopyard	64	65	1	Maybe
Hacienda	North of West Las Positas	58	60	2	Maybe
West Las Positas	East of Hacienda	63	64	2	Maybe
West Las Positas	West of Hacienda	63	65	2	Maybe
West Las Positas	North of Stoneridge	64	65	1	Maybe
West Las Positas	South of Stoneridge	64	66	2	Maybe
Stoneridge	East of West Las Positas	62	65	3	Maybe
Stoneridge	West of West Las Positas	62	64	2	Maybe
Santa Rita	North of Stoneridge	69	69	0	No
Santa Rita	South of Stoneridge	70	70	0	No
Stoneridge	East of Santa Rita	63	66	3	Maybe
Stoneridge	West of Santa Rita	63	66	3	Maybe

$\label{eq:table_$

Roadway	Segment	Existing (A)	Cum. (2035) + Project (B)	Change (B-A)	Cumulatively Significant? (Yes or No) ³
Santa Rita	North of Mohr Avenue	70	70	0	No
Santa Rita	South of Mohr Avenue	69	70	1	Maybe
Mohr Avenue	East of Santa Rita	54	54	0	No
Mohr Avenue	West of Santa Rita	53	54	1	No
Santa Rita	North of Valley	69	70	1	Maybe
Santa Rita	South of Valley	67	68	1	Maybe
Valley	East of Santa Rita	65	65	0	No
Valley	West of Santa Rita	62	63	1	Maybe
Busch	North of Valley	55	62	7	Yes
Valley	East of Busch	64	63	-1	No
Valley	West of Busch	64	65	1	Maybe
I-680 NB Off-ramp	North of Bernal	64	63	-1	No
I-680 NB Off-ramp	South of Bernal	58	58	0	No
Bernal	East of I-680 NB Off-ramp	66	67	1	Maybe
Bernal	West of I-680 NB Off-ramp	65	66	1	Maybe
Koll Center Drive	North of Bernal	54	54	0	No
Bernal	East of Koll Center Drive	66	66	0	No
Bernal	West of Koll Center Drive	66	67	1	Maybe
Valley	North of Bernal	61	63	2	Maybe
Valley	South of Bernal	57	63	6	Yes
Bernal	East of Valley	65	66	1	Maybe
Bernal	West of Valley	66	66	0	No
Santa Rita	North of Stanley Boulevard	65	66	1	Maybe
Main Street	South of Stanley Boulevard	58	60	2	Maybe
Stanley Boulevard	East of Santa Rita	59	60	1	No
Stanley Boulevard	West of Santa Rita	45	47	2	No
Stanley Boulevard	North of Residence Driveway	63	65	2	Maybe
First Street	South of Residence Driveway	59	61	2	Maybe
Stanley Boulevard	West of First Street	59	60	1	Maybe
Valley	North of Stanley Boulevard	65	64	-1	No
Bernal	South of Stanley Boulevard	63	64	1	Maybe
Stanley Boulevard	East of Valley	66	66	0	No
Stanley Boulevard	West of Valley	63	65	2	Maybe
Bernal	North of Vineyard	62	64	2	Maybe
Bernal	South of Vineyard	62	64	2	Maybe

TABLE 4.J-7 (Continued)
SUMMARY OF TRAFFIC NOISE MODELING RESULTS – CUMULATIVE (2035)
NOISE EXPOSURE (L _{DN}) AT 100 FEET FROM ROADWAY CENTERLINE ^{a,b}

Roadway	Segment	Existing (A)	Cum. (2035) + Project (B)	Change (B-A)	Cumulatively Significant? (Yes or No) ³
Vineyard	East of Bernal	61	61	0	No
Bernal	North of Vineyard	62	64	2	Maybe
Bernal	South of Vineyard	61	63	2	Maybe
Tawny	East of Bernal	53	54	1	Maybe
Vineyard	West of Bernal	56	57	1	Maybe
Sunol	North of Valley	63	66	3	Maybe
Sunol	South of Valley	64	66	2	Maybe
Junipero Street	East of Sunol	54	54	0	No
Valley	West of Sunol	57	59	2	Maybe
Fallon	North of Stoneridge	N/A	65	N/A	No
El Charro	South of Stoneridge	N/A	64	N/A	No
Friesman	East of Fallon	N/A	61	N/A	No
Stoneridge	West of Fallon	N/A	65	N/A	No
El Charro	North of Stanley Boulevard	N/A	63	N/A	No
Stanley Boulevard	East of El Charro	N/A	66	N/A	No
Stanley Boulevard	West of El Charro	N/A	67	N/A	No

^a Noise levels were calculated using the FHWA-RD-77-108 Traffic Noise Prediction Model for peak-hour conditions derived from average daily traffic levels. Noise levels were calculated at 100 feet from the centerline of the roadway.
 ^b The average which preduces for individual scenerate between 25 mph and 45 mph, based on roadway classification. The vehicle

The average vehicle speed varies for individual segments between 25 mph and 45 mph, based on roadway classification. The vehicle mix consists of 98 percent automobiles, 1 percent medium trucks, and 1 percent heavy trucks for neighborhood arterial roads and 96 percent automobiles, 2 percent medium trucks, and 2 percent heavy trucks for major arterial roads.

The thresholds of significance include a 5+ dB increase in project-related traffic noise exposure or a project-related increase in traffic noise exposure that would cause overall traffic noise levels to exceed the applicable $60dBL_{dn}$ standard for single-family land uses or $65dBL_{dn}$ standard for multi-family land uses. Each roadway segment was reviewed via aerial photo to identify the existence of residential uses, existing noise-mitigating construction (i.e., noise barriers) for these uses, and to determine if project-related noise increases could exceed the established significance criteria. A significant noise impact was established for those roadway segments where project-related noise increases would be 5+ dB or where the project-related increase could cause noise exposure to exceed the applicable $60/65 dB L_{dn}$ noise exposure limit in residential recreation areas.

SOURCE: Environmental Science Associates, 2011

Housing Element Significance after Mitigation: Less than Significant.

Climate Action Plan Mitigation: None Required.

Impact 4.J-10: Development facilitated by the General Plan Amendment and rezonings could potentially locate residential uses or mixed-use buildings near an existing highway, arterial, or collector roadway, exposing future residents to excessive exterior and interior traffic noise exposure. (Significant)

Housing Element

The potential sites for rezoning are in close proximity to existing highway, arterial, or collector roadways, which exceed the applicable $60/65 \text{ dB } L_{dn}$ exterior noise exposure limit(s) and 45 dB L_{dn} criterion within habitable rooms. As a result, this impact would be significant. However, implementation of **Mitigation Measures 4.J-5b and 4.J-5c** would reduce this traffic-related noise impact to a less than significant level.

Noise exposure at the closest project housing sites to Interstates 580 and 680 (i.e., Sites 1, 2, and 7) was calculated to be in the range of 77-81 dB L_{dn} under existing traffic conditions. This noise exposure could be as-high-as 85 dB L_{dn} given future increases in traffic volumes (without significant decreases in speed) and elevated receiver locations (e.g., upper-floor building facades). As shown in **Table 4.J-7**, future traffic noise exposure at project sites along Owens, West Las Positas, First, Stanley, Bernal, and Sunol may be as-high-as 61-67 dB L_{dn} (setback of 100 feet from center of roadway). Upper-floor building facades at these sites could experience traffic noise exposure would be expected to exceed the City's 65 dB L_{dn} exterior noise exposure limit for multi-family residential uses, and could exceed the City's 45 dB L_{dn} interior noise exposure limit without appropriate noise-mitigating construction efforts.

Mitigation Measure: Implement Mitigation Measures 4.J-5b and 4.J-5c.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. Recommendations within of the Draft CAP include reducing vehicle use, developing bicycle and pedestrian facilities, enhancing public transit, using renewable energy, improving energy efficiency in buildings, improving energy management, increasing water conservation, and promoting green infrastructure. The Draft CAP does not, in and of itself, site future residence near traffic related noise sources. There is no direct impact.

However, a key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development near an existing highway, arterial, or collector roadway, it could create indirect noise impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Significance after Mitigation: Less than Significant.

J. Noise

Climate Action Plan Mitigation: None Required.

References—Noise

City of Pleasanton, Proposed General Plan DEIR, Noise, September 2008.

- City of Pleasanton, Pleasanton General Plan 2005-2025, Noise Element, adopted July 21, 2009.
- City of Pleasanton, Municipal Code, Title 9 Health and Safety, Chapter 9.04 Noise Regulations, available online at: http://qcode.us/codes/pleasanton/view.php?topic=9-9_04&frames=, accessed June 6, 2011.

Federal Highway Administration, Construction Noise Model, V1.1, December 8, 2008.

- Federal Transportation Authority (FTA), Transit Noise and Vibration Impact Assessment Guidance Manual, FTA-VA-90-1003-06, U.S. Department of Transportation, Federal Transit Administration (FTA), Office of Planning and Environment, 1200 New Jersey Avenue, S.E, Washington, DC 20590.
- Jones & Stokes, Transportation- and Construction-induced Vibration Guidance Manual (J&S 02-039) Sacramento, Caltrans, June 2004.
- Bollard & Brennan, Inc. and Sacramento County DERA, *Report on the Status of Rubberized* Asphalt Traffic Noise Reduction in Sacramento County, November 1999.

4.K Population and Housing

This section of the SEIR describes existing and projected population, housing, and employment in the City of Pleasanton and potential effects of the proposed project related to changes in population.

Regional Setting

Population

Alameda County

The City of Pleasanton is located within Alameda County, one of the nine Bay Area counties bordering the San Francisco Bay. As of 2010, Alameda County has a population of approximately 1,590,271 (U.S. Census Bureau, 2011) and is the second largest county among the nine Bay Area counties. By 2025, the Association of Bay Area Governments (ABAG) estimates that Alameda County will have a population of approximately 1,787,300, an increase of approximately 197,029 from 2010 (see **Table 4.K-1**).

Geographical Area	2000	2005	2010	2015	2020	2025	2010-2025 Change
Bay Area Regional Total							
Population	6,783762	7,096,500	7,341,700	7,677,500	8,018,000	8,364,900	1,023,200
Households	2,400,020	2,583,080	2,667,340	2,784,690	2,911,000	3,039,910	372,570
Persons per Household	2.69	2.69	2.70	2.70	2.70	2.70	0.00
Employed Residents	3,452,117	3,225,100	3,410,300	3,633,700	3,962,800	4,264,600	854,300
Jobs	3,753,460	3,449,740	3,475,840	3,734,590	4,040,690	4,379,900	904,060
Employed Residents/Jobs	0.92	0.93	0.98	0.97	0.98	0.97	-0.01
Alameda County							
Population	1,443,741	1,505,300	1,549,800	1,626,100	1,705,900	1,787,300	237,500
Households	523,366	543,790	557,270	585,400	615,470	645,680	88,410
Persons per Household	2.71	2.72	2.73	2.72	2.72	2.72	2.72
Employed Residents	709,557	705,900	725,200	778,900	868,800	950,800	225,600
Jobs	750,160	730,270	712,850	761,270	825,070	897,810	184,960
Employed Residents/Jobs	0.95	0.97	1.02	1.02	1.05	1.06	0.04
Percent of Bay Area Population	21.3%	21.2%	20.5%	20.4%	20.4%	20.5%	0.0%
Percent of Bay Area Jobs	20.0%	21.2%	20.5%	20.4%	20.4%	20.5%	0.0%
City of Pleasanton							
Population	63,654	67,500	70,711	72,200	75,600	78,800	8,089
Households	23,311	24,660	25,260	26,350	27,550	28,750	3,490
Persons per Household	2.72	2.73	2.75	2.73	2.74	2.73	-0.02
Jobs	58,670	57,300	55,770	61,320	66,760	70,240	14,470
Percent of County Population	4.4%	4.5%	4.6%	4.4%	4.4%	4.4%	-0.2%
Percent of County Jobs	7.8%	7.8%	7.8%	8.1%	8.1%	7.8%	0.0%

 TABLE 4.K-1

 EXISTING AND PROJECTED BAY AREA POPULATION BY COUNTY, 2000-2025

SOURCE: City of Pleasanton, May 2011.

K. Population and Housing

City of Pleasanton

As shown in **Table 4.K-1**, Pleasanton has an estimated 2010 population of 70,711 making it the ninth largest city in Alameda County. This estimate represents an approximately eleven percent (7,057-person) increase from 2000, when the city's population was 63,654 (ABAG, 2009). Pleasanton's eleven percent population growth rate was much slower than the approximately 36 percent growth rate of Alameda County as a whole during the 2000 to 2010 period. According to ABAG projections, Pleasanton's population is anticipated to be approximately 78,800 (an increase of approximately eleven percent over the 2010 population) by 2025.

Housing

Alameda County

Between 2000 and 2010, the number of housing units throughout the Bay Area increased by approximately eight percent. During this period, Alameda County experienced an approximate seven percent growth in the housing stock, adding about 35,282 units (California Department of Finance, 2010). In percentage terms, this increase ranked fifth among Bay Area counties. **Table 4.K-2**, below, compares the number of housing units in 2000 and 2010 in each of the nine Bay Area counties.

County	Number of Housing Units 2000	Number of Housing Units 2010	% Change 2000–2010
Alameda	540,183	575,465	+7%
Contra Costa	354,577	400,268	+13%
Marin	104,990	108,850	+4%
Napa	48,554	54,348	+12%
San Francisco	346,527	368,136	+6%
San Mateo	260,578	269,491	+3%
Santa Clara	579,329	629,508	+9%
Solano	134,513	153,280	+14%
Sonoma	183,153	200,332	+9%
Bay Area Total	2,552,404	2,759,678	+8%

TABLE 4.K-2NUMBER OF HOUSING UNITS BY COUNTY FOR THE BAY AREA, 2000-2010

SOURCE: Department of Finance, 2010.

City of Pleasanton

Pleasanton contained approximately 25,961 housing units in 2010 (California Department of Finance, 2010), with single-family housing accounting for approximately 77 percent, multi-family housing accounting for 21 percent, and mobile homes accounting for 2 percent of the total. Compared to Alameda County as a whole, the City of Pleasanton has a higher proportion of single-family housing and a lower proportion of multi-family housing. **Table 4.K-3** presents the

range of housing types currently provided in Pleasanton and Alameda County. As noted in Table 4.K-1, the average household size in Pleasanton is approximately 2.79 people (City of Pleasanton, 2011); the average household size is similar to Alameda County as whole at approximately 2.70 people (California Department of Finance, 2010).

	Number of Housing Units	Distribution Percer Unit	ntage of Housing ts
Housing Type	City of Pleasanton	City of Pleasanton	Alameda County
Single-Family			
Detached	17,146	66%	53%
Attached	2,802	10.8%	7%
Multi-Family			
2-4 Units in Structure	1,169	4.5%	11%
5 Units or More in Structure	4,388	16.9%	28%
Mobile Homes	456	1.8%	1%
Total	25,961	100%	100%

TABLE 4.K-3
EXISTING HOUSING TYPES, PLESANTON AND ALAMEDA COUNTY, 201

SOURCE: Department of Finance, 2010.

Employment

Alameda County

As shown in Table 4.K-1, the total number of jobs in Alameda County was about 712,850 in 2010. By 2025, the County is projected to have approximately 897,810 jobs, representing an increase of about 26 percent between 2010 and 2025 (City of Pleasanton, 2011).

City of Pleasanton

Pleasanton has been called a "job rich" community, as job growth has outpaced residential growth during the last few decades. As of 2005, Pleasanton encompassed about 4,100 businesses (excluding home occupations) which together employed about 58,110 full- and part-time workers. Approximately 21 percent of these workers lived in Pleasanton, another 29 percent lived elsewhere in the Tri-Valley, and the remaining 50 percent commuted from the greater outlying area. As shown in Table 4.K-1, there were approximately 55,770 jobs in Pleasanton by 2010. By 2025, the number of jobs in Pleasanton is expected to increase by approximately 26 percent to a total of about 70,240 jobs (City of Pleasanton, 2011).

Regulatory Framework

State Assembly Bill 2853 (Regional Housing Needs Allocation)

Assembly Bill 2853 (AB 2853), enacted in 1980, requires all cities to address their regional "fair share allocation" of housing needs by income group in their General Plan Housing Elements. The

K. Population and Housing

City of Pleasanton must therefore evaluate "regional fair share" as projected by ABAG, which is the council of governments for the nine-county San Francisco Bay Area region. ABAG's determination of the local share of regional housing takes into consideration factors such as: market demand for housing; employment opportunities; availability of suitable sites and public facilities based on local plans; commuting patterns as they relate to the differences between job creation and labor supply; type and tenure of housing; and housing needs of farm workers.

ABAG allocates housing needs for each city and county in the region according to five specified income levels, so that each jurisdiction can make plans to provide for its "fair share" of regional housing needs by income group. To describe these housing needs, ABAG uses the income categories of *extremely low* and *very low* for household incomes of up to 50 percent of the median income for the region (i.e., the county), *low* for 51 to 80 percent of the regional median income, *moderate* for 81 to 120 percent of the regional median income, and *above moderate* for household incomes greater than 120 percent of the regional median income.

ABAG's most recent projected housing needs are for the 2007 to 2014 period. ABAG has determined that a total of 3,277 housing units would be needed in Pleasanton during this seven-year period, consisting of 1,076 units affordable to *very low-income* (one-half of these units be affordable for households less than thirty percent of county median income households, 728 units affordable to *low-income* households, 720 units affordable to *moderate-income* households, and 753 units affordable to *above moderate-income* households (ABAG, 2008). These "fair-share" totals represent the ABAG-projected number of units that would need to be added to Pleasanton's housing stock over the 2007 to 2014 period in order to achieve an equitable distribution of housing opportunities.

Local

Pleasanton General Plan

The City of Pleasanton General Plan, adopted in July 2009, as amended in October 2010, outlines policies, standards, and programs that together provide a comprehensive, long-term plan for physical development within the city. Development projects proposed in the city must demonstrate consistency with the goals and polices outlined in the General Plan. The General Plan articulates the city's long-term vision and goals as it pertains provisions related to population and housing.

Pleasanton's General Plan examines existing development and natural resources while guiding and mapping out future growth and sustainability within the community.

The proposed project analyzed in this SEIR analyzes the impacts related to the implementation of the proposed General Plan Amendments and rezonings. The General Plan Amendment includes adoption of both the Housing Element Update 2007-2014 and the Climate Action Plan (CAP) as part of the City's General Plan. Once the Housing Element is adopted, future developments within the city would be subject to policies outlined in the updated document. The CAP once adopted will implement greenhouse reduction strategies to reduce the City's overall emissions.

Noteworthy to this SEIR to the General Plan EIR is that since the adoption in 2009 it was amended in September 2010 to remove the voter-approved 29,000 unit cap on residential units. The action is in response to the Settlement Agreement which steamed from a lawsuit that claimed that the policy prevented or hindered the development of affordable housing in Pleasanton, which made it inconsistent with State housing law.

The following policies from the Land Use Element of the General Plan, as amended, would reduce potential impacts of the project related to future population and housing:(fix format to look like other sections)

Policy 6:	Develop a comprehensive planning documents for undeveloped and underutilized areas of Pleasanton that are changing or have the potential to change. In the planning process, identify facility needs, explore opportunities for mixed-use development, and plan for a comprehensive circulation system.
Policy 9:	Develop new housing in infill and peripheral areas which are adjacent to existing residential development, near transportation hubs or local-serving commercial areas.
Policy 10:	Provide flexibility in residential development standards and housing type consistent with the desired community Character.
Policy 13:	Ensure that neighborhood, community, and regional commercial centers provide goods and services needed by residents and businesses of Pleasanton and its market area.
Policy 19:	Preserve designated open space areas for the protection of public health and safety, the provision of recreational opportunities, agriculture and grazing, the production of natural resources, the preservation of wildlands, water management and recreation, and the physical separation of Pleasanton from neighboring communities.
Policy 23:	Regulate the number of housing units approved each year to adequately plan for infrastructure and assure City residents of a predictable growth rate.
Program 23.1:	Review and modify the City's Growth Management Program to ensure an orderly process for developing residential units to ensure that the City's goals for affordable housing and energy sustainability are met.
Program 23.2:	Prepare and Growth Management report as needed on which the City Council can base its Growth management allocations.

Pleasanton Residential Growth Management System

The City's Growth Management Program (GMP) is designed to ensure that new residential development occurs at a rate that can be supported by the City's infrastructure, facilities, and

4. Environmental Setting, Impacts, and Mitigation Measures

K. Population and Housing

services and that supports new job growth and the City's share of regional housing needs. The City's Urban Growth Boundary has been incorporated into Pleasanton's General Plan as an expression of the practical limits to the City's physical boundaries (City of Pleasanton, 2011).

The City's Urban Growth Boundary promotes smart growth by focusing new housing in areas that can be readily serviced and that avoid major environmental issues. In order for the City to better ensure that a sufficient number of permits are available to accommodate its regional housing need throughout the planning period, the proposed Housing Element contains a policy to continue to use the Growth Management Report to monitor the numbers and types of units at all income levels (City of Pleasanton, 2011). In addition, The GMP is used to inform decision-makers of the City's progress in meeting its housing goals and to guide them in making housing allocations sufficient to meet the City's housing needs. Furthermore, the proposed Housing Element enables the Growth Management Ordinance to be amended in order to provide a mechanism to override its annual allocations to approve projects, especially affordable-housing projects, to meet its total regional housing goals; this would enable the City to allow larger high-density housing projects with large percentages of affordable housing to be approved (City of Pleasanton, 2011).

Impacts and Mitigation Measures

Significance Criteria

Appendix G of the CEQA *Guidelines* provides that a project would have a significant population or housing impact if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Approach to Analysis

The methodology for this analysis included reviewing relevant documents, statistics, and policies about the City's housing population and employment data. Additionally, local regulations were reviewed for project applicability, including the City's General Plan 2005-2025, ABAG, U.S. Census Bureau, and California Department of Finance. The proposed Housing Element was evaluated based on the potential effects on Pleasanton's housing, population and employment.

Impacts and Mitigation Measures

Impact 4.K-1: Development facilitated by the General Plan Amendment and rezonings could directly induce substantial population growth in the City. (Less than Significant)

Housing Element

The proposed Housing Element provides programs to facilitate a maximum buildout potential of 3,116 housing units between 2007 and 2014. Conservatively assuming that the City redesignates and rezones all parcels proposed and these sites are developed at the maximum proposed density, implementation of the proposed Housing Element could result in a net increase of approximately 10,800 persons. Added to the current population of 70,711, total population in Pleasanton as a result of the Housing Element could reach 80,100 by the year 2015. This exceeds ABAG's population projection for the city, which ABAG has anticipated to be approximately 72,200 by 2015, and is only expected to reach 78,800 by 2025.

If the City approves the General Plan Amendment and rezoning of all the potential sites for rezoning, the permitted 2025 buildout of the General Plan would exceed ABAG projections. However, the final action taken by the City will not necessarily include all the potential sites for rezoning, nor would they likely be built to maximum proposed density on all sites, but will be sufficient to meet RHNA identified housing needs. Because the population that would be generated by the proposed Housing Element would exceed ABAG's population projections, the population growth associated with implementation of the Housing Element is considered substantial.

It should be noted that impacts due to population increases are usually associated with other environmental issue areas such as air quality, public services and utilities, traffic and circulation, etc. In most cases where increases in population are directly related to environmental impacts in this SEIR, impacts are either less than significant or have been mitigated to less than significant levels.

The following proposed Housing Element policies would reduce potential impacts related to future population and housing:

- Program 14.1: Fund the infrastructure improvements contained in the General Plan to accommodate projected housing growth.
- Program 14.6: Assess the level of effort to overcome infrastructure constraints to housing affordable to low- and very-low-income households on a periodic basis.
- Program 29.1: Continue to use the Growth Management Report to monitor the numbers and types of units built at all income levels. Use this information to facilitate the issuance of sufficient numbers of permits to meet the regional housing need throughout the planning period.

K. Population and Housing

- Program 29.2: Review and amend the Growth Management Ordinance to reflect current housing and infrastructure conditions and current housing needs.
- Policy 35: Disperse high-density housing throughout the community, especially in the Downtown and in other areas near public transit, major thoroughfares, shopping, and employment centers.
- Policy 36: Strongly encourage residential infill in areas where public facilities are or can be made to be adequate to support such development.
- Program 36.1: Zone infill sites at densities compatible with infrastructure capacity and General Plan Map designations.
- Program 36.5: Develop appropriate incentives which would facilitate relocating existing commercial/office/industrial uses in order to enable development with residential uses. Specific Incentives may include the following:
 - Transfer of development rights;
 - A review of traffic requirements and evaluation measures to facilitate mixed use development;
 - Development of transit alternatives
 - Use of development agreements;
 - Flexibility of parking standards;
 - Expedited processing of development applications.

With the implementation of the proposed Housing Element policies and programs, the City would meet the allocation as determined by RHNA in a sustainable manner, one in which the provision of affordable housing is accomplished largely without stressing the City's current infrastructure. This is a less than significant impact.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's emissions of GHGs. It does not directly result in the development of housing and would not directly result in population growth in the City of Pleasanton. However, the Draft CAP does indirectly result in population growth under the Housing Element on the potential sites for rezoning, as the greenhouse gas (GHG) reduction strategies rely on the land use changes to reduce vehicle miles traveled, a major source of GHG emissions.

While the Draft CAP measures may influence land use patterns and decisions, including the type and location of housing, it is anticipated that these measures would apply to housing that has already been planned for in the General Plan or in the proposed Housing Element and would not result in additional population beyond that which is projected in those planning documents.

Therefore, the Draft CAP would result in less than significant impacts related to population growth.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.K-2: Development facilitated by the General Plan Amendment and rezonings could potentially displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere. (Less than Significant)

Housing Element

The proposed Housing Element would result in significant impacts if it would displace a substantial number of housing units, creating the need for construction of replacement housing. As the intent of the proposed Housing Element is to provide guidance on future housing development in the Planning Area, which includes conversion of non-residential to high density residential land uses, the proposed Housing Element would result in minimal displacement of existing housing which would require the replacement of housing elsewhere, specifically on Sites 6 and 21, described below.

