

4.0 CUMULATIVE IMPACT ANALYSIS METHODOLOGY

PURPOSE

The purpose of this section is to explain the methodology for the cumulative project analysis presented in this EIR. This section is important because, in many cases, the impact of a single project may not be significant, while when combined with other projects the “cumulative” impact may be greater. Section 15355 of the State California Environmental Quality Act (CEQA) Guidelines defines “cumulative impacts” as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” State CEQA Guidelines (Section 15130(b)) states, “the discussion [of cumulative impacts] need not provide as great detail as is provided of the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness.”

Substantial cumulative impacts often result from the combined effect of past, present, and future projects that are located in proximity to the project under review. For example, the wastewater demand generated by a proposed project may not be significant when analyzed alone; however, when analyzed in combination with wastewater demand of other approved or proposed projects, the wastewater demands may exceed the resource capabilities of the wastewater agency, resulting in a significant cumulative impact. Therefore, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future developments that may have impacts that might compound or interrelate with those of the project under review. Furthermore, the cumulative impact analysis is an important part of an EIR as it allows the environmental analysis to provide a more complete forecast of the future environmental conditions and by showing the impacts of all known projects.

CUMULATIVE GROWTH FORECASTING METHODOLOGY

In order to analyze the cumulative impacts of the project in combination with other expected future growth, the amount and location of growth expected to occur in addition to that of the proposed project must be predicted. Section 15130(b) of the *State CEQA Guidelines* allows two methods of prediction as described below: “(A) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency, or (B) a summary of projections contained in an adopted general plan or related planning document which is designed to evaluate regional or areawide conditions.” In order to analyze a worst-case condition, this EIR uses a combination of both methods to provide a reasonable and comprehensive estimate of cumulative impacts. For this EIR, cumulative impacts are analyzed using the Santa Clarita Valley Cumulative Build-Out Scenario. A list of projects can be found in **Appendix 3.0**.

It should be noted that the list of cumulative projects used in this EIR to assess cumulative impacts is an ever-changing dynamic list. From time to time, the list of cumulative projects is increased or decreased as

specific development proposals are applied for, changed, withdrawn, approved, or denied by the City of Santa Clarita and the County of Los Angeles. An attempt has been made as part of this EIR to be as current as possible while compiling cumulative projects lists; however, it is possible that the lists maintained by the City of Santa Clarita and County of Los Angeles will change even further while this EIR is being reviewed by the public. To account for possible changes in City/County project filings which might occur prior to or during this EIR's public circulation, the cumulative analysis used in this EIR incorporates an additional unfiled 400 dwelling units. The unfiled units have been agreed to and accommodated by their inclusion into the City of Santa Clarita and the County of Los Angeles Santa Clarita Valley Consolidated Traffic Model.

Santa Clarita Valley Cumulative Build-Out Scenario

The Santa Clarita Valley Cumulative Build-Out Scenario, which also adds to existing development, entails buildout of all lands under the current land use designations indicated in the City of Santa Clarita General Plan, Los Angeles County Santa Clarita Valley Area Plan, the proposed project, plus all known active pending general plan amendment requests for additional urban development in the City of Santa Clarita and County unincorporated area. Because this scenario combines both of the CEQA future development prediction methods (i.e., (A) the listing of known projects plus (B) a summary of development projections from an adopted general plan), the Santa Clarita Valley Cumulative Build-Out Scenario is considered a worst-case projection of future development activity. It also allows a comprehensive analysis of the infrastructure, services, and other impacts of the region's buildout. The source of data for the Santa Clarita Valley Cumulative Build-Out Scenario is the November 2004 Santa Clarita Valley Consolidated Traffic Model (SCVCTM), 2004 Update and Validation, which was used in the traffic analysis. The SCVCTM was developed jointly by the City of Santa Clarita and the County of Los Angeles Department of Public Works and amended as necessary to include general plan amendment applications as they are submitted to the City and County. The modeled area extends easterly from the Ventura County line to where the Antelope Valley Freeway (SR-14) passes out of the Santa Clarita Valley near Vasquez Rocks Park; northerly to the Grapevine area north of Castaic; and southerly to the confluence of the Interstate 5 and SR-14 freeways south of Newhall Pass (this is the area that is the subject of the County's Santa Clarita Valley Area Plan). In this EIR, the SCVCTM area is often referred to as the "Valley." A list of the future development activity expected in the Valley under the Santa Clarita Valley Cumulative Build-Out Scenario is presented in **Table 4.0-1, Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with Project**. The City of Santa Clarita General Plan can be reviewed at the City of Santa Clarita, Community Development Department (Planning Division Public Counter), 23920 Valencia Boulevard, Suite 300, Santa Clarita, California, and the Los Angeles County Santa Clarita Valley Area Plan can be reviewed at the County of Los Angeles Department of Regional Planning, 320 West Temple Street, Los Angeles, California.

