CHAPTER 3 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EVALUATION

3.1 DETERMINING SIGNIFICANCE UNDER CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable Federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 USC 327. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 DISCUSSION OF SIGNIFICANCE OF IMPACTS

3.2.1 Less-than-Significant Effects of the Proposed Project

Based on the analyses completed for this EIR/EA, each of which is summarized in Chapter 2, the Build Alternative will result in the following less-than-significant environmental effects:

- Land Use (Section 2.1)
- Growth (Section 2.2)

- Relocations (Section 2.3)
- Environmental Justice (Section 2.4)
- Utilities/Emergency Services (Section 2.5)
- Cultural Resources (Section 2.8)
- Water Quality & Stormwater Runoff (Section 2.9)
- Geology/Soils/Seismic/Topography (Section 2.10)
- Hazardous Waste/Materials (Section 2.11)
- Air Quality (Section 2.12)
- Noise (Section 2.13)
- Animal Species (Section 2.14)
- Invasive Species (Section 2.15)
- Construction Impacts (Section 2.16)
- Cumulative Impacts (Section 2.17)

3.2.2 Significant Environmental Effects of the Proposed Project

The project will result in the following significant environmental effects:

Traffic (Section 2.6)

Under both design options, the full project will result in a significant degradation in the Saturday, mid-day peak period level of service at the intersections of Stevens Creek Boulevard/San Tomas Expressway and Winchester Boulevard/Moorpark Avenue. The 5-Legged Intersection Design Option will also significantly impact the Winchester Boulevard/Tisch Way intersection during the Saturday mid-day peak period. In addition, under the Hook-Tamp Design Option, the new intersection at Tisch Way/Northbound I-280 Off-Ramp will operate at LOS "F" during the PM peak-hour. The mitigation for these impacts consists of roadway upgrades that cannot be accommodated within the existing rights-of-way. Acquisition of the necessary right-of-way would, in turn, result in substantial impacts to adjacent land uses. For this reason, the mitigation is considered infeasible. Please see Section 2.6.4 for details.

Visual/Aesthetics (Section 2.7)

The Build Alternative will result in a significant visual impact at the single-family homes located near Parkmoor Avenue, at the single-family homes located on Pioneer Avenue near Hodges Avenue, and at the apartments located on Tisch Way at Dudley Avenue. Mitigation and/or avoidance measures for the impacts at these first two locations are included in the project and are described in Section 2.7.4. The visual impact at the apartments cannot, however, be mitigated to a less-than-significant level.

3.2.3 Unavoidable Significant Environmental Effects

Of the significant environmental impacts described above, all but the following will be mitigated to a less-than-significant level. The significant unavoidable impacts, which apply to both design options under the Build Alternative except where noted, are as follows:

- Traffic impacts during the Saturday mid-day peak period at the intersection of Stevens Creek Boulevard/San Tomas Expressway
- Traffic impacts during the Saturday mid-day peak period at the intersection of Winchester Boulevard/Tisch Way [Note: This impact will not occur under the Hook-Ramp Design Option.]
- Traffic impacts during the weekday PM peak-hour at the new intersection of Tisch Way/Northbound I-280 Off-Ramp. [Note: This impact will not occur under the 5-Legged Intersection Design Option.]
- Traffic impacts during the Saturday mid-day peak period at the intersection of Winchester Boulevard/Moorpark Avenue
- Visual impacts at the apartments located on Tisch Way at Dudley Avenue

3.3 CLIMATE CHANGE

3.3.1 Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include carbon dioxide (CO2), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 -tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions

standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by Environmental Protection Agency in December 2007 and efforts to overturn the decision had been unsuccessful. See California v. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. However, on January 26, 2009, it was announced that EPA would reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. On June 30, 2009 EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow California to implement even stronger standards in the future. The state is expected to start developing new standards for the post-2016 model years later this year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases. " Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride

(SF6)--in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.[13]

