CHAPTER 3 - ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3-1 INTRODUCTION

The purpose of this chapter is to provide the reader with the information necessary to understand and evaluate the potential environmental impacts due to implementation of the proposed Los Angeles Valley College Facilities Master Plan (Master Plan). In accordance with the *State CEQA Guidelines* (§15128 and §15143), this EIR focuses on the impacts identified in the NOP and during project scoping as needing further analysis (visual resources; air quality, historical resources; archaeological resources; paleontological resources; geology/soils/seismicity; hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; public services; transportation, traffic and parking; and public utilities). A list of the impacts determined to be less than significant and the reasons for that determination are provided in Chapter 5.

To assist the reader, each environmental impact category in this EIR is discussed separately. These discussions include a description of the environmental setting, the criteria used to determine significance of potential effects, the potential environmental impacts of the proposed project, mitigation measures, and any unavoidable significant adverse effects that would remain after implementation of the proposed mitigation measures.

The environmental setting discussions contain a description of the physical environmental conditions in the vicinity of the project as it existed at the time the Notice of Preparation was distributed (January 2003). The existing environmental conditions described in the setting sections serve as a baseline for the impact analyses in this EIR. The significance criteria identified for each environmental impact category are based on the definitions that have been developed and established by the Los Angeles Community College District, various public agencies, or professional organizations and are consistent with the *State CEQA Guidelines*. The environmental impact analyses focus on the potentially significant effects that could occur during project construction and/or operation. As required by CEQA, mitigation measures are identified to reduce or eliminate significant adverse impacts to the extent feasible.

The analyses presented in this EIR are based on a projected enrollment of 23,000 students or 15,693 full-time-equivalent[1] (FTE) students for the 2008-2009 academic year. Total enrollment at Valley College in the fall 2001 semester was 18,487 students. For the 2001-2002 academic year, there were 14,154 full-time-equivalent (FTE) students enrolled at the College. There were an estimated 19,309 students enrolled in the fall 2002 semester and the estimated number of FTE students for the 2002-2003 academic year is 13,393. As of the fall 2002 semester there were 324 FTE employed staff members at Valley College.

[1] To determine the number of full-time-equivalent students, the District calculates the total number of instructional hours for all of the enrollments and divides by 525 hours which is roughly the number of instructional hours of one student taking five 3-unit classes for two primary terms. Instructional hours are based on enrollments on a census date and hours are counted differently for full-term and short-term classes. Some courses require reporting of actual hours of attendance only.

3-2 VISUAL RESOURCES

This section describes the visual setting of the Valley College campus and provides an evaluation of the potential impacts of the proposed Master Plan to the College's visual quality and character, and the effect of artificial light and shading/glare in the project area. A discussion of feasible measures to mitigate or reduce the significant effects on the visual environment is also provided.

3-2.1 Environmental Setting

Valley College is located in the San Fernando Valley, within the community of Van Nuys, and is part of the City of Los Angeles Van Nuys-North Sherman Oaks Community Plan Area. The College is bounded on the east by Grant High School and Coldwater Canyon Extension/Tujunga Wash, on the south by Burbank Boulevard, on the west by Fulton Avenue, and on the north by Oxford Street.

Agricultural activities predominated in Van Nuys from the time of the establishment of San Fernando Mission (1797) well into the 1930s. Dry cultivation of wheat and barley was introduced in Van Nuys and a large portion of the Valley in the early 1870s, supplanting most of the previous sheep grazing activities. This coincided with the arrival of the Southern Pacific Railroad in 1876 and marked a significant expansion of agricultural activity in the community. Completion of the Owens Valley Aqueduct (1913) increased agricultural activity while at the same time setting the stage for the dramatic urbanization of the San Fernando Valley. During the decade of the 1940s alone 250,000 new people moved there. This rapid suburbanization, along with a major expansion of the industrial sector, provided the rationale for establishment of Valley College. The local business community and chamber of commerce organizations were instrumental to the establishment of the school, which opened in September 1949 on the campus of Grant High School. The school's early curriculum reflects the priority placed upon job skills necessary in a rapidly growing suburban economic context, such as business administration, engineering, and teacher training.

The Van Nuys-Sherman Oaks communities comprising the Community Plan Area contain varied land uses, including single-family and low-to-medium density residential as well as heavy commercial and industrial uses. The campus is bordered on the east by Grant High School and Tujunga Wash; on the north by two-story, medium-density apartment housing; on the west by single-family residential neighborhoods; and on the south by a combination of commercial uses, a fire station, community care facilities, and two-story medium-density apartment housing. The institutional and commercial uses on Burbank Boulevard are located between Fulton and Ethel Avenues. Multi-family medium-density apartment buildings are located between Ethel and Coldwater Canyon Avenues.

Views of Valley College from the surrounding neighborhood are almost completely blocked by the landscaping within Tujunga Wash and along the east border of the campus. Hedges and extensive trees along the north and west perimeters of the College also serve to filter views of the campus.

Preservation and enhancement of visual resources is articulated in a series of objectives and policies within the Van Nuys-North Sherman Oaks Community Plan. These are addressed in a detailed set of planning and urban design improvements to enhance the community's identity (viz., parkway landscaping, signage/graphics, and street furniture enhancements), including improvements to the appearance of industrial and commercial development and the improved interface of such development with residential areas. Salient policies that are germane when considering the Valley College Master Plan include:

- Provision of sufficient and well-designed parking conforming to the urban design guidelines.
- Identification, documentation, and preservation of historic and cultural resources (Policy 1-4.1).
- Design and development of projects "to achieve a high level of quality, distinctive character and compatibility with existing uses and development" (Policy 2-1.2). This includes conformance with community urban design standards, shielding and directing onsite lighting onto roadways and pathways and away from residential areas, and utilizing walls and landscape buffers to screen parking areas (including landscaping a minimum of 7 percent of parking lots)(Chapter 5, Design Policies for Individual Projects).
- Shared use of existing school facilities to facilitate after hour/non-peak time recreational uses.

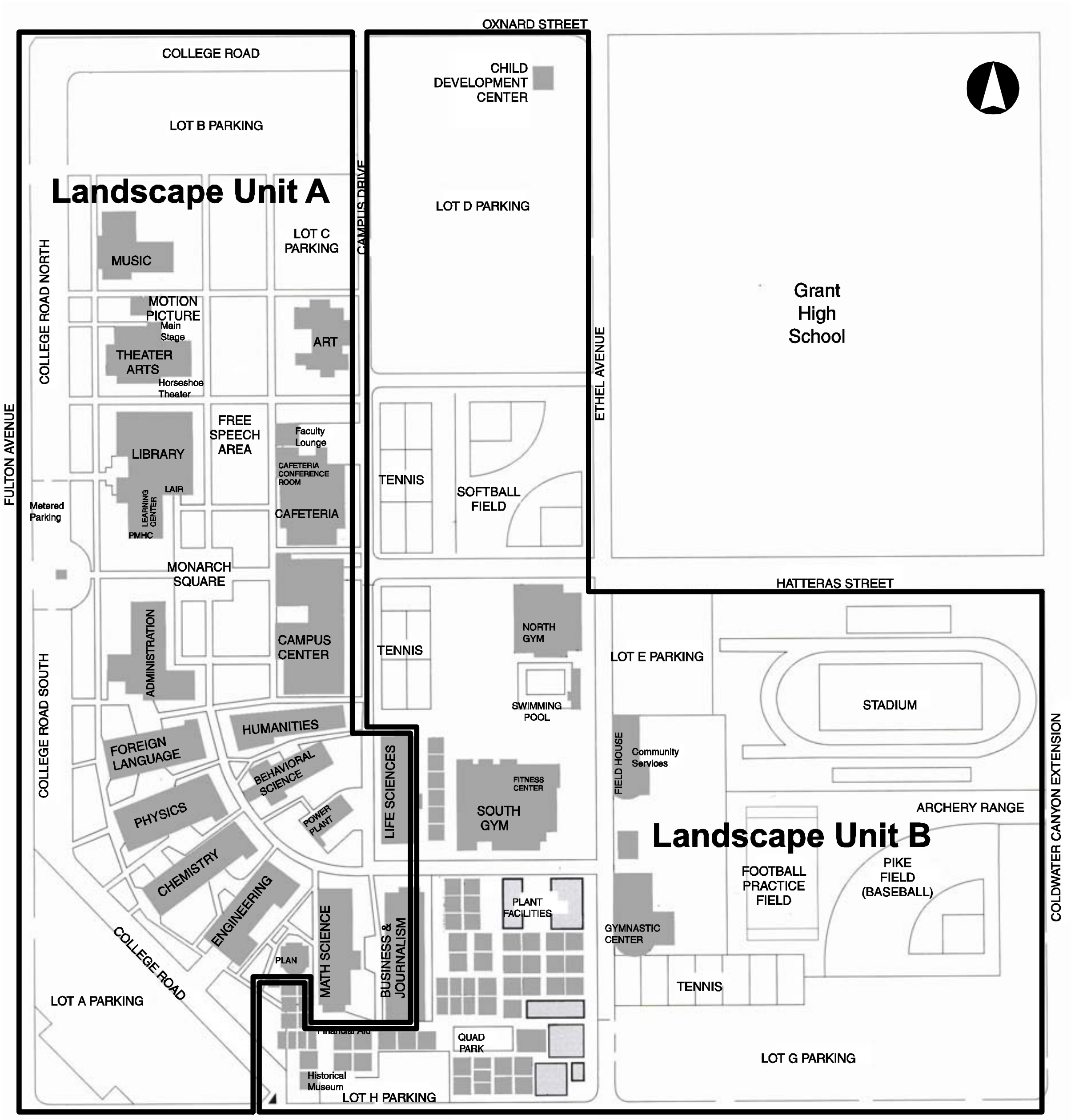
In the Public and Institutional Land Uses Subsection the need for modernization of facilities and improvement to service levels is acknowledged but is to be balanced by an adequate protection of the community's amenities and environmental quality. Open Space Subsection, Policy 5-1.1 states the intent of the City to... "encourage the retention of passive and visual open space, which provides a balance to the urban development of the community."

The Circulation Element of the Van Nuys-North Sherman Oaks Community Plan identifies the streets that border Valley College as Secondary Highways. However, none of these is identified as a scenic highway and no other visual resources of concern on or near the Valley College campus are identified.

Valley College is arrayed in an L shape and consists of a tight cluster of educational and administrative buildings, bordered by athletic fields on the east and surface parking lots on the south, southeast, west, and north. Approximately 50 acres of the total 105 acres on campus are currently occupied by academic buildings and ancillary green space (e.g., landscape planters, trees, lawn, walkways), while approximately 35 acres are devoted to athletic fields (baseball field, the football field, soccer fields, fenced tennis courts). The remaining acreage is devoted to parking.

In order to facilitate a description of the existing visual setting and evaluation of visual impacts the campus has been subdivided into two "landscape units," or discussion focus areas. Each landscape unit is defined by its differences in visual resources, including natural and built features. The landscape units are shown on Figure 3-1 and are as follows:

Figure 3-1: Boundaries of Landscape Assessment Units A and B



Source: Valley College, Myra L. Frank & Associates, Inc., 2003.

- Landscape Unit A – Essentially the westernmost portion of the campus, located west of Campus Drive. This includes essentially all the academic buildings housed in permanent structures, in addition to Parking Lots A, B, and C.

- Landscape Unit B – Essentially the eastern portion of the campus east of Campus Drive, including the North and South Gymnasiums, Gymnastic Center, Field House, Tennis courts, softball and baseball fields, football practice field, the Stadium, and Parking Lots D, E. and G.

Each landscape unit is analyzed with reference to viewer sensitivity in terms of visual quality and character, scenic vistas and views, shading/glare, artificial light, and the presence of special visual attributes.

a. Visual Quality and Character

The visual quality and character of Valley College is defined by the natural (geologic, topographic, biologic) and built (classrooms, buildings, recreational) environment, including land coverage, scale, and form. The assessment of visual character is descriptive rather than evaluative because it is based on defined attributes. Visual quality is evaluative in nature, and is based upon the relative degree of vividness, intactness, and unity. "Vividness" is the visual power or memorability of landscape components as they combine in striking and distinctive patterns. "Intactness" is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements; "unity" is the visual coherence and compositional harmony of the landscape considered as a whole.

Overall, Valley College is considered to have a moderately high visual quality because the natural and built features within it are considered vivid and relatively intact, and exhibit a moderately high degree of visual unity.

The visual quality and character of each landscape unit is described as follows:

Landscape Unit A – Western Portion of the Campus

Landscape Unit A consists of the campus core, comprised of nearly all the permanent academic buildings on the western portion of the campus. It includes some 19 buildings. The area is generally flat, sloping slightly to the east, and is defined on the east by Campus Drive, on the north by Oxnard Street, on the west by Fulton Avenue and on the south by Burbank Boulevard.

Nearly all the buildings in this portion of the campus were constructed between 1955 and 1963 and are designed in analogous architectural styles strongly related to each other by scale, architectural detail, materials of construction, color, and siting. The Quadrangle stretching between the Administration and Humanities Buildings on the south and extending to Parking Lot B on the north is the primary focal point around which all the buildings are grouped and strongly associated both in visual and site planning terms (see Figure 3-2).

Figure 3-2: Quadrangle/Monarch Square, View North

Source: Myra L. Frank & Associates, Inc., 2003.

The oldest buildings date from 1955, including the Chemistry, Foreign Language, Engineering, Music, and Library (the original sections) buildings. Each is designed in a fairly straightforward version of the Late Moderne Style and designed both to harmonize with the other campus buildings and to recede into the landscape. Character-defining features include sand-textured stucco, three- and four-bay metal sash windows (painted white) with horizontally aligned white glazing bars (i.e., no vertical glazing bars are utilized), extremely low-pitched gable roofs (with boxed eaves) that read as flat at the perimeter of the building. The second phase of construction occurred 1959 and included the Administration Building, Theater Arts, and the Cafeteria. These buildings are executed in an architectural style bridging the Late Moderne and Modernist Styles (see Figure 3-3 and Figure 3-4).