The potential sites for rezoning identified in the proposed Housing Element for residential development are largely designated for Retail/Highway Service/Commercial, Business, and Professional Offices (Sites 2 through 4, portions of Site 6, Sites 7, 8, 12, 16 and 20), and Mixed Use/Business Park designations (Sites 1, 9, 10, and 13). Sites 11 and 14 are within the East Pleasanton Specific Plan, and Site 17 is designated for Retail/Highway. However, Site 6 does contain one farmhouse and Site 21 contains a mostly vacant mobile home park that has approximately three remaining tenants, which are protected from displacement by state law (Government Code Section 65863.7). As such, four households would be displaced under the development facilitated by the proposed Housing Element.

Rezoning under the proposed Housing Element would displace existing housing units on two of the potential sites for rezoning. However, displacement would be minimal as only four of the units are occupied (4 units are occupied between Sites 6 and 21). The intent of the Housing Element is to provide the required amount and type of housing per the RHNA and the City proposes to accommodate the RHNA housing requirements largely on infill development sites that are currently underutilized or vacant. In the event that residents would need to be relocated, the City would work with those residents to find a suitable arrangement, per the policies of the Housing Element, which are outlined below. Therefore, with minimal potential displacement as well as the policies of the Housing Element that discourage displacement and/or replacement strategies for any displaced residents, impacts related to displacement of existing housing is less than significant.

K. Population and Housing

The proposed Housing Element contains a number of policies and programs that would address any potential impacts from displacing housing, including the following:

- Policy 8: Minimize displacement of tenants in rental apartments and mobile homes and encourage ownership of lower-cost residential units by prior renters through the regulation of condominium conversions.
- Program 8.1: Regulate condominium, townhouse, and mobile home conversions and mitigate tenant displacement through the provisions of the City's Condominium Conversion Ordinance, and Government Code, Section 65863.7 (as to mobile homes).Program 8.2: Deny conversion of apartment units to condominiums if the percentage of multiple-family units available for rent, city-wide, is below 50 percent.
- Program 8.3: Require moving assistance and other means to minimize hardship of persons displaced by condominium and mobile home conversions.
- Program 8.5: Review the City's Condominium Conversion Ordinance to identify desirable changes, such as potentially requiring more affordable housing and longer tenant noticing requirements, to minimize the impact and displacement of lower-income tenants.
- Policy 13: Preserve for the longest term feasible, at-risk low-income housing rental units which are at risk of changing to market-rate housing.
- Program 13.4: Where preservation of assisted units is not possible, minimize the displacement and inconvenience of tenants by assisting in negotiations with the owners regarding anti-displacement policy or relocation mitigation, where appropriate. In order to encourage the retention of affordable housing, the City should start working with apartment owners 18 months to two years prior to the expiration of the below-market-rate housing contract. If the City is not successful in retaining the units as below-market-rate housing, the City should begin working with the affected tenant at least one year prior to the term expiration to facilitate the tenant's transition from below-market-rate to market-rate housing or to locate for the tenant other below-market-rate housing.
- Program 13.7: Structure future rent-restriction contract agreements for all new assisted projects with limited or no time restrictions to minimize the displacement of tenants.
- Policy 21: Assist in the relocation of persons displaced by public projects.
- Policy 30: Provide incentives to encourage the maintenance of affordability in existing housing that is rehabilitated.

Policy 31: Encourage and support the formation of a Valley Housing Authority to administer the Section 8 Program for the entire Tri-Valley area and also to maintain the public housing units in each city.

Policy 32: Encourage the maintenance of safe, sound, and well-kept housing city-wide.

With the implementation of the proposed Housing Element policies and rezoning of all or some of the potential sites for rezoning, the City of Pleasanton would not substantially displace existing housing stock, but provide opportunities for residential development. Impacts would be less than significant and no mitigation is necessary.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's emissions of GHGs. It does not directly result in the development of housing and would not directly result in displacement in the City of Pleasanton. However, the Draft CAP does indirectly result in population displacement under the Housing Element on the potential sites for rezoning, as the GHG reduction strategies rely on the land use changes to reduce vehicle miles traveled, a major source of GHG emissions, including the two potential sites for rezoning that would demolish existing housing (Site 6 and Site 21).

While the Draft CAP encourages infill development and higher density development, this type of development would occur as indicated in the General Plan or proposed Housing Element, which would result in less than significant impacts related to displacement. Therefore, like the Housing Element, implementation of the Draft CAP would result in less than significant impacts related to displacement of existing housing.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.K-3: Development facilitated by the General Plan Amendment and rezonings could potentially displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. (Less than Significant)

Housing Element

The proposed Housing Element would not result in the displacement of a substantial number of existing residents or housing units, as it would only displace four households between two of the potential sites for rezoning (Site 6 and Site 21). It would add additional potential for the development of housing to support Pleasanton's growing population and future housing demands as specified in the RHNA through rezoning of all or some of the potential sites for rezoning. As indicated above, under Impact 4.K-2, the General Plan contains provisions that would mitigate any potential impacts, including policies and actions that would encourage development of

K. Population and Housing

second units, mixed-use development, and protection of existing housing stock such as affordable housing and mobile homes. Development of any or all of the potential sites for rezoning would not displace residents, but would build on existing neighborhoods by utilizing in-fill development, would be compatible with surrounding residential development, and would be consistent with land use and housing policies in the General Plan.

Therefore, implementation of the proposed Housing Element and the rezoning of some or all of the potential sites for rezoning are not expected to displace existing residents or result in housing displacement. Any potential impacts to the displacement of existing residents and housing units would be less than significant and no mitigation would be required.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's emissions of GHGs. While it encourages higher density development in infill locations, this would not directly result in the displacement of a large number of people and would not necessitate the construction of housing elsewhere. However, the Draft CAP does indirectly result in population displacement under the Housing Element on the potential sites for rezoning, as the GHG reduction strategies rely on the land use changes to reduce vehicle miles traveled, a major source of GHG emissions, including the two potential sites for rezoning that would demolish existing housing (Site 6 and Site 21). Therefore, implementation of the Draft CAP, like the Housing Element, would result in less than significant impacts related to displacement of existing people.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.K-4: Development facilitated by the General Plan Amendment and rezonings, along with potential development in the surrounding region could potentially introduce additional population to the region, and would result in unanticipated population, housing, or employment growth, or the displacement of existing residents or housing units on a regional level. (Less than Significant)

The increase in housing and population facilitated by the proposed Housing Element and CAP combined would not have a significant cumulative impact on population, housing or employment grow. The General Plan enables the construction of residential and commercial growth, and incorporates construction of additional infrastructures, including roads, utilities, and government services that would support future growth.

The direct and indirect impacts of population and housing growth on the potential sites for rezoning which are requirements of both the proposed Housing Element and Draft CAP, are considered throughout this SEIR and include potential impacts to traffic, air quality, noise, visual

resources, the provision of public services and utilities, and other resource areas. To the extent that the projected population would result in significant adverse effects to these resources, these impacts have been identified and considered within relevant sections of this document.

This SEIR also identifies goals and policies proposed by the Housing Element and Draft CAP that would serve to mitigate the impacts of development and population growth (as well as an increased demand for housing that typically accompany a larger population) to the extent feasible and provides additional mitigation that is not currently included as part of the proposed Housing Element, as needed. The policies in the proposed Housing Element are designed to preserve existing units and their affordability. In addition, the Housing Element and specifically the potential sites for rezoning, would serve to meet the City's RHNA goals. The proposed Housing Element would not result in, or contribute to, substantial demolition of existing housing that would displace existing people or dwelling units. Furthermore, implementation of the proposed Housing Element within Pleasanton would be subject, on a project-by-project basis, to mitigation identified in this EIR, as well as policies in the City's General Plan, governing area plans, design guidelines, zoning codes (including development standards), and other applicable land use plans that are intended to reduce impacts related to population and housing.

The proposed Housing Element would enable construction of housing units on the potential sites for rezoning which would induce direct population growth. However, the residential development on the potential sites for rezoning would not cause significant indirect population impact to the existing and planned infrastructure because population growth would be within projected capacity for the Planning Area, and many of the sites are considered infill development. The residential development pattern of the potential sites for rezoning would encourage compact, mixed-use development within existing urban areas and would discourage dispersed, automobile-dependent development at the urban fringe. Residential densities would increase and infill development would occur in areas where public services already exist or could be easily extended. Moreover, the goals, policies and programs in the General Plan would provide the necessary infrastructure to support the population growth. As a result, the impacts related to the significant growth in population would be reduced to a less than significant level. The goals, policies, and programs that are included in the proposed General Plan would reduce impacts associated with population and housing unit growth to less than significant levels.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Population and Housing

Association of Bay Area Governments (ABAG), 2008, *San Francisco Bay Area Housing Needs Plan, 2007-2014*, available online at http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf, accessed June 2011. K. Population and Housing

California Department of Finance, 2010, *E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark,* available online at http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2001-10/, accessed May 2011.

City of Pleasanton, Pleasanton General Plan 2005-2025, adopted July 21, 2009.

City of Pleasanton, Housing Element 2007-2014, June 2011.

City of Pleasanton, Preliminary Draft Housing Element Background, May 2011.

4.L Public Services and Utilities

This section evaluates potential impacts to public services and utilities. Public services include fire services, police services, and schools. Impacts related to recreation and parks are discussed in Section 4.M, Recreation. Utilities include water service, wastewater conveyance and treatment facilities, and solid waste disposal facilities. Impacts related to storm drains are discussed in Section 4.H, Hydrology and Water Quality.

With the exception of the potential sites proposed to be rezoned for residential uses, impacts on public services and utilities within the City were previously addressed in the *City of Pleasanton General Plan 2005-2025 EIR* (City of Pleasanton, 2009a), which is hereby incorporated by reference in this SEIR. Therefore, for this SEIR, public services and utilities in the City were reviewed with a particular focus on the increase in need from the development on potential sites for rezoning.

Setting

Regional Setting

Public Services

Fire Protection

Fire protection in Pleasanton is provided by the Livermore-Pleasanton Fire Department (LPFD). The Cities of Livermore and Pleasanton share costs for operating fire services, but each community maintains its own buildings, light-duty vehicles and fire apparatus. LPFD operates ten stations and one training center (LPFD, 2011). Five of the stations, the training center and headquarters are located in Pleasanton and are staffed by18 personnel daily. **Table 4.L-1**, presents a list of fire stations within and near Pleasanton, along with their address.

Fire Station	Address
Fire Station 1, Fire Headquarters	3560 Nevada Street
Fire Station 2	6300 Stoneridge Mall Road
Fire Station 3	3200 Santa Rita Road
Fire Station 4	1600 Oak Vista Way
Fire Station 5, Ruby Hill Station	1200 Vineyard Avenue
Fire Station 10 (in Livermore)	330 Airway Boulevard
Sunol Forest Fire Station, California Department of Forestry	Pleasanton-Sunol Road

TABLE 4.L-1 FIRE STATIONS SERVING PLEASANTON

SOURCE: City of Pleasanton, 2009a

LPFD operates 52 vehicles, which include 10 fire prevention vehicles, 10 Type I fire engines (with a minimum 1,000 gallon per minute pump, 400 gallon water tank and 20 foot ladder), four

L. Public Services and Utilities

Type III vehicles (with four-wheel drive, 120 gallon per minute pump, 300 gallon water tank), eight Type IV vehicles (with minimum 50 gallon per minute pump, 200 gallon water tank), two ladder engines, seven utility vehicles, and a volunteer van (City of Pleasanton, 2009a).

In addition to LPFD, the California Department of Forestry's Sunol Forest Fire Station has jurisdiction in the Pleasanton Ridge, Southeast Hills, and several areas of the unincorporated land adjacent to Pleasanton's city limits.

The majority of Pleasanton lies within a five-minute radius from one of the five fire stations in the city. The portions located outside of this five-minute radius are designated as Special Fire Protection Areas and include additional requirements, such as automatic fire sprinklers which gives LPFD more response time (City of Pleasanton, 2009a).

Police

The City of Pleasanton's Police Department is divided into three divisions, including Operations, Professional Standards, and Investigations and Services. There are a total of 65 sworn officers (Pleasanton PD, 2010). The Operations division includes 52 sworn officers, four civilian staff members in the Patrol Bureau, and ten sworn officers in the Special Operations Unit. The Patrol Bureau includes Canine, Special Weapons and Tactic Teams, and Reserve Officer Programs. The Special Operations Unit is responsible for traffic, parking, special events, permits and animal services. The average response time in 2005 was 22 minutes and 11 seconds per call. For emergency calls, the response time was 5 minutes and 12 seconds (City of Pleasanton, 2009a). The Professional Standards Division is responsible for managing the department's budget, polities and internal affairs. The Investigations and Special Division employs 42 full-time staff members, including 16 police officers, three police sergeants, a police captain and support staff.

The City's Police Department offers a variety of public safety programs, including the Citizen's Academy and Teen Academy, a Neighborhood Watch Program, a Parenting course, and a School Resource Officers and Drug Abuse Resistance Education (DARE) program.

Schools

The Pleasanton Unified School District operates nine elementary schools, three public middle schools, and four high schools, two of which are specialty schools (City of Pleasanton, 2009b). **Table 4.L-2**, below, summarizes past enrollment at Pleasanton's public schools. Pleasanton also has a private school that operates outside of the district, and accommodates 300 school-aged children from elementary through high school.

Pleasanton Unified School District's enrollment in the 2005-2006 academic year was 14,518 students; by the 2010-2011 school year enrollment grew 2.6 percent to 14,904.

School	Enrollment 2005-2006	Enrollment 2010-2011
Alisal Elementary	708	660
Thomas H. Donlon Elementary	660	753
Fairlands Elementary	622	764
Phoebe Apperson Hearst Elementary	671	696
George C. Lydiksen Elementary	695	653
Henry P. Mohr Elementary	658	700
Valley View Elementary	692	730
Vintage Hills Elementary	633	661
Walnut Grove Elementary	715	710
Thomas S. Hart Middle	1,165	1,084
Harvest Park Middle	1,072	1,179
Pleasanton Middle	1,253	1,203
Amador Valley High School	2,450	2,591
Foothill High School	2,322	2,275
Village High School	202	216
Total Enrollment	14,518	14,904

TABLE 4.L-2 SCHOOLS IN PLEASANTON UNIFIED SCHOOL

SOURCE: California Department of Education, 2011.

Utilities

Water Service

The Alameda County Flood Control and Water Conservation District's Zone 7 (Zone 7) is responsible for supplying water as a wholesaler to four Tri-Valley area water utilities. These include the Dublin-San Ramon Services District, California Water Service Company, and the cities of Pleasanton and Livermore. Some residents that live in unincorporated areas of Alameda County and in Pleasanton receive their water from the City and County of San Francisco (City of Pleasanton, 2009d).

Zone 7 provides water to the region by storing water from the South Bay Aqueduct and from local runoff in the Del Valle Reservoir, which it used to replenish groundwater supplies through release into the Arroyo del Valle and the Arroyo Mocho. The sources of water include the South Bay Aqueduct, surface runoff from the Del Valle Reservoir, and local groundwater. Water from the aqueduct is treated at the Patterson Pass and Del Valle Water Treatment Plants in Livermore, and then delivered to Pleasanton. Water from the Del Valle Reservoir is used to replenish groundwater supplies through the Arroyo del Valle and Arroyo Mocho, and serves as a secondary water source to the water treatment plants. Most of the groundwater wells are located in the west-central area of the Tri-Valley area (City of Pleasanton, 2009c).

According to the 2011 Water Supply Assessment prepared by the City of Pleasanton (Appendix E), in 2008 Zone 7 had a sustainable water supply of 87,500 acre-feet per year (afy);

4. Environmental Setting, Impacts, and Mitigation Measures

L. Public Services and Utilities

however, due to Delta environmental issues, the current supply is 81,200 afy. Groundwater basins managed by Zone 7 currently hold approximately 202,000 acre-feet of water; approximately half of this is available by well pumping (City of Pleasanton, 2009c). Not including groundwater safe yields and recycled water, the total sustainable water supply was 64,500 afy in 2008 and 55,050 afy in 2011. In 2011, Zone 7 reduced the range for increase in annual water demand to a range of 1.7 percent and 2.2 percent for years 2011 to 2015. Additionally, the total demand between 2016 and 2020 has been reduced by 3,000 afy due to conservation efforts (see Appendix E).

The City receives approximately 75 to 80 percent of its water from Zone 7. Zone 7 provides this water through seven permanent turnouts, and the City relies on its own remaining 20 to 25 percent of water demand, which is approximately 3,500 afy. The City is a water retailer and provides water to homes and businesses in Pleasanton, as well as to adjacent unincorporated areas. The City does not serve Castlewood area residences or golf courses, as these are serviced by the City and County of San Francisco's Water Department. The City operates three groundwater wells, and a water service system that includes distribution, pumping and storage (City of Pleasanton, 2009c).

The City's groundwater entitlement is 3,500 acre-feet annually, which is approximately 22 percent of their total water demand, according to the 2010 Urban Water Management Plan (City of Pleasanton, 2010). The groundwater entitlement is a fixed amount in contract with Zone 7.

Water service is provided in Pleasanton through a delivery system that includes over 300 miles of water pipelines ranging from four inches to 36 inches in diameter. The Water System Management Plan Update in 2004 identified improvements to the water system to accommodate growth in the city. The current system can deliver approximately 34.4 million gallons per day (mgd) during normal year peak periods, which includes 25.4 mgd from Zone 7 and 9.0 mgd from Pleasanton's groundwater wells (City of Pleasanton, 2009c).

Wastewater

Wastewater treatment and disposal in the Tri-Valley area are provided by Dublin-San Ramon Services District and the City of Livermore. The Livermore-Amador Valley Water Management Agency exports treated wastewater through a pipeline from the Tri-Valley area to San Francisco Bay. A recent expansion of this pipeline will allow Pleasanton, the Dublin-San Ramon Services District and Livermore to share the allocated expansion increment and will accommodate their wet-weather flows in future years (City of Pleasanton, 2009d).

The City of Pleasanton manages wastewater through a facility that involves a collection system, and treatment plant before disposal. The City provides sewage collection facilities throughout Pleasanton, and the Dublin-San Ramon Services District provides sewage treatment services for the City. Lastly, the Livermore-Amador Valley Water Management Agency, which is a joint powers agency between Pleasanton, Livermore and the Dublin-San Ramon Services District, provides export and disposal services for the treated wastewater. The Regional Water Quality Control Board permits this wastewater to be discharged into the San Francisco Bay (City of Pleasanton, 2009c).

The wastewater collection system within Pleasanton includes over 250 miles of pipelines and consists of local and trunk sewer pipes, which range from four inches to 42 inches in diameter. The system also includes ten lift stations and four major trunk sewers, which lead to the wastewater treatment plant. The size and capacities of the collection system have been determined in the Wastewater Collection System Master Plan, which was completed in 2006 (City of Pleasanton, 2009c).

The treatment facility operated by the Dublin-San Ramon Services District has an average dryweather wastewater-flow capacity of 17 mgd of wastewater. The City of Pleasanton is currently entitled to half of this amount, which is 8.5 mgd. The City's average annual wastewater flow is approximately 6.0 mgd (City of Pleasanton, 2009c).

The export system discharges treated wastewater into the San Francisco Bay and utilizes a wastewater pipeline that traverses I-580 as it extends west from Pleasanton to the bay, and connects to the East Bay Dischargers. In November of 1998, the City Pleasanton approved Measure U, which allowed the City to expand its capacity in the discharge system, which is managed by the Livermore-Amador Valley Water Management Agency. This expansion allows for additional capacity, and the total capacity of the wet weather export will be 41.2 mgd; however, the City has acquired an additional 6.9 mgd of this capacity. With an additional 6.9 mgd of capacity, the City's total wastewater wet-weather discharge capacity is 14.4 mgd (City of Pleasanton, 2009c).

Solid Waste

The City has a franchise agreement with Pleasanton Garbage Service (PSG) through 2019. This agreement gives PSG rights to collect and transport solid waste in the City. PSG maintains a contract for disposal with Browning Ferris Industries, a landfill operator for the Vasco Road Landfill in Livermore. As of December 2007, the Vasco Road Landfill had a total capacity of 32,970,000 cubic yards, of which 22,500,000 cubic yards had been filled and is expected to have capacity through 2037. In 2005, Pleasanton generated 240,900 tons of solid waste; the waste diversion rate, or the percentage of waste that is diverted away from the landfill due to recycling efforts, was 49.74 percent. As a part of Alameda County's goals for waste reduction, it is expected the diversion rates will increase in future years (i.e., up to 75 percent by 2025) (City of Pleasanton, 2009b).

Regulatory Setting

This section briefly describes applicable regulatory programs applicable to the proposed Housing Element.

Senate Bill (SB) 610 / Senate Bill (SB) 221

Senate Bill (SB) 610, codified as Sections 10910-10915 of the California Public Resources Code, requires local water providers to conduct a water supply assessment (WSA) for projects proposing over 500 housing units, 250,000 square feet of commercial office space (or more than

L. Public Services and Utilities

1,000 employees), a shopping center or business establishment with over 500,000 square feet (or more than 1,000 employees), or equivalent usage.

Assembly Bill (AB) 939 and SB 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans and also mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. In 2006, Senate Bill 1016 updated the requirements. The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a factor, along with evaluating program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving its Integrated Waste Management Act (AB 939) diversion goals. The 50 percent diversion requirement is now measured in terms of per-capita disposal expressed as pounds per person per day.

California Code of Regulations Title 24

The State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards were developed by the California Energy Commission (CEC) and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The CEC updates these standards periodically and adopted the latest standards in October 1, 2005, which provides new standards for outdoor lighting and residential lighting. These standards establish lighting zones that differentiate the amount of outdoor lighting by geographical location, and establish new performance standards for residential lighting.

City of Pleasanton General Plan

The City of Pleasanton's General Plan was adopted in 2009. Elements of this plan that are relevant to Public Services and Utilities include the Public Safety Element, the Public Facilities and Community Programs Element and the Water Element. Applicable goals, policies, and programs contained in these elements are listed below.

Public Safety Element

Fire Hazards and Emergency Response

- Goal 3: Minimize the risks to lives, property, and the environment to fire hazards within the Planning Area, and provide the highest quality of emergency response feasible.
- Policy 8: Provide an adequate level of fire and emergency medical equipment and personnel to protect the community.

- Program 8.2: Require new development to pay for fire safety improvement needs generated by the new development.
- Program 8.4: Invest in equipment that assists emergency responders in accurately and quickly reaching the scene of an emergency.
- Policy 10: Strive to respond to all emergency fire-related calls within seven minutes of the time the call for service is received 90 percent of the time.
- Program 10.1: Deny proposed developments not within a five-minute travel time of a Fire Station unless acceptable mitigations are provided.
- Program 10.3: Evaluate the need for expanded services or facilities as the city grows.
- Policy 11: Maintain or improve the City's existing Insurance Services Office¹ fireprotection rating of three.
- Program 11.1: Require developers to finance and construct necessary water facilities for their projects when they develop.
- Program 11.2: Require that all new developments be provided with sufficient fire-flow facilities at the time of development at least at the level specified by the Fire Chief.
- Policy 13: Require fire mitigation measures in new and existing developments that reduce the fire threat to the structure and occupants. Require development outside the five-minute travel time and in Special Fire Protection Areas to provide effective fire prevention measures.
- Program 13.1: Require the installation of building and fire code compliant fire-detection and alarm equipment in residential and commercial structures.
- Program 13.2: Install automatic fire sprinkler protection in certain structures as required by adopted City ordinances.
- Program 13.3: Encourage the installation of automatic fire-sprinkler systems in all new construction.

Police Services

- Goal 8: Provide the highest quality of Police services within the city.
- Program 26.2: Require new development to pay for police safety improvements required of that development.
- Policy 27: Strive for a response time of an average of four minutes for emergency calls, and sixteen minutes for general service calls.

¹ The Insurance Services Office provides classifications from 1 through 10, to establish appropriate fire insurance premiums for residential and commercial properties. A classification of 1 represents superior fire protection, and a classification of 10 indicates that the area's fire prevention programs to not meet the Insurance Services Offices minimum criteria.

L. Public Services and Utilities

Public Facilities and Community Programs Element

Capital Improvements and Financing

Goal 3:	Promote responsible financing and construction to preserve and enhance Pleasanton's public facilities.
Policy 2:	Development should pay its fair share for the construction and use of municipal facilities.
Program 2.1:	Require future development to pay its fair share of the cost of purchasing sites and financing needed improvements for existing and future municipal facilities, such as a city hall, fire stations, athletic facilities, libraries, cultural arts center, etc.
Policy 5:	To maintain City service standards, construct permanent City sewer, water, and storm drainage improvement as a condition of new development.
Program 5.1:	Coordinate developer financing with the City's Capital Improvement Program to ensure adequate capacity for future growth.

Schools and Education

Goal 4:	Promote lifelong learning.
---------	----------------------------

- Policy 7: Encourage and support high quality public and private education facilities in Pleasanton and facilitate lifelong educational opportunities for all ages.
- Program 7.2 Encourage school enrollment sizes that maintain neighborhood character, provide facilities for specialized programs, and promote more personalized education. The current target is 600 students per elementary school, 1,000 students at each middle school, and 2,000 students at each comprehensive high school, with a 10 percent contingency planned for each site, subject to board discretion and financial considerations.
- Policy 8: Coordinate with the School District to maintain elementary schools within student walking distance whenever feasible and allow other community-related activities within these facilities.
- Program 8.1: Partner with the School District and community groups to use schools as neighborhood centers. These neighborhood centers should offer a wide range of services and programs.

Solid Waste

- Goal 10: Strive to meet or exceed State and County standards for source reduction and waste diversion, including the countywide goal of 75 percent reduction of waste going to landfills by 2010.
- Policy 26: Minimize the City's generation of solid waste materials by supporting the Alameda County Integrated Waste Management Plan and Source Reduction

and Recycling Plan and by developing City recycling programs using the California Diversion rate methodology for measurement.

- Program 26.4: Promote incentives for using recycled materials in construction or manufacturing.
- Program 26.18: Residential projects with more than three units and all non-residential projects² in the city shall prepare and implement a Project Waste Diversion Plan that includes a discussion of the project's diversion strategies. The plan shall include a description of on-site disposal, composting and recycling facilities, a construction debris disposal and recycling plan, and a discussion of any pre-waste stream conservation measures appropriate to the project. The City shall review and approve waste diversion plans as part of the land entitlement process for projects.