According to *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

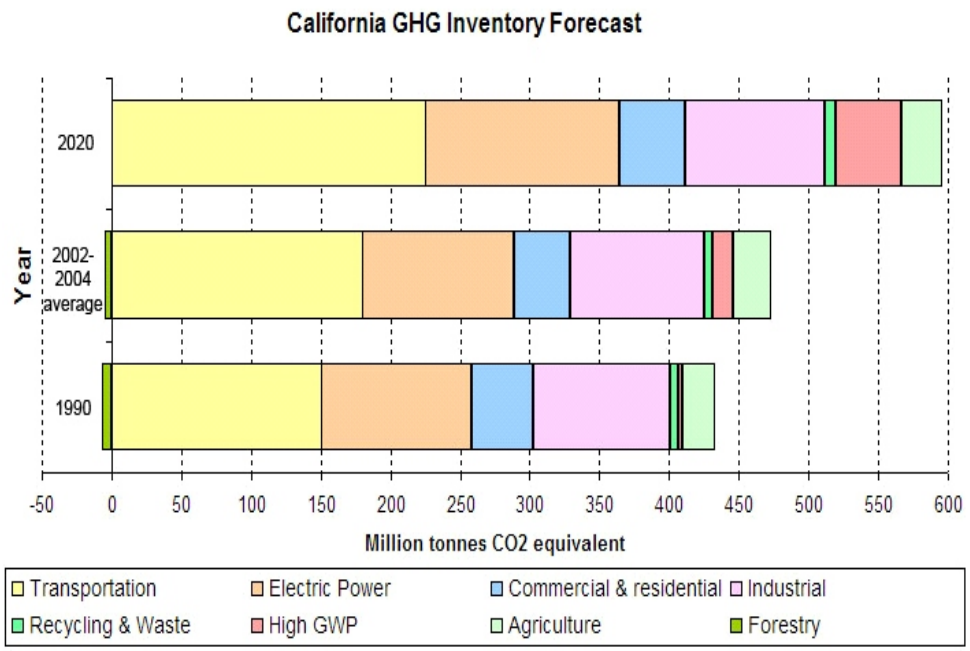
As part of its supporting documentation for the Draft Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Shown below in Table 26 is a graph from that update that shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation (see Climate Action Program at Caltrans (December 2006), Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006. This document can be found at: http://www.dot.ca.gov/docs/ClimateReport.pdf.

[13] http://www.epa.gov/climatechange/endangerment.html

T A B L E 2 6

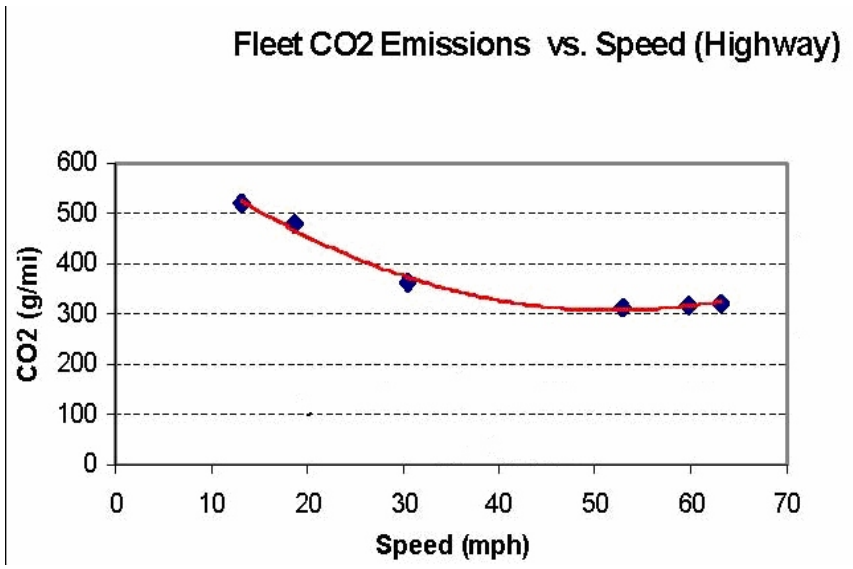
CALIFORNIA GREENHOUSE GAS INVENTORY



3.3.2 Project Analysis

One of the main strategies in the Department's Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of CO_2 from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 mph) and speeds over 55 mph; the most severe emissions occur from 0-25 miles per hour (see graph below). To the extent that a project relieves congestion by enhancing operations and improving travel times in high congestion travel corridors GHG emissions, particularly CO_2, may be reduced.