Visual quality and character of the buildings comprising Landscape Unit A is moderately high, rather than very high due to deferred maintenance and minor alterations (e.g., discolored or peeling paint in some locations, minor change-outs of architectural details). Although the Campus Center (1969; 1974) is in a good state of repair and architecturally intact, its visual quality and character is considered medium because the building diverges so substantially from the design theme of the earlier buildings on campus (viz., height, scale, footprint, use of brick sheathing). This building was designed in an architectural style known as the "New Formalism." Characteristics include formal classical design devices such as symmetry of plan, use of decorative brick covering with contrasting white banding (framing windows and door openings and used in a band across the top of the building at the roofline), abstracted columns, and nearly flat arches (Figure 3-5).

Figure 3-3: South Façade, Foreign Language Building

Source: Myra L. Frank & Associates, Inc., 2002.

Figure 3-4: Library/Learning Resource Center

Source: Myra L. Frank and Associates, Inc., 2002.

Figure 3-5: Campus Center (Architectural Style: New Formalism)

Source: Myra L. Frank & Associates, Inc., 2002.

For CEQA purposes, the core campus portion of Valley College is considered a significant visual resource. The Quadrangle is one of the College's key visual resources in landscape and architectural design terms, as it is considered vivid and intact, and exhibits a high degree of visual unity (Figure 3-6). The landscape plan appears to be the work of a talented designer.

That portion of the campus located west of Campus Drive, comprised of the Quadrangle and its associated landscape design features, and adjacent building placements on the south and on the east and west, may qualify as an historical resource for CEQA purposes as a significant example of college site planning and landscape design from the 1950s. These features embody the history of Valley College as an educational institution in the Van Nuys community at a time during the 1950s and early 1960s when the College was undergoing rapid physical development in which temporary structures were supplanted with permanent buildings. For listing on the California Register of Historical Resources, a resource generally must be 50 years or older. Accordingly, when the Quadrangle and its associated landscape and architectural design features become at least 50 years old they may become eligible for inclusion on the California Register of Historical Resources.

Figure 3-6: Quadrangle, Looking South (Adjoining Art Building)

Source: Myra L. Frank & Associates, Inc., 2003.

Valley College was developed in phases as bond funding became available. The Campus Center was one of the last major buildings to be erected as part of the Quadrangle area during 1969 and 1974. Funding for improvements also occurred in 1959, 1962 (viz., Business and Journalism Building, Math and Science Building, the Planetarium) and 1963.

Landscaping and vegetation within Landscape Unit A include a variety of trees and shrubs located both along the walkways, the Quadrangle space, and within the smaller courtyard spaces between buildings. Many of the trees are mature specimens that date from the period between 1955 and 1963. The most prevalent tree species are magnolia (Magnolia grandiflora and Magnolia soulangeana), tulip trees (Liriodendron tulipifera), olive (Olea europea), sweet gum (Liquidambar Styraciflua), Podocarpus, pine and Shamel Ash (Fraxinus uhdei). Juniper hedges (viz., Juniperus chinensis, J, pfitzer, J. sabina tamariscifolia) are used as a border for the classrooms and walkways in the Quadrangle area. A number of the mature trees and some of the shrubbery are noteworthy specimens as identified by the College's Biology Department faculty (viz., the Cape Chestnut trees in Monarch Square; the Bunya Bunya tree adjoining the entrance to the Administration Building; English oak trees west of the Swimming Pool; the Sequoia trees in front of the Behavioral Sciences Building). These trees provide shade, and along with other campus vegetation, are considered to be of high visual quality, and important to the College's aesthetic setting. The landscape seems to have been designed as the primary design feature and the buildings as complementary elements that recede into it (Figure 3-7).

Figure 3-7: Landscaping East Side of Quadrangle, Adjoining Cafeteria

Source: Myra L Frank and Associates, Inc., 2002.

Although their care over the years has been neglected sometimes, these plants are considered to be of high visual quality and important to the College's aesthetic setting.

Covered Walkways serve to link the key academic buildings visually and are a significant visual feature throughout that portion of the campus located west of Campus Drive. The walkways consist of steel pipe with flat flanges at the top that extend out a perpendicular angle to support the overhead canopy in outrigger fashion. The structural members and fascia are painted white while the undersurface of the canopy has been stuccoed and painted a soft beige/pale brown color to match the buildings (Figure 3-4 and Figure 3-19).

Parking is located on the periphery of the campus, including Parking Lots A, B, C, and staff and metered parking flanking College Road (South and North). Each lot is sizeable. Parking Lots B and C are located north of the Music and Arts Buildings and are rectangular in shape. Parking Lot A is at the southwest corner of the campus and is trapezoid-shaped. Each is partially shaded with mature perimeter trees and shrubbery that also serve to buffer the campus from the adjoining neighborhoods (Figure 3-8). In general, these parking lots are in fair condition and of medium visual quality due to cracked pavement and faded parking stall striping, notwithstanding the fact that each is partially shaded by attractive mature trees. A cellular tower has been placed in the center of Parking Lot B, serving to further diminish the aesthetic character of the lot (Figure 3-9). Parking Lot A has medium visual quality. The northern portion of the lot is shaded by large carob trees with attractive canopies. However, the middle and southern portions of the lot in back of the Middle Eastern restaurant at the corner of Burbank Boulevard and Fulton Avenue have few trees or other landscape enhancements. Overall, Parking Lot A has low visual quality (Figure 3-10).

Figure 3-8: Parking Lot C, Looking South to the Art Building

Source: Myra L. Frank & Associates, Inc., 2003.

Figure 3-9: Parking Lot B (Showing Cellular Tower), View North

Source: Myra L. Frank & Associates, Inc., 2002.

Figure 3-10: Parking Lot A and Adjoining Restaurant, View South

Source: Myra L. Frank & Associates, Inc., 2003.

Landscape Unit B – Eastern Portion of the Campus

Landscape Unit B consists of the eastern portion of the campus. Roughly half of the total acreage is devoted to athletic fields—three tennis court areas, one football field/running track, a stadium; and baseball, football practice and softball fields. Approximately half of the remaining land—located north of the softball field between Campus Drive and Ethel Avenue, bordering Burbank Boulevard, and sandwiched between the North Gym and Stadium—is developed as parking lots. Seven permanent structures and approximately 66 bungalows/temporary structures occupy the remainder of the land in scattered locations (Child Development Center, Reading Center, Sheriff's Department, and Plant Facilities Buildings). None of these is of visual importance. The area is generally flat and defined by Parking Lot D, Grant High School, and the Coldwater Canyon Extension/Tujunga Wash on the north and east, and Parking Lots G, H, and Burbank Boulevard on the south. The campus' core academic buildings, in their densely landscaped setting, border on the west. No covered walkways exist within this visual assessment unit.

A number of the buildings comprising this landscape assessment unit are in somewhat deteriorated condition due to deferred maintenance. Views are also highly segmented. The southeastern border of the unit is marked by tall perimeter trees (pines) and oleander hedges. As one moves north from Burbank Boulevard, the trees along the edge of the southern border of the baseball field and tennis courts—along with the broad expanse of green grass on the baseball field—are visually prominent. Due to the expanse of asphalt pavement—much of it in disrepair (potholes, fissures)—these features considered together create a setting of only medium visual quality (Figure 3-11).

Figure 3-11: Parking Lot G, Looking East (Landscape Unit B)

Source: Myra L. Frank and Associates, Inc., 2003.

Approximately 66 bungalows and approximately a half dozen larger semi-permanent buildings (e.g., Plant Facilities) are concentrated in the small area stretching between the rear of the Planetarium, Ethel Avenue, and the South Gym. These bungalows appear to date primarily from the late 1940s and 1950s period; however they are architectural resources of a modest character. Because of the concentration of structures with only nominal landscaping and a monotonous visual character resulting from having so many largely identical buildings lined up next to one another, the bungalow area was deemed to exhibit low visual quality. Although there was initially some question concerning the possible historical significance of the bungalow housing the James Dodson Historical Museum, it was concluded that the bungalow does not meet the criteria for historical resources under CEQA (see Section 3-4, Historical Resources, of this EIR)(see Figure 3-12 and Figure 3-13).

Figure 3-12: Bungalow Grouping, Looking South (Landscape Unit B)

Source: Myra L. Frank & Associates, Inc., 2002.

Figure 3-13: James Dodson Historical Museum Bungalow, View West

Source: Myra L. Frank and Associates, Inc., 2002.

Approximately half of the acreage in Landscape Unit B is comprised of green open space, including the Stadium and the adjoining baseball, football, and additional play fields. At the western edge of the football field/running track, the park-like atmosphere is terminated by views of the Gymnastic Center, Field House, Parking Lot E, and Ethel Avenue (Figure 3-14 and Figure 3-15). The Gymnastic Center and Field House are housed in the original barrel-roofed women's and men's gymnasiums constructed in 1952 (Figure 3-16). The paved areas within Parking Lot E and adjoining the gymnasiums are in fair condition (loose aggregate, potholes, fissures) and have low visual quality, notwithstanding the presence of some mature shade trees nearby. Views along Ethel Avenue are fragmented and of low visual quality overall, notwithstanding distant views of the mountains (north) and the presence of some disparate trees (Figure 3-17). Although the tennis courts and playing fields exist to the east, they are blocked from view by buildings (Gymnastic Center and Field House). The asphalt paving is visually dominant along Ethel Avenue and in this portion of Landscape Unit B.

Figure 3-14: Football Practice Field, Looking South

Source: Myra L. Frank & Associates, Inc., 2002.

Figure 3-15: Field House (Original 1952 Gymnasium)

Source: Myra L. Frank and Associates, Inc., 2002.

Figure 3-16: Paved Area Adjoining North Gym, Looking North

Myra L. Frank & Associates, Inc., 2002.

Figure 3-17: Ethel Avenue, Looking North (Gymnastic Center on Right)

Source: Myra L. Frank and Associates, Inc., 2002.

b. Scenic Vistas and Views

For the purposes of the proposed project, scenic vistas and views are determined by their perceived importance to a particular set of viewers. The quality of a scenic vista and view is evaluated by the length of exposure the viewer has to it and the viewer's sensitivity. In general, the length of exposure is determined by the proximity of the viewer to the viewshed, viewing duration, and the overall impression of the view on the viewer. Viewer sensitivity is based on the visibility of resources in the landscape, the number and type of viewers, the frequency of viewing, and the duration of viewing. Viewer activity, awareness, and expectation also influence visual sensitivity.

Sensitivity depends upon the length of time the viewer has access to a particular view. Typically, residential viewers have extended viewing periods and are often concerned about changes in views from their homes. Visual sensitivity is therefore considered to be high for neighborhood residential areas. Visual sensitivity is considered to be less important for commuters and other people driving along surrounding streets. Views from vehicles are generally more fleeting and temporary, yet under certain circumstances are sometimes considered important.

The importance of a view to viewers is related to the position of the viewers relative to the resource and the distinctiveness of a particular view. The visibility and visual dominance of landscape elements are usually described with respect to their placement in the viewshed.

No scenic vistas and views are identified in the Van Nuys-North Sherman Oaks Community Plan. Although there are no designated scenic vistas or views within the community, important view corridors within the campus and from areas adjacent to the campus are described as follows:

Landscape Unit A – Western Portion of the Campus

The only prominent views of Landscape Unit A are from within the campus. Views from the academic buildings into adjoining green space and vistas from within the plazas and along the principal pedestrian pathways are considered the most important to College staff and students. The core of the campus has a densely landscaped and developed character in which there are numerous tall, mature shade trees. Such views within the campus are generally of high visual quality (Figure 3-18 and Figure 3-19).

Off-campus views of the buildings and structures in Landscape Unit A are limited by heavy foliage (large mature trees) in and around the core campus area. Along Fulton Avenue, for example, there are multiple layers of landscape elements that serve to screen views into the campus from the street. Oleander hedges are found along the perimeter of the property. There is also a triple row of mature deciduous trees (liquidambar and tulip trees) on both the street and interior sides of the College Road (Figure 3-20). Mature plantings/shrubbery alongside the academic buildings provide additional screening of the buildings from off-campus viewing. These same landscape features create attractive streetscape views for pedestrians and motorists along Fulton Avenue side of the campus.

Landscape Unit B – Eastern Portion of the Campus

Views from within the eastern portion of the campus include vistas from the grassy athletic fields, such as the baseball, softball, and football practice fields, to the tall buffer trees along the streets bordering the College. More segmented views exist in the outside areas bordering the North and South Gymnasiums, Stadium and tennis court areas. Parking Lot D and G are landscaped with perimeter oleander hedges and shaded by mature perimeter trees, precluding long views across campus and restricting such views to the outside. Mature trees lining Campus Drive form a strong north-south visual element of high visual quality. These trees, which are typically 25 to 35 feet in height, block east-west views across campus while providing much needed shade for pedestrians and adjoining academic buildings and tennis courts (Figure 3-21). Views from Landscape Unit B west to the core of the campus are similarly blocked primarily by building placements, fencing, mature trees, and by segmented viewing opportunities. The resultant views are of medium quality, offering neither long vistas across the breadth of the campus nor more than intermittent off-campus views (viz. Ethel Avenue looking north to the mountains). Vistas are even more constrained in the bungalow area between the Business/Journalism Building and Ethel Avenue due to the close juxtaposition of buildings. Because of the activities housed in this landscape unit viewer sensitivity is considered moderately low (team sports practice, spectator viewing of athletic events, swap meet, parking opposite offices, classrooms, promenade areas, study areas).

Figure 3-18: Representative View - Inside Campus (Landscape Unit A)

Source: Myra L. Frank & Associates, Inc., 2002.

Figure 3-19: Representative View - Adjoining Quadrangle, Looking South

Source: Myra L. Frank and Associates, Inc. 2002.

Figure 3-20: Representative View - Tulip Tree Alleé, College Drive South

Source: Myra L. Frank & Associates, Inc., 2002.

Figure 3-21: Campus Drive, Looking South (Between Parking Lots B & D)

Source: Myra L. Frank and Associates, Inc., 2003.

Off-campus views into Landscape Unit B from the north are screened by both the Grant High School campus and Parking Lot D. A combination of heavy foliage (including large mature trees and shrubbery) and the great distance separating those buildings from the street creates a visual buffer. The Grant High School campus, around which the College wraps spatially, screens Landscape Unit B from the neighborhoods to the northeast and east. The dense foliage along the eastern border of the property abutting Tujunga Wash, and along the Tujunga Wash side of Coldwater Canyon Avenue, as well as the landscaping and fencing in the southeastern portion of the campus, effectively block most views of the campus from the southeast and east. Views of the campus from the residential neighborhood located to the east (across Coldwater Canyon Avenue) are thereby largely, though not entirely, precluded (particularly during late winter when deciduous trees have shed their leaves). Visual sensitivity of the neighbors is generally rated as high, as their views are generally of the greenery on campus. Conversely, views of students and staff from the campus play fields looking offsite to the north and south are rated medium to low because viewer sensitivity is rated low (Figure 3-22). The abundant landscaping along Coldwater Canyon Extension creates attractive view corridors for pedestrians and motorists traveling along that thoroughfare.