Water Element

Goal 1:	Preserve and protect water resources and supply for long-term sustainability.
Policy 1:	To ensure sustainability, promote the conservation of water resources.
Program 1.1:	Prohibit water supply production policies and practices which would deplete groundwater resources below existing sustainable levels.
Program 1.5:	Utilize cost-effective water reclamation and recycling techniques for the purpose of water conservation rather than as a new source of water which must be used to sustain new and existing development, where these techniques can be implemented without degrading surface water and groundwater quality.
Program 1.7:	Require the installation of water conservation devices in new construction and additions.
Program 1.8:	Encourage Zone 7 to continue its on-going citywide rebate program for water- conserving fixtures and appliances.
Program 1.12:	Compile a list of recommended landscaping species, including trees, that are native and drought tolerant. Include discussion of any wildlife habitat values of these species. Compile a list of noxious and invasive species and educate the public about their disadvantages. Distribute these lists to the public and make them available at the Planning and Building offices, as well as at the Library.
Program 1.13:	Plant drought-tolerant landscaping in appropriate locations. All landscaping aspects from plant selection to irrigation methods should be designed to reduce water demand, decrease runoff, and minimize impervious surfaces.
Program 1.14:	Undertake programs to educate citizens about water conservation in the home and in landscaping.

² Refers to residential new construction (not additions) and new non-residential projects of 20,000 square feet or more.

L. Public Services and Utilities

Water Systems

Goal 4:	Provide sufficient water supply and promote water safety and security.
Policy 4:	Ensure an adequate water system and a high quality water supply for existing and future development, and maintain an adequate reserve of water in storage facilities.
Program 4.1:	Require new development to pay for its fair share of the City's water system master plan improvements.
Program 4.4:	Maintain sufficient water pressure to serve residential, commercial, industrial, and fire-flow requirements as determined by the City Engineer.
Wastewater	
Goal 5:	Provide adequate sewage treatment and minimize wastewater export.
Policy 5:	Secure sewage capacity through all available means for residential, commercial, and industrial development.
Program 5.1:	Require new development to pay its fair share of the City's planned sewer system improvements including treatment, distribution, reuse, and export facilities.

Wastewater Collection System Master Plan

The City's wastewater collection system is governed by the Wastewater Collection System Master Plan, which was completed in 2006. This plan identifies the capacity and sizing for the system, and determined appropriate improvements that would be required by the build-out of the General Plan. These improvements include the construction of new or parallel sewers, diversion structures, modifications or improvements to various pump stations. Additionally, this Master Plan requires that individual project developers finance improvements to in-tract sewers, or pipelines smaller than ten inches in diameter be improved in commercial or residential developments.

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist) the project could have a significant impact on public services if it would:

• Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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 such as fire protection, police protection, schools, parks and other facilities.

The project could have a significant impact on utilities if it would:

- 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;
- Require new or expanded water supply resources or entitlements;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the projects projected demand in addition to the provider's existing commitments;
- Be served by a landfill with insufficient permitted capacity to accommodate the project solid waste disposal needs; or
- Not comply with federal, state, and local statutes and regulations related to solid waste.

Approach to Analysis

Potential impacts on public services and utilities are evaluated based on the location of the potential sites for rezoning to fire and police protection, schools and its contribution to water, wastewater and solid waste services and the capabilities of those services and facilities to support the proposed residential development.

Impacts and Mitigation Measures

Impact 4.L-1: Development facilitated by the General Plan Amendment and rezonings could potentially result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public services such as fire protection, police protection, schools, parks and other facilities. (Less than Significant)

Housing Element

Fire Protection

The majority of Pleasanton lies within a five-minute response radius from one of the five fire stations in the city, and all of the proposed housing sites are also within a five-minute response radius from one of the stations. As a result, none of the sites are in areas designated as Special Fire Protection Areas, and would not require special fire prevention mitigation measures. Additionally, as stated in the General Plan's Public Safety Element, *Program 8.2*, new development will be required to pay for fire safety improvement needs generated by the new development. The City requires developers to pay a Public Facilities Fee, which is collected by the Building and Safety Division. For multifamily housing units, the fee is approximately \$2,674, for each new multi-family unit, and is adjusted annually (City of Pleasanton, Building and Safety,

L. Public Services and Utilities

2011). As a result, the developers will be responsible for any improvements needed for fire protection services, which would effectively mitigate any increase demand for services resulting from the proposed project. Therefore, impacts to fire protection associated with the residential development on the potential sites for rezoning under the proposed Housing Element would be less than significant.

Police Protection

New development on the sites proposed for rezoning will increase demands for police services, and response times may increase as a result. However, as stated in *Program 26.2* of the General Plan's Public Safety Element, all new development will be required to pay for police safety improvements required of that development, which would provide for capital facilities and equipment costs, but not operations costs. As a result, any physical improvements required by the police department to maintain service standards and to comply with response time goals would be financed by the developers of proposed residential projects. Therefore, impacts to police protection associated with the residential development on the potential sites for rezoning under the proposed Housing Element would be less than significant.

Schools

New housing developments as facilitated on the potential sites for rezoning will increase enrollment at schools as population increases which could require additional facilities and staff. To mitigate possible impacts to schools, the Pleasanton Unified School District collects developer fees on building plans for new construction before the City of Pleasanton issues building permits on those plans. The current fee schedule is presented in **Table 4.L-3**.

Fees (per square foot)
\$8.62
\$3.04
\$2.97
\$0.47

TABLE 4.L-3 PLEASANTON UNIFIED SCHOOL DISTRICT'S DEVELOPER FEES

The fees are expected to cover the facilities costs, which are created by residential development through the General Plans build-out plans, including the proposed housing elements (City of Pleasanton, 2009b). As a result, the new development associated with the proposed Housing Element would pay a fee to cover facility costs to accommodate new enrollment. Furthermore, in accordance with Section 65995(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "…is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or

reorganization." Therefore, with the required payment of fees, impacts to schools associated with the residential development on the potential sites for rezoning under the proposed Housing Element would be less than significant.

Climate Action Plan

The Draft CAP would not directly result in any new development potential or construction of facilities that would negatively affect acceptable service ratios, response times, or other performance objectives for public services, beyond what the General Plan EIR considered. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would expansion of public services, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. The GHG reduction strategies would have a less than significant impact on public service performance.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.L-2: Development facilitated by the General Plan Amendment and rezonings could potentially require new or expanded water supply resources or entitlements. (Less than Significant)

Housing Element

New housing development as facilitated on the potential sites for rezoning by the proposed Housing Element would increase demand for water and could require new water supply sources. However, as discussed in the Water Element of the City's General Plan, the City of Pleasanton has already planned for this growth by supporting Zone 7's capital improvement projects to secure more water, as discussed further below. In order to meet future needs, Zone 7 plans to spend over \$300 million to improve conveyance, storage, and groundwater recharge and extraction facilities to accommodate the growth outlined in its customers' general plans, which include the City of Pleasanton and the proposed Housing Element. In the next 20 years, Zone 7 plans to spend an additional \$200 million to replace or improve the existing water system so it can meet future demands.

In 2008, Zone 7 had a sustainable water supply of 87,500 afy; however, due to Delta environmental issues, this has been temporarily reduced to 81,200 afy. Not including groundwater safe yields and recycled water, the total sustainable water supply was 64,500 afy in 2008 and 55,050 afy in 2011.

4. Environmental Setting, Impacts, and Mitigation Measures

L. Public Services and Utilities

The percent of the total Zone 7 water supply demand attributable to the City of Pleasanton is 34 percent or approximately 16,473 afy in 2005. For the years 2011 to 2015, it is estimated that the demand for treated and untreated water (including demand from the proposed project) from Zone 7 is 68,875 afy and the estimated supply is 72,350 afy (City of Pleasanton, 2011). The addition of 3,116 dwelling units under the proposed Housing Element on the potential sites for rezoning would produce an approximate demand of 675.6 afy of new water demand (above what is already anticipated in the Pleasanton's General Plan adopted in 2009). This equates to approximately 0.99 percent of Zone 7's anticipated total system demand in 2015, and 0.82 percent in 2031 (City of Pleasanton, 2011). As such, there is adequate supply available for the residential development on the potential sites for rezoning between years 2015 to 2015. Thus, development facilitated by the proposed Housing Element would not exceed Zone 7's allocated or contractual water supply. Therefore, residential development on the potential sites for require expanded water supply resources for this timeframe.

It is estimated that after 2015, demand will increase to 74,975 afy by 2020 and to 83,535 afy by 2031(City of Pleasanton, 2011). However, the City would have adequate water supply as the City operates three groundwater wells which provide approximately 3,500 afy, and water conservation measures have been successful to reduce demand. Additionally, Zone 7 is taking measures to prepare for the buildout of many General Plans in the various areas serviced, and the 0.99 percent increase in demand from the proposed project would be insignificant. To further ensure supply is adequate, the City has developed a Condition of Approval in the 2011 WSA for residential development on the potential sites for rezoning, which is presented as Mitigation Measures 4.L-2. Further, the proposed Housing Element includes policies to protect water supplies and to ensure a sustainable water service for the future. *Program 44.1* of the proposed Housing Element refers to programs in the Water Element that should be adopted to reduce impacts on water supply to less than significant levels. These programs include:

Program 1.1	Prohibit water supply production policies and practices which would deplete groundwater resources below existing sustainable levels.
Program 1.2	Foster water conservation practices which do not allow depletion of groundwater and surface water resources to the extent that they cannot be replaced within the same "water season."
Program 1.3:	Support Zone 7 Water Agency in water supply production, treatment, and procurement practices that do not negatively impact the environment
Program 1.5	Utilize cost-effective water reclamation and recycling techniques for the purpose of water conservation rather than as a new source of water which must be used to sustain new and existing development, where these techniques can be implemented without degrading surface water and groundwater quality.
Program 1.7	Require the installation of water conservation devices in new construction and additions.
Program 1.8	Encourage Zone 7 to continue its on-going citywide rebate program for water- conserving fixtures and appliances.
- Program 1.12 Compile a list of recommended landscaping species, including trees, that are native and drought tolerant. Include discussion of any wildlife habitat values of these species. Compile a list of noxious and invasive species and educate the public about their disadvantages. Distribute these lists to the public and make them available at the Planning and Building offices, as well as at the Library.
- Program 1.13 Plant drought-tolerant landscaping in appropriate locations. All landscaping aspects from plant selection to irrigation methods should be designed to reduce water demand, decrease runoff, and minimize impervious surfaces.
- Program 1.14 Undertake programs to educate citizens about water conservation in the home and in landscaping.

As noted above, the city will apply a condition of approval to the development of the potential sites for rezoning. The condition of approval is presented as Mitigation Measure 4.L-2:

Mitigation Measure 4.L-2: Prior to the recordation of a Final Map, the issuance of a grading permit, the issuance of a building permit, or utility extension approval to the site, whichever is sooner, the applicant shall submit written verification from Zone 7 Water Agency or the City of Pleasanton's Utility Planning Division that water is available for the project. To receive the verification, the applicant may need to offset the project's water demand. This approval does not guarantee the availability of sufficient water capacity to serve the project.

With the inclusion of the above-mentioned programs, Mitigation Measure 4.L-2, and Zone 7's existing plans for the build-out of several general plans, the proposed Housing Element would have a less-than-significant impact on water supply.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would require new water supply resources, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Additionally, the Draft CAP recommends numerous water conservation measures, which will result in reduced demand for water supplies, including potential groundwater supplies. The Draft CAP does not recommend any strategy or measure that would require additional water supply that would be attained specifically from groundwater supplies and would not result in any future projects that would substantially interfere with groundwater recharge. Instead, strategies proposed include increasing or establishing the use of reclaimed and grey water systems, and conserving municipal operations water. Impacts would be less than significant.

Housing Element Significance after Mitigation: Less than Significant.

L. Public Services and Utilities

Climate Action Plan Mitigation: None Required.

Impact 4.L-3: Development facilitated by the General Plan Amendment and rezonings could potentially result in the need for construction of wastewater treatment facilities or exceed capacity available by the wastewater treatment provider which serves or may serve the residential development sites identified in the General Plan's Amendment and the rezonings. (Less than Significant)

Housing Element

The addition of new residential development on the potential sites for rezoning facilitated by the proposed Housing Element could increase wastewater levels and result in exceeding capacity or requiring new facilities. As discussed in the Water Element of the General Plan, the treatment facility operated by the Dublin-San Ramon Services District has an average dry-weather wastewater-flow capacity of 17 mgd of wastewater. The plant will plan to expand operations to 20.7 mgd after 2015, which is the year that flows are expected to be around the 17 mgd capacity. The City is currently entitled to half of the plants 17.0 mged capacity, which is 8.5 mgd. The City's average annual wastewater flow is approximately 6.0 mgd, and the 8.5 mgd capacity allocated to the City is sufficient to serve the City. Additionally, after the expansion to 20.7 mgd, the City will be allocated 10.3 mgd, which will accommodate future growth. Typically, multifamily residential development, as is proposed, discharges similar amounts of wastewater as commercial development discharges. As a result, the planned buildout of the proposed Housing Element would create a level of wastewater discharge that would have likely existed otherwise and would not exceed the 8.5 mgd capacity for wastewater allotted to the City (City of Pleasanton, 2009c). The current 8.5 mgd wastewater treatment capacity is sufficient to serve Pleasanton's planned build-out growth, and the planned expansion of the treatment plant after 2015 would further accommodate new growth (City of Pleasanton, 2009). As a result, new housing development facilitated by the proposed Housing Element on the potential sites for rezoning would not exceed the allocated capacity for the City and wastewater would be treated without the construction of new facilities.

In November of 1998, the City of Pleasanton approved Measure U, which allows the City to expand its capacity in the discharge system which is managed by the Livermore-Amador Valley Water Management Agency. Once completed, the expansion would allow for additional capacity and the total capacity of the wet weather export would be 41.2 mgd; however, the City would acquire an additional 6.9 mgd of this capacity. With an additional 6.9 mgd of capacity, the City's total wastewater wet-weather discharge capacity would be 14.4 mgd, which is sufficient to accommodate the planned buildout of the General Plan (City of Pleasanton, 2009c). As a result, the new housing development facilitated by the proposed Housing Element on the potential sites for rezoning would not exceed the allocated discharge capacity for the City's wastewater, and future residential development would be served without the construction of new facilities.

The City has planned its wastewater treatment contracts with the appropriate agencies to accommodate future needs of the general plans buildout and of new housing developments like those of the proposed Housing Element. Additionally, the proposed Housing Element includes policies to ensure that impacts to wastewater service remain less than significant.

These policies and programs include *Policy 36*, which strongly encourages residential infill to occur in areas where public facilities already exist or where these facilities could be made to adequately support such development. In addition, *Program 44.1*, which refers to the Water Element's Program 1.5, 1.7, 1.8, 1.12, 1.13 and 1.14, listed in Impact 4.L-2, above, provides guidelines to reduce wastewater discharge. With the inclusion of these policies and programs, impacts to wastewater treatment and discharge would be less than significant.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would impact wastewater treatment, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Additionally, the Draft CAP recommends numerous water conservation measures, which may result in reduced demand for water supplies, including potential groundwater supplies. The Draft CAP does not recommend any strategy or measure that would require construction of wastewater treatment facilities or exceed the current capacity for treatment by the waste treatment provider. Additional water supply that would be attained from groundwater supplies would not result in any future projects that would substantially interfere with groundwater recharge. Instead, strategies proposed include increasing or establishing the use of reclaimed and grey water systems, and conserving municipal operations water, which would reduce the amount of wastewater that would require treatment. Impacts would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.L-4: Development facilitated by the General Plan Amendment and rezonings could potentially be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs, or conflict with statues and regulations related to solid waste. (Less than Significant)

4. Environmental Setting, Impacts, and Mitigation Measures

L. Public Services and Utilities

Housing Element

The proposed Housing Element would introduce new housing units on the potential sites for rezoning, which would contribute to an increase in solid waste generation within the City of Pleasanton. New housing development facilitated by the proposed Housing Element on the potential sites for rezoning would introduce approximately 10,800 new residents. A typical resident would generate approximately four pounds of solid waste per day, on average. At this rate, it is expected that the proposed project would generate approximately 43,200 pounds of solid waste, or 21.6 tons of waste in a day, which would a minimal portion of the City's current waste generation discussed below.

The Vasco Landfill has an estimated remaining capacity of 9,870,704 cubic yards, which has sufficient capacity, at current disposal rates until 2037. In addition, not all of the solid waste generated on the potential sites for rezoning under the proposed Housing Element would be landfilled, as diversion programs operated pursuant to AB 939 would reduce the solid waste interred.

The City has a franchise agreement with Pleasanton Garbage Service (PSG) until 2019. This agreement gives PSG rights to collect and transport solid waste in the City. PSG maintains a contract for disposal with Browning Ferris Industries, a landfill operator for the Vasco Road Landfill in Livermore. In 2005, Pleasanton generated 240,900 tons of garbage, and the waste diversion rate was 49.74 percent. As part of Alameda County's goals for waste reduction, it is expected that the diversion rates will increase in future years (i.e., up to 75 percent by 2025) (City of Pleasanton, 2009b). As a result, in the coming years, the City plans to divert more of its waste and to contribute less to the landfill.

The new development facilitated by the proposed Housing Element on the potential sites for rezoning would be serviced by PSG, and the City would regulate diversion policies such as *Policy* 26 from the Public Services and Community Programs Element of the General Plan, which states that the City minimize solid waste materials and increase its diversion rate. As part of this policy, *Program 26.18* states that residential projects with more than three units implement a Project Waste Diversion Plan, which should include on-site disposal, composting and recycling facilities, and a plan for construction debris disposal and recycling. This plan would be reviewed and approved by the City as a part of the land entitlement process. With the incorporation of the above-mentioned policies and because the City would be served by PSG's existing operations, the proposed Housing Element would not conflict with regulations regarding solid waste; therefore, impacts to solid waste would be less than significant.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would impact landfill capacity, it could create indirect impacts

as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Additionally, the Draft CAP recommends numerous recycling measures, which may result in reduced solid waste, more of which can be diverted away from a landfill. The Draft CAP recommends increasing recycling, organics diversion, and waste reduction associated with the entire community. These strategies would reduce solid waste generated, and would increase waste that can be diverted away from the landfill. Impacts would be less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.L-5: Development facilitated by the General Plan Amendment and rezonings, in combination with other past, present, existing, approved, pending, and reasonably foreseeable future projects within and around Pleasanton, could potentially result in an increased demand for utilities services. (Less than Significant)

Cumulative development in the City of Pleasanton includes the residential development proposed under the proposed Housing Element on the potential sites for rezoning as well as any anticipated foreseeable development through the buildout of the General Plan. As a result, cumulative development could result in changes and additional density in Pleasanton which could result in greater needs for fire and police protection, schools, water supply, wastewater services, and solid waste generation. However, implementation of the land use policy provisions in the City's General Plan, individually project evaluations to ensure compliance and compatibility with the City's policies and programs, payment of development fees, and adherence to regulations discussed above would ensure that cumulative impacts to public service and utilities would be less than significant.

Feasible mitigation is already included in the General Plan's policies and programs, and the proposed Housing Element would not require any new mitigation measures.

Further, the Draft CAP recommends numerous water conservation, recycling, and energy efficiency measures which would reduce remand for utility services. The GHG reduction strategies would have a less than significant impact on public service and utilities and would have a beneficial impact on overall reductions in the city under the cumulative scenario.

Mitigation: None Required.

L. Public Services and Utilities

References—Public Services and Utilities

- California Department of Education, Dataquest: District and School Enrollment by Grade, 2010-2011 website: http://data1.cde.ca.gov/dataquest, accessed May 31, 2011.
- City of Pleasanton, Building and Safety Division, Building Permit and Development Fees website: http://www.ci.pleasanton.ca.us/pdf/bldg-fees-update.pdf, accessed May 31, 2011.
- City of Pleasanton, *General Plan 2005-2009, 5.Public Safety Element,* adopted July 21, 2009 (2009a).
- City of Pleasanton, *General Plan 2005-2009, 6.Public Facilities and Community Programs Element,* adopted July 21, 2009 (2009b).
- City of Pleasanton, General Plan 2005-2009, 8. Water Element, adopted July 21, 2009 (2009c).
- City of Pleasanton, *General Plan 2005-2009, 14. Subregional Planning* Element, adopted July 21, 2009 (2009d).
- City of Pleasanton, 2010 Urban Water Management Plan, available online at http://www.ci.pleasanton.ca.us/pdf/DraftUWMPV22Final5.pdf, accessed May 31, 2011.
- City of Pleasanton, Wastewater Collection System Master Plan, 2006.
- City of Pleasanton, 2011, *Housing Element Update, Draft Water Supply Assessment,* September 2011.
- Livermore-Pleasanton Fire Department (LPFD) 2011. *Fire Services Website*, available online at <u>http://www.ci.pleasanton.ca.us/services/fire/</u> accessed on May 31, 2011.
- Pleasanton Police Department (PD), 2010, *Annual Report*, available online at <u>http://www.ci.pleasanton.ca.us/pdf/police-2010annualreport.pdf</u> accessed on May 31, 2011.
- Pleasanton Unified School District, 2010, *Developer Fee Schedule*, adopted April 2010, available online at http://www.pleasanton.k12.ca.us/BusinessServices/Purchasing/Downloads/DevFee2010.pd f, accessed May 31, 2011.
- Pleasanton Unified School District, 2011, *Our Schools* website: http://www.pleasanton.k12.ca.us/OurSchools.cfm, accessed May 27, 2011.

4.M Recreation

This section describes existing recreational facilities within the city which would serve residential development facilitated by the proposed General Plan Amendment and rezoning, relevant policies pertaining to recreation, and analyzes potential adverse impacts to recreational facilities as a result of the proposed population growth due to development on the potential sites for rezoning.

With the exception of the potential sites being rezoned for residential uses, impacts on recreation resources within the City were previously addressed in the *City of Pleasanton General Plan* 2005-2025 *EIR* (City of Pleasanton, 2009a), which is hereby incorporated by reference in this SEIR. Therefore, for this SEIR, recreation in the City was reviewed with a particular focus on the recreational needs of population growth specifically from the potential sites for rezoning.

Setting

Regional Parks

The Tri-Valley Area is based around the cities of Pleasanton, Livermore, Dublin, San Ramon, and Danville, and the Town of Sunol, and is located approximately 18 miles southeast of Oakland and 30 miles from San Francisco. The Tri-Valley Area contains approximately 56,000 acres of regional open space and watershed lands. The East Bay Regional Parks District (EBRPD) owns and manages approximately 35,000 acres of this regional open space, including the Pleasanton Regional Park and the Shadow Cliffs Regional Recreation Area, both of which are located in Pleasanton (City of Pleasanton, 2009b).

The 4,084-acre Pleasanton Ridge Regional Park is located on the western side of Pleasanton. This park provides canyon and ridge-top views, and access to remote deep-canyon streams. A multi-purpose trail system within the park accommodates hikers, equestrians, and bicyclists. The 249-acre Shadow Cliffs Regional Park is located on the eastern edge of Pleasanton and includes Shadow Cliffs Lake that is open to swimmers and fishers. This park also includes a water slide, several picnic areas, and multi-use trails. (City of Pleasanton, 2009b).

Regional open space trails provide opportunities for walking, hiking, jogging, mountain biking, and horseback riding. The two regional parks described above include these types of multipurpose trails. Additionally, the City and the EBRPD provide a system of interconnecting trails that connect Pleasanton Ridge Park to other open spaces including the Augustin Bernal Park.

City Parks and Recreational Facilities

The City of Pleasanton's park system consists of 26 neighborhood parks, totaling approximately 133 acres, and 14 community parks, totaling approximately 209 acres (City of Pleasanton, 2009a). Community parks are intended for community-wide use, and feature a variety of amenities. A neighborhood park is intended to serve the immediate neighborhood but is open for use by the general public and has limited amenities. Many neighborhood parks are located within 0.5 mile of the residential neighborhoods they serve, which is a goal in the City's General Plan

(City of Pleasanton, 2011). This acreage does not include the Augustin Bernal Park, which is a community park located in the western portion of Pleasanton and on the Pleasanton Ridge. Augustin Bernal Park is comprised of 237 acres of open space with trails for hiking and picnic tables.

Other dedicated open spaces within the City include the Callippe Preserve Open Space, which includes a 280-acre golf course and 173 acres of open space used for cattle grazing. This 173 acre area is split into two unconnected parcels: (1) 112 acres to the north and west, and (2) 61 acres to the south. The northern open space area is accessible from Clubhouse Drive, and the southern open space which is closed to the public is visible from adjacent trails. The preserve also includes a 30 acre habitat for the endangered Callippe silverspot butterfly. The 41-acre Bonde Ranch Open Space is comprised of grass-covered hills and is also visible to recreationists from adjacent trails. The Gold Creek Open Space is open to the public, and offers 38 acres of open space with a paved parking lot, restrooms and a trailhead. The Mission Hills Open Space contains four acres of uncultivated grassland on the south side of Junipero Street, and provides pedestrian access for passive recreation (City of Pleasanton, 2009b). These larger open space areas total over 800 acres of undeveloped open space and there are approximately 24 miles of trails within Pleasanton for the community's enjoyment (City of Pleasanton, 2011). **Figure 4.M-1** illustrates the locations of the parks, open space and recreational facilities within the Planning Area in relation to the proposed housing sites.

Additional recreational facilities owned by the City include the Callippe Preserve Golf Course, the Dolores Bengtson Aquatic Center, and the Pleasanton Tennis and Community Park. The Callippe Preserve Golf Course consists of 18 holes, a club house, short-game practice area, 20stall driving range, and 280 acres of open space. The Dolores Bengtson Aquatic Center includes a 50-meter pool and bathhouse. The Pleasanton Tennis and Community Park include tennis, handball, and basketball facilities, along with a children's play area. A 3.75 acre BMX park includes dirt tracks for bicycling and motocross racing (City of Pleasanton, 2009a).

The national standard for parks per capita is five acres per 1,000 people, which the City has also adopted as their minimum standard for provision of neighborhood and community parks (see General Plan Program 10.18, below). Currently, the City is consistent with this standard and provides approximately five acres per population. The estimated population in 2010 was 70,711, and the City provides approximately 342 acres of community and neighborhood park space, which results in 4.8 acres per capita.



SOURCE: Park & Community Services, 2008; East Bay Regional Park Distirct; Pleasanton Parks & Community Services, 2006

 General Plan Amendment and Rezonings . 210016
 Figure 4.M-1
 Pleasanton Parks and Open Space with Proposed Housing Overlay

Regulatory Setting

This section briefly describes applicable regulatory programs applicable to the proposed General Plan Amendment and rezonings.