The proposed project will help relieve traffic congestion in the peak-hour periods during the day. With the construction of the project, overall vehicle-miles-traveled will be slightly lower than under No Build conditions, approximately one and a half percent. The speeds during the peak hours will increase and speeds during the off peak hours will remain the same. The combination of these changes will have an overall positive effect on the GHG emissions generated in the project area when compared with the No Build scenario. Table 27 shows the GHG emissions as expressed in tons per day of CO_2.



Source: Center for Clean Air Policy - http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20(1-13-04).pdf

T A B L E 2 7

COMPARISON OF CARBON DIOXIDE (CO_2) EMISSIONS
[Expressed in Tons per Day]

	Year 2009	Year 2035
Existing	755	
No Build		914
Build		902

Source: Modifications to I-880/Stevens Creek Boulevard, I-280/I-880/SR-17, & I-280/Winchester Boulevard Interchanges Air Quality Report, 2009.

The CO_2 emissions numbers shown in Table 27 are only useful for a comparison between alternatives. The numbers are not necessarily an accurate reflection of what the true CO_2 emissions will be because CO_2 emissions are dependent on other factors that are not part of the model such as the fuel mix[14], rate of acceleration, and the aerodynamics and efficiency of the vehicles.

3.3.3 Construction Emissions

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

The project includes measures that will reduce GHG emissions during construction, including the following:

- A transportation management plan (TMP) will be prepared and implemented. Among other benefits, the TMP will reduce traffic congestion during construction.

- Unnecessary idling of internal combustion engines will be strictly prohibited.

3.3.4 CEQA Conclusion

As discussed in the project analysis above, Caltrans does anticipate a decrease in CO_2 emissions in the immediate project area as a result of the project. However, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination regarding the significance of the project's direct impact and its contribution on the cumulative scale to climate change. Caltrans is firmly committed however to taking measures to help reduce energy consumption and greenhouse gas emissions both at the program level and at the project level. These measures are outlined in Section 3.3.5 below.

[14]EMFAC model emission rates are only for direct engine-out CO2 emissions, not the full fuel cycle; fuel cycle emission rates can vary dramatically depending on the amount of additives like ethanol and the source of the fuel components.

3.3.5 AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as CARB works to implement the Governor's Executive Orders and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a $222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including $100.7 billion in transportation funding during the next decade. As shown on the figure below, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