Figure 3-22: View North of Stadium from the Athletic Field

Source: Myra L. Frank and Associates, Inc., 2003.

c. Shading/Glare

This subsection describes the existing shading/glare conditions for the two landscape units of the Valley College campus.

The natural and built features at Valley College do not currently create shadow patterns or glare that significantly affect any on-campus or off-campus properties. Glare is the result of sharply reflected light caused by sunlight or artificial light reflecting from highly finished surfaces such as window glass or brightly colored surfaces. Glare is minimal on campus. Most buildings have soft-textured stucco or concrete and/or brick exterior surfaces that are painted beige/light brown or pale gray, and thus have a low potential for glare (Figure 3-23). Roofs are painted an off-white color and covered with off-white colored rocks, the mottled texture of the rock covering serving to diffract light. In some instances, metal rooftop mechanical equipment is visible; however, it is generally painted a light gray/off-white color with a matte finish that does not produce glare. No unpainted galvanized metal roof equipment with shiny surfaces was noticed. In a majority of cases, the building mechanical systems and air conditioning equipment are screened from view. Campus buildings also rely, in addition, on architectural design features (e.g., widely overhanging eaves, window and door placements) and landscaping for cooling purposes.

Figure 3-23: PMRC/Learning Center/Library, View Northeast

Source: Myra L. Frank & Associates, Inc., 2002.

With the exception of the bungalows in the south central portion of the campus, all key academic buildings on the Valley College campus are set back large distances from the abutting streets, and screened from those streets by dense landscaping that features both shrubbery and many mature trees. A majority of the buildings are one-story in height and do not cast deep shadows. Due to the partial screening created by campus landscaping the buildings are not fully seen from off-campus locations. These existing campus development characteristics effectively preclude adverse offsite shade/shadow effects. Shading of the campus at present is due to numerous mature trees (approximately 25 to 35 feet in height), which serve to block out a portion of the early and mid-morning sunlight originating from the east, yet provide desirable shade from the sun when it is hottest (i.e., while directly overhead or to the west). Incorporation of deciduous trees (viz., tulip, liquidambar, and California sycamore trees) into the campus landscape design allows desirable sun penetration into the campus during the winter months when daylight is more restricted and colder temperatures prevail.

d. Artificial Light

This subsection describes the existing ambient lighting conditions within and adjacent to the Valley College campus. In general, on-campus nighttime lighting poses no spillover impacts to the surrounding neighborhood. This is due to the low levels of nighttime illumination employed on campus and the low window-to-wall surface area ratio of the buildings; building placements in relationship to adjoining streets; as well as the abundance of mature landscaping, which essentially block views of the campus from the surrounding community (Figure 3-24).

Figure 3-24: College Road, View West (Parking Lot B is to the Left)

Source: Myra L. Frank and Associates, Inc., 2003.

Current nighttime lighting levels vary depending upon location and type of light fixture. The heaviest concentration of lighting occurs in the Stadium and on a few of the athletic fields. Nighttime lighting in other portions of the campus is limited to lighting emanating from inside buildings through windows and entrances, the undersides of the covered walkways, and a small number of 10-foot-tall light poles alongside pedestrian pathways. These light standards feature flat-lens shoebox fixtures that emit soft white light that illuminates small nearby areas of the ground. The headlights of vehicles entering and leaving campus parking areas add limited amounts of evening illumination but this lighting is not intrusive and does not migrate to off-campus locations, in large measure, due to campus perimeter landscaping that serves to screen the parking lots (e.g., oleander hedges). Nighttime lighting generated by the above sources poses no effect upon the adjoining neighborhood. Lighting in the Tennis Courts, Baseball Field, and Stadium/Track have the greatest potential to produce nighttime lighting effects that migrate off-campus. Parking lot lighting sometimes consists of unattractive 25-foot-tall Marblelite light standards with cobrahead light fixtures of a type commonly used throughout Los Angeles for street lighting purposes. Tall, high intensity field lighting is utilized for the several athletic fields. However, because of the physical separation of the play fields from the perimeter of the campus and the mature landscaping, this lighting cannot be seen easily from nearby residential areas to the east and southeast, and is partially screened from view to the south by landscaping.

One concern about nighttime lighting is the effective operation of the campus' Planetarium and its associated Astronomy curriculum. While not optimal, at present, artificial lighting on campus does not significantly interfere with nighttime viewing of the sky.

3-2.2 Environmental Impacts

a. Significance Criteria

For the purposes of the analyses in this EIR, the proposed Master Plan would have a significant impact on visual resources if it:

- substantially degrades the existing visual character or quality of the campus and its surroundings,
- substantially damages significant visual resources such as trees and historic buildings,
- would have a substantial adverse effect on a scenic vista or obstruct scenic views,
- creates substantial shade/shadows that affect shadow-sensitive uses (residences or parks),
- results in substantial glare that would adversely affect sensitive views in the area or create potential hazards to motorists, or
- creates substantial artificial light that would adversely affect nighttime views in the area.

b. Impacts Discussion

One of the objectives of the Master Plan is to improve the visual image of the campus, making it more readily identifiable to passersby and visitors, while adding badly needed classroom and library space. This would be done by giving entrance points into campus a clearer design focus, creating clearer campus circulation arteries, constructing several large new buildings (viz., Library, Media Arts, Allied Health/Sciences Center), and by renovating a majority of the existing academic buildings. New development would be located throughout the campus (in both Landscape Units A and B). The following discussion summarizes what changes would be made to the visual environment of each landscape unit in terms of visual quality and character, scenic vistas/views, shading/glare, and artificial light.

c. Visual Quality, Character, and Resources

In accordance with the first two significance criteria identified above, this section evaluates the impacts of the proposed Master Plan on the visual quality and character of the campus setting and on significant visual resources in the project area.

Implementation of the proposed Master Plan would include construction of a number of new buildings, demolition of a number of existing buildings, reconfiguration of open space areas and establishment of new pedestrian walkways, renovation of existing buildings, and various utility and infrastructure improvements. The total building area on campus would increase by approximately 289,500 square feet. The total square footage devoted to surface parking lots would increase by roughly 30,000 square feet, accommodating an additional 307 parking spaces.

Landscape Unit A – Western Portion of the Campus

Proposed new buildings would be constructed in several portions of the core campus area. The key building would be the new three-story, approximately 108,675-square-foot Library/Learning Resource Center facility, which is proposed on the site of the current Cafeteria. Also proposed are the new 80,425 square-foot two-story Student Services Center on the site of the existing Library/Media Center; the 44,592-square-foot Computer-Business-Technology Building, and the two-story, 62,000-square-foot Media Arts Center Building, for a combined total gross floor area of 295,692 square feet. Construction of these projects entails demolition of the present Cafeteria, Library/Media Center, Physics and Chemistry Buildings, and a partial demolition of the rear of the Planetarium, in order to accommodate an addition of comparable size (approximately 2,500 square feet). Some existing parking would be displaced. For example, Parking Lot C would be eliminated and would become the site of the new Media Arts Center Building. A new passenger drop off area is proposed at the northern end of the Quadrangle. It would probably entail the removal of approximately two dozen existing parking spaces in Parking Lot B. However, new replacement parking would be created in the area currently occupied by bungalows (at the south end of the campus), for a net gain of parking spaces.

Although the exact architectural treatments for these buildings have yet to be finalized, the new buildings would be designed in accordance with the design criteria and standards established by the District[2] to ensure that new Proposition A Bond Program buildings are compatible with

[2] According to the District's *Design Criteria and Standards/Sustainable Design Manual*, the "primary objective of the architectural building criteria and standards is to develop a rational and unified design which will address not only functional design requirements but will also provide aesthetic quality and enhancement to the campus of which it will become a part." Additionally, the District's Design Manual recognizes that the "nine colleges that form the District not only show differences of architectural expression from campus to campus but also within each campus. There is a wide spectrum of forms, materials, and finishes. This by and in itself can be rather refreshing as long as there are general consistencies, which identify all as a member of one family. In this respect this Proposition A

existing campus architecture and will enhance the overall visual quality of the existing campuses. Consequently, it is expected that most of the proposed new buildings would not substantially diverge from the design styles exhibited by existing buildings (i.e., Late Moderne, Modernist), in terms of scale, massing, etc., and significant impacts are not anticipated.

The existing Chemistry and Physics Buildings are of good architectural character and have a shared design affinity with the neighboring buildings. Demolition of the Chemistry and Physics Buildings and construction of the new Computer-Business-Technology Building in their place would not be a significant effect as the new Computer-Business-Technology Building will be designed with a compatible t footprint, massing, and scale. Therefore, the visual quality of this portion of the campus would not be significantly diminished because the spatial relationships that express the original campus master plan concept would not be disrupted.

Though previously proposed for siting within the Quadrangle the new Library would be constructed on the site of the current Cafeteria. This site would avoid a significant visual impact to the Quadrangle area of the campus, which possesses a high level of visual quality. Siting the Library on the site of the existing Cafeteria would preserve the Quadrangle's landscape design and circa 1955 campus site plan, which at a later date could make the Quadrangle portion of the campus (i.e., that portion west of Campus Drive) potentially eligible for the California Register of Historical Resources. Furthermore, the new Library may be screened by existing mature olive trees and juniper hedges bordering the Quadrangle side of the existing Cafeteria or by new replacement landscaping. A reduction, therefore, in the visual quality of the Quadrangle is not anticipated.

A new Student Services Center is proposed on the site of the existing Library Building. All or most of the existing building would be demolished to accommodate the new Student Service Center. However, because the replacement building will be designed in conformance with District design criteria and standards to be compatible with existing campus architecture, no significant adverse effect on the visual character of this portion of the campus is likely to result. Most of the existing buildings within Landscape Unit A would be retained and renovated. Renovation of and a new 2,500-square-foot addition to the Planetarium is among the more extensive rehabilitation projects proposed as part of the Facilities Master Plan. Adherence to the District's design standards, however, would reduce the potential that the new additions would be visually incompatible with the existing buildings in terms of architectural detail, massing, and scale.

Other renovation and modernization work, entailing interior improvements and infrastructure upgrade work rather than exterior remodeling, would occur within the Engineering, Math/Science, Humanities, Foreign Language, Art, Music, Behavioral Sciences, Administration, Motion Picture, and Campus Center Buildings. These buildings were initially constructed

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Program represents a unique opportunity to 'fill in the gaps' and create harmony." Furthermore, "responding to this diversity it will be incumbent on the Architect/Engineer consultant to thoroughly study and document the campus architecture in an effort to develop a design which contributes to the existing environment rather than portraying an isolated expression of its own." "Special attention should be given to the selection of form, material, color and texture to all surfaces of the building as well as to the relationship with circulation and landscaping."

between 1955 and 1964. The buildings from the 1950s are designed in the Late Moderne Style while those from the early 1960s are designed in a straightforward version of the Modernist Style (with Ranch Style influences). Each retains integrity of location and is largely intact in design terms.

The proposed landscape design enhancements to Landscape Unit A would result in only a minor, and potentially beneficial change to the visual character of the campus. The loss of trees on the campus due to new construction would be minimal and would be mitigated by new landscaping, including new trees, that would be provided in accordance the Master Plan's landscape plan.

During construction, temporary staging areas would be established where construction equipment and materials are stockpiled. Although this would detract from the visual setting, the effects would be temporary. Thus, no significant effects to visual resources are anticipated.

Landscape Unit B – Eastern Portion of Campus

A limited amount of new construction would occur in all portions of Landscape Unit B. The key Master Plan projects include construction of a new two-story, 28,000-square-foot Sheriff's Center/Plant Facilities Building; three-story, 103,155-square-foot Allied Health/Sciences Center (on the site of the current Plant Facilities Complex); new Child Development Center (at the southwest corner of Ethel Avenue and Oxnard Street); and new Field House as part of the Stadium complex. Although the exact architectural treatments for these buildings have yet to be finalized, adherence to the District's design standards would minimize the likelihood that they would substantially diverge from the architectural design, scale, and massing of the existing campus buildings and pose a potentially significant visual impact. The remainder of the proposed projects include reconfiguration of the athletic fields, an addition to the North Gymnasium, the refurbishment of Parking Lot D, and the establishment of a new surface parking lot along the southern central portion of the campus on the current site of many of the bungalows.

Removal of the 66 bungalows and temporary structures housing the Child Development Center, reconfiguration of the athletic fields, and redesign of the abutting parking lots is anticipated to have a largely positive effect on the visual resources within Landscape Unit B.

d. Scenic Vistas/Views

This section evaluates, in accordance with the third significance criterion identified above, the impacts of the proposed Master Plan on the scenic vistas and views in the project area.

There are no designated scenic highways or identified vistas, views, or other visual resources in the community.

Landscape Unit A – Western Portion of the Campus

New views of campus would be provided from the upper floors of new buildings and along the new campus vehicular and pedestrian pathways. On-campus views would generally be enhanced, provided new development is compatible with existing campus elements and viewsheds.

Views of Landscape Unit A from other areas of the campus would not be significantly affected by the projects proposed in the Master Plan. New buildings in the central campus core generally would not be visible above the tops of trees and are not expected to significantly affect any important views from these portions of the campus.

Offsite views of the campus are not anticipated to change significantly because of the distance of the academic buildings from the perimeter of the campus and the dense nature of the intervening landscaping. A new formal entrance to the core campus, as proposed as part of the Facilities Master Plan, could be a potentially beneficial effect.

Landscape Unit B – Eastern Portion of Campus

Given the current fragmented character of views within Landscape Unit B, the low visual quality of Parking Lot D, and the lack of attractive vistas at present, the proposed Master Plan would result in somewhat improved visual integration of the southern and northern halves of the campus.

No vistas would be obstructed by the proposed on-campus development. The proposed Fire/Life Safety Training Tower has some potential to be seen from the south and east in the adjoining neighborhood. However, due to the physical separation from the perimeter of the campus and existing landscaping, the impact is lessened. Incorporation of additional tall trees to screen views and appropriate design, color choices, and finishes would further reduce the impact of the tower to a level of insignificance.

e. Shading/Glare

This section evaluates, in accordance with the fourth and fifth significance criteria above, the proposed Master Plan’s shading and glare impacts.