City of Pleasanton General Plan 2005-2025

The City's General Plan was adopted in 2009. Elements of this plan that are relevant to Recreation include the Public Facilities and Community Programs Element, and the Conservation and Open Space Element.

Public Facilities and Community Programs Element

The General Plan outlines a number of new parks and recreational facilities, and the planned expansion of existing facilities. These improvements include the 50-acre Bernal Community Park, which will include lighted sports fields for soccer, football and lacrosse, and will include parking. Additional planned facilities near the park include the development of a Cultural Arts Center with an amphitheater, art gallery, art studios, classrooms, community/teen center and a wetlands and agricultural area. Other planned facilities include a 17-acre Community Park in the Staples Ranch property, which would include football/lacrosse and baseball/softball fields, among other amenities. A planned 40-acre park would be sited on reclaimed quarry lands to the east side of Pleasanton; this park may include sports fields or serve as a gateway to the chain of lakes in the area.

The following goals, policies and programs contained in the Public Facilities and Community Programs Element relate to recreational uses within the Planning Area.

Goal 6:	Achieve a complete park and recreation system featuring a wide variety of opportunities to serve the public need.
Policy 10:	Provide sufficient parkland and recreational activities to accommodate existing and future needs of residents, workers and visitors.
Program 10.1:	Acquire all park lands shown on the General Plan Map and retain them for permanent public open space through the City's Park Dedication Ordinance and other means.
Program 10.2:	Encourage developers to dedicate public park acreage in areas designated for park use on the General Plan Map rather than contribute in-lieu fees.
Program 10.3:	Disperse neighborhood and community parks throughout the city and combine them with areas of natural, scenic, or cultural resources.
Program 10.4:	Provide a wide variety of active and passive recreational facilities to accommodate the needs of all ages in a diverse and inclusive community.

Conduct periodic public surveys to ascertain the park and recreational needs of the community.

- Program 10.5: Develop neighborhood, community, and regional parks in accordance with the General-Plan goals and the land-use diagram.
- Program 10.6: Provide additional lighted facilities in appropriate park locations to accommodate the community's nighttime recreational needs. Potential new sites include the Bernal Property, Staples Ranch Community Park or another community park.
- Program 10.7: Provide community parks with adequate parking facilities to the greatest extent possible.
- Program 10.8: Locate parks within one-half mile of the residential area they serve. To the greatest extent possible, such parks should not be separated from the neighborhood they serve by major arterials, commercial centers, and topographical or other features which create a direct or perceived physical barrier to the park.
- Program 10.10: Continue the policy of not charging access fees for use of City parks.
- Program 10.11: Support non-traditional recreational opportunities such as designated dog exercise areas in new or existing parks.
- Program 10.12: Encourage the establishment of an environmental learning center at Alviso Adobe Community Park, and investigate opportunities for jointly establishing a center with other agencies.
- Program 10.13: Encourage the establishment of recreational opportunities for business park employees in conjunction with the development of business parks.
- Program 10.14: Continue to support non-traditional sports which serve the public need and investigate opportunities to provide facilities for them (non-traditional sports might include skateboarding, roller-blading, rock-climbing, BMX, racquetball, sports facilities for the disabled, etc.).
- Program 10.15: Explore the construction of additional indoor recreation facilities.
- Program 10.16: Undertake a study of recreational needs for teens.
- Program 10.17: Continue to use the Alameda County Fairgrounds for recreational and cultural activities.
- Program 10.18: Maintain at least the standard of 5 acres of neighborhood or community parks per 1,000 people.
- Program 10.19: Design Community Parks to better integrate active recreation, leisure recreation, and open space in ways that will be more functional for all three uses.

Program 10.20:	Design sports fields in ways that will maximize flexibility and that will allow sports fields to evolve over time to meet the changing sports needs of the community.
Program 10.21:	Promote youth access to, and enjoyment of, the Callippe Preserve Golf Course.
Program 10.22:	Provide trails, bike routes or pedestrian walkways to connect the parks and recreational facilities throughout Pleasanton.

Conservation and Open Space Element

The following goals, policies and programs contained in the Conservation and Open Space Element aim to protect and enhance open space and recreational facilities and recreational uses within the Planning Area.

Goal 6:	Achieve an extensive open-space system featuring a wide variety of opportunities to serve the diverse needs of the public.
Policy 7:	Preserve and expand open-space opportunities, including open-space access to the public.
Program 7.1:	Support expansion of the East Bay Regional Park District's Pleasanton Ridge Park in areas designated as Open Space.
Program 7.2:	Work cooperatively with Alameda County, the City of Hayward, and the East Bay Regional Park District to retain Pleasanton Ridge as permanent open-space lands.
Program 7.3:	Encourage public accessibility to appropriate public open-space land or in private open-space land that could accommodate public-access open-space trails.
Program 7.4:	Provide adequate parking and staging areas for open space access and include facilities such as picnic areas, restrooms, and potable water.
Goal 7:	Promote expansion and maintenance of a trail system that serves Pleasanton's diverse population while respecting and protecting the integrity of its natural and cultural resources.
Policy 9:	Promote the development of a comprehensive system of pedestrians, bicycle, equestrian, and hiking trails throughout open-space lands, including arroyos, canals, in the Planning Area.
Program 9.1:	Light only those trails in natural areas that provide a reasonable alternative to transportation, or important links, between residential areas, parks, and commercial centers, as long as such lighting does not intrude upon environmentally sensitive areas or impact nearby residents.

- Program 9.2: Require developers to dedicate public-access easements for trails in private open-space areas, where feasible.
- Program 9.3: Continue to coordinate with Livermore, Dublin, Sunol, and the East Bay Regional Park District to develop trails linking recreation and open-space areas.
- Program 9.4: Implement the 2002 Community Trails Master Plan Update.
- Program 9.5: Retain all publicly-owned corridors abandoned rail lines, utility corridors, water courses and canals, and other easements for future (non-exclusive) open space and trail use.
- Program 9.6: Continue to provide different trail types for a variety of users: hikers, walkers, joggers, cyclists, and equestrians.
- Program 9.7: Protect, improve, develop, and maintain recreation and open-space trails and their related facilities.

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist) the proposed Housing Element could have a significant impact if it would:

- 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; and/or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment.

Approach to Analysis

This analysis is based on a review of web-based information about the City of Pleasanton's parks and recreational facilities, and the region's recreational offerings. Additionally, policies and programs contained in the City of Pleasanton's General Plan 2005-2025 were reviewed for project applicability. Potential recreation impacts associated with the proposed Housing Element are evaluated based on the proximity of potential residential development to designated recreational facilities and the Housing Element's potential contribution to demand for future facilities.

Impacts and Mitigation Measures

Impact 4.M-1: Development facilitated by the General Plan Amendment and rezonings could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. (Less than Significant)

Housing Element

In order to meet the State mandated goals, the City has identified potential sites for rezoning that could accommodate a total of approximately 3,285 housing units (see Chapter 3, Project Description), which would result in the addition of up to approximately 9,165 residents to the City's existing population. This additional population would result in increased demand for parks and recreational facilities.

The City conducted an analysis of the suitability of the various proposed housing sites to identify locations that would meet certain criteria (see Chapter 3, Project Description), including placement of housing near neighborhood conveniences to enhance livability. These neighborhood conveniences include parks, recreational facilities and open space. The locations of potential sites for rezoning in relation to existing parks and recreational facilities are shown in **Figure 4.M-1**. As shown in Figure 4.M-1, the majority of the proposed sites are within 0.5 mile of a neighborhood or community park, which provides greater accessibility and is a goal of the General Plan as mentioned in Program 10.8, above.

Pleasanton's estimated population in 2010 was 70,711 and currently the City provides approximately 342 acres of community and neighborhood park space, which is a ratio of 4.8 acres of parks per 1,000 people. With the addition of up to 9,165 residents from the proposed Housing Element, the total population at full build-out would be approximately 79,900. With this growth, the City would only be able to offer 4.3 acres per 1,000 people and would be below its goal of five acres per 1,000 people.

However, as outlined in the General Plan's Public Facilities and Community Programs Element, the City plans to build approximately 131 acres of new community parks in Pleasanton by 2025. These include the new 6-acre Alviso Adobe Park, which provides an interpretive center and restored adobe; and the planned Bernal Community Park, which would be 50 acres and would include lighted sports fields for soccer, football and lacrosse, and parking. The planned 38-acre East Pleasanton Park would be located on reclaimed quarry land on the east side of the City and may include sports fields or serve as a gateway to the chain of lakes in the area. The Staples Ranch Community Park could also offer 17 acres of park amenities; and the planned Vineyard Avenue Community Park would encompass 20 acres.

With the addition of 131 acres of new community parks, the City will be able to offer 473 acres of neighborhood and community parks. With the planned build-out of the proposed Housing Element and an estimated population of 79,900, the City would be able to offer 5.9 acres of neighborhood and community parks per capita and be consistent with their goal of five acres per capita. Larger parks and open spaces such as the Augustin Bernal Park, Callippe Preserve Open

Space, Bonde Ranch Open Space, and Gold Creek Open Space, are not included in the park space per capita calculation but provide valuable recreational opportunities to residents, visitors and the neighboring communities and should be considered when determining impacts to recreational facilities. Additionally, as shown in Figure 4.M-1, development facilitated by the proposed Housing Element, specifically on the potential sites for rezoning would be located throughout the city and would not overburden any one area's recreational facilities.

The addition of 131 acres of new parks and recreational facilities along with the City's current 342 acres of community and neighborhood parks, and with the City's 800 acres of undeveloped open space and 24 miles of trails, the City has ample capacity to accommodate for new recreational users from housing developments. The addition of up to 3,900 housing units facilitated by the proposed Housing Element on the potential sites for rezoning would not substantially deteriorate recreational facilities nor would it create a significant impact on these facilities. Therefore, impacts to recreational facilities associated with the proposed Housing Element would be less than significant.

Climate Action Plan

The Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, and thus would not increase use of existing parks or recreational facilities. As the Draft CAP proposes to achieve GHG emission reductions by encouraging or requiring applicants to use recycled and sustainable building materials, landscape with water conservation in mind, and retrofit older buildings to be energy efficient, implementation of the plan would tend to maintain the less than significant impact on recreational resources. One of the strategies proposed in the CAP to reduce GHGs is to create and maintain a safe, convenient, and effective system for pedestrians and bicyclists, which would enhance recreational opportunities in the City. Additionally, Recreation policies adopted as part of the General Plan would continue to apply.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would increase the use of recreational facilities, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Impact 4.M-2: Development facilitated by the General Plan Amendment or rezonings could potentially include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. (Less than Significant)

Housing Element

As discussed in Impact 4.M-1, above, the addition of up to 3,900 housing units could bring the population of Pleasanton to 79,900. The City's existing neighborhood and community parks offer 342 acres of parks which results in 4.8 acres of parks per 1,000 people. With full build-out of the proposed Housing Element and the estimated increase in population, the park offering would be reduced to 4.2 acres of parks per 1,000 people.

However, the City's General Plan outlines plans to build approximately 131 acres of new community parks in Pleasanton by 2025. The addition of these parks would beautify and enhance Pleasanton and meet the goals of the General Plan by providing recreation opportunities. With the addition of 131 acres of parks and upon full build-out, the City would be able to offer 5.9 acres of parks per 1,000 people.

As a result, the proposed Housing Element would not include the construction of recreational facilities, as future park development has been planned for and accounted for in the General Plan and the impacts of this development have been analyzed in the General Plan EIR. Therefore, adverse physical impacts associated with new parks and recreational facilities would be less than significant.

Climate Action Plan

As discussed in Impact 4.M-1, above, the Draft CAP proposes strategies and measures that would aid in reducing the City's GHG emissions, and, thus, would not increase use of existing parks or recreational facilities. One of the strategies proposed in the Draft CAP to reduce GHGs is to create and maintain a safe, convenient, and effective system for pedestrians and bicyclists, which would enhance recreational opportunities in the City. Additionally, Recreation policies adopted as part of the General Plan would continue to apply.

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the CAP would not directly lead to development that would require new recreation facilities, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Impact 4.M-3: Development facilitated by the General Plan Amendment or rezonings, in combination with other past, present, existing, approved, pending, and reasonably foreseeable future projects within and around Pleasanton, could potentially result in an increased demand for recreational facilities. (Less than Significant)

Housing Element

The Tri-Valley area is rich with regional parks and recreational facilities. The EBRPD owns and operates these regional facilities and ensures that the recreational needs of the region are met. The Tri-Valley Area contains approximately 56,000 acres of regional open space and watershed lands. The EBRPD owns and manages approximately 35,000 acres of this regional open space, including the Pleasanton Regional Park and the Shadow Cliffs Regional Recreation Area, which are both located in Pleasanton. Many of these regional parks include multi-purpose trails available for walking, hiking, jogging, mountain biking and horseback riding. The deterioration of recreational facilities as a result of related housing projects would be unlikely given the ample acres of recreational facilities in the region, and that the projected population is consistent with the regional Association of Bay Area Government's population projections for the City, which have been accounted for in the planning of parks and recreational space. Therefore, cumulative impacts to recreational facilities would be less than significant.

Climate Action Plan

The Draft CAP does not result in any new development potential or construction of facilities that would be impacted by these conditions beyond what the GP EIR considered. Implementation of policies and programs under the Draft CAP would not increase demand for recreational facilities. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezonings proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would impact recreational facilities, it could create indirect impacts resulting from the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. These impacts are less than significant.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

References—Recreation

City of Pleasanton, *General Plan 2005-2009, 6.Public Facilities and Community Programs Element,* adopted July 21, 2009 (2009a).

City of Pleasanton, *General Plan 2005-2009, 7. Conservation and Open Space Element,* adopted July 21, 2009 (2009b).

City of Pleasanton, Parks and Trails website:

http://www.ci.pleasanton.ca.us/services/recreation/parks-and-trails.html, accessed on May 24, 2011.

4.N Transportation and Traffic

This section describes transportation and circulation conditions in the City and assesses the proposed General Plan Amendment and rezonings proposed by the Housing Element and upon which the Climate Action Plan relies in terms of whether it would (1) conflict with adopted policies or programs supporting alternative transportation (e.g., pedestrian, bicycles, and public transit travel modes), (2) cause an increase in traffic that is substantial in relation to background traffic load and capacity (i.e., increase congestion and delay at intersections), (3) exceed level of service standards established by the City of Pleasanton, (4) substantially increase traffic safety hazards, or (5) result in inadequate emergency access. Both short-term and long-term project effects are analyzed to determine their significance under CEQA. For project impacts that are determined to be significant, mitigation measures have been identified to avoid or reduce those impacts.

This section summarizes potential impacts relating to traffic and circulation as reported in the traffic analyses prepared by Fehr & Peers Transportation Consultants for both the proposed Housing Element and Climate Action Plan. Both are included in their entirety in **Appendix D**.

Setting

Regional Roadways

Two interstate freeways and one state route serve Pleasanton and its Planning Area.

Interstate 580 (I-580) is a multilane freeway that runs in an east-west direction from Interstate 5 near Tracy to beyond a convergence point with Interstate 80 in Emeryville. A high-occupancy vehicle (HOV) lane exists in the eastbound direction from Hacienda Drive to the base of the Altamont to the east of Livermore.

Interstate 680 (I-680) is a multilane freeway that runs in a north-south direction from Interstate 80 near Fairfield to Interstate 280 in San Jose. The I-580/I-680 interchange is located in northwestern Pleasanton (see Figure 3-1 in the *General Plan Circulation Element*).

State Route 84 (SR 84) is a two-lane roadway that runs from I-580 in Livermore to I-680 in Sunol and continues across the Dumbarton Bridge on to SR 1 near San Gregorio.

Local Roadways

Seven arterials in the Planning Area provide access to the freeway system via an interchange. These arterial interchanges include:

- Bernal Avenue (Signalized)
- Foothill Road (Unsignalized))
- Hacienda Drive (Signalized)
- Hopyard Road (Signalized)
- Santa Rita Road (Signalized)

- Stoneridge Drive (Signalized)
- Sunol Boulevard (Unsignalized)

In the *Circulation Element* of City of Pleasanton's General Plan 2005-2025, Table 3-1 lists and Figure 3-2 shows the locations of all signalized and future signalized intersections. In addition to the interchanges, access to and from the City's transportation network can be gained from arterials providing a system with multiple and distributed access points.

As required by the Alameda County Congestion Management Authority's guidelines for the Congestion Management Program (CMP), an analysis of freeway and arterial segment levels of service was prepared. The CMP designated the 40 freeway and arterial segments presented in Table 3.2-1 of the City of Pleasanton *General Plan Draft Environmental Impact Report*, as part of the CMP network.

Existing Traffic Conditions

Level of Service Analysis Methodologies

The operation of a local roadway network is commonly measured and described using a grading system called Level of Service (LOS). The LOS grading system qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long delays). This LOS grading system applies to both roadway segments and intersections. The City of Pleasanton has established LOS D as the generally acceptable service level standard at most intersections throughout their jurisdictions. Level of service standards are exempt for intersections located in the Downtown Area and at gateway intersections. These intersections may have a LOS worse than LOS D if no reasonable mitigation exists or if the necessary mitigation conflicts with other City goals and policies.

At signalized intersections, traffic conditions are evaluated using the 2000 *Highway Capacity Manual* operations methodology (TRB, 2000). The operation analysis uses various intersection characteristics (e.g., traffic volumes, lane geometry, and signal phasing/timing) to estimate the average control delay experienced by motorists traveling through an intersection.¹ **Table 4.N-1** summarizes the relationship between control delay and LOS.

Existing Traffic Volumes and Intersection Levels of Service

Intersection operations at 33 study intersections were evaluated during weekday a.m. and p.m. peak traffic hours. Peak conditions on weekdays usually occur during the morning and evening commute hours from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., respectively. The location of study intersections is presented in **Figure 4.N-1** and include:

¹ Control delay, which is the portion of total delay attributed to traffic signal operation for signalized intersections, includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The use of control delay as the basis for defining LOS differs from earlier versions of the Highway Capacity Manual methodology, which used "stopped delay" (i.e., a portion of the total control delay) to define LOS.

Level of Service	Average Control Delay Per Vehicle (Seconds)	Description
A	≤ 10.0	Operations with very low delay occurring with favorable progression and/or short cycle length.
В	10.1 to 20.0	Operations with low delay occurring with good progression and/or short cycle lengths.
С	20.1 to 35.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D	35.1 to 55.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E	55.1 to 80.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.
F	> 80.0	Operations with delays unacceptable to most drivers occurring due to over- saturation, poor progression, or very long cycle lengths.

TABLE 4.N-1 SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

SOURCE: Transportation Research Board, Special Report 209, Highway Capacity Manual, updated 2000.

Figure 4.N-1 Study Intersection Locations

- 1. Foothill Road / Dublin Canyon Road
- 2. Owens Drive / Willow Road
- 3. Owens Drive / East BART Station Driveway
- 4. Hacienda Drive / Owens Drive
- 5. Santa Rita Road / Rosewood Drive
- 6. Santa Rita Road / Pimlico Drive
- 7. Foothill Road / Stoneridge Drive
- 8. Stoneridge Drive / Springdale Avenue
- 9. Stoneridge Drive / Stoneridge Mall Road
- 10. Stoneridge Drive / Johnson Drive
- 11. Stoneridge Drive / Hopyard Road
- 12. Stoneridge Drive / Hacienda Drive
- 13. Owens Drive / West Las Positas Boulevard
- 14. West Las Positas Boulevard / Santa Rita Road
- 15. Foothill Road / West Las Positas Boulevard
- 16. West Las Positas Boulevard / Hopyard Road
- 17. West Las Positas Boulevard / Hacienda Drive

- 18. Stoneridge Drive / West Las Positas Boulevard
- 19. Stoneridge Drive / Santa Rita Road
- 20. Santa Rita Road / Mohr Avenue
- 21. Santa Rita Road / Valley Avenue
- 22. Valley Avenue / Busch Road
- 23. Bernal Avenue / I-680 NB Ramps
- 24. Koll Center Drive / Bernal Avenue
- 25. Bernal Avenue / Valley Avenue
- 26. Stanley Boulevard / Santa Rita Road
- 27. Stanley Boulevard / First Street
- 28. Stanley Boulevard at Bernal Avenue / Valley Avenue
- 29. Bernal Avenue / Vineyard Drive (N)
- 30. Bernal Avenue / Vineyard Drive (S)
- 31. Junipero Street / Sunol Boulevard
- 32. Stoneridge Drive / El Charro Road
- 33. Stanley Boulevard / El Charro Road

The intersections indicated in **BOLD** text above are identified as gateway intersections in the *General Plan* and are exempt from the LOS D standard if all feasible improvements have been implemented. The existing peak hour intersection volumes are presented in **Figure 4.N-2** and the existing lane configurations are shown on **Figure 4.N-3**. All the study intersections included in this assessment currently operate at acceptable service levels during both peak hours.





N. Transportation and Traffic

Existing Intersection Levels of Service

Results of the existing conditions level of service analysis at the 33 study intersections during the a.m. and p.m. peak hours are summarized **Table 4.N-2**. As shown in Table 4.N-2, the study intersections operate at acceptable levels of service during both peak hours under existing conditions.

Metropolitan Transportation System (MTS) Roadway System

An assessment of potential impacts to the Metropolitan Transportation System (MTS), which includes freeways and roadways designated by the Alameda County Transportation Commission (ACTC) is also provided. MTS routes have been declared "regionally significant" and the Metropolitan Planning Commission (MTC) provides funding for these regionally important streets, roads, and highways through the adopted Regional Transportation Plan (RTP). The MTS freeway and roadways have been adopted into the Alameda County Congestion Management Program (CMP) network. The CMP network consists of all freeways, state highways, and principle arterials within Alameda County that are regulated and monitored by ACTC to evaluate transportation and land use implications and identify congestion management implications of proposed transportation projects.

The LOS standard for CMP facilities is LOS E, except where LOS F was the LOS when originally measured in the CMP in 1991 for specific routes. None of the study freeway and arterial segments were measured at LOS F in 1991; therefore, the LOS significance threshold of LOS E is applicable to both MTS and CMP routes within the study area (ACCMA, 2009). MTS and CMP freeway and arterial segments in Pleasanton were included in this analysis:

- I-580 (7 segments)
- I-680 (4 segments)
- SR 84/Isabel Avenue/Kitty Hawk Road (5 segments)
- Foothill Boulevard (4 segments)
- Stoneridge Drive (8 segments)
- W. Las Positas Road (5 segments)

Operations of the MTS freeway and surface street segments were assessed based on volume-tocapacity (V/C) ratios. For freeway segments, a per-lane capacity of 1,950 vehicles per hour was used. This capacity is consistent with capacities assumed for the ACTC analysis presented in the City of Pleasanton *General Plan Update*. For arterial roadways, a per-lane capacity of 900 vehicles per hour was used. Roadway segments with a V/C ratio greater than 1.0 are assigned LOS F.

Alternative Transportation Modes

Figure 3-12 in the *Circulation Element* shows existing public transit service in the Planning Area. Bay Area Rapid Transit (BART), Altamont Commuter Express (ACE) trains, Livermore Amador Valley Transit Authority (LAVTA) Bus Rapid Transit service and BART express bus service (including The County Connection in Contra Costa County between the Walnut Creek BART

		Traffic Control	LOS Standard	AM Peak Hour		PM Peak Hour	
NO.	Intersection			Delay	LOS	Delay	LOS
1	Foothill Road / Dublin Canyon Road ²	Signal	D	21	С	30	С
2	Owens Dr / Willow Rd / BART	Signal	D	16	В	16	В
3	Owens Dr / East BART Station Drwy	Signal	D	6	А	9	А
4	Foothill Rd/Dublin Canyon Rd	Signal	D	16	В	29	С
5	Santa Rita Rd / Rosewood Dr	Signal	D	9	А	17	В
6	Santa Rita Rd / Pimlico Dr ²	Signal	E	21	С	26	С
7	Foothill Rd / Stoneridge Dr	Signal	D	19	В	19	В
8	Stoneridge Dr / Springdale Ave	Signal	D	17	В	25	С
9	Stoneridge Dr / Stoneridge Mall Rd	Signal	D	7	А	27	С
10	Stoneridge Dr / Johnson Dr ²	Signal	E	11	В	16	В
11	Stoneridge Dr / Hopyard Rd	Signal	D	25	С	36	D
12	Stoneridge Dr / Hacienda Dr	Signal	D	23	С	23	С
13	Owens Dr / W Las Positas Blvd	Signal	D	10	А	13	В
14	W Las Positas Blvd / Santa Rita Rd	Signal	D	24	С	23	С
15	Foothill Rd / W Las Positas Blvd	Signal	D	14	В	11	В
16	W Las Positas Blvd / Hopyard Rd	Signal	D	24	С	37	D
17	W Las Positas Blvd / Hacienda Dr	Signal	D	15	В	14	В
18	Stoneridge Dr / W Las Positas Blvd	Signal	D	21	С	24	С
19	Stoneridge Dr / Santa Rita Rd	Signal	D	29	С	28	С
20	Santa Rita Rd / Mohr Ave	Signal	D	16	В	15	В
21	Santa Rita Rd / Valley Ave	Signal	D	35	С	44	D
22	Valley Ave / Busch Rd	Signal	D	11	В	7	А
23	Bernal Ave / I-680 NB Ramps ²	Signal	E	21	С	12	В
24	Koll Center Dr / Bernal Ave	Signal	D	6	А	3	А
25	Bernal Ave / Valley Ave ²	Signal	E	29	С	22	С
26	Stanley Blvd / Santa Rita Rd	Signal	D	16	В	22	С
27	Stanley Blvd / First St	Signal	D	16	В	13	В
28	Stanley Blvd at Bernal Ave / Valley Ave	Signal	D	48	D	46	D
29	Bernal Ave / Vineyard Dr (N)	Signal	D	15	В	11	В
30	Bernal Ave / Vineyard Dr (S)	Signal	D	16	В	9	А
31	Junipero St / Sunol Blvd	Signal	D	29	С	21	С
32	Stoneridge Dr / El Charro Rd	Does Not Exist					
33	Stanley Blvd / El Charro Rd ²	Does Not Exist					

TABLE 4.N-2 EXISTING INTERSECTION LEVELS OF SERVICE (LOS)¹

Notes: 1. Based on intersection turning movement volumes and intersection geometries provided to Fehr & Peers by City of Pleasanton. 2. Indicates gateway intersection, potentially exempt from the LOS D standard.