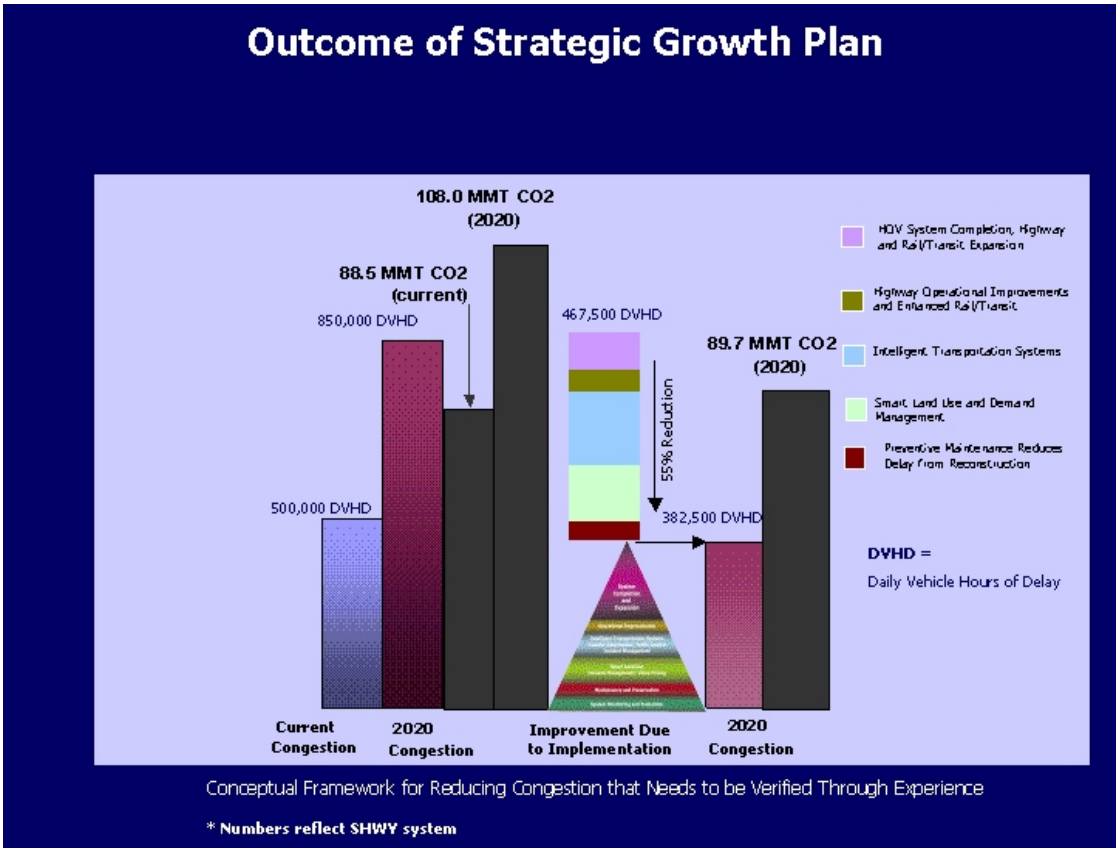


Figure 14 Outcome of Strategic Growth Plan

As part of the Climate Action Program at Caltrans (December 2006, http://www.dot.ca.gov/docs/ClimateReport.pdf), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by EPA and CARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the UC Davis.

Table 28 summarizes Caltrans' and statewide efforts that Caltrans is implementing in order to reduce GHG emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at http://www.dot.ca.gov/docs/ClimateReport.pdf.

To the extent that it is applicable or feasible for the project and through coordination with the project development team, the following measures will also be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

- Caltrans and the California Highway Patrol are working with regional agencies to implement intelligent transportation systems (ITS) to help manage the efficiency of the existing highway system. ITS is commonly referred to as electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

- In addition, the VTA provides ridesharing services and park-and-ride facilities to help manage the growth in demand for highway capacity.

- Landscaping reduces surface warming, and through photosynthesis, decreases CO_2. The project proposes planting, as described in Section 2.7, *Visual/Aesthetics*

- The project will incorporate the use of energy efficient lighting, such as LED traffic signals. LED bulbs - or balls, in the stoplight vernacular - cost $60 to $70 apiece but last five to six years, compared to the one-year average lifespan of the incandescent bulbs previously used. The LED balls themselves consume 10 percent of the electricity of traditional lights, which will also help reduce the projects CO_2 emissions.

TABLE 28

CLIMATE CHANGE STRATEGIES

Strategy	Program	Partnership		Method/Process	Estimated CO_2 Savings (Million Metric Tons)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovern-mental Review	Caltrans	Local governments	Review and seek to mitigate develop-ment proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local/Regional Agencies, other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans & Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & GHG into Plans & Projects	Office of Policy Analysis & Research; Division of Environmenta l Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	.34

TABLE 28 [continued]

CLIMATE CHANGE STRATEGIES

Strategy	Program	Partnership		Method/Process	Estimated CO_2 Savings (Million Metric Tons)	
		Lead	Agency		2010	2020
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5% limestone cement mix 25% fly ash cement mix, >50% fly ash/slag mix	1.2 .36	3.6
Goods Movement	Office of Goods Movement	CalEPA, CARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total:					2.72	18.67

3.3.6 Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damaging roadbeds by longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

Climate change adaption must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, Governor Schwarzenegger signed Executive Order S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change.

The California Resources Agency (now the Natural Resources Agency, (Resources Agency)), through the interagency Climate Action Team, was directed to coordinate with local, regional, state and federal

public and private entities to develop a state Climate Adaptation Strategy. The Climate Adaptation Strategy will summarize the best known science on climate change impacts to California, assess California's vulnerability to the identified impacts and then outline solutions that can be implemented within and across state agencies to promote resiliency.

As part of its development of the Climate Adaptation Strategy, Resources Agency was directed to request the National Academy of Science to prepare a Sea Level Rise Assessment Report by December 2010 to advise how California should plan for future sea level rise. The report is to include:

- relative sea level rise projections for California, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates;
- the range of uncertainty in selected sea level rise projections;
- a synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems;
- a discussion of future research needs regarding sea level rise for California.