The proposed Master Plan would not have a significant impact on shadow patterns within or from either of the landscape units. New buildings generally would be located within areas that are already heavily shaded by existing structures and large trees. While new buildings may produce larger shadow patterns, these would not be substantial and would not significantly affect any sensitive open space areas on campus.

Similarly, new buildings and the proposed renovation projects would not create substantial sources of glare. It is anticipated that the construction of new buildings and the renovation of existing buildings would utilize building materials that are generally non-reflective. The opportunity for glare, which would be greatest during the late afternoon hours (due to the low angle of the sun), would be reduced by the relatively large number of trees on the campus. Therefore, the proposed projects of the Master Plan are not likely to result in a significant glare impact to sensitive receptors—whether on- or off-campus.

f. Artificial Light

This section evaluates, in accordance with the sixth significance criterion above, the proposed Master Plan's artificial light impacts.

The proposed Master Plan would not introduce significant new sources of artificial light that could adversely affect sensitive residential uses or nighttime views. New lighting could include security lighting in all parking lots, along roadways, and adjacent to new buildings and walkways and possibly new lighting in the playing fields. However, such lighting would be filtered by landscape and both directed and shielded away from residential uses in the adjoining neighborhood. If properly positioned and shielded, the possible introduction of new nighttime light sources as part of the College's Master Plan effort would not degrade the quality of nighttime sky viewing activities of the Planetarium,and any potential impacts on planetarium activities would be minimized per the mitigation measures proposed below. In conclusion, no significant spillover impacts to sensitive receptors are anticipated.

3-2.3 Mitigation Measures

V-1 New buildings and renovations to existing buildings shall adhere to the standards, criteria, and guidelines in the District's *Design Criteria and Standards/Sustainable Design Manual* and shall be sympathetic to the Late Moderne/Modernist style of the campus' early permanent buildings (1955-1959) in terms of architectural detail and scale.

Although significant artificial lighting impacts on sensitive residential uses or the Planetarium are not anticipated, the following measures shall be implemented to ensure any potential impacts are minimized.

V-2 Nighttime lighting shall incorporate full-cutoff shielded fixtures or three-sided shielded fixtures pointed at least 45 degrees below the horizontal to contain the light within the campus and avoid spillover lighting impacts on off-campus properties to the south and east.

V-3 Lighting shall be designed in accordance with the standards of the Sky & Telescope Publishing Corporation guidelines so as not to impair nighttime sky-watching activities by Planetarium staff and students.

3-2.4 Unavoidable Significant Adverse Impacts

Implementation of mitigation measures V-1 and V-2 above would ensure the visual impacts due to demolition of the Library/Media Center, Cafeteria, Chemistry and Physics Buildings, and construction of a new Computer-Business-Technology Building would be less than significant.

Therefore, no significant adverse impacts to visual resources are anticipated as a result of the proposed project

Additionally, it should be noted that the Master Plan would provide additional and enhanced exterior spaces, as well as renovations to the exteriors of existing buildings, that would improve the overall appearance of the campus.

3-3 AIR QUALITY

3-3.1 Environmental Setting

a. Project Location

Valley College is located just north of the Valley Glen area of the San Fernando Valley in the city and county of Los Angeles. The campus is generally bounded to the north by Oxnard Street and Hatteras Street, to the east by Ethel Avenue and Coldwater Canyon Extension, to the south by Burbank Boulevard, and to the west by Fulton Avenue. The area in the immediate vicinity of Valley College contains primarily single-family and multi-family residential neighborhoods. Commercial uses are located southwest of the College, across Burbank Boulevard and Fulton Avenue. In addition, a fast food restaurant is located at the northeast corner of Burbank Boulevard and Fulton Avenue, adjacent to the campus parking lot. Ulysses Grant High School is located immediately northeast of the College. A railroad right of way owned by the Los Angeles County Metropolitan Transportation Authority is located to the west and south of the campus. The Tujunga Wash extension of the Los Angeles River is located just east of the southeast portion of the campus.

b. Air Quality Setting

The Southern California region in general has a Mediterranean climate characterized by warm, dry summers and mild winters with most of the rainfall occurring between the months of November and April. The San Fernando Valley experiences warmer summer temperatures and cooler winter temperatures than portions of the South Coast Air Basin immediately adjacent to the coastline.

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The proposed project is located in the South Coastal Los Angeles County Source-Receptor Area. Los Angeles County is within the South Coast Air Basin (Basin), a 6,600-square-mile area comprised of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The Basin's climate and topography are highly conducive to the formation and transport of air pollution. Peak ozone concentrations in the Basin over the last 2 decades have occurred at the base of the mountains around Azusa and Glendora in Los Angeles County and at Crestline in the mountain area above the city of San Bernardino. Ozone increases in concentration as new emissions are added to the air mass as it is carried across the Basin towards the base of the mountains by prevailing coastal breezes. Peak ozone concentrations, as well as the number of days that the ozone standards were exceeded, decreased in the Basin throughout the 1990's. Carbon monoxide (CO) concentrations also dropped significantly throughout the Basin as a result of strict new emission controls and reformulated gasoline sold in winter months.

c. Regulatory and Planning Requirements

Regionally, the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) have responsibility under state law to prepare the Air Quality Management Plan (AQMP) for the South Coast Air Basin. The AQMP contains measures to meet state and federal requirements. When approved by CARB and the federal Environmental Protection Agency (EPA), the AQMP becomes part of the State Implementation Plan (SIP).

Federal Attainment Status

The South Coast Air Basin was the nation's only "extreme" ozone non-attainment area until the EPA accepted the San Joaquin Valley Air Pollution Control District Board' request to "bump up" the Valley from "severe" to "extreme" to give the area three more years to attain the national 1-hour ozone standard. The Clean Air Act allows "extreme" areas until 2010 to achieve this standard. The Clean Air Act set the deadlines for CO and PM_{10} (particulate matter less than 10 microns in diameter) attainment in the Basin at 2000 and 2005, respectively. EPA regulations specify that a CO standard is attained when there are 2 years of data with no more than 1 exceedance at any 1 station. Although there were no exceedances of any CO standard in 2001, there were 2 exceedances of the national 8-hour standard at the South Central Los Angeles County monitoring station in 2000. All other stations met the 2-year attainment standard in 2001. Preliminary data released by the SCAQMD indicate that all stations met the attainment requirements in 2002 for the second consecutive year.

The national nitrogen dioxide (NO_2) standard was regularly exceeded in Los Angeles County until 1992. As a result, the Basin was the only area in the nation still designated an NO_2 non-attainment area when the EPA redesignated it attainment in 1998.

In July 1997, the EPA promulgated stricter standards for ozone and fine particulates less than 2.5 microns in diameter ($PM_{2.5}$), with up to 15 years allowed for attaining the $PM_{2.5}$ standard. Attainment of the new 8-hour ozone standard would not be required until after the 1-hour standard is attained. The PM_{10} standard was revised, but the existing PM_{10} standard remains in effect until attainment is achieved. Until there has been sufficient monitoring for the EPA to designate the $PM_{2.5}$ attainment status for each region, the PM_{10} standard will remain the particulate standard of reference.

State and National Standards

California standards are generally stricter than national standards, but have no penalty for non-attainment. California and national ambient air standards are shown in Table 3-1.

Table 3-1: Ambient Air Quality Standards				
Air Pollutant	**State Standard**	**National Standards**		**Health Effect**
		Primary	**Secondary**	
Ozone (O_3)	0.09 ppm, 1-hr avg.	0.12 ppm, 1-hr avg. 0.08 ppm, 8-hr avg.	0.12 ppm, 1-hr avg.	Aggravation of respiratory and cardiovascular diseases; Impairment of cardiopulmonary function
Carbon Monoxide (CO)	9.0 ppm, 8-hr. avg. 20 ppm. 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	Aggravation of respiratory diseases (asthma, emphysema)
Nitrogen Dioxide (NO_2)	0.25 ppm, 1-hr. avg.	0.0534 ppm, annual avg.	0.0534 ppm, annual avg.	Aggravation of respiratory illness
Sulfur Dioxide (SO_2)	0.25 ppm 1-hr 0.04 ppm, 24-hr avg.	0.03 ppm, annual avg. 0.14 ppm, 24-hr. avg.	0.50 ppm, 3-hr. avg.	Aggravation of respiratory diseases (asthma, emphysema)
Respirable Particulate Matter (PM_{10})	50 $\mu g/m^3$, 24-hr avg. 30 $\mu g/m^3$ AGM	150 $\mu g/m^3$, 24-hr avg. 50 $\mu g/m^3$ AAM	150 $\mu g/m^3$, 24-hr. avg.; 50 $\mu g/m^3$ AAM	Increased cough and chest discomfort; Reduced lung function; Aggravation of Respiratory and cardio-respiratory diseases
Fine Particulate Matter ($PM_{2.5}$)	No state 24-hr std. 12 $\mu g/m^3$ AGM	65 $\mu g/m^3$, 24-hr avg. 15 $\mu g/m^3$ AAM	65 $\mu g/m^3$, 24-hr. avg.; 15 $\mu g/m^3$ AAM	Increased cough and chest discomfort; Reduced lung function; Aggravation of Respiratory and cardio-respiratory diseases
Sulfates (SO_4)	25 $\mu g/m^3$, 24-hr avg.			Increased morbidity and mortality in conjunction with other pollutants
Lead (Pb)	1.5 $\mu g/m^3$, monthly avg.	1.5 $\mu g/m^3$, calendar quarter	1.5 $\mu g/m^3$	Impairment of blood and nerve function; Behavioral and hearing problems in children
Hydrogen Sulfide (H_2S)	0.03 ppm, 1-hr avg.			Toxic at very high concentrations
Vinyl Chloride	0.010 ppm, 24-hr. avg.			Carcinogenic
Visibility-Reducing Particles	In sufficient amount to reduce prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation			
Note: ppm = parts per million by volume; $\mu g/m^3$ = micrograms per cubic meter; AAM = annual arithmetic mean; AGM = annual geometric mean				

Source: California Air Resources Board, January 2003.

Ambient air standards are established to protect the average person from health effects associated with air pollution. The standards include an "adequate margin of safety." However, some people are particularly sensitive to some pollutants. These sensitive people include persons with respiratory illnesses or impaired lung function because of other illnesses, the elderly, and children. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. Chapter 4 of the SCAQMD's new *Air Quality Analysis Guidance Handbook* defines land uses considered to be sensitive receptors as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers and athletic facilities.

d. Regional Planning to Meet Standards

Regionally, the SCAQMD and the Southern California Association of Governments (SCAG) prepare the AQMP. The agencies adopted new plans in 1989 to meet national standards and in 1991 to meet state standards. The SCAQMD revised these attainment plans in 1994 and 1997. The EPA approved the 1994 AQMP in 1996 as part of the SIP. In 1999, the SCAQMD revised the 1997 AQMP to address concerns raised by the EPA. The revised plan, now known as the 1999 AQMP, was approved by the EPA on May 10, 2000 and replaced the 1994 AQMP as the federally enforceable SIP for the air basin. The SCAQMD and SCAG have revised the 1999 AQMP and expect to adopt the new revision later this year following completion of public review.

e. Existing Air Quality

The SCAQMD is responsible for monitoring air quality in the South Coast Air Basin (Basin), and for adopting controls, in conjunction with the California Air Resources Board, to improve air quality. Overall air quality has improved considerably throughout the Basin since 1990. These improvements have occurred despite extensive population growth in the Basin during the past decade.

The EPA has adopted new standards for 8-hour ozone and fine particulates ($PM_{2.5}$). Neither standard is operational in the South Coast Air Basin until the 1-hour ozone standard is achieved and the EPA completes its database on existing $PM_{2.5}$ concentrations. The EPA expects to finalize the 8-hour ozone implementation procedures sometime this year and designate non-attainment areas in late 2003 or early 2004. The agency expects to designate $PM_{2.5}$ non-attainment areas in 2004 or 2005. In the interim, the SCAQMD is monitoring both 8-hour concentrations of ozone and concentrations of $PM_{2.5.}$

The SCAQMD has divided the Basin into "source-receptor areas" (SRAs) with similar meteorological characteristics. Valley College is in SRA 7, the East San Fernando Valley. Readings for SRA 7 for the past 5 years, together with the applicable state and national standards, are shown in Table 3-2. Where they are available, the 8-hour ozone and the $PM_{2.5}$ concentrations in SRA 7 are shown for information purposes.

Table 3-2: Summary of Air Quality Data at East San Fernando Valley (SRA 7) Monitoring Station

Pollutant Standards	1997	1998	1999	2000	2001
Ozone (O_3)					
State standard (1-hr. avg. 0.09 ppm)					
National standard (1-hr avg. 0.12 ppm)					
National standard (8-hr avg 0.08 ppm)					
Maximum 1-hr concentration (in ppm)	0.13	0.18	0.12	0.15	0.13
Maximum 8-hr concentration (in ppm)	0.11	0.13	0.10	0.12	0.12
Days state standard exceeded	15	34	13	18	15
Days national 1-hr standard exceeded	2	7	0	3	2
Days national 8-hr standard exceeded	6	14	3	11	5
Carbon Monoxide (CO)					
State standard (1-hr. avg. 20 ppm)					
National standard (1-hr avg. 35 ppm)					
State standard (8-hr. avg. 9.0 ppm)					
National standard (8-hr avg. 9 ppm)					
Maximum concentration 1-hr period (in ppm)	9	8	9	8	6
Maximum concentration 8-hr period (in ppm)	7.4	7.5	9.0	6.1	4.9
Days state/national 1-hr standards exceeded	0	0	0	0	0
Days state 8-hr standard exceeded	0	0	0	0	0
Days national 8-hr standard exceeded	0	0	0	0	0
Nitrogen Dioxide (NO_2)					
State standard (1-hr avg. 0.25 ppm)					
National standard (0.0534 AAM in ppm)					
Annual arithmetic mean (in ppm)	0.0424	0.0416	0.0456	0.0416	0.0419
Percent national standard exceeded	0	0	0	0	0
Maximum 1-hr concentration	0.20	0.14	0.18	0.17	0.25
Days state standard exceeded	0	0	0	0	0
Suspended Particulates (PM_{10})					
State standard (24-hr. avg. 50 $\mu g/m^3$)					
National standard (24-hr avg. 150 $\mu g/m^3$)					
Maximum 24-hr concentration	92	75	82	74	86
Percent samples exceeding state standard	10.4	15.3	35	23	23
Percent samples exceeding national standard	0	0	0	0	0
Suspended Particulates ($PM_{2.5}$)					
National standard (24-hr avg. 65 $\mu g/m^3$)					
Maximum 24-hr concentration	NM	NM	79.5	84.4	84.7
Percent samples exceeding national standard			1	4.3	3.4

ppm = parts per million

$\mu g/m^3$ = micrograms per cubic meter

NM = Not Monitored

Source: SCAQMD Air Quality Data,1997 through 2001.