Bold indicates unacceptable LOS.

SOURCE: Fehr and Peers Associates (2011)

N. Transportation and Traffic

Station and the Pleasanton/Dublin BART station) provide the Planning Area with regional transit options. Local transit service in the Planning Area and the Tri-Valley generally consists of the LAVTA's "WHEELS". The City also actively promotes programs to encourage bicycle, pedestrian and carpool traffic.

Rail Service

Bay Area Rapid Transit. The Bay Area Rapid Transit (BART) line extends from San Francisco through Oakland to San Leandro and along I-580 to Castro Valley, Dublin, and Pleasanton. Stations on this BART route exist in Castro Valley, adjacent to Stoneridge Mall, and within Hacienda Business Park. The BART long-range plan includes extension of fixed-rail service to Livermore.

Altamont Commuter Express Train. The Altamont Commuter Express (ACE) provides regional rail service from Stockton to San Jose with Tri-Valley stops in both Livermore and Pleasanton. In 1998, service started with two westbound morning trains and two eastbound evening trains. In 2001, ACE added a third commute train. Currently average daily ridership totals about 3,000 passengers. At the Pleasanton Station, an average of 167 people board ACE trains in the morning while 215 people alight. In the evening approximately 185 people board the trains while 137 people alight. Measure B helps fund ACE service operations in Alameda County. The Pleasanton ACE Station is located along Pleasanton Avenue, between Angela Street and Bernal Avenue, and across the street from the Alameda County Fairgrounds. Union Pacific Railroad. Rail service along the Union Pacific tracks is used for transporting freight as well as ACE Train service. Current freight rail usage of the track is about 12 trains per day.

The Metropolitan Transportation Commission, Caltrans, BART, and Caltrain have updated and initiated the *Bay Area Regional Rail Plan* (2007). This Plan examined future design of the regional rail system within the nine Bay Area counties. In addition, the Plan identified opportunities to expand existing facilities such as BART, Caltrain, and ACE, as well as incorporate plans for a new high speed rail system into the existing regional rail network.

Bus Transit Service

Livermore Amador Valley Transit (Wheels). Wheels provides public bus service for the Tri-Valley communities of Pleasanton, Dublin, and Livermore. The buses serve neighborhoods, businesses, and schools as well as regional connections via BART and ACE.

The Livermore Amador Valley Transit Authority recently added a new Route 10 Bus Rapid Transit project (RAPID) along its existing Route 10. Route 10 runs from the Pleasanton/Dublin BART station to the Lawrence Livermore and Sandia National Laboratories. The RAPID service reduces commute times along this line.

Paratransit. The City of Pleasanton currently maintains a Dial-A-Bus (paratransit) service for senior and disabled residents on weekdays, providing about 60 percent of the program's operating budget. The City Department of Parks and Community Services provides drivers who operate the bus service on a regular schedule during weekday hours and by appointment during evenings and

weekends. Wheels supplements this paratransit service with weekend and extended-hour weekday service.

Regional Transit. Several regional transit companies and private shuttles also serve the Planning Area. The County Connection in Contra Costa County (CCCTA) provides BART express bus service between the Walnut Creek BART Station and the Pleasanton/Dublin BART station. The San Joaquin Regional Transit District (RTD) provides bus service from the San Joaquin Valley to the Hacienda Business Park with separate service to the BART station. The Modesto Area Express (MAX) provides bus service between Modesto and the Pleasanton/Dublin BART station as well as between Modesto and the Lathrop/Manteca ACE train station. Several companies provide private shuttles to/from Pleasanton for their employees, while numerous taxi companies operate in the Planning Area.

Pedestrian and Bicycle Facilities

The City of Pleasanton's *Community Trails Master Plan* provides general direction as to the proposed location of pedestrian and bicycle recreational facilities. In January of 2010 the City adopted a Pedestrian and Bicycle Master Plan to explicitly address on-street facilities that complements and expands on the existing Community Trails Master Plan. See Figure 3-13 in the *Circulation Element* of the General Plan for existing and proposed pedestrian and bicycle trails and paths. The pedestrian and bicycle master plan prioritizes projects, establishes new standards for bicycle and pedestrian facilities, and will be incorporated into the Alameda Countywide Bicycle Plan and the Alameda Countywide Strategic Pedestrian Plan. This master plan identifies projects and funding priorities for both local and regional facilities. Pleasanton currently has a network of bicycle paths serving many parts of the City. It is the City's intent to provide additional bicycle paths and lanes, where sufficient right-of-way and funding exists, at the time new roadways are constructed or improved.

Transportation corridors also exist along the former Southern Pacific Railroad right-of-way, which extends from Concord to Pleasanton and from Fremont to Tracy. The City of Pleasanton has purchased a portion of this transportation corridor from Alameda County, extending from Bernal Avenue to Ray Street. Parking, landscaping, and a pedestrian and bike trail are planned for this portion of the corridor.

Regulatory Setting

This section identifies the policies related to the physical environment and that pertain to the project's potential effects to traffic and transportation.

California Department of Transportation (Caltrans)

Caltrans has authority over the state highway system, including mainline facilities and interchanges. Caltrans must be involved in and approve the planning and design of all improvements involving state highway facilities. State highway facilities in the city include I-680, I-580, and State Route 84.

N. Transportation and Traffic

Metropolitan Transportation Commission and the Association of Bay Area Governments

The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) jointly develop land use projections that are critical inputs into travel demand models that are utilized in this SEIR analysis. The Alameda County Transportation Commission (ACTC) oversees the Congestion Management Program (CMP). This program analysis focuses on the Metropolitan Transportation System and Congestion Management Program highway segments and transit corridors, but does not extend to intersections. The ACTC also has jurisdiction over public transit funding in the county where bus service includes several local and intercity routes in the Planning Area.

Local Plans and Policies

City of Pleasanton General Plan

The *Circulation Element*, of the Pleasanton General Plan 2005-2025 establishes the following policies and programs for maintaining and managing the City's transportation network:

Goal 1:	Develop a safe, convenient and uncongested circulation system.				
Goal 2:	Develop and manage a local and regional street and highway system which accommodates future growth while maintaining acceptable levels of service.				
Policy 1:	Complete the City's street and highway system in accordance with the General Plan Map, Figures 3-7 and 3-10, and Table 3-8.				
Policy 2:	Phase development and roadway improvements so that levels of service at adjacent major intersections do not exceed LOS D at major intersections outside Downtown and gateway intersections, except as noted below. ²				
Policy 3:	Facilitate the free flow of vehicular traffic on major arterials.				
Policy 4:	In the Downtown, facilitate the flow of traffic and access to Downtown businesses and activities consistent with maintaining a pedestrian-friendly environment.				
Policy 5:	At gateway intersections, facilitate the flow of traffic and access into and out of the City, consistent with maintaining visual character, landscaping, and pedestrian convenience.				
Policy 6:	Design and regulate city streets to minimize traffic-related impacts on adjacent land uses.				
Policy 7:	Adhere to City design standards for streets in new developments.				
Policy 8:	Maximize traffic safety for automobile, transit, bicycle users, and pedestrians.				

² Major intersections are those intersections of two or more arterials or one arterial and one collector street. Gateway intersections are intersections located at the edges of the city.

Policy 9:	Work with other local jurisdictions and regional agencies such as the Metropolitan Transportation Commission (MTC), Alameda County Congestion Management Agency (ACCMA), Alameda County Transportation Improvement Authority (ACTIA), and Tri-Valley Transportation Council to plan and coordinate regional transportation improvements.
Goal 3:	Protect residential neighborhood quality-of-life and community character from cut-through traffic, speeding, and nonresidential parking.
Policy 11:	Manage arterial and collector traffic to minimize adverse impacts on neighborhoods.
Policy 12:	Discourage encroachment of non-residential parking in existing neighborhoods.
Goal 4:	Provide a multi-modal transportation system which creates alternatives to the single-occupancy automobile.
Policy 13:	Phase transit improvements to meet the demand for existing and future development.
Policy 14:	Encourage coordination and integration of Tri-Valley transit to create a seamless transportation system.
Policy 15:	Reduce the total number of average daily traffic trips throughout the city.
Policy 16:	Reduce the percentage of average daily traffic trips taken during peak hours.
Policy 17:	Support the continued and expanded operation of the Livermore Amador Valley Transit Authority (LAVTA).
Policy 18:	Encourage the extension of BART from Pleasanton to Livermore and beyond.
Policy 19:	Support the continued and expanded service of the Altamont Commuter Express.
Policy 20:	Support paratransit services to elderly and disabled residents of Pleasanton.
Policy 21:	Support the use of alternative fuel vehicles.
Policy 22:	Create and maintain a safe, convenient, and effective bicycle system which encourages increased bicycle use.
Policy 23:	Create and maintain a safe and convenient pedestrian system which encourages walking as an alternative to driving.
Policy 24:	In cooperation with the Pleasanton Unified School District, explore ways to reduce automobile traffic related to schools.

N. Transportation and Traffic

Impacts and Mitigation Measures

Significance Criteria

Consistent with CEQA *Guidelines* Appendix G (Environmental Checklist), the Project could have a significant impact if it would:

- 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, 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);
- Conflict with an applicable congestion management program (CMP), including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards 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 locations 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; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Level of Service E is considered acceptable on the Alameda County Metropolitan Transportation System. Impacts to the Alameda County Metropolitan Transportation System were evaluated against the following criteria:

• The project would cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or would increase the V/C ratio by more than 0.03³ for a roadway segment that would operate at LOS F without the project.

Methodology and Future Traffic Modeling

Level of Service

The City of Pleasanton has standards for acceptable levels of traffic congestion within the city. The addition of project traffic to the local roadway network may result in intersections not satisfying the City's LOS standards. When this happens, various measures are required to mitigate project traffic, including the installation of traffic signals; roadway improvements such as street widening or turn lanes; travel demand management strategies such as ridesharing

³ Note that the ACTC does not have a policy for determining a threshold of significance for LOS for the Land Use Analysis Program of the CMP. This threshold used to be consistent with the MTS analysis presented in the General Plan Update EIR.

(carpools and vanpools), bicycling, walking, public transit, and flexible working hours; or limiting the density or type of land uses.

Under the existing General Plan, intersections located in the downtown area and at gateway intersections are currently exempt from operating at LOS D or better. Traffic at these intersections may exceed the LOS D standard if no reasonable mitigation exists or if the necessary mitigation is contrary to other goals and policies of the City.

Approach to Analysis

The transportation analysis was conducted in compliance with the City of Pleasanton guidelines for typical weekday a.m. and p.m. peak commute hour conditions at project intersections. Current conditions with and without the residential development of the potential sites for rezoning were used to judge direct impacts from development facilitated by the proposed General Plan Amendment and rezonings. Cumulative traffic operating conditions, and the contribution of development facilitated by the proposed residential development on the potential sites for rezoning to those cumulative conditions, were analyzed on the basis of forecasts from approved, pending, and reasonably foreseeable projects. These scenarios are summarized below:

- 1. <u>Existing plus Project</u> this scenario represents traffic volumes added on top of existing traffic volumes from development on the potential sites for rezoning. Traffic associated with other near-term planned and approved projects and near-term roadway improvement projects were not included in the scenario.
- <u>Cumulative 2025 No Project</u> this scenario includes Cumulative (Future Year) 2025 traffic volumes derived from the City of Pleasanton Travel Demand Model. The model presumes the completion of certain roadway improvement projects that are funded or approved and buildout of the General Plan land uses. This scenario represents a future baseline and Project-related traffic was not included.
- 3. <u>Cumulative 2025 plus Project</u> this scenario includes Cumulative 2025 traffic volumes derived from the City of Pleasanton Travel Demand Model. Land uses in the model were adjusted for each Traffic Analysis Zone (TAZ) where new housing development on the potential sites for rezoning could occur under the proposed project. Existing land uses that would be removed to accommodate housing development, or approved or potential land uses development that would otherwise not occur with housing development were also modified in the model. This scenario represents Project-related traffic volumes added on top of future baseline traffic volumes.

The (ACTC) model traffic forecasts were applied in the MTS and CMP roadway segment analysis under cumulative conditions to analyze the impacts of the proposed Housing Element on the regional roadway network in 2015 and 2035. The MTS and CMP roadway segment analysis was not conducted under existing conditions. The forecasts for the MTS and CMP system differ from the intersection forecasts (year 2025) presented above due to the following:

- The land use data sets used for the intersection forecasts and the MTS and CMP forecasts are different for areas outside Pleasanton and are consistent with Association of Bay Area Governments (ABAG) population and employment projections.
- The MTS and CMP roadway analysis reports the outputs of the ACCMA model directly on a roadway segment level. The results of the ACCMA model were applied to forecast Year 2015 No Project and Year 2035 No Project conditions. Project trips were distributed to the MTS roadway segments (freeways and surface streets) identified above using the project trips for the increment of traffic growth projected for Pleasanton with the Housing Element no accounted for in the ACCMA model. The distribution of project trips onto MTS segments are analyzed under Year 2015 plus Project and Year 2035 plus Project conditions.

Planned Roadway Improvements

No planned or funded roadway improvements were identified under existing condition scenarios. However, under cumulative conditions as outlined in the General Plan, the City of Pleasanton plans to construct a number of roadway improvements that would result in improved service levels at a number of existing study intersections in the cumulative conditions. The planned roadway improvements have been incorporated into the traffic forecast model. Some of the critical roadway improvements identified in the General Plan that are already under construction or conditions on approved development, include:

- Santa Rita Road/Stoneridge Drive
- Bernal Avenue/I-680 Northbound Ramps
- Bernal Avenue/Koll Center Drive
- Bernal Avenue/Valley Avenue
- Stoneridge Drive/El Charro Road
- Foothill Road/ Canyon Way
- El Charro Road extension
- Stoneridge Drive extension

The intersection lane configurations where intersection modifications were assumed under cumulative conditions are presented in **Figure 4.N-4**. Signal timings were optimized for a.m. and p.m. peak hour operations at signalized intersections, as the City regularly monitor traffic signal timing to ensure optimal traffic flow through critical corridors.

Impacts Not Further Evaluated

Due to the nature of the proposed Housing Element, there would be no impacts related to the following criteria; therefore, no impact discussion is provided for these topics for the reasons described below:

• **Results in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that result in substantial safety risks**. The proposed Housing Element would have no impact on air traffic patterns as it would not introduce new air traffic or interfere with existing air traffic; the nearest public airport is Livermore Municipal Airport, located approximately three miles east of the Planning Area. The proposed Housing Element would not result in a change in air traffic patterns, including either an



General Plan Amendment and Rezonings . 210016
 Figure 4.N-4
 Future Lane Configuations

SOURCE: Fehr & Peers

N. Transportation and Traffic

increase in traffic levels or a change in location, which would result in substantial safety risks. This impact category, listed in the significance criteria above as an impact topic to consider in a CEQA evaluation, is therefore not further examined.

Impacts and Mitigation Measures

Impact 4.N-1: Development facilitated by the General Plan Amendment and rezonings could potentially affect levels of service at the local study intersections under <u>Existing plus</u> <u>Project conditions.</u> (Less than Significant)

Housing Element

Trip Generation

Development facilitated by the Housing Element, specifically on the potential sites for rezoning would comprise of approximately 3,285 new residential units (this assumes suitable buildout (meeting zoning code requirements, such as setbacks and building height requirements) of all the potential sites for rezoning, beyond the Regional Housing Needs Assessment (RHNA) requirements). The General Plan Amendments and rezonings would increase the maximum allowed density (if the sites were built out to the maximum allowable use) on the potential sites for rezoning, potentially permitting development of up to 3,900 housing units. **Table 3-3** in Chapter 3, Project Description, summarizes development potential on the potential sites for rezoning.⁴

To assess the changes in traffic flow through the City, the City of Pleasanton Travel Demand Model was used to assess citywide vehicular travel changes. Land uses in the model were adjusted for each TAZ where new housing development could occur on the potential sites for rezoning. Existing land uses that would be removed to accommodate housing development, or approved or potential development that would otherwise not occur with housing development, were also modified in the model.

Model plots showing the magnitude of expected vehicular demand changes are provided in Attachment B of the traffic impact analysis (**Appendix D**); post processing adjustments were made at select locations where the travel demand model did not accurately load traffic onto the roadway network. The expected changed in vehicular demand at each study intersection was added or subtracted from the base volume for each scenario. Although traffic at some of the sites for rezoning would increase with residential development, traffic for some intersection turning movements may decrease as traffic generated by residential uses has different travel patterns than some of the land uses that would be replaced, such as employment uses. Overall, sites for rezoning would replace existing approved land uses that may generate higher traffic, and potential changes in travel patterns could result in better utilization of the existing and planned roadway network. As a result, in select cases, intersection LOS conditions would improve with the rezoning for development consistent with the General Plan.

⁴ The impact analysis of the potential rezonings in this SEIR is based on development of all 17 of the potential sites for rezoning. However, it is in the intent of the Pleasanton City Council to rezone to allow multifamily development on sites sufficient to meet the City's share of the regional housing need which is approximately 70 acres, rather than the total 112 acres.

Existing plus Project Intersection Levels of Service

As shown in **Table 4.N-3**, all of the study intersections would continue to operate at acceptable levels of service during both peak periods evaluated (at LOS D or better). The impact of development on the potential sites for rezoning would be less than significant. LOS calculation sheets are provided in the transportation impact analysis report (**Appendix D**). **Figure 4.N-5** presents the intersection turning movements under existing plus project conditions.

Climate Action Plan

As described in the Draft CAP, Pleasanton's Greenhouse Gas (GHG) inventory is dominated by emissions from motor vehicles on major freeways and City streets. Emissions associated with consumption of on-road and off-road transportation fuels account for approximately 55 percent of the City's existing conditions (2005 GHG emissions inventory). The vast majority of these emissions (representing 52 percent of the total inventory) are from on-road vehicles, with about 3 percent from off-road vehicles (e.g., construction and agricultural equipment). As such, a major component of the Draft CAP is to achieve a reduction of Vehicle Miles Traveled (VMT)s generated by Pleasanton residents and business employees.

The Draft CAP relies largely on the General Plan Amendment and rezonings associated with the Housing Element to achieve a more balanced jobs/housing balance, thus reducing VMT, as VMT represents the single largest contributor to the City's GHG emissions. The transportation strategies outlined in the Draft CAP would reduce overall daily VMT by promoting a balanced transportation/land use environment, locating development near transit corridors, and encouraging alternative transportation. GHG reduction strategies outlined in the Draft CAP related to transportation and land use establish the framework for these reductions:

- LU1 Support infill and higher density development
- LU2 Support mixed-use infill and new development near local-serving commercial areas
- LU3 Improve transportation efficiency through design improvements
- NM1 Create and maintain a safe, convenient, and effective system for pedestrians and bicyclists.
- TDM1 Use parking pricing/policy to discourage single occupancy vehicle (SOV) travel
- TDM2 Promote alternatives to work and school commutes
- TR1 Improve transit system and ridership

Implementation of the Draft CAP, in conjunction with development of the potential sites for rezoning, would reduce VMT under existing plus conditions; as such, implementation of the Draft CAP would have a less than significant impact to the local and regional roadway network.

N. Transportation and Traffic

		Traffic Control	LOS Standard	AM Peak Hour		PM Peak Hour	
NO.	Intersection			Delay	LOS	Delay	LOS
1	Foothill Road / Dublin Canyon Road ²	Signal	D	22	С	32	С
2	Owens Dr / Willow Rd / BART	Signal	D	15	В	15	В
3	Owens Dr / East BART Station Drwy	Signal	D	6	А	9	А
4	Foothill Rd/Dublin Canyon Rd	Signal	D	17	В	31	С
5	Santa Rita Rd / Rosewood Dr	Signal	D	9	А	17	В
6	Santa Rita Rd / Pimlico Dr ²	Signal	Е	24	С	26	С
7	Foothill Rd / Stoneridge Dr	Signal	D	21	С	19	В
8	Stoneridge Dr / Springdale Ave	Signal	D	18	В	25	С
9	Stoneridge Dr / Stoneridge Mall Rd	Signal	D	8	А	26	С
10	Stoneridge Dr / Johnson Dr ²	Signal	Е	11	В	16	В
11	Stoneridge Dr / Hopyard Rd	Signal	D	25	С	33	С
12	Stoneridge Dr / Hacienda Dr	Signal	D	25	С	23	С
13	Owens Dr / W Las Positas Blvd	Signal	D	10	А	14	В
14	W Las Positas Blvd / Santa Rita Rd	Signal	D	27	С	23	С
15	Foothill Rd / W Las Positas Blvd	Signal	D	14	В	12	В
16	W Las Positas Blvd / Hopyard Rd	Signal	D	24	С	40	D
17	W Las Positas Blvd / Hacienda Dr	Signal	D	19	В	15	В
18	Stoneridge Dr / W Las Positas Blvd	Signal	D	21	С	26	С
19	Stoneridge Dr / Santa Rita Rd	Signal	D	31	С	29	С
20	Santa Rita Rd / Mohr Ave	Signal	D	18	В	16	В
21	Santa Rita Rd / Valley Ave	Signal	D	38	D	47	D
22	Valley Ave / Busch Rd	Signal	D	14	В	15	В
23	Bernal Ave / I-680 NB Ramps ²	Signal	E	31	С	12	В
24	Koll Center Dr / Bernal Ave	Signal	D	6	А	3	А
25	Bernal Ave / Valley Ave ²	Signal	E	33	С	26	С
26	Stanley Blvd / Santa Rita Rd	Signal	D	17	В	23	С
27	Stanley Blvd / First St	Signal	D	18	В	14	В
28	Stanley Blvd at Bernal Ave / Valley Ave	Signal	D	40	D	43	D
29	Bernal Ave / Vineyard Dr (N)	Signal	D	15	В	11	В
30	Bernal Ave / Vineyard Dr (S)	Signal	D	17	В	11	В
31	Junipero St / Sunol Blvd	Signal	D	31	С	21	С
32	Stoneridge Dr / El Charro Rd	The El Charro Road extension, including this intersection, does not exist under this scenario.					
33	Stanley Blvd / El Charro Rd ²	The El Charro Road extension, including this intersection, does not exist under this scenario.					

TABLE 4.N-3 EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS)¹

Notes:

Based on intersection turning movement volumes and intersection geometries provided to Fehr & Peers by City of Pleasanton.
 Indicates gateway intersection, potentially exempt from the LOS D standard.

Bold indicates unacceptable LOS.

SOURCE: Fehr and Peers Associates (2011)


N. Transportation and Traffic

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Traffic Safety Hazards

Impact 4.N-2: The residential development proposed in the General Plan Amendment and rezonings could potentially increase traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways due to roadway design features, incompatible uses, or project-related vehicles trips. (Less than Significant)

Housing Element

As discussed in Impact 4.N-1, the development of the potential sites for rezoning would add new traffic to the existing circulation system. Each individual project would contribute to the increase in traffic; however, the increase in traffic volumes resulting from traffic generated by the General Plan Amendments and rezonings would not affect traffic safety on affected intersections and roadways, since all roadway improvements associated with this development will be required to comply with all applicable roadway design standards. Additionally, the *Circulation Element* of the General Plan contains the following policies related to traffic safety which would require development to adhere to design standards and traffic safety protocols.

Policy 6:	Design and regulate city streets to minimize traffic-related impacts on adjacent land uses.
Policy 7:	Adhere to City design standards for streets in new developments.
Policy 8:	Maximize traffic safety for automobile, transit, bicycle users, and pedestrians.

In addition, the roadway design features will be evaluated for each individual development and would be subject to traffic engineering design standards. These standards regulate features such as right-of-way widths, the number of lanes necessary, curb to curb separation distances, and facility-type classification and require roadway designs consistent with Caltrans' Highway Design Manual, California Manual of Uniform Traffic Control Devices (MUTCD), the City Standard Specifications and Details, and others. The Highway Design Manual establishes uniform policies and procedures to carry out the highway design functions of Caltrans. Further, considering that each individual development is expected to be consistent with the City's Fire Code, Subdivision and other regulations in effect at the time, development facilitated by the proposed Housing Element would cause a less than significant impact on traffic safety.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished in part through the General Plan Amendment and rezoning proposed in the Housing Element. Although the CAP would not

directly lead to development that would affect traffic safety, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. All future GHG reduction measures related to roadway improvements implemented under the Draft CAP would be subject to traffic engineering design standards. As such, the Draft CAP would cause a less than significant impact on traffic safety.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Emergency Vehicle Access

Impact 4.N-3: Development facilitated by the General Plan Amendment and rezonings could potentially generate services calls from emergency vehicles. (Less than Significant)

Housing Element

Development facilitated by the proposed Housing Element, specifically on the potential sites for rezoning, would not significantly alter or modify the circulation system in the Planning Area and thus would not adversely affect travel times of emergency vehicles. Further, the City's Fire Code and Subdivision regulations contain detailed standards and mitigation requirements relating to dead-end streets and emergency vehicle access. The adequacy of emergency vehicle access will be evaluated for each individual development in relation to these standards. Considering that each individual development will be required to be consistent with the City's Fire Code, Subdivision and other regulations in effect at the time of review, development facilitated by the proposed Housing Element would cause a less than significant impact on emergency access.

Climate Action Plan

A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished in part through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the Draft CAP would not directly lead to development that would affect emergency vehicle access, it could create indirect impacts, such as an increase in demand and/or the need for additional emergency services, as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion. The adequacy of emergency vehicle access would be maintained through the City's Fire Code and Subdivision regulations. As such, the Draft CAP would cause a less than significant impact on emergency vehicle access.

N. Transportation and Traffic

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Consistency with Adopted Policies, Plans or Programs Supporting Alternative Transportation

Impact 4.N-4: Implementation of the General Plan Amendment and rezonings could potentially be inconsistent with adopted polices, plans, and programs supporting alternative transportation. (Less than Significant)

Housing Element

Currently, sidewalks and pedestrian paths exist along the vast majority of roadways within the Planning Area. Development facilitated by the proposed Housing Element on the potential sites for rezoning would generate pedestrian demand; however, residential development on the potential sites for rezoning would not permanently eliminate or modify existing or planned pedestrian facilities (e.g., sidewalks, crosswalks, pathways, and recreational trails). In addition, implementation of the Housing Element would not include changes in policies or programs that support existing and planned pedestrian facilities nor would the Housing Element interfere or effect users of such facilities.