Furthermore, Executive Order S-13-08 directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level affecting safety, maintenance and operational improvements of the system and economy of the state. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Prior to the release of the final *Sea Level Rise Assessment Report*, all state agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. However, all projects that have filed a Notice of Preparation, and/or are programmed for construction funding the next five years (through 2013), or are routine maintenance projects as of the date of Executive Order S-13-08 may, but are not required to, consider these planning guidelines. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data. (Executive Order S-13-08 allows some exceptions to this planning requirement.)

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted as part of Governor's Schwarzenegger's Executive Order on Sea Level Rise and is mobilizing to be able to respond to the National Academy of Science report on Sea Level Rise Assessment which is due to be released by December 2010.

On August 3, 2009, Natural Resources Agency in cooperation and partnership with multiple state agencies, released the 2009 California Climate Adaptation Strategy Discussion Draft, which summarizes the best known science on climate change impacts in seven specific sectors and provides recommendations on how to manage against those threats. The release of the draft document set in motion a 45-day public comment period. Led by the California Natural Resources Agency, numerous other state agencies were involved in the creation of discussion draft, including Environmental Protection; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The discussion draft focuses on sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. The strategy is in direct response to Gov. Schwarzenegger's November 2008 Executive Order S-13-08 that specifically asked the Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings. A revised version of the report was posted on the Natural Resource Agency website on December 2, 2009; it can be viewed at:
http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.pdf

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change impacts, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Caltrans will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

The Effects of Sea-Level Rise on the California Coast, a March 2009 report written by the California Climate Change Center[15], includes maps that depict the areas that would be affected by coastal flooding and/or erosion in year 2100 under an assumed 1.3-meter rise in sea level. The mapping shows that portions of northern San Jose and Santa Clara, which are at lower elevations than the project site, would be affected. The limits of such flooding and/or erosion would not, however, extend to within five miles of the project. Therefore, the effects of climate change on the proposed project would likely be limited to a decrease in pavement life as a result of long periods of intense heat.

[15]This paper was prepared as the result of work funded by the CEC, CalEPA, MTC, Caltrans, and the California Ocean Protection Council.

3.4 MITIGATION MEASURES FOR SIGNIFICANT IMPACTS UNDER CEQA

Section 3.2.2 lists all of the significant environmental effects of the project. The following is a list of the mitigation, minimization, and/or avoidance measures that are included in the project for each of these significant impacts.

3.4.1 Mitigation Measures for Visual/Aesthetic Impacts

- A metal beam guardrail (or similar barrier) will be installed along the easterly edge of the ramp and collector-distributor road adjacent to the Pioneer Avenue/Hodges Avenue neighborhood. Trees will be preserved between the guardrail and the right-of-way line where feasible.

- At the location where the three single-family homes will be removed, a dense grove of fast growing evergreen trees such as redwood trees will be planted between the edge of Parkmoor Avenue and the soundwall and between the soundwall and the ramps to provide a dense visual screen. With maturity, the trees will screen both the soundwalls at the ground level with their broad lower branches and screen the ramps with their tall growth characteristics.

- Fast growing vines will be planted at the bases of the new soundwalls to grow up and cover the uniform surfaces of the walls to soften their appearance.

- Metal beam guardrails (or similar barrier) will be installed, where feasible, to preserve desirable trees and vegetation located within 30 feet of the edge of the outside traffic lanes of the freeways, such vegetation that would otherwise need to be removed to comply with requirements for an object free safety/recovery zone.

CHAPTER 4 COMMENTS AND COORDINATION

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, a scoping meeting, presentations to neighborhood groups, and meetings with commercial and residential property owners. This chapter summarizes the results of the Department's and VTA's efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Substantial coordination, outreach, and public participation regarding the proposed project has occurred, which is summarized as follows:

>> A CEQA Notice of Preparation (NOP) of an EIR was circulated to local, regional, state, and federal agencies from January 13, 2009 through February 27, 2009. Only one comment, a letter from the Regional Water Quality Control Board (RWQCB) was received in response to the NOP. The RWQCB requested an analysis of stormwater runoff impacts, which is included in this EIR/EA in Section 2.9.