Table 4.0-1
Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario

Land Use Types	Cumulative Buildout w/o Project¹	Project	Cumulative Buildout w/ Project
Single Family	93,720 du		93,720 du
Multi-Family	48,703 du	54 du	48,757 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	19,899,030 sq. ft.		19,899,030 sq. ft.
Hotel	2,071 rooms		2,071 rooms
Sit-Down Restaurant	283,790 sq. ft.		283,790 sq. ft.
Fast Food Restaurant	23,600 sq. ft.		23,600 sq. ft.
Movie Theater	3,300 seats		3,300 seats
Health Club	54,000 sq. ft.		54,000 sq. ft.
Car Dealership	411,000 sq. ft.		411,000 sq. ft.
Elem./Middle School	278,953 students		278,953 students
High School	12,843 students		12,843 students
College	29,348 students	600 students	29,948 students
Hospital	247,460 sq. ft.		247,460 sq. ft.
Library	171,790 sq. ft.		171,790 sq. ft.
Church	501,190 sq. ft.		501,190 sq. ft.
Day Care	785,000 sq. ft.		785,000 sq. ft.
Industrial Park	41,743,950 sq. ft.		41,743,950 sq. ft.
Business Park	8,424,330 sq. ft.		8,424,330 sq. ft.
Manufacturing./Warehouse	3,932,470 sq. ft.		3,932,470 sq. ft.
Utilities	1,150,240 sq. ft.		1,150,240 sq. ft.
Commercial Office	6,380,520 sq. ft.		6,380,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,238.0 ac		1,238.0 ac
Developed Parkland	493.3 ac		493.3 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator ²	413.0 sg		413.0 sg

Source: City of Santa Clarita

du = dwelling unit; sq. ft. = square feet; ac = acres; sg = special generator

¹ Santa Clarita Valley Consolidated Traffic Model (2004). Includes existing development, buildout under the existing City of Santa Clarita General Plan and Santa Clarita Valley Area Plan and active pending General Plan Amendment requests.

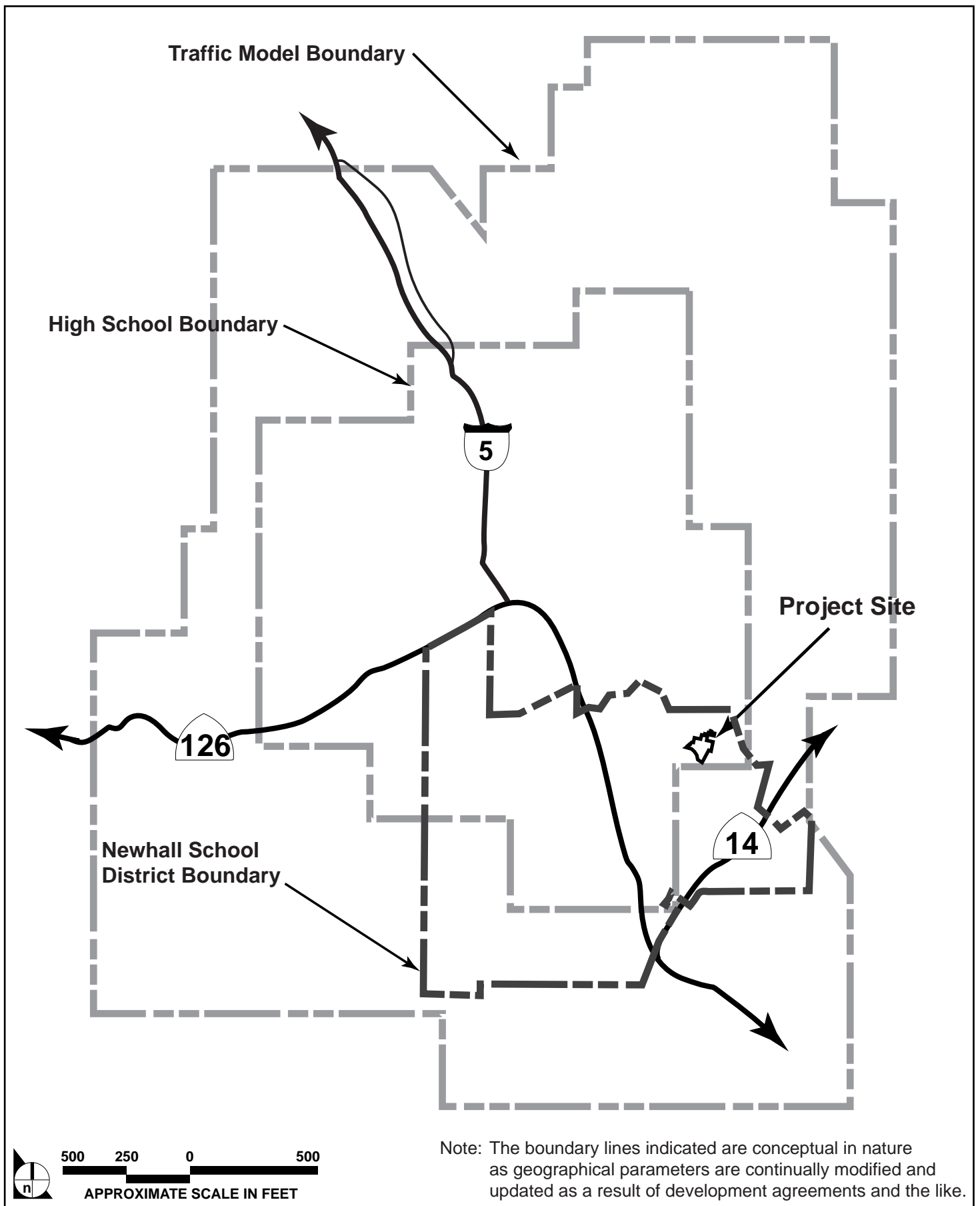
² Includes Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Agua Dulce Airport.