Traffic generation or site access from development on the potential sites for rezoning would not create any physical changes to the existing bicycle facilities or adversely affect planned bicycle facilities. The proposed General Plan Amendments and rezoning would not permanently eliminate or modify bicycle paths, lanes, routes, and other existing or planned bicycle facilities. In addition, implementation of the Housing Element would not include changes in policies or programs that support existing and planned bicycle facilities nor would the Housing Element interfere or effect users of such facilities.

Development facilitated under the proposed Housing Element would generate transit ridership. Additional passengers generated by growth in the Planning Area would be accommodated by the existing service and impact to transit services would not be considered significant as current services have available capacity to accommodate future demand. The proposed Housing Element would not permanently eliminate or modify existing and planned transit corridors, routes, headways, or related facilities (e.g., bus shelters/stops). Additionally, the proposed Housing Element contains the following policies related to transit which would encourage ridership in the Planning Area.

Policy 5:	Apply for Federal and State grants offered for mixed-use development near
	transit centers.

Program 36.5: Develop transit alternative which would facilitate relocating existing commercial and office/industrial uses in order to enable development with residential uses.

The Housing Element encourages the use of alternative transportation modes to maintain and enhance the City's neighborhoods and commercial districts. As discussed, above, the Housing Element contains policies and programs that promote development at, or near transit centers as well as integrate housing opportunities with access to alternative transportation options and other city services. Furthermore, project-related developments of the Housing Element would be required to comply with existing *General Plan* provisions that encourage the use of the alternative modes of transportation. Implementation of the proposed Housing Element would not eliminate or modify alternative transportation corridors or facilities. As a result, the proposed Housing Element would not include changes in policies or programs that support alternative transportation nor would the Housing Element impair access to such facilities.

Climate Action Plan

The *General Plan Update* contains specific policies and programs aimed at protecting the neighborhood quality of life and preserving the character of the community. These policies and program include reducing the number of daily traffic trips throughout the city (Policy 15), encouraging alternative modes of transportation (Program 15.1), and reducing the percentage of daily traffic during typical peak commute hours (Policy 16).

Since VMT reduction and fuel efficiency represent two key important factors in emissions reduction, the Draft CAP seeks to decrease automobile use and increase the use of transit and more efficient/alternative fuel vehicles. For instance, carpooling is more fuel efficient than single-occupancy-vehicle (SOV) use. Providing more pedestrian and bicycle amenities, supporting mixed-use and transit-oriented development, and providing alternatives to commuting and transit services decreases VMT and reduces traffic congestion. The following reduction strategies are focused on improving alternative transportation, thus reducing VMT and its associated GHG emissions:

- LU3 Improve transportation efficiency through design improvements
- NM1 Create and maintain a safe, convenient, and effective system for pedestrians and bicyclists.
- TDM1 Use parking pricing/policy to discourage single occupancy vehicle (SOV) travel
- TDM2 Promote alternatives to work and school commutes
- TR1 Improve transit system and ridership

The Draft CAP is written to promote transit, pedestrian, and bicycle use, and because the General Plan reinforces alternative transportation measures (as stated above), the proposed project would have a less than significant impact on alternative transportation.

N. Transportation and Traffic

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Temporary Construction Impacts

Impact 4.N-5: Development facilitated by the General Plan Amendment and rezonings could potentially generate temporary increases in traffic volume and temporary effects on transportation conditions. (Less than Significant)

Housing Element

During the construction on the potential sites for rezoning, temporary and intermittent transportation impacts may result from truck movements as well as construction worker vehicles to and from the sites, or temporary closure of sidewalks and/or bicycle lanes. The construction-related traffic may temporarily increase traffic along affected roadways due to the short-term influx in construction worker vehicles, haul trucks, and the transport of materials. In additional, construction-related traffic may reduce capacities of Planning Area roadways because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles and due to potential lane closures during construction activities. Truck traffic that occurs during the peak commute hours (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) may result in temporary worse levels of service and higher delays at study intersections during the construction period. Also, if parking of construction workers' vehicles cannot be accommodated within the specific project site, it would temporarily impact available parking along nearby roadways and further reduce roadway capacities (e.g. reducing travel lane width) during construction activities. Future construction could also affect the operations of transit buses along affected roadways.

The City of Pleasanton requires that a Construction Traffic Management Plan be developed and implemented as part of a larger Construction Management Plan for each development project to address potentially significant impacts during the project's construction. Elements of a Construction Traffic Management Plan may include, but are not limited to, developing detour/circulation plans to minimize potential traffic impacts during road/lane closures, identifying appropriate truck routes, identifying construction staging areas for worker vehicles and equipment, limiting lane closures during peak time periods, restoring roads to pre-project conditions, notifying local police/emergency responders, and implementing appropriate roadway safety protocols (e.g., advanced warning and speed control signs). This is a less than significant impact, and as a result no mitigation measures are required.

Climate Action Plan

The purpose of the Draft CAP is to reduce GHG emissions within the city to help contribute to global efforts to mitigate climate change. A key method to reduce GHG emissions is improving Pleasanton's jobs/housing balance by increasing the amount of proposed residential development (housing) in relation to non-residential development (jobs). This will be accomplished through the General Plan Amendment and rezoning proposed in the Housing Element. Thus, although the

Draft CAP would not directly lead to development that would generate construction traffic, it could create indirect impacts as the result of the residential development of proposed rezoning sites. Evaluation of these indirect impacts is provided as part of the Housing Element discussion.

The Draft CAP includes recommendations to reduce vehicle use, develop bicycle and pedestrian facilities, enhance public transit, increase renewable energy production, improve energy efficiency in buildings, improve energy management, increase water conservation, and promote green infrastructure. Any construction project that occurs as a result of the Draft CAP would be required to prepare a Construction Traffic Management Plan to address potentially significant impacts during the project's construction.

During construction (such as retrofits and renovations), temporary minor traffic increases would occur as a result of construction equipment vehicles and employee vehicle trips to and from the area. These impacts, however, would be temporary in nature and would end upon project construction. This is a less than significant impact, and as a result no mitigation measures are required.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative Impacts

Transportation conditions with the General Plan Amendment and rezonings were evaluated under Cumulative Year 2025 conditions (consistent with the planned General Plan Update build-out year). Further, the ACTC model traffic forecasts were applied in the MTS and CMP roadway segment analysis under cumulative conditions to analyze the impacts of the proposed General Plan Amendment and rezonings on the regional roadway network in 2015 and 2025.

As stated, cumulative conditions scenarios includes traffic volumes related to the residential buildout of the potential sites for rezoning and the projected roadways system using the City of Pleasanton Travel Demand Model. Peak hour travel demand estimates based on the amount of additional vehicle trips associated with the proposed residential buildout of the potential sites for rezoning. The effects on the future transportation network were evaluated and the analysis of cumulative traffic impacts is provided below.

Cumulative plus Project Intersection Levels of Service

Impact 4.N-6: Development facilitated by the General Plan Amendment and rezonings could potentially affect levels of service at the local study intersections under Cumulative plus Project conditions. (Less than Significant)

N. Transportation and Traffic

Housing Element

Under Cumulative 2025 conditions, analyzed intersections would operate at acceptable levels of service (LOS D or better) during both the a.m. and p.m. peak hours, with the exception of the Bernal Avenue/ Valley Avenue Intersection (which would operate at LOS E during the a.m. peak hour), the Junipero Street/Sunol Boulevard intersection (which would operate at LOS E during the a.m. peak hour), and the Stanley Boulevard/El Charro Road intersection (which would operate at LOS E during the a.m. peak hour). Table 3 in the traffic impact analysis report (**Appendix D**) includes detailed level of service results for intersections under Cumulative 2025 conditions and traffic volumes used in the analysis are shown in **Figure 4.N-6**.

Under Cumulative 2025 plus Project conditions, all analyzed intersections would continue to operate at acceptable levels of service (LOS D or better) during both the a.m. and p.m. peak hours. Implementation of the General Plan Amendment and rezoning proposed by the Housing Element under cumulative conditions would improve intersection performance at the Bernal Avenue/ Valley Avenue, the Junipero Street/Sunol Boulevard, and Stanley Boulevard/El Charro Road intersections from unacceptable conditions (LOS E) to acceptable conditions (LOS D) during the a.m. peak hour, as traffic patterns shift with housing development as opposed to the non-residential land uses currently designated in the General Plan for the rezoning sites. As shown in **Table 4.N-4**, no intersections would operate at unacceptable conditions under this scenario. As such, development facilitated by the proposed Housing Element would have a less-than-significant impact on levels of service at the study intersections under Cumulative 2025 plus Project conditions.

The analysis indicates that the proposed Housing Element would not result in an impact to local and CMP intersections under cumulative conditions, which is a less than significant impact.

Climate Action Plan

VMT represents the single largest contributor to the City's GHG emissions inventory. The Draft CAP relies largely on the General Plan Amendment and rezoning associated with the Housing Element to achieve a more balanced jobs/housing balance, thus reducing VMT. The transportation strategies outlined in the Draft CAP would reduce overall daily VMT by promoting a balanced transportation/land use environment, locating development near transit corridors, and encouraging use of alternative transportation. GHG reduction strategies outlined in the Draft CAP related to transportation and land use establish the framework for these reductions:

- LU1 Support infill and higher density development
- LU2 Support mixed-use infill and new development near local-serving commercial areas
- LU3 Improve transportation efficiency through design improvements
- NM1 Create and maintain a safe, convenient, and effective system for pedestrians and bicyclists.

N -	had a second and	Traffic Control		AM Peak Hour		PM Peak Hour	
NO.	Intersection		LOS Standard	Delay	LOS	Delay	LOS
1	Foothill Road / Dublin Canyon Road ²	Signal	D	32	С	49	D
2	Owens Dr / Willow Rd / BART	Signal	D	17	В	16	В
3	Owens Dr / East BART Station Drwy	Signal	D	7	А	10	А
4	Foothill Rd/Dublin Canyon Rd	Signal	D	23	В	31	С
5	Santa Rita Rd / Rosewood Dr	Signal	D	8	А	27	С
6	Santa Rita Rd / Pimlico Dr ²	Signal	Е	21	С	22	С
7	Foothill Rd / Stoneridge Dr	Signal	D	31	С	21	С
8	Stoneridge Dr / Springdale Ave	Signal	D	22	В	27	С
9	Stoneridge Dr / Stoneridge Mall Rd	Signal	D	11	В	22	С
10	Stoneridge Dr / Johnson Dr ²	Signal	Е	11	В	14	В
11	Stoneridge Dr / Hopyard Rd	Signal	D	28	С	30	С
12	Stoneridge Dr / Hacienda Dr	Signal	D	26	С	21	С
13	Owens Dr / W Las Positas Blvd	Signal	D	12	В	16	В
14	W Las Positas Blvd / Santa Rita Rd	Signal	D	31	С	24	С
15	Foothill Rd / W Las Positas Blvd	Signal	D	33	С	13	В
16	W Las Positas Blvd / Hopyard Rd	Signal	D	29	С	28	С
17	W Las Positas Blvd / Hacienda Dr	Signal	D	20	В	18	В
18	Stoneridge Dr / W Las Positas Blvd	Signal	D	40	D	34	С
19	Stoneridge Dr / Santa Rita Rd	Signal	D	50	D	32	С
20	Santa Rita Rd / Mohr Ave	Signal	D	17	В	16	В
21	Santa Rita Rd / Valley Ave	Signal	D	42	D	44	D
22	Valley Ave / Busch Rd	Signal	D	18	В	53	D
23	Bernal Ave / I-680 NB Ramps ²	Signal	E	22	С	10	А
24	Koll Center Dr / Bernal Ave	Signal	D	23	С	31	С
25	Bernal Ave / Valley Ave ²	Signal	E	53	D	40	D
26	Stanley Blvd / Santa Rita Rd	Signal	D	23	С	16	В
27	Stanley Blvd / First St	Signal	D	12	В	18	В
28	Stanley Blvd at Bernal Ave / Valley Ave	Signal	D	46	D	40	D
29	Bernal Ave / Vineyard Dr (N)	Signal	D	24	С	12	В
30	Bernal Ave / Vineyard Dr (S)	Signal	D	36	D	12	В
31	Junipero St / Sunol Blvd	Signal	D	54	D	24	С
32	Stoneridge Dr / El Charro Rd	Signal	D	40	D	32	С
33	Stanley Blvd / El Charro Rd ²	Signal	E	53	D	32	С

TABLE 4.N-4 CUMULATIVE 2025 PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS)¹

Notes: 1. Based on future baseline planned roadway improvements identified in the General Plan. 2. Indicates gateway intersection, potentially exempt from the LOS D standard.

Bold indicates unacceptable LOS.

SOURCE: Fehr and Peers Associates (2011)





N. Transportation and Traffic

TDM1 Use parking pricing/policy to discourage SOV travel

TDM2 Promote alternatives to work and school commutes

TR1 Improve transit system and ridership

Implementation of the Draft CAP, in conjunction with development of the potential sites for rezoning, would reduce VMT under cumulative plus conditions; as such, implementation of the Draft CAP would have a less than significant impact to the local and regional roadway network.

Housing Element Mitigation: None Required.

Climate Action Plan Mitigation: None Required.

Cumulative plus Project Roadway Segment Analysis

Impact 4.N-7: Development facilitated by the General Plan Amendment and rezonings could potentially add traffic to the regional roadway network to the point at which they would operate unacceptably under Cumulative plus Project conditions. (Significant and Unavoidable)

Housing Element

Year 2015

The MTS and CMP a.m. and p.m. peak hour roadway segment analysis is presented in Tables 9, 10, 11, and 12 in the traffic impact analysis report (**Appendix D**).

In 2015, traffic generated by development facilitated on the potential sites for rezoning, would worsen the LOS F on Sunol Boulevard (First Street) between Vineyard Avenue and Stanley Boulevard during the p.m. peak hour and increase the volume-to- capacity (V/C) ratio by more than 0.03. No other segments would worsen from acceptable to unacceptable conditions with development facilitated under the proposed Housing Element. For other segments operating unacceptably under Year 2015 conditions, development facilitated under the proposed Housing Element would not increase the V/C ratio by more than 0.03.⁵ Implementation of the proposed Housing Element would result in a significant impact to Sunol Boulevard, a designated MTS/CMP roadway segment under Year 2015 conditions. Widening this segment of Sunol Boulevard (First Street) is not considered feasible or desirable due to the surrounding built environment. Improvements to nearby parallel corridors could create more attractive alternative routes and provide additional capacity.)⁶ Mitigation Measure 4.N-7 would address significant impacts to MTS/CMP segments.

⁵ The significance threshold for project impacts is if the proposed project would cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or would increase the V/C ratio by more than 0.03 for a roadway segment that would operate at LOS F without the project.

⁶ The portion of Sunol Boulevard (First Street) where the impact is identified goes through the downtown area where only one travel lane in each direction is provided. Providing additional vehicle capacity would likely require

Year 2035

In Year 2035, numerous regional roadway facilities are projected to operate at deficient LOS F conditions. Traffic generated by development facilitated under the proposed Housing Element on the potential sites for rezoning would not worsen operations of any segment projected to operate acceptably to unacceptable conditions; however, it would increase the V/C by more than 0.03 on two roadway segments projected to operate at LOS F:

- Sunol Boulevard (First Street) between Vineyard Avenue and Stanley Boulevard
- Hopyard Road between Owens Drive and I-580

Traffic generated by development facilitated under the Housing Element on the potential sites for rezoning would worsen LOS F conditions on Sunol Boulevard (First Street) between Vineyard Avenue and Stanley Boulevard during the morning peak hour in increasing the volume to capacity ratio by more than 0.03. Additionally, the proposed Housing Element would worsen LOS F conditions on Hopyard Road between Owens Drive and I-580 during the morning peak hour in increasing the volume to capacity ratio by more than 0.03. Based on the significance criteria, this is considered a significant impact. Widening this segment of Sunol Boulevard (First Street) is not considered feasible or desirable due to the surrounding built environment. Likewise, widening the segment of Hopyard Road is not considered feasible due to the surrounding built environment. Improvements to nearby parallel corridors could create more attractive alternative routes and provide additional capacity. Implementation of **Mitigation Measure 4.N-7** would reduce the projects contribution to cumulative impacts.

Mitigation Measure 4.N-7: The City shall require developers on the potential sites for rezoning to contribute fair-share funds through the payment of the City of Pleasanton and Tri-Valley Regional traffic impact fees to help fund future improvements to local and regional roadways.

However, as the City of Pleasanton is not the Lead Agency (the Tri-Valley Transportation Council is the implementing agency for the Tri-Valley Region traffic impact fee) and because the City cannot be assured that collected funds would specifically improve Sunol Boulevard or parallel corridors, the impact to this segment would remain significant and unavoidable after mitigation.

Climate Action Plan

VMT represents the single largest contributor to the City's GHG emissions inventory. The Draft CAP relies largely on the General Plan Amendment and rezonings associated with the Housing Element to achieve a more balanced jobs/housing balance, thus reducing VMT. The transportation strategies outlined in the Draft CAP would reduce overall daily VMT by promoting a balanced transportation/land use environment, locating development near transit corridors, and encouraging alternative transportation. GHG reduction strategies outlined in the Draft CAP related to transportation and land use establish the framework for these reductions:

intrusion into front-yards, or demolition of houses, tree removal and/or removal of on-street parking, and property acquisition.

- LU1 Support infill and higher density development
- LU2 Support mixed-use infill and new development near local-serving commercial areas
- LU3 Improve transportation efficiency through design improvements
- NM1 Create and maintain a safe, convenient, and effective system for pedestrians and bicyclists.
- TDM1 Use parking pricing/policy to discourage SOV travel
- TDM2 Promote alternatives to work and school commutes
- TR1 Improve transit system and ridership

Implementation of the Draft CAP, in conjunction with development of the potential sites for rezoning, would reduce VMT under cumulative plus conditions; as such, implementation of the Draft CAP would have a less than significant impact to the local and regional roadway network.

Housing Element Level of Significance after Mitigation: Significant and Unavoidable. As the City of Pleasanton is not the Lead Agency (the Tri-Valley Transportation Council is the implementing agency for the Tri-Valley Region traffic impact fee) and because the City cannot be assured that collected funds would specifically improve Sunol Boulevard or parallel corridors, the impact to this segment would remain *significant and unavoidable* after mitigation.

Climate Action Plan Mitigation: None Required.

References—Transportation and Traffic

- Alameda County Transportation Commission (ACCMA), 2009 Congestion Management Program, adopted 2009.
- American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, Washington, D.C., 2004.
- Caltrans, Highway Design Manual, Fifth Edition, Sacramento, California, 2004.
- California Department of Transportation (Caltrans), *Manual on Uniform Traffic Control Devices* (MUTCD), Part 4 (Traffic Signals), 2003.
- City of Pleasanton, Pedestrian and Bicycle Master Plan, January 2010.
- Fehr and Peers, Pleasanton Housing Element Transportation Analysis, July 18, 2011
- Fehr and Peers, Pleasanton Housing Element Transportation Analysis- Increased Density Assessment, August 2, 2011

Fehr and Peers, Pleasanton Climate Action Plan Transportation Baseline and Future Year VMT Estimates. November 12, 2010

Transportation Research Board (TRB), 2000 Highway Capacity Manual, 2000.

CHAPTER 5 Alternatives to the Project

The purpose of this chapter is to describe and evaluate alternatives to the proposed project. Pursuant to the provisions of CEQA, alternatives have been developed to reduce or eliminate the significant environmental effects that would result from implementation of the proposed General Plan Amendment and rezonings as identified in Chapter 4.

A. CEQA Requirements

The California Environmental Quality Act (CEQA) requires an evaluation of the comparative effects of a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (CEQA *Guidelines* § 15126.6[a]). The EIR is to consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The discussion of alternatives is to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede, to some degree, the attainment of the project objectives, or would be more costly (CEQA *Guidelines* § 15126.6[b]).

Pursuant to CEQA, this chapter presents a meaningful comparative analysis of the proposed project and the alternatives (CEQA *Guidelines* § 15126.6[d]); identifies and discusses any alternatives that were considered by the lead agency but that it rejected as infeasible for detailed analysis in this EIR (CEQA *Guidelines* § 15126.6[c]); and provides comparative evaluation of the proposed project to a No Project Alternative (CEQA *Guidelines* § 15126.6[e]).

B. Factors in the Selection of Alternatives

The CEQA Guidelines recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed (CEQA *Guidelines* § 15126.6[c]). The nature and scope of the reasonable range of alternatives to be discussed is governed by the "rule of reason" and consistent with the goal of the alternatives analysis considers the following factors:

- The extent to which the alternative would accomplish most of the basic goals and objectives of the project;
- The extent to which the alternative would avoid or lessen the identified significant and unavoidable environmental effect of the project;

- The feasibility of the alternative, taking into account site suitability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The extent to which an alternative contributes to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a "No-Project" alternative and to identify an "environmentally superior" alternative in addition to the no-project alternative [CEQA *Guidelines* § 15126.6(e)].

Basic Goals and Objectives of the Proposed Project

As stated in the first factor bulleted above, the selection of alternatives shall consider the basic goals and objectives of the project. As previously presented in Chapter 3, Project Description, the project objectives for the 2007-2014 Housing Element and associated General Plan Amendment and rezonings to increase the City's inventory of land available for the development housing:

- Provide a vision for the City's housing and growth management through 2014;
- Maintain the existing housing stock to serve housing needs;
- Ensure capacity for the development of new housing to meet the RHNA at all income levels;
- Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character;
- Encourage, develop and maintain programs and policies to meet projected affordable housing needs;
- Develop a vision for Pleasanton that supports sustainable local, regional and state housing and environmental goals;
- Provide new housing communities with substantial amenities to provide a high quality of life for residents;
- Present the California Department of Housing and Community Development a housing element that meets the requirements of the settlement agreement; and
- Adopt a housing element that substantially complies with California housing element law.

The following are the project objectives for the CAP:

- Provide a vision for the City's sustainable development through 2025 while preserving the City's character;
- Provide the framework to meet the AB32 target of reducing GHG emissions to 1990 levels (or 15 percent below the 2005 baseline, consistent with recommendations provided by the California Air Resource Board);
- Incorporate additional GHG emissions reduction programs into the General Plan;
- Serve as an example of environmentally sustainable development to cities throughout California and the Country at large;

Meet the terms of the Settlement Agreement, providing GHG emissions analysis and reduction strategies for the life of the City's General Plan.

Significant and Unavoidable Impacts Identified

As stated in the second factor bulleted above, the selection of alternatives shall consider the ability for each alternative to avoid or lessen the significant and unavoidable environmental effect identified with the project. Development facilitated by the proposed General Plan Amendment and rezonings would result in the following significant and unavoidable impacts, as identified throughout Chapter 4, Environmental Setting, Impacts, and Mitigation Measures:

Impact 4.D-1: Development facilitated by the General Plan Amendments and rezonings has the potential to change the significance of historical resource.

Impact 4.N-7: Development facilitated by the General Plan Amendment and rezonings could potentially add traffic to the regional roadway network to the point at which they would operate unacceptably under Cumulative plus Project conditions.

C. Description of Alternatives Selected for Analysis

With consideration given to the above factors for selection, the Lead Agency, the City of Pleasanton (City), identified the following reasonable range of project alternatives to be addressed in this SEIR:

- No Project Alternative
- Large Properties Alternative
- Transit Oriented Alternative
- Exclude East Pleasanton Alternative
- Increased Density Alternative

The significant impacts of the proposed project are related to the residential development needed to meet identified objectives, both for the provision of housing to meet the needs of all economic segments of the community and to reduce vehicle miles travelled by improving the City's jobs/housing balance. Thus, project alternatives, expect the required No Project Alternative, are various means of increasing local housing opportunities.

The four build alternatives were evaluated in the plus project conditions and the residential uses assumed for each potential site for rezoning are summarized in **Table 5-1**. Below, each of the build alternatives are described and its potential environmental impacts and ability to meet basic project objectives are compared with the proposed project.

No Project Alternative

Pursuant to CEQA *Guidelines* § 15126.6[e], one of the alternatives analyzed must be the No Project Alternative. The No Project Alternative assumes that the proposed 2007-2014 Housing Element and associated General Plan Amendment and rezonings, as well as the proposed Climate Action Plan are not adopted.

Map ID	Site	Proposed Project	Alternative 1 Large Properties	Alternative 2 Transit Oriented	Alternative 3 Exclude East Pleasanton	Alternative 4 Increased Density
1	BART Site	250 multi-family homes	300 multi-family homes	249 multi-family homes	300 multi- family homes	249 multi-family homes
2	Sheraton	99 multi-family homes	No HE development	99 multi-family homes	No HE development	132 multi-family homes
3	Stoneridge Mall Parking Lot	400 multi-family homes	300 multi-family homes	300 multi-family homes	300 multi- family homes	400 multi-family homes
4	Kaiser Site	183 multi-family homes	No HE development	183 multi-family homes	No HE development	244 multi-family homes
6	Irby-Kaplan-Zia	138 multi-family homes	180 multi-family homes	138 multi-family homes	270 multi- family homes	180 multi-family homes
7	Gateway	300 multi-family homes; 88 SFH	279 multi-family homes	No HE development	279 multi- family homes	400 multi-family homes
8	Auf de Mar/ Rickenback	159 multi-family homes	345 multi-family homes	345 multi-family homes	345 multi- family homes	212 multi-family homes
9	Nearon Site	129 multi-family homes	No HE development	168 multi-family homes	150 multi- family homes	168 multi-family homes
10	CarrAmerica	336 multi-family homes	252 multi-family homes	252 multi-family homes	252 multi- family homes	420 multi-family homes
11	Kiewit	300 multi-family homes	300 multi-family homes	300 multi-family homes	No HE development	400 multi-family homes
13	CM Capital Properties	360 multi-family homes	No HE development	No HE development	290 multi- family homes	378 multi-family homes
14	Legacy Partners	360 multi-family homes	276 multi-family homes	276 multi-family homes	No HE development	480 multi-family homes
17	Axis Community Health	13 multi-family homes	No HE development	14 multi-family homes	14 multi-family homes	18 multi-family homes
18	Downtown	46 multi-family homes	No HE development	No HE development	No HE development	96 multi-family homes
19	Sunol at Sonoma	30 multi-family homes	No HE development	No HE development	No HE development	39 multi-family homes
20	Sunol at Sycamore	53 multi-family homes	No HE development	No HE development	No HE development	30 multi-family homes
21	4202 Stanley	41 multi-family homes	No HE development	No HE development	No HE development	54 multi-family homes
Total Units		3,285	2,232	2,324	2,200	3,900

Table 5-1 Project Build Alternatives Summary¹

Note: Housing Element Alternatives identified for inclusion in the Housing Element as of July 7, 2011 by City of Pleasanton; Alternative 4 as of July 22, 2011. (F&P, 2011)

Pursuant to the requirements of CEQA, the No Project analysis must discuss existing conditions in the project area, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved and development continued to occur in accordance with existing plans and consistent with available infrastructure and community services (CEQA *Guidelines* § 15126.6 [e][2]). According to the CEQA Guidelines:

"When the project is the revision of an existing land use or regulatory plan . . . the 'no project' alternative will be the continuation of the existing plan . . . into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed." (CEQA *Guidelines* § 15126.6 [e][3][A])

Here, the 'existing plan' would be the existing Housing Element (2003), which remained part of the General Plan when it was adopted in 2009 and amended in 2010. Since the proposed Climate Action Plan (CAP) is a new document, the 'existing plan' would be the General Plan as it was adopted in 2009 and amended in 2010 without a climate action plan.