>> An Environmental Scoping Meeting was held at the O'Connor Hospital Auditorium on January 28, 2009. Approximately 12,500 notices for the Scoping Meeting were mailed to residences and businesses in the project area. Notices regarding the Scoping Meeting were published in 11 local newspapers (6 English, 3 Spanish, 1 Chinese, and 1 Vietnamese). In addition, the San Jose Mercury-News ran a large, front-page article regarding the proposed project two days prior to the Scoping Meeting, which resulted in increased attendance at the meeting.

The Scoping Meeting was attended by approximately 150 persons. A total of 91 written and verbal comments were submitted by those in attendance.

- Many of those in attendance expressed frustration at the level of congestion that is present in the project area and, therefore, are supportive of making improvements to the transportation network.
- A number of attendees questioned why the capacity of the transportation network had not been implemented (and paid for) as part of large development projects that have been constructed in the project area in recent years.
- Several attendees who live in the vicinity of Tisch Way expressed their concern that a portion of Tisch Way could become 1-way.
- A common theme expressed at the meeting was that any proposed improvements should not come at the expense of the adjacent residential neighborhoods, particularly with regard to noise. In addition, residents do not want any of the improvements to result in increased traffic volumes in their neighborhoods.

>> The U.S. Fish & Wildlife Service was contacted to obtain a list of threatened and endangered species that are known to occur in the greater project area. That list is attached as Appendix F.

>> During the preparation of the project's cultural resources studies, the Native American Heritage Commission and eight representatives of local Native American groups were contacted for input. No concerns or issues were identified during that consultation process.

>> Coordination with the City of San Jose Department of Parks, Recreation, and Neighborhood Services occurred during the preliminary design for the replacement of the Monroe Street Pedestrian Overcrossing, as pertains to its impact on the City-owned Santana Park. See Appendix E for further discussion.

>> The project was presented to members of the Eden Neighborhood Association at a meeting held on March 10, 2009. The meeting was attended by approximately 20 persons.

>> The project was presented to members of the Lynhaven Neighborhood Association at a meeting held on April 16, 2009. The meeting was attended by approximately 15 persons.

>> The project was presented to members of the Burbank Community Association at a meeting held on April 20, 2009. The meeting was attended by approximately 10 persons.

>> The project was presented to members of the Winchester Neighborhood Action Coalition at a meeting held on July 22, 2009. The meeting was attended by approximately 30 persons.

>> The project was presented to representatives of the owners/operators of the Westfield Valley Fair Shopping Center and Santana Row.

>> The VTA website (www.vta.org) contains an overview of the project, a project "FAQ", and information about the schedule for the project's approval and construction (including a listing of upcoming public meetings). The website also provides an opportunity for people to submit comments and questions regarding the project.

>> The project development team for the proposed project includes staff from the VTA, as well as staff from the City of San Jose. The City is a partner on the project and will be issuing encroachment permits to the Department/VTA for all work that extends onto City streets.

CHAPTER 5 LIST OF PREPARERS

The following individuals were principally responsible for preparing this EIR/EA and/or the technical studies upon which the EIR/EA is based:

California Department of Transportation, District 4 [Oversight]

Sheryl M. Garcia, Branch Chief, Office of Environmental Analysis
Greg McConnell, Branch Chief, Office of Environmental Analysis
Nick Saleh, Regional Project Manager, Office of Project Development
Shawn Enjily, District Branch Chief, Office of Project Development
Hassan Nikzad, District Branch Chief, Office of Project Development
Charlie Wu, Project Engineer, Office of Project Development
Phyllis Chinn, Project Engineer, Office of Project Development
Azadeh Faghihi, Associate Biologist, Office of Biological Resources
Bryan Walker, Senior Landscape Architect, Office of Landscape Architecture
Lance Hall, Senior Traffic Engineer, Office of Highway Operations
Elizabeth Greene, Branch Chief, South Counties, Office of Cultural Resource Studies
Chris Caputo, Associate Environmental Planner, Office of Cultural Resource Studies
Mary K. Smith, Associate Environmental Planner, Office of Cultural Resource Studies
Michelle P. Squyer, Architectural Historian, Office of Cultural Resources Studies
Glenn Kinoshita, Senior Environmental Engineer, Office of Environmental Engineering
Anna Sojourner, Engineering Geologist, Office of Geotechnical Design-West
Grant Wilcox, Chief, Branch B, Office of Geotechnical Design-West
Margaret Gabil, District Branch Chief, Office of Biological Sciences and Permits
Jeffrey Jensen, District Office Chief, Office of Biological Sciences and Permits
Jae-Myung Lee, District 4 Water Quality-Stormwater