Summary of Existing Air Quality

Ozone concentrations and the number of standard exceedances in SRA 7 have remained relatively constant since 1997. The 1-hour and 8-hour carbon monoxide concentrations were and relatively unchanged throughout the period. Although it is too early to know if it is a trend, there was a marked improvement in the 8-hour concentrations the past two years. No CO standard was exceeded in the period. Annual NO_2 concentrations were consistent. Although the state 1-hour NO_2 standard was not exceeded, the highest 1-hour concentration in 2001 was equal to the state standard. Particulate levels vary from year to year, but the national PM_{10} standard was not exceeded in any year. The national $PM_{2.5}$ standard was slightly exceeded in each of the 3 years it was measured.

3-3.2 Environmental Impacts

a. Significance

Appendix G (Environmental Checklist Form) of the *State CEQA Guidelines* states that, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to determine if the project would result in a significant air quality impact.

The applicable air pollution control district for the project area is SCAQMD. SCAQMD's *CEQA Air Quality Handbook,* as revised in November 1993 and approved by the SCAQMD's Board of Directors, contains recommended thresholds for construction and operational air quality impacts. SCAQMD is currently in the process of preparing a new Air Quality Handbook, to be titled the *AQMD Air Quality Analysis Guidance Handbook.* Chapters 2, 3, and 4, which are related to air quality background information and the roles of regulatory agencies, are available on SCAQMD's web page at *www.aqmd.gov*. Other chapters will be posted on the web page as they become available. Revisions at the time this analysis was prepared do not include new significance thresholds or analysis methodologies.

SCAQMD's emission thresholds apply to all federally regulated air pollutants except lead, which is not exceeded in the Basin and does not contribute to exceedances of other federally regulated pollutants. Construction and operational emissions are considered by the SCAQMD to be significant if they exceed the thresholds shown in Table 3-3.

Table 3-3: Emission Thresholds of Significance

Pollutant	Construction		Operations
	pounds/day	tons/quarter	pounds/day
Carbon Monoxide (CO)	550	24.75	550
Sulfur Oxides (SO_x)	150	6.75	150
Particulate Matter (PM_{10})	150	6.75	150
Nitrogen Oxides (NO_x)	100	2.5	55
Volatile organic compounds (ROC)	75	2.5	55

Source: SCAQMD *CEQA Air Quality Handbook*, 1993.

Therefore, for the purposes of the analyses in this EIR, the proposed Master Plan would have a significant environmental impact if it:

- Generates emissions that exceed the thresholds in Table 3-3;

- Would cause the exceedance of a CO standard or results in increases in carbon monoxide concentrations, in areas that already exceed national or state standards, greater than one part per million (ppm) averaged over 1 hour or 0.45 ppm averaged over 8 hours;
- Exposes sensitive receptors to substantial pollutant concentrations;
- Conflicts with or obstructs implementation of the applicable air quality plan; or
- Creates objectionable odors affecting a substantial number of people.

b. Impacts Discussion

Construction Impacts

Air quality impacts of a project may occur during construction on both a regional and local scale. Construction impacts include airborne dust from demolition, grading, excavation and dirt hauling and gaseous emissions from heavy equipment, delivery and dirt hauling trucks, employee vehicles, and paints and coatings. These impacts may affect regional pollutants such as ozone or pollutants where the impacts occur very close to the source, such as carbon monoxide or particulate matter (fugitive dust).

Construction to implement the proposed Master Plan would begin in 2004 and end in 2009. The second quarter of 2005 would be the peak construction period. During that period, construction would begin on the Media Arts Center (new). In addition, construction would be continuing on the Allied Health/Sciences Center (new) and the Gym Complex (refurbish). Construction of the Campus Improvements would also begin at this time.

Construction impacts were assessed in accordance with procedures contained in the SCAQMD *CEQA Air Quality Handbook* (1993), updated with current California Air Resources Board emission factors

Peak day construction emissions are shown in Table 3-4 and peak quarter construction emissions are shown in Table 3-5.

❑ Demolition

Implementation of the full Master Plan would result in the demolition of approximately 175,000 square feet of building space, including interior spaces in renovated buildings, as well as some existing paving in roads, parking lots, walkways, etc.

Prior to demolition of any structure, the contractor would comply with requirements of SCAQMD Rule 1403 regarding asbestos control during demolition and renovation. This rule ensures that asbestos is removed and encapsulated prior to demolition so that no asbestos fibers are released to the atmosphere. The SCAQMD *CEQA Air Quality Handbook* states that asbestos emissions from a project are fully mitigated and not significant when the project is in compliance with Rule 1403.

Table 3-4: Peak Day Construction Emissions (pounds per day)

Source Category	Pollutant				
	Carbon Monoxide (CO)	Volatile Organic Compounds (VOC)	Oxides of Nitrogen (NOx)	Oxides of Sulfur (SOx)	Particulate Matter (PM_{10})
Demolition					21
Earthmoving/Grading (Fugitive Dust)					267
Dirt Piling					174
Diesel-Powered Equipment	71	52	190	17	16
Trucks	30	3	27	0	1
Employee Vehicles	64	6	5	0	0
MAXIMUM DAILY CONSTRUCTION EMISSIONS	165	61	222	17	479
SCAQMD Significance Thresholds for Construction	550 lb/day	75 lb/day	100 lb/day	150 lb/day	150 lb/day
Significant?	NO	NO	YES	NO	YES

Source: JHA Environmental Consultants, LLC, 2003.

Table 3-5: Peak Quarter Construction Emissions (in tons per quarter)

Source Category	Pollutant				
	Carbon Monoxide (CO)	Volatile Organic Compounds (VOC)	Oxides of Nitrogen (NOx)	Oxides of Sulfur (SOx)	Particulate Matter (PM_{10})
Demolition					0.37
Earthmoving/ Grading					8.69
Dirt Piling					5.67
Diesel-Powered Equipment	2.29	1.68	6.17	0.55	0.52
Trucks	0.98	0.11	0.87	0.01	0.03
Employee Vehicles	2.09	0.20	0.16	0	0.01
MAXIMUM QUARTER CONSTRUCTION EMISSIONS	5.36	1.99	7.2	0.56	15.29
SCAQMD Significance Thresholds for Construction	24.75 tons/qtr	2.5 tons/qtr	2.5 tons/qtr	6.75 tons/qtr	6.75 tons/qtr
Significant?	NO	NO	YES	NO	YES

Source: JHA Environmental Consultants, LLC, 2003.

Most of the particulate emissions related to demolition, as well as debris removal, would take place after the peak construction period. However, the analysis assumes some demolition associated with refurbishment of the Gymnasium and removal of existing walkways as part of the Campus Improvements.

❑ Grading and Excavation

Soil may be disturbed during grading and excavation or while storing project-related equipment. Table A9-9 of the SCAQMD *CEQA Air Quality Handbook* states that there would be 26.4 pounds of PM_{10} for each acre of graded surface.

Grading and excavation would begin for the Media Arts Center and the Library. Campus improvements would begin during this period. The analysis assumes that 10.1 acres could be exposed in the peak quarter, including ground area exposed during landscaping, laying utilities, and for storing equipment.

❑ Dirt and Debris Piling

Based on a formula contained in Table A9-9-F in the South Coast Air Quality Management District *CEQA Air Quality Handbook* (1993), each loader or dozer generates 21.8 pounds of PM_{10} an hour. The analysis assumes two dozers operate 4 hours a day throughout the 65-day quarter loading trucks with excavated soil and debris. No emissions are assumed for PM_{10} emissions lost in transport because the analysis assumes loads are fully mitigated by measures described in the Mitigation Measures section.

❑ Equipment

Heavy-duty equipment emission estimates are derived from formulas contained in Tables A9-8-A and B in the South Coast Air Quality Management District *CEQA Air Quality Handbook* (1993). The analysis assumes there would be 4 dozers and 11 pieces of miscellaneous heavy-duty equipment. All equipment is assumed to operate 8 hours a day. Water is assumed to be available on the site; therefore, no water trucks are included in the total.

❑ Trucks

Although it is expected that the demolition contractor would initiate recycling programs, some dirt and debris would be exported to the nearest landfill authorized to accept such waste, which is assumed to be 20 miles away. The analysis assumes there would be 30 loads a day throughout the peak quarter. In addition, there would be approximately 20 heavy-duty truck trips a day to bring supplies and equipment. These trips are assumed to average 10 miles each way.

❑ Employee Vehicles

Different workers are on site at different phases of construction. The analysis assumes there could be as many as 200 employees working on all the projects on any day during the peak construction period. Worker vehicle trips are assumed at the SCAG 2000 Los Angeles County home-to-work average vehicle ridership (AVR) of 1.10 and regional average trip length of 11.2

miles each way listed in the SCAQMD *CEQA Air Quality Handbook* (1993). Emission factors are from the CARB emission model, EMFAC2002. Calculation sheets are contained in the Air Quality Technical Appendix (See Appendix B of this EIR).

❑ Odors

There are no known sources of odors on the site that would cause significant odor impacts during grading and excavation. Diesel equipment exhaust produces odors that are unpleasant to some people, but these are not considered significant.

❑ Toxics

As discussed earlier, some older buildings may contain asbestos, which is a hazardous substance. This material would be collected and encapsulated according to provisions of SCAQMD Rule 1403, then taken to an approved landfill prior to any demolition. Consequently, there would be no significant public exposure to asbestos fibers. (Also see Section 3-8, Hazardous Materials.)

Equipment and trucks used in construction would produce diesel exhaust emissions. On April 28, 1998 the Scientific Review Panel of the California Air Resources Board (CARB) approved reports prepared by staffs of the Office of Environmental Health Hazard Assessment (OEHHA) and CARB identifying diesel exhaust as a carcinogen. To date, no guidelines have been issued or models developed to identify what concentrations of carcinogens or other health-risk substances are contained in the exhaust streams of individual vehicles or pieces of equipment, how they differ under various operating and environmental conditions, and what would constitute a significant health risk. There are over 40 substances in diesel exhaust listed by the U.S. EPA as hazardous substances. However, there is a wide difference in the amount of these substances contained in individual diesel trucks, depending on the age of the vehicle and the amount of controls. Significant progress has been made in California as a result of state and federal controls already enacted. CARB has projected that emissions of diesel exhaust PM_{10}, which contains most of the hazardous materials in diesel exhaust, will decline 85 percent between 1990 and 2010.

❑ Sensitive Receptors

College students are considered to be adults and are not described as sensitive receptors. There are residences near the campus, but these are separated by at least one street width from the nearest construction. However, there is a Child Development Center located on the campus and Grant High School is located adjacent to the campus, immediately east of Ethel Avenue and north of Hatteras Street. Children attending the Child Development Center and susceptible students at Grant High School could be significantly affected if construction activities in the immediate vicinity generate substantial amounts of fugitive dust emissions. Accordingly, these sensitive receptors should be protected from fugitive dust emissions to the maximum extent feasible. Sensitive receptors, such as children could also be significantly affected if construction equipment and vehicles generate substantial amounts of diesel emission in the immediate vicinity of the receptors.

Summary of Construction Impacts Without Mitigation

As shown in Table 3-4 and Table 3-5, construction activities would generate an estimated 222 pounds of NO_x and 479 pounds of PM_{10} on the peak day, which would exceed the SCAQMD recommended significance thresholds of 100 and 150 pounds/day, respectively. In addition, during the peak construction quarter, construction activities would generate an estimated 7.2 tons of NO_x and 15.29 tons of PM_{10} emissions, which would exceed the SCAQMD significance thresholds of 2.5 and 6.75 tons/quarter, respectively. Thus, without mitigation, $NO_{x,}$ and PM_{10} emissions would be significant on the peak day and in the peak quarter of construction. There are no known sources of odors on the site that would be released during construction. The California Air Resources Board has declared that diesel exhaust is a toxic substance. Both trucks and equipment would emit diesel exhaust. The potential exists for significant adverse impacts on sensitive receptors, without mitigation.

Operation Impacts

❑ Regional

Completion of the projects proposed under the Master Plan would add approximately 289,500 gross square feet (gsf) to the existing 600,000 gsf and increase parking spaces by 307 spaces to a total of 4,170. Implementation of the Master Plan would also increase student enrollment and employment at the College.

Based on the Traffic Report for the project, the completed project at build out would result in an increase of 5,700 daily trips. Vehicle and area source emissions were calculated with the CARB model, URBEMIS2001, adjusted with total new trips supplied by the Traffic Consultant. Emissions were calculated for both summer and winter, with the highest total being shown in Table 3-6. All concentrations except for CO are higher in the winter.

Significance of Regional Impacts Before Mitigation

Based on SCAQMD significance thresholds, the project would result in regional emissions of CO, VOC, and NO_x that exceed SCAQMD's significance thresholds. However, the project accommodates regional growth already accounted for in the AQMP through the SCAG regional forecasts that were incorporated into the AQMP baseline. Therefore, all operational emissions have been offset through control measures in the AQMP. Nonetheless, the impact of pollutant emissions generated by the proposed project, is considered to be significant.

❑ Local

The Traffic Consultant's estimates of future traffic volumes at the intersections most affected by the project, both with and without the project, were evaluated to determine if there could be significant carbon monoxide concentrations when the project is built out.

Table 3-6: Net Increase in Operation Emissions (in pounds per day)				
Source Category	**Pollutant**			
	Carbon Monoxide (CO)	**Volatile Organic Compounds (VOC)**	**Oxides of Nitrogen (NOx)**	**Particulate Matter (PM_{10})**
Traffic Emissions	712.99	63.17	79.29	39.28
Area Source Emissions	1.37	0.23	2.48	0.01
TOTAL PROJECT EMISSIONS	714.36	63.4	81.77	39.29
SCAQMD Significance Thresholds for Operation	550 lb/day	55 lb/day	55 lb/day	150 lb/day
Significant?	YES	YES	YES	NO
Note: Traffic emissions calculated with California Air Resources Board model URBEMIS (2001).				