CUMULATIVE IMPACT ANALYSIS METHODOLOGY

The specific group of projects that interact to produce cumulative impacts can differ from environmental topic to environmental topic. For example, the William S. Hart Union High School District serves the project site, but also serves a large area of unincorporated County land. The potential for cumulative high school impacts would be analyzed for that large area to account for a worst case analysis. On the other hand, the Newhall School District also serves the project site, but provides elementary school education to only a portion of the City of Santa Clarita. Thus, a smaller geographical area (and, therefore, a smaller amount of future growth) would be analyzed for cumulative elementary school impacts in the Newhall School District. **Figure 4.0-1, Cumulative Impact Analysis Methodology**, illustrates this concept. The topics in this EIR that fit this type of service boundary-driven cumulative impact analysis methodology include fire services, sheriff services, and water and wastewater services.

Other environmental impacts do not confine themselves to specific service boundaries. The relevant geographical area is subject to certain variables such as the current structure of the regional and local roadway system, variables in driving behavior, future modifications to the circulation system, and uncertainty with respect to the pace of buildout of other development projects that would affect the same elements of the circulation system. In this case, a conservative approach was taken and a wide study area was utilized. In these cases, the broad geographical area used is the SCVCTM, 2004 Update and Validation Planning Area described above for the Santa Clarita Valley Cumulative Build-Out Scenario. The topics in this EIR that fit this type of cumulative impact analysis methodology include: visual resources, land use and planning, noise, population and housing, transportation and circulation, and solid waste.

The potential cumulative effects relating to another group of environmental topics can be felt beyond the SCVCTM Planning Area referred to in the previous paragraph. For example, cumulative impacts on biological resources can occur regionally, particularly when sensitive resources that occur over a large regional context are involved. For instance, a freeway may be proposed in a way that cuts off the regional movement of animals from one large open area to another, thereby having a regional impact that is not restricted to a planning area, but likely affecting the biological environment in topographically related areas. The topics in this EIR that fit this type of cumulative impact analysis methodology include biological resources, and hydrology and water quality.



SOURCE: Impact Sciences, Inc., November 2003

FIGURE 4.0-1



The assessment of cumulative air quality impacts relies on project-specific methods suggested by South Coast Air Quality Management District (SCAQMD) rather than the aforementioned growth predictions. The SCAQMD staff has suggested that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable. In addition, the relevant methods for determining cumulative impacts in the *CEQA Air Quality Handbook*, which are based on performance standards and emission reduction targets necessary to attain the federal and state air quality standards identified in the Air Quality Management Plan (AQMP), are also evaluated. If the analysis shows that a project does not comply with the standards, then cumulative impacts are considered significant unless there is other pertinent information available to the contrary.

Lastly, some cumulative impacts confine themselves to the project site. An example would be geotechnical impacts. For these, the effects of two or more projects that occur at different locations are not affected by, and would not impact, the same piece of land. The topics in this EIR that fit this type of cumulative impact analysis methodology include geology and soils.

The first step in evaluating cumulative impact potential is to predict the amount of future cumulative growth that is expected to occur. As indicated previously in this EIR section, such predictions have been completed under the Santa Clarita Valley Cumulative Build-Out Scenario. Where the boundaries of an affected service district are precisely defined, the growth prediction was adjusted to estimate future growth on a district-by-district basis. Where boundaries are not as narrowly defined, the total cumulative growth prediction for the SCVCTM is utilized. For those impacts that are isolated to just the project site, the prediction of future growth beyond that proposed for the site or the expected tributary area is not needed.