Santa Clara Valley Transportation Authority [Oversight]

Margaret Simmons-Cross, VTA Highway Program Manager
Jim Costantini, Deputy Director, Engineering & Construction
Casey Emoto, Deputy Director, Project Development
Sajeeni DeAlwis-Mima, Project Manager
Darrell Vice, Project Manager
Ven Prasad, Project Manager
Thomas W. Fitzwater, Manager, Environmental Programs & Resources Management
Lauren Bobadilla, Senior Environmental Planner
Ann Calnan, Senior Environmental Planner
Peter Le, Transportation Engineer
David Kobayashi, Senior Transportation Planner

David J. Powers & Associates, Inc. [EIR/EA Preparation]
John M. Hesler, Principal/Project Manager
Tanya Cottle, Researcher
Stephanie Francis, Graphic Artist

Mark Thomas & Company, Inc. [Project Design, Initial Site Assessment, Water Quality Report]
Richard K. Tanaka, Principal
Daniel Ho, Project Manager
Ivy To, Design Engineer
Maren Schram, Project Engineer

DKS Associates [Traffic Report]
Terry R. Klim, Senior Transportation Engineer

Far Western Anthropological Research Group, Inc. [Cultural Resources]
Jack Meyer, Principal Investigator/Geoarchaeologist

Holman & Associates [Cultural Resources]
Miley Holman, Principal/Archaeologist
Randy Wiberg, Project Manager/Archaeologist

Basin Research Associates [Cultural Resources]
Colin Busby, Principal/Archaeologist
Ward Hill, Architectural Historian

H.T. Harvey & Associates, Inc. [Natural Environment Study]
Patrick Boursier, Principal
Amanda Breen, Project Manager

Illingworth & Rodkin, Inc. [Noise, Air Quality, & MSAT Studies]
Michael S. Thill, Senior Consultant
James Reyff, Senior Consultant
Alina Pommerenck, Consultant
Keith Pommerenck, Consultant

Parikh Consultants, Inc. [Preliminary Geotechnical Report]
Gary Parikh, Principal
James Baker, Engineering Geologist
Lam Tran, Staff Engineer

Haygood & Associates [Visual Impact Assessment]
Leah Haygood, Principal
Charlene Saito, Photosimulations

CHAPTER 6 DISTRIBUTION LIST

This EIR/EA was distributed to the following legislators, public officials, agencies and organizations:

Legislators and Public Officials

- U.S. Senator Dianne Feinstein
- U.S. Senator Barbara Boxer
- U.S. Representative Mike Honda
- U.S. Representative Zoe Lofgren
- California Senator Elaine Alquist
- California Senator Joe Simitian
- California Assemblyman Jim Beall
- Santa Clara County Supervisor Ken Yeager
- San Jose Councilmember Pierluigi Oliverio

State Agencies (via State Clearinghouse)

- California Highway Patrol
- California Department of Fish & Game (Region 3)
- California Department of Toxic Substances Control
- Regional Water Quality Control Board (San Francisco Bay Region)
- California Public Utilities Commission
- State Historic Preservation Office
- California Transportation Commission
- Air Resources Board
- Native American Heritage Commission
- State Water Resources Control Board
- California Department of Water Resources

Regional Agencies

- Metropolitan Transportation Commission
- Association of Bay Area Governments
- Bay Area Air Quality Management District
- Santa Clara Valley Water District

Local Agencies

- City of San Jose
- City of Santa Clara
- Santa Clara County Roads & Airports Department
- Clerk of the Santa Clara County Board of Supervisors

Organizations

- Pacific Gas & Electric Company
- Eden Neighborhood Association
- Lynhaven Neighborhood Association
- Winchester Neighborhood Action Coalition
- Burbank Community Association