Source: JHA Environmental Consultants, LLC, 2003.

In order for a CO hotspot to occur, there must be a combination of high volume of traffic and congestion. The SCAQMD determined in its 1993 Handbook that a CO hotspot would not develop at an intersection operating at LOS C or better. Since the Handbook was written, there have been new CO controls on vehicles and modified gasoline sold during the winter, high CO months. These controls have lowered both ambient CO concentrations and per vehicle emissions. The SCAQMD requires that background concentrations projected for future years be added to modeled concentrations in order to provide a margin of safety. For SRA 7, the AQMD has projected that 8-hour CO concentrations would decline to 6.5 ppm in 2010 and remain at this level. However, the monitored 8-hour concentrations in SRA 7 dropped below 6.5 ppm in both 2000 and 2001.

Adding backgrounds measured at a distant station to modeled concentrations sometimes results in artificially high concentrations. If a project's contribution to the total traffic volume is low, the project will not cause a significant increase, as defined by the SCAQMD, even if adding the background causes the CO concentration at an intersection to exceed the 8-hour standard.

Review of the Traffic and Parking Study for the project shows that, although 10 intersections would operate at LOS E or F with the project, the highest percentage increase in traffic attributed to the project is 3.2 percent in the AM peak hours at Coldwater Canyon Avenue and Oxnard Street and Coldwater Canyon Avenue and Burbank Boulevard. However, the total traffic volumes at these two intersections are lower than at all but one other affected intersection. The increase in traffic from the project is too small to cause a significant increase in CO concentrations at any affected intersection.

Significance of Local Impacts Before Mitigation

As discussed above, carbon monoxide concentrations would be less than significant.

Consistency with the AQMP

The proposed project would provide services for the population growth projected in the 1999 AQMP for the South Coast Air Basin and is therefore consistent with the AQMP. The increase in emissions that arise from population growth and the services this added population requires are accounted for in the AQMP. Measures and programs are contained in the AQMP to offset the adverse effects on air quality resulting from this growth. The project would utilize mitigation measures contained in the SCAQMD's *CEQA Air Quality Handbook* (1993) to offset fugitive dust emissions to the extent feasible. These reductions are assumed in the air basin's PM_{10} control strategy contained in the AQMP.

3-3.3 Mitigation Measures

a. Construction Mitigation Measures

Fugitive Dust Emissions

The following measures shall be implemented to control fugitive dust. These measures would reduce PM_{10} emissions by 60 percent.

AQ-1 Moisten soil not more than 15 minutes prior to moving soil and three times a day or four times a day under windy conditions in order to maintain soil moisture of 12 percent.

AQ-2 On the last day of active operations prior to a weekend or holiday, apply water or a chemical stabilizer to maintain a stabilized surface.

AQ-3 Water excavated soil piles hourly or cover piles with temporary coverings.

AQ-4 Cease grading during periods when winds exceed 25 miles per hour.

AQ-5 Moisten excavated soil prior to loading on trucks.

AQ-6 Apply cover to all loads of dirt leaving the site or leave sufficient freeboard capacity in truck to prevent fugitive dust emissions en route to disposal site.

AQ-7 Sweep streets to remove dirt carried out by truck wheels.

AQ-8 Schedule grading and excavation activities that occur within approximately 200 feet of the Child Development Center (CDC) during periods when children are not in attendance. If it is not possible to schedule grading and excavation activities when children are not present at the CDC, then children shall be kept indoors with the windows closed. Air conditioners in the CDC Building shall have proper filters to ensure dust generated by construction activities is not transmitted indoors via the building's ventilation system.

AQ-9 Construct a temporary fence around the perimeter of the Child Development Center site to shield the Center from fugitive dust emissions. The fence shall have a minimum height of 8 feet and a solid or impermeable surface.

Gaseous Emissions

The following measure shall be implemented to reduce emissions from equipment. This measure would reduce emissions by approximately 10 percent.

AQ-10 Turn off equipment when not in use for longer than 5 minutes.

The following measures shall be employed wherever feasible to reduce gaseous emissions from equipment. They would also reduce toxic emissions from diesel equipment. No reduction credit is taken because of the uncertainty regarding scheduling and applicability to construction requirements.

AQ-11 Use bio-diesel fuel in all onsite diesel-powered equipment, if available.

AQ-12 Use alternatively fueled (compressed natural gas (CNG), liquefied natural gas (LNG), dual-fuel or electric) construction equipment, if available.

AQ-13 To the extent feasible, minimize truck idling on site and locate staging areas away from locations where students are congregated.

The peak day and peak quarter construction emissions after mitigation measures are shown in Table 3-7 and Table 3-8, respectively.

b. Operational Mitigation Measures

Regional

AQ-14 To reduce tripmaking and resulting operational pollutant emissions, Valley College shall implement transportation demand management measures.

The reader is referred to Section 3-14.3 for a detailed discussion of specific proposed measures to reduce vehicle tripmaking.

Local

Impacts are not significant and do not require mitigation.

Table 3-7: Maximum Daily Construction Emissions after Mitigation (in pounds per day)

Source Category	Pollutant				
	Carbon Monoxide (CO)	**Volatile Organic Compounds (VOC)**	**Oxides of Nitrogen (NOx)**	**Oxides of Sulfur (SOx)**	**Particulate Matter (PM_{10})**
Emissions Before Mitigation	165	61	222	17	479
Demolition (60% reduction)					13
Earthmoving/ Grading (Fugitive Dust) (60% reduction)					160
Dirt Piling (60% reduction)					104
Diesel-Powered Equipment (10% reduction)	7	5	19	2	2
MAXIMUM DAILY CONSTRUCTION EMISSIONS AFTER MITIGATION	158	55	203	15	200
SCAQMD Significance Thresholds for Construction	550 lb/day	75 lb/day	100 lb/day	150 lb/day	150 lb/day
Significant?	NO	NO	YES	NO	YES

Source: JHA Environmental Consultants, LLC, 2003.

3-3.4 Unavoidable Significant Adverse Impacts

a. Construction

After mitigation, NO_x concentrations on the peak day and in the peak construction quarter would still exceed SCAQMD's significance thresholds. PM_{10} emissions would still be significant on the peak day but not in the peak quarter. Conformity to recommended fugitive dust control measures should protect sensitive receptors from adverse health effects from construction dust. Adherence to mitigation measures to locate vehicle staging areas, to the extent feasible, away from areas where sensitive receptors and students congregate should minimize exposure to diesel exhaust. Use of alternative diesel fuels would prevent exposure to toxic diesel emissions.

b. Operation

There would be significant regional emissions of CO, NO_x, and VOC, based on SCAQMD thresholds.

No local carbon monoxide hotspots would occur as a result of the completed project.

Table 3-8: Peak Quarter Construction Emissions after Mitigation (in tons per quarter)					
Source Category	**Pollutant**				
	Carbon Monoxide (CO)	**Volatile Organic Compounds (VOC)**	**Oxides of Nitrogen (NOx)**	**Oxides of Sulfur (Sox)**	**Particulate Matter (PM_{10})**
Maximum Emissions Before Mitigation	5.36	1.99	7.2	0.56	15.29
Demolition (60%reduction)					0.22
Earthmoving/ Grading (60% reduction)					5.21
Dirt Piling (60% reduction					3.40
Diesel-Powered Equipment (10% reduction)	0.23	0.17	0.62	0.06	0.05
Maximum Quarter Construction Emissions After Mitigation	5.14	1.82	6.58	0.50	6.41
SCAQMD Significance Thresholds for Construction	24.75 tons/qtr	2.5 tons/qtr	2.5 tons/qtr	6.75 tons/qtr	6.75 tons/qtr
Significant?	NO	NO	YES	NO	NO

Source: JHA Environmental Consultants, LLC, 2003.

3-4 HISTORICAL RESOURCES

3-4.1 Environmental Setting

In 1769, Members of the Gaspar de Portola expedition became the first Europeans to view the San Fernando Valley (Valley) as they paused on their journey north in search of Monterey Bay. They gave the valley its first name: "Valle Santa Catalina de Bononia de los Encinos" (Valley of Saint Catherine Bononia of the Live Oak Trees), due to the abundant Live Oak trees in the vicinity of present-day Encino and Sherman Oaks. Permanent settlement of the Valley began with the establishment of the Mission San Fernando Rey de España in 1797. The Mission gave the Valley its current name.

During the mission era and the period following secularization in 1833, land in present-day Van Nuys was devoted to sheep grazing. The modern history of the Van Nuys community began however with the arrival of the Southern Pacific Railroad in 1876, and the trend toward large-scale agricultural production in the San Fernando Valley brought the introduction of dry wheat and barley cultivation. The Los Angeles Farm and Milling Company (established 1880), and its chief local representative Isaac Newton Van Nuys (1835-1912) led this effort, converting a huge segment of the Southern and East-Central San Fernando Valley for this purpose. These operations were conducted from six ranch units—some of which were named for their superintendents—including Van Nuys (or "Home Ranch")(which is named for the Van Nuys family), Kester, Workman, Patton, Sheep, and Clyman Ranch. Each ranch had a superintendent's house, two or three large barns, shops, bunkhouses and mess halls for the workers, and a fenced acreage for cattle pasturage. In 1888, real estate speculation prompted the subdividing of the eastern 12,000 acres of the Los Angeles Farm and Milling Company lands for the platting—chiefly into 40-acre homestead-sized lots—of what is present-day North Hollywood.

Following voter approval for the construction of the Owens Valley Aqueduct in 1907, large-scale urbanization of the Valley became possible for the first time. Between 1907 and 1913, when the aqueduct was completed, real estate promotion began in earnest with fairs, excursions, barbecues, automobile races, and all manner of boosterism. In 1910, in the midst of this fevered real estate speculation, the Suburban Home Association syndicate created the largest subdivision in the San Fernando Valley: Tract 1000. Because of its great size, historian W.W. Robinson considers the platting of this particular subdivision an official ending point of the Valley's earlier rancho period. This tract encompassed some 47,500 acres of wheat-farming land acquired from the Los Angeles Farm and Milling Company and stretched from the crest of the Santa Monica Mountains on the south to Roscoe Boulevard on the north. In 1911, Suburban Home Association syndicate member William Paul Whitsett purchased a half-interest in the Van Nuys townsite and assumed responsibility for its related sales and promotion activities. The kick-off event was a broadly advertised opening day barbecue held on February 22, 1911 (Washington's Day). At the close of the initial weekend some $39,606 in property cash down payments had been netted (see Figure 3-25).

Figure 3-25: Opening Day, February 22, 1911

Source: Roderick, Kevin. 2001. The San Fernando Valley; America's Suburb. p. 59.

During the decade ending in 1920, Van Nuys and the adjoining Valley communities were annexed into the city of Los Angeles (1915) and a period of intensive agriculture based on large-scale irrigation as well as widespread subdivision and community building activity occurred. This set the stage for the dramatic urbanization of the San Fernando Valley. Between 1920 and 1930 the population of the San Fernando Valley nearly quadrupled to 78,749 (Preston 1965). Even though the Valley economy was still overwhelmingly agricultural in 1930, by the end of the 1940s significant new industrial development had occurred, including opening of the General Motors plant in Van Nuys (1947), the Schlitz and Anheuser-Busch Brewing companies, and the moving of the Lockheed Corporation to Burbank (1941).

A majority of residential and commercial development in Van Nuys dates from just after World War II and from the 1950s. During the decade of the 1940s alone, 250,000 new people moved to the Valley. This rapid suburbanization, along with the significant expansion of the industrial sector, provided the rationale for the establishment of Valley College.

Valley College began operating on the campus of Grant High School (originally known as Van Nuys High School), utilizing five bungalows located on the agricultural plot of the high school as its embryonic campus, and sharing the high school's other facilities as necessary. Instruction officially began during September 1949, with 440 students and approximately two dozen faculty. Through nearly 30 small land acquisitions occurring between 1949 and 1952, the College acquired the property upon which the current campus exists. During this same time it also acquired dozens of temporary move-on wood-framed classroom bungalows from other Los Angeles City School District campuses.

During the early 1950s, the College was housed chiefly in temporary structures and on the Grant High School campus. Beginning with the two barrel-roofed gymnasiums in 1952 (currently known as the Gymnastics Center and Field House), a number of permanent buildings were erected. Bond funds provided in 1955 ("Phase I") made possible the construction of the first group of permanent classroom structures, including the Chemistry, Foreign Language, Engineering, Library, and Music Buildings. Bond funding provided in Fall 1959 ("Phase II") made possible the construction of Life Sciences and Theater Arts Buildings, Plant Maintenance, Cafeteria (and subsequent expansion thereof), expansion of the Music Building, as well as major landscape and grounds improvements. Further funding ("Phases III and IV") in early 1962 and Summer 1963 was provided for the construction of the Business & Journalism, Math & Science, Planetarium, Art, Faculty Restrooms, Behavioral Science and Humanities Buildings, as well as for additional landscape and grounds improvements.

The core of the campus—located essentially between Campus Drive and Fulton Avenue—including the Quadrangle and radial and bilateral building placements at the base and along the sides of the Quadrangle, is a largely intact, architecturally cohesive grouping united by shared site plan, architectural characteristics, and landscape features. Though most of the buildings are visually unified in terms of scale, footprint, height, materials, colors, window and door details, and tied together by the covered walkways and landscape, the buildings are not individually distinctive in architectural terms. They were designed to be seen as part of a grouping rather than as individual architectural creations (Figure 3-26 and Figure 3-27). Although built in phases between 1955 and 1969, the core of the campus shows careful attention to detail and is not the product of random design choices. Accordingly, the core campus appears to be a significant example of college site planning, architecture, and landscape design. The architecture is significant for how its evokes a master plan concept in which the landscape is accorded the primary visual role and the buildings are of secondary visual importance. The related features (viz., campus master plan characteristics, building placements, architectural treatment and landscape design) form a potential historic district and should be considered historic resources under CEQA. It appears that, upon becoming 50 years old, they would be eligible for inclusion on the California Register of Historical Resources per California Public Resource Code §§5024.1, Title 14 CCR, Section 4852, criterion C because they embody the distinctive characteristics of a type, period or design, and possess high artistic values. The campus is also significant under criterion C because it is the work of two important Los Angeles area architects from near the end of their professional careers.