Housing Element

The previous Housing Element addressed the housing needs for the 1999-2007 planning period, is out of date, and does not address housing needs for the 2007-2014 planning period. As shown in noted in **Table 5-2**, below, the existing Housing Element did not provide for an adequate inventory of housing for all economic segments of the community, requiring 871 units of unmet need for low income housing to be carried over from the previous Housing Element to the 2007-2014 planning period. As further shown in Table 5-2, the existing development capacity of residentially zoned land within the City of Pleasanton is inadequate to meet Pleasanton's share of regional housing needs, requiring a 1,992 dwelling unit increase in the City's residential development capacity. Thus, under the No Project Alternative, the City would be left with an outdated Housing Element which sets forth an inventory of housing inadequate to meet identified housing needs through the current Housing Element planning period (2007-2014). In addition, the City would not be able to comply with the provisions of the Settlement Agreement described in Chapter 3 of this SEIR.

State law recognizes the vital role local governments play in the availability, adequacy, and affordability of housing. Every jurisdiction in California is required to adopt a long-range General Plan to guide its physical development; the Housing Element is one of the seven mandated elements of the General Plan. Housing element law mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for (and do not unduly constrain) housing production. Housing Element statutes also require the State Department of Housing and Community Development (HCD) to review local housing elements for compliance with state law and to report their findings to the local government.

California's housing element law requires that each city and county develop local housing programs to meet its "fair share" of existing and future housing needs for all income groups. The Association of Bay Area Governments (ABAG) is responsible for developing and assigning these regional needs, via a Regional Housing Needs Assessment (RHNA), to Bay Area jurisdictions such as the City of Pleasanton. If the City fails to adopt a housing element or adopts one that is

	Total	Units Affordable to Very Low Income	Units Affordable to Low Income	Units Affordable to Moderate Income	Above Moderate Income
Remaining Need remaining from the 1999-2007 housing period	871	0	871	0	0
2007-2014 RHNA	3,277	1,076	728	720	753
Total RHNA	4,148	1,076	1,599	720	753
Permits Finaled 2007-2010 ¹	319	0	5	38	276
Units Under Construction ²	82	0	5	39	38
Approved (zoned) projects with building permits not yet issued ³	1,321	102	32	312	875
Land Designated for Residential Development w/no entitlements ⁴	1,028	435	435	0	158
Additional Residential Zoning Capacity Required (units)	1,992	539	1,122	331	-594
Total Unaccommodated Need			1.992 units	s	

TABLE 5-2 2007-2014 HOUSING ELEMENT NEEDS ASSESSMENT

1. Includes Low Income and Moderate Income units from Birch Creek; 31 second units; 5 apartment units

2. Includes Low Income and Moderate Income Civic Square apartments and 7 second units.

3. Includes affordable Staples units, Windstar Vey Low Income units and balance of Windstar as Moderate Income

4. This number does not include development potential for several hill area sites which require further analysis.

SOURCE: Pleasanton Housing Element, June 2011

inadequate, as would occur under the No Project Alternative, a court can order the City to halt all development until an adequate element is adopted or order approval of specific affordable housing developments (California Government Code § 65583(f)).

Although State law requires the City to adopt a Housing Element that responds to the housing needs identified in the RHNA, because under the No Project Alternative, the existing Housing element, General Plan, and zoning remain in place, the City would not have an inventory of land available for the development of housing capable of meeting the housing needs set forth in the RHNA.

Since the City must adopt and maintain a Housing Element for the 2007-2014 Housing Element planning period that provides an adequate inventory of land for residential development to meet Pleasanton's RHNA allocation, the City does not have the option of selecting the No Project Alternative, and not meeting applicable requirements for the Housing Element or the requirements of the Settlement Agreement, which requires the City to adopt a Housing Element for the 2007-2014 planning period within 90-days of receiving comments from the Department of Housing and Community Development.

Climate Action Plan

Under the No Project Alternative, the Draft CAP would not be adopted and its GHG reduction measures would not be implemented. For Pleasanton, this means that it would not meet the goals AB 32, of reducing greenhouse gas emission to a level 15 percent below 2005 emissions by the

Year 2020 (306,311 MT CO₂e below 2005 emissions). However, the No Project Alternative, the City would realize greenhouse gas emissions reductions from several high-impact state-wide measures included in the AB 32 Scoping Plan, which are estimated to be 194,017 MT CO₂e. With the addition of projected impact of rising fuel prices on driving behavior described in the Draft CAP, which is estimated to translate to a equivalent to annual emissions reductions of 18,729 MT CO₂e, Pleasanton would fall short of reducing city-wide emissions and meeting AB 32 goals by 93,585 MT CO₂e per year by 2020 under the No Project Alternative.

Further, the No Project would not meet the requirements of the Settlement Agreement, which states that the City would adopt a Climate Action Plan by February 17, 2012.

Alternative 1, Large Properties

Alternative 1, Large Properties, would result in the development of a total of 2,232 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. Like the proposed project, Alternative 1 would include rezoning to accommodate future residential growth. Alternative 1 would rezone 8 of the 17 potential sites, specifically the sites that could accommodate larger developments. The larger properties could more easily address neighborhood compatibility issues through site design, and also provide high quality open space as other amenities. As presented in Table 5-1, Alternative 1 would permit residential development on:

- Site 1 BART Site with 300 units
- Site 3 Stoneridge Mall with 300 units
- Site 6 Irby-Kaplan-Zia with 180 units
- Site 7 Gateway with 279 units
- Site 8 Auf de Mar/ Rickenback with 345 units
- Site 10 CarrAmerica with 252 units
- Site 11 Kiewit with 300 units
- Site 14 Legacy Partners with 276 units

Alternative 2, Transit Oriented

Alternative 2, Transit Oriented, would result in the development of a total of 2,324 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. Like the proposed project, Alternative 2 would include rezoning to accommodate future residential growth. Rather than focusing on larger properties as in the Large Properties Alternative, the Transit Oriented Alternative would focus on sites in proximity to transit for rezoning to residential use. As illustrated in **Figure 5-1**, Alternative 2 would rezone 11 of the 17 potential sites, specifically the sites that are closest to the BART stations and the Route 10 transit corridor, a bus line with 15-minute headways. The Kiewit and Legacy sites (Sites 11 and 14) could also be served by a future ACE train station. As presented in Table 5-1, Alternative 2 would allow residential development on:



SOURCE: The City of Pleasanton

- General Plan Amendment and Rezonings . 210016

- Site 1 BART Site with 249 units
- Site 2 Sheraton with 99 units
- Site 3 Stoneridge Mall with 300 units
- Site 4 Kaiser with 183 units
- Site 6 Irby-Kaplan-Zia with 138 units
- Site 8 Auf de Mar/ Rickenback with 345 units
- Site 9 Nearon with 168 units
- Site 10 CarrAmerica with 252 units
- Site 11 Kiewit with 300 units
- Site 14 Legacy Partners with 276 units
- Site 17 Axis Community Health with 14 units

Alternative 3, Excludes East Pleasanton

Alternative 3, Excludes East Pleasanton, would result in the development of a total of 2,200 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. Like the proposed project, Alternative 3 would include rezoning to accommodate future residential growth, but excludes properties 11 and 14 which have been included in the plan area for the East Pleasanton Specific Plan, as well as Sites 2, 4, 18, 19, 20 and 21, which are smaller sites. Alternative 3 would rezone 9 of the 17 potential sites, specifically the sites that could accommodate larger developments and would include one downtown residential site to increase vitality in the downtown area. As presented in Table 5-1, Alternative 3 would allow residential development on:

- Site 1 BART Site with 249 units
- Site 3 Stoneridge Mall with 300 units
- Site 6 Irby-Kaplan-Zia with 270 units
- Site 7 Gateway with 279 units
- Site 8 Auf de Mar/ Rickenback with 345 units
- Site 9 Nearon with 150 units
- Site 10 CarrAmerica with 252 units
- Site 13 CM Capital Properties with 290 units
- Site 17 Axis Community Health with 14 units

Alternative 3 adheres to Program 26.1 of the General Plan that calls for a specific plan for East Pleasanton.

Alternative 4, Increased Density

Alternative 4 Increased Density would result in the development of a total of 3,900 housing units to fulfill 100 percent of the RHNA and improve Pleasanton's jobs/housing balance as a means of reducing greenhouse emissions. This alternative evaluates increased density on all the potential

sites for rezoning, in the event that the City wishes to consider a higher density on one or more of the 17 sites. Those buildout projections are presented in Table 5-1.

D. Comparative Analysis of the Alternatives

This section presents the comparative discussion of the environmental effects of each alternative compared to the effects of the proposed project. This section is organized to discuss, for each alternative, the significant impacts identified with the Housing Element first, and to then discuss for each alternative the less than significant impacts identified with the Housing Element.¹

As permitted by CEQA, the significant effects of the alternatives are discussed in less detail than are the effects of the proposed project (CEQA *Guidelines* § 15126.6[d]). However, the analysis of alternatives has been conducted at a sufficient level of detail to provide project decision-makers adequate information to fully evaluate the alternatives and to approve any of the alternatives without further environmental review. Unless otherwise indicated, the impacts associated with the proposed project and each alternative are for year 2025, buildout conditions of the General Plan. All impacts are described after implementation of any applicable mitigation measures identified in Chapter 4. Table 5-4, Alternatives Impact Summary and Comparison, near the end of this chapter summarizes the comparison of impacts for the proposed project and the alternatives.

Comparison of Significant and Unavoidable Impacts Identified for the Proposed Project with Alternatives

No Project

Cultural Resources

The No Project Alternative would result in development consistent with the City's existing General Plan. Although the General Plan did not specifically analyze the redevelopment of Site 6 or Site 21, which may have historic homes and outbuildings, it is assumed that both sites would be redeveloped under General Plan buildout. As such, the No Project Alternative would have the same significant and unavoidable impact related to Cultural Resources as the proposed project.

Transportation and Traffic

The No Project Alternative would result in development consistent with the City's existing General Plan and would not encourage residential uses on any of the potential sites for rezoning. Although the General Plan would not rezone any of the potential sites for rezoning, it would allow these sites to be develop under their existing land use designations. The proposed project through the proposed rezoning provides a better jobs-housing balance than does the existing General Plan, thus reducing the overall vehicle miles traveled in the city as compared to the No Project. Under the No Project Alternative, three study intersections projected to operate at unacceptable levels:

¹ The Housing Element is the focus of this alternatives analysis as no direct significant impacts were identified for the CAP.

- Bernal Avenue/Valley Avenue (LOS E in a.m. peak hour)
- Junipero Street/Sunol Boulevard (LOS E in a.m. peak hour)
- Stanley Boulevard/El Charro Road (LOS E in a.m. peak hour)

Therefore, the proposed project would have fewer traffic impacts than the No Project Alternative. The No Project Alternative would maintain the Significant and Unavoidable finding identified in the General Plan EIR.

Alternative 1, Large Properties

Cultural Resources

The Large Properties Alternative would result in development on Site 6, which may contain a historic resource. As a historic evaluation has not been conducted for the site, it must be assumed that the resource is historically significant, and development of Site 6 would either remove the resource or substantially alter its context, resulting in a significant and unavoidable impact. Although, Site 21, which also may have a historic home on it, would not be demolished under this alternative, it is assumed that the site would be developed under General Plan buildout. Thus the Large Properties Alternative would have the same significant and unavoidable impact related to Cultural Resources as the proposed project.

Transportation and Traffic

The Large Properties Alternative would result in development of 9 of the larger sites of the 17 potential sites for rezoning. Alternative 1 would allow for the development of approximately 1,000 few dwelling units than the proposed project (2,246 units vs. 3,285 units). Like the proposed project, it would also provide improvements at the three intersections operating at LOS E in the a.m. peak hour (Bernal Avenue/ Valley Avenue, Junipero Street/Sunol Boulevard, and Stanely Boulevard/El Charro Road) to LOS D and no intersections would degrade from acceptable to unacceptable conditions.

Alternative 2, Transit Oriented

Cultural Resources

The Transit Oriented Alternative would result in development on Site 6, which may contain a historic resource. As a historic evaluation has not been conducted for the site, it must be assumed that the resource is historically significant, and development of Site 6 would either remove the resources or substantially alter its context, resulting in a significant and unavoidable impact. Although, Site 21, which also may have a historic home on it, would not be demolished under this alternative, it is assumed that the site would be developed under General Plan buildout. Thus the Transit Oriented Alternative would have the same significant and unavoidable impact related to Cultural Resources as the proposed project.

Transportation and Traffic

The Transit Oriented Alternative would result in development of 11 of the 17 potential sites for rezoning focusing residential development on those sites near a transit corridor. Alternative 2 would allow for the development of approximately 1,000 fewer dwelling units than the proposed project (2,324 units vs. 3,285 units). Like the proposed Housing Element, it would also improve the two intersections operating at LOS E in the a.m. peak hour (Junipero Street/Sunol Boulevard, and Stanely Boulevard/El Charro Road) to LOS D; however, the intersection of Bernal Avenue/ Valley Avenue would continue to operate at LOS E. No intersections would degrade from acceptable to unacceptable conditions.

Alternative 3, Excludes East Pleasanton

Cultural Resources

The Excludes East Pleasanton Alternative would result in development on Site 6, which may contain a historic resource. As a historic evaluation has not been conducted for the site, it must be assumed that the resource is historically significant, and development of Site 6 would either remove the resources or substantially alter its context, resulting in a significant and unavoidable impact. Although, Site 21, which also may have a historic home on it, would not be demolished under this alternative, it is assumed that the site would be developed under General Plan buildout. Thus the Excludes East Pleasanton Alternative would have the same significant and unavoidable impact related to Cultural Resources as the proposed project.

Transportation and Traffic

The Excludes East Pleasanton Alternative would result in development of 9 of the 17 potential sites for rezoning, excluding sites in East Pleasanton. Alternative 3 would allow for the development of approximately 1,000 few dwelling units than the proposed project (2,200 units vs. 3,285 units). Like the proposed project, it would also improve the three intersections operating at LOS E in the a.m. peak hour (Bernal Avenue/ Valley Avenue, Junipero Street/Sunol Boulevard, and Stanley Boulevard/El Charro Road) to LOS D and no intersections would degrade from acceptable to unacceptable conditions.

Alternative 4, Increased Density

Cultural Resources

The Increased Density Alternative would develop both Site 6 and Site 21 which may have historic homes on them. The Increased Density Alterative would have the same significant and unavoidable impact related to Cultural Resources as the proposed project.

Transportation and Traffic

The Increased Density Alternative would result in development all of the 17 potential sites for rezoning. Alternative 4 would allow for the maximum development potential on all the potential sites for rezoning. As such, the Increased Density Alternative would accommodate approximately

600 additional dwelling units than the proposed project (3,900 units vs. 3,285 units). Like the proposed project, it would also improve the three intersections operating at LOS E in the a.m. peak hour (Bernal Avenue/ Valley Avenue, Junipero Street/Sunol Boulevard, and Stanely Boulevard/El Charro Road) to LOS D and no intersections would degrade from acceptable to unacceptable conditions.

Comparison of Less than Significant Impacts Identified for the Proposed Project with Alternatives

All the alternatives, except the No Project Alternative, would allow for varying degrees of residential development intensity on the potential sites for rezoning, as shown in Table 5-1. Under each of the alternatives, except the No Project Alternative, the City would adopt the Housing Element and Draft CAP, including the implementing policies and programs (such as the proposed General Plan Amendment and rezonings) outlined in both documents.

No Project Alternative

Implementation of the No Project Alternative would represent continuation of the City's existing General Plan and zoning to guide future residential development and management of greenhouse gas emissions. Although the General Plan was amended in September 2010 to remove references to the housing cap of 29,000, that amendment did not alter the buildout projections of the General Plan. The adopted General Plan, as amended in September 2010, would result in an increase of 9,400 new residents in an addition of 2,007 housing units and an increase in employment of 22,644. The No Project Alternative would have more population and housing impacts as compared to the proposed Housing Element because housing needs identified in the RHNA would not be met as the result of less opportunity for residential development, nor would the No Project Alternative further the goal of improving the City's jobs-housing balance. Further, the No Project Alternative would not implement the programs and policies outlined in the Draft CAP, and thus would not meet the goals set forth in AB 32.

The No Project Alternative has the least amount of residential development opportunity compared to the proposed project and other Alternatives. This alternative would not achieve the RHNA requirements for affordable housing or the greenhouse gas reduction targets of AB 32. Overall, the No Project Alternative would result in more impacts associated with land use and planning because it would not improve the local jobs/housing balance, most critically having more impacts on greenhouse gases and climate change than the proposed project, and would leave the City with an outdated Housing Element that sets forth an inventory of land for the development of housing that falls short of RHNA objectives. Further, the No Project Alternative would not meet the requirements of the Settlement Agreement which states that City must adopt both a Housing Element and a Climate Action Plan by defined dates.

The No Project Alternative would result in similar hydrology and water quality impacts as nonresidential development would still occur on the potential sites for rezoning. All other less-than-significant impacts under the proposed project would remain less than significant under this alternative. Mitigations required for these impacts would apply to this alternative as well. See the relative less-than-significant impacts compared by topic in Table 5-4.

Alternative 1, Large Properties

The Large Properties Alternative focuses increasing residential development capacity on the larger of the potential sites for rezoning. Compared to the proposed project, this alternative would result in a small increase in residents and housing units. The policies and programs outlined in the Housing Element and the Draft CAP would remain the same. By reducing the number of potential housing units, the alternative would not achieve the jobs and housing balance of the proposed project, however, it would still improve the balance. By improving the jobs/housing balance, the City would still be able to meet its GHG emissions target, while achieving its RHNA objectives.

Therefore, all of the less-than-significant impacts under the proposed project would still remain less-than-significant under this alternative, although in most cases the impact would be to a lesser degree than under the proposed project. None of the impacts would be more severe under this alternative such that they would be significant because this alternative would result in less total growth than would occur under the proposed project. Moreover, all mitigation measures identified for the proposed project would also apply to the impacts resulting with this alternative. See the relative less-than-significant impacts compared by topic in Table 5-4.

Alternative 2, Transit Oriented

This alternative focuses increasing residential development capacity along t the BART and bus route 10 corridors. This alternative would result in fewer new residents and housing units compared to the proposed project. The policies and programs outlined in the Housing Element and the Draft CAP would remain the same. By reducing the number of potential housing units, the alternative would not achieve the same level of jobs/ housing balance improvement of the proposed project, however, it would still improve the balance. By improving the balance the City would still be able to meet its GHG emissions target, while achieving its RHNA allocations. The Transit Oriented Alternative, of all the reduced density alternatives, would attain the highest GHG reductions through VMT reductions, as residential uses would be clustered near alternative forms of transportation.

Therefore, all the less-than-significant impacts under the proposed project would still remain lessthan-significant under this alternative, and in most cases the impact will be to a lesser degree than under the proposed project. None of the impacts would be more severe under this alternative such that they would be significant because this alternative would result in less total growth under the proposed project. Moreover, all mitigation measures identified for the proposed project would also apply to the impacts resulting with this alternative. See the relative less-than-significant impacts compared by topic in Table 5-4.

Alternative 3, Excludes East Pleasanton

This alternative focuses increasing residential development capacity away from east Pleasanton by excluding the potential sites for rezoning in that geographic region. This would result in a smaller increase in fewer new residents and housing units compared to the proposed project. The policies and programs outlined in the Housing Element and the Draft CAP would remain the same. By reducing the number of potential housing units, the alternative would not achieve the jobs/ housing balance improvement of the proposed project; however, it would still improve the balance. By improving the balance the City would still be able to meet its GHG emissions target, while achieving its RHNA allocations.

Therefore, all the less-than-significant impacts under the proposed project would still remain lessthan-significant under this alternative, and in most cases the impact will be to a lesser degree than under the proposed project as it would develop fewer units overall. None of the impacts would be more severe under this alternative such that they would be significant because this alternative would result in less total growth under the proposed project. Moreover, all mitigation measures identified for the proposed project would also apply to the impacts resulting with this alternative. See the relative less-than-significant impacts compared by topic in Table 5-4.

Alternative 4, Increased Density

This alternative considers the maximum buildout density of each of the potential sites for rezoning. The policies and programs outlined in the Housing Element and the Draft CAP would remain the same. This would result in more residents and housing units compared to the proposed project.

By increasing the number of potential housing units, the alternative would achieve a greater improvement in the local jobs/ housing balance as compared to the proposed project. This would result in a per capita VMT reduction as compared to the proposed project. As such, the Increased Density Alternative would achieve a larger reduction in GHG emissions from a reduction in VMT. Under the Increased Density Alternative, the City would be able to meet its GHG emissions target by increasing its residential development capacity beyond that needed for the 2007-2014 Housing Element planning period.

Therefore, all the less-than-significant impacts under the proposed project would still remain lessthan-significant under this alternative, and in most cases the impact will be to a lesser degree than under the proposed project. None of the impacts would be more severe under this alternative such that they would be significant because this alternative would result in less total growth under the proposed project. Moreover, all mitigation measures identified for the proposed project would also apply to the impacts resulting with this alternative. See the relative less-than-significant impacts compared by topic in Table 5-4.

E. Environmentally Superior Alternative

Based upon the evaluation described in this section, Alternative 2, Transit Oriented development would be the environmentally superior alternative given its reduced residential development potential and associated environmental effects (as compared to development under the proposed development of all the potential sites for rezoning). Additionally, this alternative would not directly result in the significant and unavoidable on Site 21 related to demolition of a potentially significant cultural resource. The significant and unavoidable transportation impact on a regional roadway (Sunol Boulevard and Hopyard Road) for which the City would not be the Lead Agency for mitigation implementation would remain under this alternative. Further, the Transit Oriented Alternative meets all the key objectives and goals of the Housing Element and CAP, namely it would ensure capacity for the development of new housing to meet the RHNA at all income levels or present the California Department of Housing and Community Development a housing element that meets the requirements of the settlement agreement, as well as reduce GHG emissions from vehicle miles traveled (VMT) through strategic rezonings. For these reasons, Alternative 2 is considered the Environmentally Superior Alternative.

F. Project Alternatives Considered but Rejected for Further Analysis in this SEIR

CEQA *Guidelines* § 15126.6(c) requires an EIR to identify and briefly discuss any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. In identifying alternatives, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the project objectives. Alternatives that would have the same or greater impacts as the proposed project, or that would not meet most of the project objectives, were rejected from further consideration.

As the Housing Element and CAP are both designed to guide development in the City, an alternative site would not be appropriate as an alternative to the proposed project.² Other land uses which would exclude residential development would not achieve the objectives of the proposed project, requirements under State law, or the obligations of the Settlement Agreement. Therefore, these alternatives were rejected from further analysis in the SEIR because they do not meet the objectives, nor do they fulfill legal requirements under State law. Under the No Project Alternative analysis, there is no discussion of a no project alternative with a freezing of conditions (i.e., no development); under CEQA *Guidelines* §15126.6(a), the No Project Alternative for a land use plan analyzes the continuation of existing land use plans into the future.

As a SEIR considers alternatives analyzed in the parent EIR, this analysis also considered the Dispersed Growth and Concentrated Residential/Mixed Use Alternatives analyzed in the General Plan EIR. Both of these alternatives were rejected for analysis in this SEIR, as they would not

² It should be noted that an extensive public process was undertaken to develop the list of potential sites for rezoning under the Housing Element. The sites that were excluded from further analysis constitute an "off-site alternative" that was rejected.

achieve the objectives of the proposed project, requirements under State law, or the obligations of the Settlement Agreement.

As part of preparing the Climate Action Plan, some alternatives were considered, but rejected when they proved to be ineffective, inefficient, or more difficult than the projected GHG savings warranted. These included (1) adoption of a "Residential Energy Conservation Ordinance" and a Commercial Energy Conservation Ordinance, (2) restrictions on downtown parking, and (3) expanding employer-based transportation demand management (TDM) programs to yield a 20 percent (rather than 6 percent) reduction in trip generation.

Residential/commercial energy conservation ordinances would have provided for energy audits and potentially provision of energy conservation measures to be provided for existing residential and commercial structures at time of sale. The alternative was rejected due to the substantial practical difficulties involved in implementing such a program and strong community reaction against the program. The concept of restricting downtown parking either by increasing the cost of parking within the downtown area, or by reducing parking requirements for uses within the downtown area as a means of providing an incentive for use of transit rather than private automobiles. This alternative was rejected due to its likely ineffectiveness. Increasing the cost or reducing the supply or downtown parking would as or more likely to simply divert private automobile traffic to locations outside of the downtown area, with no reduction in GHG emissions. Expanding employer-based TDM programs to yield a 20 percent (rather than 5 percent) reduction in trips was rejected since it could not be demonstrated that expansion of employer-based TDM programs could, in fact, be effective in reducing employee trips by more than 5 percent. Rejecting these alternatives did not affect the City's ability to meet identified GHG reduction targets, as demonstrated in the Climate Action Plan and Section 4.E of this document.