The architects Lester H. Hibbard (1886-?) and Harold C. Chambers (1885-1971) created the original campus master plan and landscape plan (with the probable consulting assistance of a landscape architect) and designed all of the buildings erected between 1955-1963, as well as subsequent buildings through approximately 1968. The partnership was then dissolved and Chambers probably assumed sole design responsibility up until his death in 1971. Chambers, who was a graduate of the Armour Institute of Technology and Chicago Art Institute, gained his professional experience working for the accomplished Pasadena architect, Myron Hunt (1868-1952), serving first in the capacity of draftsman (1907) and eventually becoming a full design partner in the firm (1920-1947). Upon Hunt's retirement, Chambers formed a new partnership with Lester Hibbard. This partnership was of nearly 20 years duration (1947-1968) and began when both architects were in their early sixties. Hibbard was educated in architecture at the University of California Berkeley ('09), obtaining his first full-time professional work experience (1909-1912) as a draftsman and structural engineering specialist with the firm of Myron Hunt (where, presumably, he and Chambers first became acquainted). He next became principal member of the firm Hibbard and Cody (during the 1910s), and then principal of the firm of Hibbard, Gerrity & Kerton (circa 1920-1940). During these associations he designed

Figure 3-26: Chemistry and Foreign Language Buildings, West Facades

Source: Myra L. Frank & Associates, Inc., 2003.

Figure 3-27: Administration Building and Covered Walkway

Source: Myra L. Frank & Associates, Inc., 2003.

several important Los Angeles area landmark buildings, including the Lincoln Heights Branch Library (1917; AIA Southern California Chapter award recipient) and the University of California Riverside Citrus Experiment Station facility (1916). As part of the construction firm of Stanton, Reed and Hibbard, Hibbard designed other key buildings in Downtown Los Angeles: the Hotel Figueroa/ YWCA (1925-1926), Biltmore Hotel Public Garage (1923), Forve & Pettebone Building (at 7th and Beacon Streets), and two additions to the Bullocks Department Store (1922-1923).

Both Chambers and Hibbard were accorded special biographical recognition for their professional accomplishments. Hibbard is listed in the 1924 edition of *Who's Who in Los Angeles County* and Chambers is profiled, respectively, in *Who's Who in California* (1929 Edition) and the 1962 Edition of *Who's Who in America*. Because of the biographical importance suggested by these listings, their association with the design of the Valley College campus is noteworthy. Because of the scope of the Valley College commission, and the fact that it occurred near the end of the architects' respective careers, it is also a significant example of their work.

Chambers and Hibbard specialized in the design of large institutional facilities. Valley College (beginning in1952) together with the earlier master plan work for the University of California Riverside (1949) appear to be the firm's most noteworthy college campus master planning commissions. The site plan for the campus is distinctive, combining a Beaux Arts formality that characterizes early twentieth century campus planning with unorthodox radial arrangement of buildings (south of the Quadrangle) and a Post-War modern architectural treatment (Figure 3-28). Valley College is probably the only commission for an academic institution in which Chambers and Hibbard produced the master plan, designed nearly all the buildings, and formulated landscape design features[3]—even while they had a number of college/public school commissions of much smaller scope (viz., Canoga Park High School, Occidental College, University of California Riverside). The firm's other significant work is in the specialty area of medical facility design and includes the Shriner Hospital for Crippled Children (Los Angeles), Hoag Memorial Hospital Newport Beach (1951;1957-1959), and the South Coast Medical Center Comprehensive Site Plan (1950s). Although Valley College is not cited in a standard architectural reference book about Los Angeles architecture, the Los Angeles Conservancy included Valley College as a site on a recent architectural tour showcasing Post-War architecture in the San Fernando Valley entitled "How Modern Was My Valley" (2000). Also, Hibbard is referenced in connection with the 1949 University of California Riverside Master Plan (Gebhard and Winter, 1977).

A documentation search was completed during September 2002 to identify significant historic and/or architectural resources on or within a 2-mile radius of the Valley College campus. Sources included the statewide database of historic/architectural resources, including those listed on the California Register of Historical Resources, Architecture in Los Angeles: An Architectural Guide (Gebhard and Winter), the City of Los Angeles Cultural Heritage Commission list of Historic-Cultural Monuments, and the Van Nuys Historic Preservation Overlay Zone Historic Resources Survey (Myra L. Frank and Associates, Inc. 2002). Existing databases and historic resource lists do not include any historic resources located on the Valley College campus and reference only one resource within a 1-mile radius and a total of only five resources within a 2-mile radius. Most of the resources within the 2-mile radius are part of Van

[3] Edward Huntsman-Trout (1889-1974) may have served as consulting landscape architect. Chambers and Hibbard worked together previously with Huntsman-Trout in developing the University of California Riverside Master Plan and Landscape Plan (1949).

Nuys Civic Center neighborhood—approximately 1.5 miles to the northwest. The results of this research are presented in Table 3-9.

Table 3-9: Significant Architectural/Historical Resources Within a 2-Mile Radius of Valley College

Resource Location	Historic Name	Year Built	Description	Significance
13242 Magnolia Bl. (0.6 miles south)	The Magnolia	Late 1920s	Notable Spanish Colonial Revival Residence	L. A. Cultural Heritage Monument #293
14836 Sylvan St. (1.8 miles northwest)	Van Nuys Women's Club	1917	Craftsman Style Institutional Bldg. (Civic Center)	L.A Cultural Heritage Monument #201
14410 Sylvan St. (1.4 miles northwest)	Valley Municipal Bldg.	1932	Outstanding Example WPA Moderne Style (Civic Center)	L. A. Cultural Heritage Monument #202
14540 Sylvan St. (1.5 miles northwest)	Van Nuys Post Office	c1926	Notable Italian Renaissance Revival Design (Civic Center)	Gebhard & Winter 1994
14603 Hamlin St. (1.6 miles northwest)	Baird House	1921	Craftsman Bungalow & notable historical associations	L. A. Cultural Heritage Monument #203
14339 Hamlin St. (1.4 miles northwest)	Van Nuys Missionary Church	1924	Notable Gothic Revival Stylistic Example	Van Nuys HPOZ Survey 2002
14654 Hamlin St. (1.6 miles northwest)	12th Church of Christ Scientist	1931-32	Notable Spanish Colonial Revival Stylistic Example by Meyer & Holler, Architects	Van Nuys HPOZ Survey 2002
14603 Haynes St. (1.6 miles northwest)	Central Christian Church	1925	Notable Mission Revival Stylistic Example by Allison & Allison, Architects	Van Nuys HPOZ Survey 2002
5540 Laurel Canyon Bl. (1.2 mi. southeast)	David Familian Chapel-Temple Adat Ari El	1949	First purpose-built synagogue in San Fernando Valley	L. A. Cultural Heritage Monument #199

Source: Myra L. Frank and Associates, Inc. 2003.

The Valley College campus contains at least two permanent buildings and a number of "temporary" structures that predate construction of the permanent academic buildings in the core campus area (i.e., that portion of campus essentially located between Campus Drive and Fulton Avenue). These include dozens of bungalows and the original 1952 gymnasiums (presently known as the Field House and Gymnastics Center, J.G. Middleton, engineer), which were built prior to formulation of the original campus master plan. The old gymnasiums were not deemed to be significant architectural resources because they are not associated with key events in the history of the College (e.g., the College's founding or first academic year) nor are they significant in architectural historical terms (viz., design, significant architect/engineer). The first groups of permanent buildings constructed between 1955-1959 are in what is referred to as the Late Moderne Style. The subsequent buildings constructed between 1962 and 1964 are in the Modernist Style (with Ranch Style overtones). These buildings in the core campus area reflect the original master plan concept for the campus in their siting, footprint, and shared architectural characteristics, massing, materials, scale and color (see Figure 3-29 and Figure 3-30).

Figure 3-28: Library View, Looking Northwest from the Quadrangle

Source: Hollywood Citizen News-Valley Times Photographic Collection, Los Angeles Public Library, 2003.

Figure 3-29: North Facade of Physics Building, Looking Southeast

Source: Myra L. Frank & Associates, Inc., 2003.

Figure 3-30: West Façade of Chemistry Building, Looking South

Source: Myra L. Frank & Associates, Inc., 2003.

The bungalows are modest, fairly ordinary buildings. Evaluated during site visits to the campus during summer 2002, these buildings were not deemed architecturally significant. One of them, the James Dodson Historical Museum, was used as the College's administrative offices during the first half dozen years or so of the College's existence and is commonly considered to be the oldest building on the Valley College campus (Figure 3-31). The Historical Museum is named for James Dodson, a professor of political science and history at the College, and one of the early curators for the Museum's collection. Although Dodson lobbied for historical status for the Historical Museum bungalow during the mid-to-late 1970s period, nothing seems to have come of that effort, and apparently no paperwork was filed with the City of Los Angeles Cultural Heritage Commission to explore or initiate the landmark process. Due to the fact that the Historical Museum bungalow is not a significant architectural resource under CEQA, analysis of it as a potential historic resource proceeded based upon the premise that if the first College president were of outstanding biographical significance, and if that biographical importance derived chiefly from a professional association with Valley College that the bungalow could be an historic resource. No other individuals or activities associated with the bungalow (viz., the presence of clerical and administrative associates, routine daily activities, or weekly staff meetings) were thought to confer significant historical associations upon the bungalow.

Vierling Kersey (1890-1980), President of the College for approximately the first 20 years of its existence, was the only individual of biographical note identified. Kersey's historical significance in the biographical sense, however, derives from professional accomplishments that predate his tenure as president of Valley College: His service both as a state superintendent of education (1929-1937) and Los Angeles superintendent of education (1937-1949). In those capacities, Kersey was a noteworthy and sometimes controversial policymaker. Kersey's association with Valley College was far less noteworthy in public education historical terms.

Notwithstanding his previous career accomplishments as superintendent, Kersey was not deemed to be an historical figure of such transcendent importance that his mere association with Valley College and with the bungalow housing his offices would qualify it as an historical resource under California Public Resource Code §§5024.1, Title 14 CCR, Section 4852, criteria A or B, respectively.

Figure 3-31: Historical Museum Bungalow, Looking Northwest

Source: Myra L. Frank & Associates, Inc., 2003.

3-4.2 Environmental Impacts

a. Significance Criteria

For the purposes of this EIR, and in accordance with Section 21084.1 of CEQA, the proposed project would have a significant adverse environmental impact if it:

- causes a substantial or potentially substantial adverse change in the significance of an historical resource.

A substantial adverse change is explained in the following excerpt from the *State CEQA Guidelines*:

- Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (§15064.5[b]1).

The significance of an historical resource is materially impaired when a project:

- demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources; or

- demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1 (k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1 (g) of the Public Resources Code, unless reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Impacts Discussion

Proposed Valley College Facilities Master Plan components include a relatively small number of new buildings, removal of all the existing bungalows, and the refurbishment of a majority of the existing buildings. Refurbishment will consist primarily of interior upgrading and infrastructure changes rather than the extensive remodeling of exteriors. Thus, the refurbishment activities have little potential for destroying architectural features considered significant in regard to overall exterior architectural treatment, or the spatial relationships among the buildings embodied in the original campus master plan. On that portion of the campus organized around the Quadrangle and located west of Campus Drive, new buildings would include a two-story 62,000-square-foot Media Arts Building on the site of Parking Lot C; a 44,592-square-foot Computer-Business-Technology Building on the site of the existing Physics and Chemistry Buildings; construction of a three-story 108,675-square-foot Library/Learning Resource Center on the site of the existing Cafeteria; and construction of the new 80,425-square-foot Student Services Center on the site of the current Library/Media Center Building. An approximately 2,500-square-foot addition to the rear of the Planetarium and a 10,000-square-foot addition to the existing Library Building are also proposed.

The proposed demolition of the Library/Media Center, Cafeteria, Chemistry and Physics Buildings to construct the new Student Services Center, Library, and Computer-Business-Technology Center could have an adverse effect on historical resources. Although these buildings do not possess transcendent importance as individual architectural/historical resources, they are important contributing components to a grouping of early permanent campus buildings (1955-1959) that are strongly associated with one another due to their shared architectural design, footprints, and site-plan placements. However, because the proposed new buildings will be designed in conformance with the District's *Design Criteria and Standards*, they would be compatible with the architectural style, details, and scale of the adjacent existing buildings.[4] Construction of the new Student Services and Library Buildings would not result in a substantial adverse change to the attractive spatial and landscape relationships found within the Quadrangle area, nor would the new buildings adversely affect the spatial relationships between buildings that characterize the original campus master plan.

These standards are intended to ensure that new Proposition A Bond Program buildings are designed to be cognizant of and compatible with existing campus architecture. Such standards also apply to building additions. Construction of an addition at the rear of the planetarium is proposed but is not expected to result in a significant effect under CEQA because it would be in scale with the existing Planetarium building, would not create a footprint significantly different from that of adjacent buildings, nor substantially change the spatial relationship of the Planetarium with adjacent existing buildings (Figure 3-32).

Construction on the eastern portion of the campus (east of Campus Drive) would include a new three-story 103,155-square-foot Allied Health/Sciences Center on the site of the Plant Facilities compound and several existing bungalows; a replacement two-story, 28,000-square-foot College Sheriff's Center/Plant Facilities Building and a Child Development Center on the southern and northernmost portions, respectively, of Parking Lot D; a 25-foot high, 12,000-square-foot football field house south of the existing stadium; and a new 4- to 5-story Fire/Life/Safety Training Tower adjoining the Archery range. An approximately 7,000-square-foot addition to the North Gymnasium is also proposed. None of these project components would affect historic resources.

Figure 3-32: Planetarium, Looking Southeast

[4] According to the District's *Design Criteria and Standards/Sustainable Design Manual*, the "primary objective of the architectural building criteria and standards is to develop a rational and unified design which will address not only functional design requirements but will also provide aesthetic quality and enhancement to the campus of which it will become a part." Additionally, the District's Design Manual recognizes that the "nine colleges that form the District not only show differences of architectural expression from campus to campus but also within each campus. There is a wide spectrum of forms, materials, and finishes. This by and in itself can be rather refreshing as long as there are general consistencies, which identify all as a member of one family. In this respect this Proposition A Program represents a unique opportunity to 'fill in the gaps' and create harmony." Furthermore, "responding to this diversity it will be incumbent on the Architect/Engineer consultant to thoroughly study and document the campus architecture in an effort to develop a design which contributes to the existing environment rather than portraying an isolated expression of its own." "Special attention should be given to the selection of form, material, color and texture to all surfaces of the building as well as to the relationship with circulation and landscaping."