G. Comparison of the Alternatives

The analysis of the alternatives is summarized and compared in two tables: **Table 5-3** provides a summary of the most severe impact level within each environmental topic area and **Table 5-4** summarizes the ability of each alternative to meet the objectives of the General Plan Amendment and rezonings. These tables also summarize the same information for the proposed project as well as the alternatives. The tables provide a ready means for the reader to review and compare the alternatives with each other, and with the General Plan Amendment and rezonings as proposed.

Table 5-4 indicates that the Housing Element and Draft CAP as proposed have the ability to meet stated objectives. Of the alternatives considered in this chapter, only the No Project Alternative would not have ability to meet, or partially meet, all of the project objectives. The other alternatives are equal or less able to meet the stated objectives. Notably, the Increased Density Alternative would not meet the stated objectives of developing a Housing Element that supports sustainable local, regional and state housing and environmental goals. However, all the alternatives, except the No Project, would meet the objectives of the Draft CAP, namely a reduction in greenhouse gas emissions by reducing vehicle miles traveled.

Impact	Project	No Project	Alternative 1 Large Properties	Alternative 2 Transit Oriented	Alternative 3 Excludes East Pleasanton	Alternative 4 Increased Density
Aesthetics	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Air Quality	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Biological Resources	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Cultural Resources	Significant and Unavoidable	Significant Unavoidable	Significant and Unavoidable∜	Significant and Unavoidable∜	Significant and Unavoidable₽	Significant and Unavoidable
Geology and Soils	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significantû
Greenhouse Gases	Less than Significant	Significant Unavoidable	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Hazards and Hazardous Materials	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significantû
Hydrology and Water Quality	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Land Use and Planning	Less than Significant	Significant and Unavoidable	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Noise	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Population and Housing	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significantû
Public Services and Utilities	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significant
Recreation	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant	Less than Significantû
Transportation and Traffic	Significant and Unavoidable	Significant and Unavoidable û	Significant and Unavoidable₿	Significant and Unavoidable∜	Significant and Unavoidable₽	Significant and Unavoidable

TABLE 5-3 ALTERNATIVES IMPACT SUMMARY AND COMPARISON

NOTES: \hat{U}/\mathcal{P} - The impact is more/less severe than compared to the proposed project.

The color gradients in the table are a visual representation of the significance findings with the lightest or absence of color representing the least amount of impact, and the darkest shade representing a severe impact.

SOURCE: Environmental Science Associates

Finally, as presented in Table 5-4, the reduced build alternatives (Alternatives 1- 3) would meet the stated project objectives of the Housing Element and the Draft CAP, unlike the No Project, which would fall short of meeting the majority of the stated objectives. Notably, the No Project Alterative would not ensure capacity for the development of new housing to meet the RHNA at all income levels, nor would it achieve its GHG reduction target. The proposed General Plan Amendment and rezoning and other Alternatives meet that key objectives.

TABLE 5-4	
ABILITY OF ALTERNATIVES TO SATISFY PROJECT O	BJECTIVES

Project Objective	No Project Alternative	Alternative 1 Large Properties	Alternative 2 Transit Oriented	Alternative 3 Exclude East Pleasanton	Alternative 4 Increased Density
Housing Element Objectives Provide a vision for the City's housing and growth management through 2014	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Maintain the existing housing stock to serve housing needs	Meets objective	Meets objective	Meets objective	Meets objective	Meets objective
Ensure capacity for the development of new housing to meet the RHNA at all income levels	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Encourage housing development where supported by existing or planned infrastructure, while maintaining existing neighborhood character	Does not meet objective	Meets objective	Meets objective	Meets objective	Does not meet objective
Encourage, develop and maintain programs and policies to meet projected affordable housing needs	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Develop a vision for Pleasanton that supports sustainable local, regional and state housing and environmental goals	Does not meet objective	Meets objective	Meets objective	Meets objective	Does not meet objective
Provide new housing communities with substantial amenities to provide a high quality of life for residents;	Does not meet objective	Meets objective	Meets objective	Meets objective	Does not meet objective
Present the California Department of Housing and Community Development a housing element that meets the requirements of the settlement agreement	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Adopt a housing element that substantially complies with California housing element law.	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Climate Action Plan Objectives Provide a vision for the City's sustainable development through 2025 while preserving the City's character	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Provide the framework to meet the AB32 target of reducing GHG emissions to 1990 levels (or 15 percent below the 2005 baseline, consistent with recommendations provided by the California Air Resource Board);	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Incorporate additional GHG emissions reduction programs into the General Plan;	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Serve as an example of environmentally sustainable development to cities throughout California and the Country at large	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective
Meet the terms of the Settlement Agreement, providing GHG emissions analysis and reduction strategies for the life of the City's General Plan.	Does not meet objective	Meets objective	Meets objective	Meets objective	Meets objective

NOTE: The shaded objectives give visual representation of the objectives that would result in a fatal flaw. That is it would result in an inadequate Housing Element, not achieve GHG reduction goals, or not comply with the Settlement Agreement.

SOURCE: Environmental Science Associates

CHAPTER 6 Other Statutory Sections

Consistent with CEQA *Guidelines*, §15126.2, this section summarizes the findings of the proposed General Plan Amendment and rezonings with respect to the growth-inducing effects, significant irreversible environmental changes, cumulative impacts (when considered with other projects), significant unavoidable environmental effects, and effects found to be less than significant.

A. Growth-Inducing Effects

The CEQA *Guidelines* require that an EIR evaluate the growth-inducing impacts of a proposed action (§15126.2(d)). A growth-inducing impact is defined by the CEQA *Guidelines* as:

[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project involved construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) that would encourage development of new housing for employees, or if it would involve a substantial construction effort creating short-term employment opportunities. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Infrastructure projects could also indirectly stimulate growth by enhancing access to properties, or increasing their desirability for development.

Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA *Guidelines* also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The timing, magnitude, and location of land development and population growth are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment

centers, the supply and cost of housing, and regulatory policies or conditions. Since a general plan defines the location, type and intensity of growth, it is the primary means of regulating development and growth in California.

Growth from the Proposed Project

By its very nature, a Housing Element is intended to be growth inducing. Based on Government Code § 65300, a Housing Element is intended to provide plans and programs to meet identified housing needs, including facilitating new residential development to meet the City's share of projected regional housing needs for all economic segments of the community. While a Housing Element does not propose any specific residential development projects, it does facilitate future population growth of the city that would result in indirect growth-inducing effects. By adopting a Housing Element, a city is setting the ground rules for future residential growth and development within its jurisdiction. Accordingly, it is intended to foster population growth a by facilitating housing construction in the city.

As discussed in Chapter 3, Project Description, the city is required by state law to promote the production of housing to meet its fair share of the regional housing needs distribution made by the ABAG.

Adoption of the proposed General Plan Amendment and rezonings would change existing land use and zoning designations in the city to expand the City's residential development capacity beyond that already provided in the General Plan. Thus, the Housing Element is specifically intended to be growth inducing in relation to residential development of the proposed rezoning sites. The residential development proposed in the Housing Element also improves the City's jobs and housing balance, which in turn assists in achieving greenhouse gas reductions in support of specific greenhouse gas reduction measures set forth in the proposed Climate Action Plan.

The Housing Element also establishes policies, actions and programs to facilitate future residential development within the City in order to provide for the City's share of regional housing needs for all economic segments of the community.

The proposed Housing Element includes parcels within the City limits that are are designated as residential on the General Plan map or zoned for residential use and have no planning entitlements. There are 24 such parcels which would accommodate 1,028 housing units. Further, the Housing Element identifies 17 potential sites for rezoning, which could accommodate up to 3,900 units if development to maximum density.

Because environmental impacts related to the lands designated for residential use on the General Plan land use map were already analyzed adequately in the General Plan EIR (2009) for all issues other than greenhouse gas emissions, this SEIR focuses on the additional sites identified in the Housing Element that could potentially be zoned for residential use, and are (referred to as the "potential sites for rezoning" or "rezoning sites" in this SEIR, as well as greenhouse gas emission impacts of General Plan land uses throughout the General Plan Planning Area.
The specific environmental effects resulting from the proposed General Plan Amendment and rezonings are discussed in the environmental issue areas in Chapter 4, Environmental Setting, Impacts, and Mitigations. As described above, the proposed project would induce further population in the city by altering land uses to provide additional residential opportunities, specifically on the potential sites for rezoning. As a result, the proposed project is considered to be growth-inducing. The environmental effect of growth within the City is addressed in Chapter 4, Environmental Setting, Impacts and Mitigation Measures, of this Draft SEIR.

The specific environmental effects resulting from the direct growth effects of proposed land use patterns and associated extension of public services by the year 2025 are discussed in Chapter 4, Sections 4.A through 4.N, of this Draft SEIR. The following is a discussion of the growth-inducing effects of implementing the proposed General Plan Amendment and rezonings. The proposed development facilitated by the General Plan Amendment and rezoning would result in buildout of approximately 3,900 residential units and a population of 10,800 persons. The buildout is considered to occur by the year 2014 (the horizon of the proposed Housing Element).

Population Growth

The Association of Bay Area Governments (ABAG) future growth projections for the City of Pleasanton in 2015 are 72,200 residents and 61,320 jobs, respectively. This results in a projected jobs-housing ratio of 1.17:1 in the year 2015.

A ratio of jobs to housing is an expression to relay the concept of jobs-housing balance. It is a ratio between a measure of employment and a measure of housing. The most basic measure is the ratio of the number of jobs to the number of housing units in an area. The recommended target standard and ranges for jobs-housing unit ratios vary, but fall in the range of 1.4:1 to 1.6:1 (Cervero, 1991b).

During the same time frame (2010-2015), the proposed project, through the residential development of the potential sites for rezoning in addition to residential development already analyzed in the General Plan EIR, anticipates adding up to 10,800 residents for a total population of approximately 80,100. With 61,320 jobs projected by 2015, the projected jobs and housing balance under the proposed project would be 1.31:1 in 2015. Because the jobs-housing ratio would fall in the range of what has been documented as a recommended target ratio, it is expected that the development of the potential sites for rezoning would minimize the existing jobs and housing imbalance that is estimated by ABAG. The General Plan Amendment and rezonings play a key role in balancing the jobs and housing ratio as it would provide opportunity for residential growth in the city. The physical environmental effects of growth associated with population are addressed in Sections 4.A through 4.N of this Draft SEIR and below in this section.

In order to achieve its GHG emission reduction targets, the Draft CAP includes reduction strategies that address transportation and land use. Existing land-use patterns are responsible for the large number of daily vehicular trips generated in Pleasanton that account for a majority of the City's GHG emissions. As described in the Housing Element Background Report, in 2010, 31 percent of local workers commute less than 15 minutes to work, 25 percent commute 15-29

minutes, 18 percent commute 30-44 minutes, 10 percent commute 45-59 minutes, and 16 percent commute 60 or more minutes. Thus, it can be assumed that about 69 percent of the local work force works outside of Pleasanton. Therefore, many of estimated 55,770 existing jobs are filled by persons living outside of Pleasanton.

Existing development patterns and the supporting transportation infrastructure in the City are major factors in the transportation habits of residents because they limit transportation choices, leading to an auto-dependent culture that relies less on walking, biking, and public transit and more on personal daily motor vehicle trips.

Low mileage, single-occupant vehicles, and traffic congestion contribute to tail pipe emissions. The lack of extensive pedestrian and bicycle amenities functions as a disincentive to choose noemission mobility alternatives. In response, the transportation and land use measures in the Draft CAP focus on reducing the amount of motor vehicle miles traveled (VMT) and vehicle trips required each day per person, and reducing the petroleum content and consumption of motor vehicle fuels.

Early literature concerning jobs and housing balance, argued that communities with effective balance (1.40 to 1.60 jobs per household) are associated with higher than average self containment ratios and low car dependency (Cervero, 1989a, 1991b, and 1996c). Gradually changing land-use regulations, increasing transit choices, and improving pedestrian and bicycle infrastructure will help reduce the GHG emissions associated with transportation and land-use. The proposed project, by increasing housing opportunity sites through rezonings would be changing land-use patterns to achieve a more effective balance. By improving the jobs and housing balance under the proposed General Plan Amendment and rezonings to 1.30, the Draft CAP achieves its goal of reducing VMT which in turn reduces GHG emissions.

Growth Effects Associated with Infrastructure Improvements

The proposed development facilitated by the General Plan Amendment and rezonings could indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. The city's infrastructure and public services are largely provided by other public and private service providers (e.g., Alameda County Flood Control and Water Conservation District's Zone 7 for water supply and Pacific Gas & Electric for gas service and electrical service), which utilize master plans for guiding facility and service expansions that are subject to environmental review under CEQA.

The General Plan includes proposed roadway improvements that have been designed to support the General Plan Land Use Diagram and to maintain the city's proposed level of service (LOS) standard of LOS D where feasible and appropriate. Of note is the El Charro Road extension which would provide north-south to I-580 for East Pleasanton. The extension is encouraged under Program 7.2 of the General Plan:

"Coordinate the design and construction of El Charro Road and El Charro Road / I-580 interchange improvements with Livermore, Dublin, and Alameda County."

The General Plan considered the full buildout of El Charro Road under cumulative conditions. It has been fully analyzed in support of this SEIR related to transportation under all build scenarios (see Appendix D).

The General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the General Plan.

The proposed General Plan Amendment and rezonings does not call for the construction of major new roadways or utility systems in undeveloped areas that would stimulate development in those undeveloped areas. Thus, the proposed project would not induce growth by removing infrastructure barriers or by providing new infrastructure, nor would it create new transportation access to a previously inaccessible area.

Environmental Effects of Growth

As described above, the proposed General Plan Amendment and rezonings would induce housing and population growth in the city by providing appropriately zoned land for residential development to meet projected housing needs for all economic segments of the community, along with policies and programs to facilitate the development of that housing. As a result, the proposed project is considered to be growth-inducing. The environmental effects of growth within the City of Pleasanton are summarized below, and in the analysis of each environmental topic included in Chapter 4 of this SEIR, *Environmental Setting, Impacts, and Mitigation Measures*. The following additional environmental effects could be experienced due to growth in the region:

Aesthetics: Additional residential development which could potentially alter views and increase light and glare.

Air Quality: Increases in air pollutant emissions potentially conflicting with air quality attainment efforts under state and federal Clean Air Acts and increased potential for the exposure to toxic air contaminants.

Biological Resources: Increases in development in areas with sensitive species or habitat.

Geology and Soils: Increased development in an area prone to seismic hazard, landslides, and ground failure.

Greenhouse Gas Emissions: Increases in the release of greenhouse gas emission through transportation and residential heating/cooling.

Hazards and Hazardous Materials: Increases in development areas which could expose hazardous materials through soils or demolition debris.

Hydrology and Water Quality: Increased development reducing permeable surface and increasing runoff.

Land Use: Increase in development opportunities for residential land uses.

Noise: Increased transportation noise levels from increased traffic volumes and increased noise levels from construction of residential units.

Populating and Housing: Increases in population and housing stock.

Public Services and Utilities: Increased demand for public services and utilities, including an increased water demand.

Recreation: Increases the demand for parks and gathering spaces.

Traffic and Transportation: Increased traffic volumes on the region's highways and regional roadways resulting in deficient levels of service of operation.

B. Significant Irreversible Changes

CEQA *Guidelines*, § 21100(b)(2) and 21100.1(a) require that EIRs prepared for the adoption of a plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes of project implementation. In addition, CEQA *Guidelines*, § 15126.2(c) describes irreversible environmental changes as:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Adoption of the proposed General Plan Amendment and rezonings is expected to result in the conversion of undeveloped and/or underutilized properties to residential land use. Subsequent development implementing the project involves a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of the land to its original condition.

Residential development in the city would irretrievably commit building materials and energy to the construction and maintenance of buildings and infrastructure. Renewable, nonrenewable, and limited resources that would likely be consumed as part of the development of the proposed project would include, but are not limited to, oil, gasoline, lumber, sand and gravel, asphalt, water, steel, and similar materials. In addition, residential development would result in the increased demand on utilities and public services (see Section 4.L).

Accidents, such as the release of hazardous materials, may trigger irreversible environmental damage. Construction of residential units on the potential sites for rezoning would involve use of paints, solvents, oil and grease, and petroleum hydrocarbons that are typically used during construction. Following construction completion, hazardous materials exposure from the project site would be limited to slight amounts of household hazardous materials, including paints,

solvents, cleaners, metals, fuels, oils, and pesticides associated with each housing unit. In most circumstances, the potential risks posed by hazardous materials use and storage are primarily local and, therefore, limited to the immediate vicinity of such use. Moreover, the transport, use, and disposal of even household hazardous chemicals are heavily regulated. Compliance with existing federal, State, and local laws and regulations that are administered and enforced by the City would reduce risks associated with the routine use, storage, and transportation of hazardous materials in connection with construction activities to acceptable levels. After construction, the proposed project would not emit hazardous materials and/or be expected to pose an unacceptable risk of accidental release of hazardous substances. Consequently, adherence to existing federal, State, and local regulations, the General Plan and the Municipal Code would reduce potential impacts to less-than-significant levels.

The sites selected as potential sites for rezoning are vacant or underutilized parcels. Some of these sites are parking lots, underutilized buildings, or some similar use and may contain improvements/structures. Any development under the proposed project which includes the demolition of existing buildings containing Hazardous Building Materials such as asbestos, lead-based paint and/or PCBs could expose construction workers to harmful contaminants. Improper handling of contaminated soil and/or groundwater could result in inadvertent release into the environment, which would have an adverse impact. However, compliance with existing regulations, including, but not limited to the General Plan and the Municipal Code would ensure that no significant irreversible changes from accidental releases would occur.

C. Cumulative Impacts

CEQA defines cumulative impacts as two or more individual impacts which, when considered together, are substantial or which compound or increase other environmental impacts. The cumulative analysis is intended to describe the "incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable future projects" that can result from "individually minor but collectively significant projects taking place over a period of time." (CEQA *Guidelines*, § 15355) The analysis of cumulative impacts is a two-phase process that first involves the determination of whether the project, together with existing and reasonably foreseeable projects, would result in a significant impact. If there would be a significant cumulative impact of all such projects, the EIR must determine whether the project's incremental effect is cumulatively considerable, in which case, the project itself is deemed to have a significant cumulative effect. (CEQA *Guidelines*, § 15130)

Cumulative impacts may be discussed in terms of the proposed project impacts, in combination with impacts anticipated for future development (including approved and planned development within the city and surrounding affected area). The geographic area for each impact varies, depending on the nature of the impact, whether it is regional, such as air quality, or local, such as noise.

Quantification can be difficult for cumulative impacts, as it requires speculative estimates of impacts including, but not limited to the following: the geographic diversity of impacts (impacts

of future development may affect different areas); variations in time of impacts; and data for buildout projections may change following subsequent approvals. However, every attempt has been made herein to make sound qualitative judgments of the combined effects of, and relationship between, land uses and potential impacts.

This SEIR assesses the overall environmental effects of the proposed project at a program level of detail, while focusing specific analysis on the potential sites for rezoning as opportunity sites for residential development. This SEIR evaluates the overall (cumulative) effects of buildout in accordance with the land use designations, land use assumptions, and all goals, policies, and implementing strategies contained in the General Plan and the proposed project. The analysis of each environmental topic included in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this SEIR evaluates possible cumulative impacts considering regional development in combination with the buildout of the proposed project and the City's General Plan.

As noted below, in *D. Significant and Unavoidable Environmental Impacts*, implementation of the proposed project in combination with potential development in the surround area would result in significant and unavoidable impacts under cumulative conditions related to transportation. Transportation impacts are considered significant and unavoidable on regional roadways under the buildout of the General Plan, as the City would not be fully responsible for addressing feasible infrastructure improvements on regional roadways. Pleasanton, as outlined in their General Plan, would continue to provide policy framework to lessen cumulative impacts by encouraging smart growth within their Urban Growth Boundary.

D. Significant and Unavoidable Environmental Impacts

In accordance with CEQA *Guidelines*, § 21083, and with CEQA *Guidelines*, §15064 and 15065, an EIR must also identify impacts that could not be eliminated or reduced to an insignificant level by mitigation measures included as part of the implementation of the proposed project, or by other mitigation measures that could be implemented, as described in Chapter 4, *Environmental Setting*, *Impacts, and Mitigation Measures*.

Development facilitated by the General Plan Amendment and rezonings would result in the following significant and unavoidable impact that cannot be mitigated to a less-than-significant level:

Impact 4.D-1: Development facilitated by the General Plan Amendments and rezonings has the potential to change the significance of a historical resource.

Impact 4.N-7: Development facilitated by the General Plan Amendment and rezonings could potentially add traffic to the regional roadway network to the point they would operate unacceptably under Cumulative plus Project conditions.

E. Effects Found Not To Be Significant

As required by CEQA, this SEIR focuses on expected significant or potentially significant environmental effects (CEQA *Guidelines*, § 15143). In accordance with § 15128 of the CEQA *Guidelines* an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the SEIR.

A Notice of Preparation (NOP) was circulated on May 2, 2011 and revised to include the Climate Action Plan and recirculated on August 23, 2011 to solicit comments from the public and agencies about the scope of this SEIR. Written comments received on the NOP were considered in the preparation of the final scope for this document and in the evaluation of the General Plan Amendment and rezonings. An Initial Study was not prepared.

Because this SEIR did not include the preparation of an Initial Study, all environmental topics in the CEQA Environmental Checklist, except for the two exceptions listed below, have been fully analyzed in this document (Chapter 4).

The following two topics were excluded from detailed discussion in Chapter 4 of this SEIR because it was determined during the SEIR scoping phase that there would be no impacts associated with these topics.

Agricultural Resources

As discussed in Section 4.I, *Land Use and Planning*, the General Plan Land Use Map designates various residential and commercial land use classifications in and surrounding the city. The city, as with the majority of developed land in the City of Pleasanton, is designated by the California Department of Conservation's Important Farmland in California Map as urban and built-up land (Department of Conservation, 2010). Therefore, neither the Housing Element nor the Climate Action Plan would directly or indirectly convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; would not conflict with existing zoning for agricultural use, or a Williamson Act contract; and would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use. The General Plan Amendment and rezonings would have no impact on agricultural resources.

Likewise, the General Plan Amendment and rezonings would not cause rezoning of forest land, timberland, or timberland-zoned Timberland Production. Development facilitated by the General Plan Amendment and rezonings would not result in the loss of forest land or convert forest land to non-forest use.

Mineral Resources

The City is a developed urban area that has few existing mineral resources. The California Geological Survey has classified lands within the San Francisco Bay Region into Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and

Geology Board, as mandated by the Surface Mining and Reclamation Act (SMARA) of 1974 (Stinson et al., 1982).

Much of the City is in the MRZ-1 category with no significant mineral deposits, although developed areas in southeastern Pleasanton and west of I-680 are classified as MRZ-3.15 A small area near the gravel pits in the eastern portion of the City, is classified as MRZ-2, and is currently mined for aggregate material used for the production of cement, asphalt, plaster sand, and fill. The depth of the deposit ranges in thickness from 25 feet in the west to over 100 feet in the east. Resources on Sites 11 and 14, in East Pleasanton, have been harvested and are depleted of mineral resources. Therefore, development facilitated by the General Plan Amendment and rezoning would not 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; and would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. The General Plan Amendment and rezonings would have no impact on mineral resources.

References – Other Statutory Sections

- California Department of Conservation, Farmland Mapping and Monitoring Program, *Alameda County Important Farmland Map*, 2010, ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/ala10.pdf, accessed June 15, 2011.
- California Environmental Quality Act (CEQA) Statutes and Guidelines; Public Resources Code 21000-21177) and California Code of Federal Regulations, Title 14, Division 6, Chapter 3, §15000-15387.
- Cervero, R. (1989a) Jobs-housing balancing and regional mobility. Journal of the American Planning Association, 55 (2): 136-150.
- Cervero, R. (1991b). "Jobs/Housing Balance as Public Policy." Urban Land 50, no. 10: 10-14.
- Cervero, R. (1996c) Jobs-housing balancing revisited. Journal of the American Planning Association, 62 (4): 492-511.
- Stinson, M. C., M. W. Manson, J. J. Plappert, and others, Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area, Part II, Classification of Aggregate Resource Areas South San Francisco Bay Production-Consumption Region, California Division of Mines and Geology Special Report 146, 1982.

CHAPTER 7 EIR Authors; Persons, and Organizations Contacted

A. EIR Authors

Lead Agency

City of Pleasanton 200 Old Bernal Road, Pleasanton, CA 94566

Jonathan Lowell, City Attorney Brian Dolan, AICP, Director of Community Development Janice Stern, AICP, Planning Manager Robin Giffin, Senior Planner Mike Tassano, City Traffic Engineer Joshua Pack, Senior Transportation Engineer Daniel Smith, Director - Operations Services Department Laura Ryan, Manager - Energy & Sustainability

EIR Consultant

Environmental Science Associates 225 Bush Street, Suite 1700 San Francisco, California 94104

> **Project Director:** Lloyd Zola, AICP Lesley Lowe, AICP **Project Manager:** Deputy Project Manager: Kelly Ross, AICP **Project Description** Lesley Lowe, AICP Aesthetics Section: Rebecca Skaggs Malone Air Quality Section: Matt Morales, Donald Ambroziak, Paul Miller **Biological Resources Section:** Martha Lowe, Erin Higbee-Kollu Cultural Resources Section: Kelly Ross, AICP Geophysical Section: Josh Smith, Eric Schniewind Hazards Section: Josh Smith, Eric Schniewind Hydrology & Water Quality Section: Josh Smith, Dylan Duverge Land Use and Planning Section: Kelly Ross, AICP Jason Mirise, Ben Frese, Paul Miller Noise Section: Population and Housing Section: Maha Darwish, Kelly Ross

Public Services and Utilities Section: Transportation and Traffic Section:

Alternatives Analysis: Growth Inducing and Cumulative: Graphics: Word Processing: Editorial Review: Kiran Hashmi Fehr and Peers Associates, Lesley Lowe, AICP, Peter Costa, AICP Lesley Lowe, AICP, Lloyd Zola Lesley Lowe, AICP, Lloyd Zola Ron Teitel John Hart Allison Chan, Kiran Hashmi

Transportation Consultant

Kathrin Tellez, AICP, PTP Fehr and Peers Associates 100 Pringle Avenue, Suite 600 Walnut Creek, CA 94596

B. Persons and Organizations Consulted

Lists of other people and organizations consulted are provided in the references at the end of each section.