Source: Myra L. Frank & Associates, Inc., 2003.

3-4.3 Mitigation Measures

HR-1 New buildings and renovations to existing buildings shall adhere to the standards, criteria, and guidelines in the District's *Design Criteria and Standards/Sustainable Design Manual* and shall be sympathetic to the Late Moderne/Modernist style of the campus' early permanent buildings (1955-1959) in terms of architectural detail and scale.

3-4.4 Unavoidable Significant Adverse Impacts

No unavoidable significant adverse impacts are anticipated to historic resources as a result of the proposed Facilities Master Plan.

3-5 ARCHAEOLOGICAL RESOURCES

3-5.1 Environmental Setting

a. Current Environmental Setting

Los Angeles Valley College is located in the south-central portion of the San Fernando Valley within the Ex-Mission San Fernando Grant Boundary. Situated at an elevation of approximately 660 feet above mean sea level, the topography of the campus is relatively flat. Currently, areas surrounding the College campus have been fully developed into housing tracts and commercial business districts.

Vegetation on the campus includes areas of open space covered by introduced grassland species, various tree species, and ornamental landscaping. Prior to historical development, however, the project area and the larger San Fernando Valley was an open, relatively dry, grassland savannah. Water sources in the vicinity of the project area include Tujunga Wash, located immediately east of and adjacent to the College, and the Los Angeles River, which is located approximately 1.3 miles south of the College. As a result of flood control, these drainages no longer resemble creeks and rivers, but are wide, relatively straight concrete-lined channels. Other water sources include springs along the base of the hills that border the San Fernando Valley.

The San Fernando Valley has a Mediterranean climate characterized by warm, dry summers and mild winters with most of the annual rainfall occurring between the months of November and April.

b. Cultural Setting

Cultural chronologies for the Los Angeles Basin have been developed by Wallace (1955) and Warren (1968). The Millingstone Period, dating back more than 6,000 years, is characterized by a generalized plant collecting economy that was supplemented by hunting and fishing; sites attributed to this period appear to have been occupied by small groups of people. The Intermediate Period dates from approximately 3,000 to 1,000 years ago; sites attributed to this period indicate an increased reliance on coastal resources, as well as a continued reliance on hunting and collecting. Additionally, the advent of the bow and arrow and increased reliance on the mortar and pestle used to process hard nuts such as the acorn typify this period. The Late Period, beginning about 1,000 years ago, is characterized by increasing cultural complexity in both economic and social spheres. In general, occupation sites tend to be larger and contain a more varied artifact assemblage; there also appears to have been more intensive exploitation of local resources within the coastal, mountain, and interior environments. Social contacts and economic influences were accelerated through trade and political and ceremonial interactions.

The project study area is situated in a general region that was inhabited by the Uto-Aztecan Gabrielino cultural group. The total area of the Gabrielino mainland territory exceeded 1,500 square miles and included the San Fernando Valley, the San Gabriel Valley, the San Bernardino Valley, and the Los Angeles-Santa Ana River Plain. Inhabiting the watersheds of the Los

Angeles, San Gabriel, and Santa Ana Rivers; several smaller intermittent streams in the Santa Monica and Santa Ana Mountains; all of the Los Angeles Basin; and the coastal strip from Aliso Creek in the south to Topanga Creek in the north; the Gabrielino also occupied the islands of Santa Catalina, San Clemente, and San Nicholas (Bean and Smith 1978:538). At the time of Spanish contact, the Gabrielino were one of the wealthiest, most populous, and most powerful ethnic nationalities in southern California. They were credited with an elaborate material culture and expert craftsmanship in quarrying and manufacturing steatite (soapstone) objects and constructing the plank canoe. For further information regarding the Gabrielino, the reader is referred to Bean and Smith (1978), Kroeber (1925), and McCawley (1996).

c. Study Methods

Prior to the archaeological field investigation of the Los Angeles Valley College campus, a literature and records search was conducted at the South Coastal Central Archaeological Information Center housed at the Department of Anthropology at California State University, Fullerton. The objective of this search was to identify any previous studies and previously recorded cultural properties within a 1-mile radius of the project study area. Results of this search indicate that two cultural resource studies have been conducted within a 1-mile radius of the project area (W & S Consultants 1996; Duke 1999); both studies were located adjacent to the boundaries of Valley College. No prehistoric or historical archaeological sites have been previously recorded within a 1-mile radius of the project area.

Inspection of the historic Santa Monica USGS 15'-series topographic maps indicates that the Los Angeles Valley College study area was entirely undeveloped in 1902. The Pacific-Electric Railroad extended northwest to southeast with the Kester Siding located very near the southwestern corner of the College campus. The 1920 and 1921 Santa Monica maps indicate that the Kester Siding was still in existence, and a few roads had been built, including one that ran along the existing footprints of Fulton and Ethel avenues, as well as Oxnard Street and Burbank Boulevard. In addition, eight structures are present within the College boundaries. The Pacific Electric line now intersects the Southern Pacific line to the south of the project area.

The City of Los Angeles Historic Cultural Monuments lists one property (#293 The Magnolia) within a 1-mile radius of the project area. The National Register of Historic Places (updated annually) lists no properties within a 1-mile radius of the project area. Other sources consulted include California Points of Historical Interest (1992), California Historical Landmarks (1990), and California State Historic Resources Inventory Database of the State Office of Historic Preservation (1976), which lists several properties that have been evaluated for historical significance within a 1-mile radius of the project area; however, there are no properties that have been evaluated for historical significance located within the project area.

In addition to the archaeological literature and records search, Æ contacted the Native American Heritage Commission (NAHC) on August 22, 2002, to solicit pertinent cultural resources information available in the Sacred Lands Files for the project study area (see Appendix A, Native American Consultation of the Archaeological Survey Report, in Appendix C of this EIR). In reply to Æ on November 6, 2002, the NAHC stated that a records search of the Sacred Lands files failed to indicate the presence of Native American cultural resources in the immediate vicinity of the project area (Wood 2002). The NAHC did, however, recommend that Æ contact

15 individuals and organizations who may have knowledge of cultural resources in the project area. On November 8, 2002, letters of inquiry were sent to these 15 individuals and organizations as recommended by the NAHC (Wood 2002, see Appendix A of the Archaeological Survey Report, in Appendix C of this EIR). On November 25, Æ received a telephone call from Mr. Samuel Dunlap regarding the proposed project. Because of the close proximity of Los Angeles Valley College to Tujunga Wash and the Los Angeles River, Mr. Dunlap recommended that an archaeologist monitor any project-related ground-disturbing activities. As of March 25, 2003, no other comments from the Native American individuals and organizations contacted had been received by Æ (see Appendix A of the Archaeological Survey Report, which is contained in Appendix C of this EIR).

Following the archaeological literature and records search, a comprehensive and intensive archaeological survey of the Los Angeles Valley College campus was completed by one Æ archaeologist on January 30, 2003. Specifically, the archaeologist inspected all portions of the campus where ground surface visibility permitted. For the most part, the entire campus location appears to have been graded and filled to create the building pads and parking lots. As such, the vast majority of the campus is covered by pavement for parking lots, walkways, and standing structures; these areas were not inspected. Athletic playing fields and grassy portions of the campus were inspected using 10- to 12-meter interval transects. Ground visibility in these areas, however, was generally poor due to the amount of vegetative ground cover.

d. Study Findings

The archaeological survey of portions of the Los Angeles Valley College campus failed to identify the presence of prehistoric or historical archeological resources. This may be due, in part, to the restricted ground surface visibility in most areas inspected, as well as previous developmental activities on the campus grounds. Lack of surface evidence of archaeological resources, however, does not preclude their subsurface existence. The proximity of the campus to the Tujunga Wash and the Los Angeles River, both natural water sources, suggests that Native American cultural resources may be present in some campus locations. Additionally, eight structures depicted on the 1921 USGS Santa Monica Quadrangle are shown as being located within the Los Angeles Valley College campus boundary, suggesting the possibility that subsurface historical features (e.g., privies, cisterns, foundations) and refuse deposits may be present in these locations.

3-5.2 Environmental Impacts

a. Significance Criteria

For the purposes of this EIR, and in accordance with Section 21084.1 of CEQA, the proposed project would have a significant adverse environmental impact if it:

- causes a substantial or potentially substantial adverse change in the significance of an historical resource.

Cultural resources management work conducted as part of the proposed Master Plan shall comply with the CEQA Statutes and the *State CEQA Guidelines*, which direct lead agencies, in this case LACCD, to first determine whether an archaeological site is a "historically significant" cultural resource. Generally, a cultural resource shall be considered by the lead state agency to be "historically significant" if the resource meets any of the criteria for listing on the California Register of Historical Resources, including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Is associated with the lives of persons important in our past;

(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

The cited statutes and guidelines specify how cultural resources are to be managed in the context of projects, such as those in the proposed Master Plan. In sum, these regulations require that archival and field surveys are conducted and identified cultural resources are inventoried and evaluated in prescribed ways. Prehistoric and historical resources deemed "historically significant" must be considered in project planning and development.

Therefore, if potentially significant archaeological resources are discovered during implementation of the proposed Master Plan projects, those resources must be inventoried and evaluated to ascertain whether they meet the criteria for listing on the California Register of Historical Resources.

b. Impacts Discussion

As stated in the Study Findings section above, the archaeological survey of portions of the Los Angeles Valley College campus failed to identify the presence of prehistoric or historical archeological resources. This may be due, in part, to the restricted ground surface visibility in most areas inspected, as well as previous developmental activities on the campus grounds. Lack of surface evidence of archaeological resources, however, does not preclude their subsurface existence. The proximity of the campus to the Tujunga Wash and the Los Angeles River, both natural water sources, suggests that Native American cultural resources may be present in some campus locations. Additionally, eight structures depicted on the 1921 USGS Santa Monica Quadrangle are shown as being located within the Los Angeles Valley College campus boundary, suggesting the possibility that subsurface historical features (e.g., privies, cisterns, foundations) and refuse deposits may be present in these locations. If significant resources are encountered during construction, construction activities could disturb or destroy these resources, a potentially significant impact.

3-5.3 Mitigation Measures

The following mitigation measures shall be implemented to reduce project-related adverse impacts to archaeological resources that may be encountered during construction of proposed Master Plan improvements:

AR-1 A certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, shall monitor all project-related ground-disturbing activities that extend beyond the depth of artificial fill and into natural soil sediments (as identified in the geotechnical investigations for the Master Plan projects), in areas of archaeological sensitivity such as along the eastern portion of the campus near Tujunga Wash and in the area of the former historical structures.

AR-2 In those areas that are not monitored by an archaeologist and a certified culturally affiliated Native American, if buried cultural resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource.

AR-3 Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans. The College shall be the final arbiter should disagreement arise over the disposition of the recovered artifacts.

AR-4 In the event of an accidental discovery of any human remains in a location other than a dedicated cemetery, the steps and procedures specified in Health and Safety Code 7050.5, *State CEQA Guidelines* 15064.5(e), and Public Resources Code 5097.98 shall be implemented.

3-5.4 Unavoidable Significant Adverse Impacts

No Native American human remains are known to exist on the campus and the likelihood of encountering remains is not high given that most construction would occur in areas already disturbed by prior construction. In the unlikely event that Native American human remains are discovered during project-related construction activities, there would be unavoidable significant adverse impacts to these archaeological resources. Implementation of the mitigation measures identified above would reduce impacts to other archaeological resources to a less than significant level.

3-6 PALEONTOLOGICAL RESOURCES

3-6.1 Environmental Setting

The Division of Geologic Sciences of the San Bernardino County Museum (SBCM) completed a literature review and records search for Los Angeles Valley College, located in the Van Nuys region of Los Angeles County, California. Previous geologic mapping of the overall study area by Jennings and Strand (1969) indicates that Los Angeles Valley College is situated upon sediments mapped as Recent alluvium. These sediments consist of clays, sands, and gravels of the San Fernando Valley flood plain, especially the overbank deposits derived from Tujunga Wash along the eastern border of the property. These sediments have low potential to contain nonrenewable paleontologic resources, due both to the young age of the sediments and to disturbances resulting from development in this region. However, these recent sediments overlie older Pleistocene alluvial sediments in the subsurface. The Pleistocene older alluvium has a high potential to contain significant nonrenewable paleontologic resources, and is therefore assigned high paleontologic sensitivity (Miller 1971; Jefferson 1991).

Review of the Regional Paleontologic Locality Inventory (RPLI) at the SBCM indicate that no paleontologic localities are recorded by the SBCM within the proposed project area, nor within several miles in any direction. A review of the records of the Department of Vertebrate Paleontology of the Natural History Museum of Los Angeles County (NHMLAC) was also completed by Samuel McLeod. This review indicated that although there were no paleontologic localities recorded within the boundaries of the Los Angeles Valley College campus, there are three recorded localities located directly west of the campus, east of the San Diego Freeway (I-405) and the Sepulveda Dam flood control basin. In addition, there is one recorded locality along Lankershim Boulevard at State Route 134 (SR 134). These localities are described in Table 3-10.

These localities and their proximity to the Los Angeles Valley College study area demonstrate the moderately high paleontologic sensitivity of Pleistocene sediments in this area.

3-6.2 Environmental Impacts

a. Significance Criteria

For the purposes of this EIR and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed project would have a potentially significant effect on the environment if it:

- directly or indirectly destroys a unique paleontological resource or site.

Sedimentary units that are paleontologically sensitive are those units with a high potential for containing significant paleontologic resources (i.e., rock units within which vertebrate fossils or significant invertebrate fossils have been determined by previous studies to be present or likely to be present). These units include, but are not limited to, sedimentary formations that contain significant paleontologic resources anywhere within their geographical extent, as well as sedimentary rock units temporally or lithologically suitable for the preservation of fossils.

Table 3-10: Fossil Localities in the Vicinity of the Project Area

Locality Number[1]	Approximate Location[2]	Fossils Found[3]
LACM 3263	East of I-405 and Sepulveda Dam flood control basin; at depths of 14 to 100 feet below existing ground surface.	Fossil remains of extinct horse (*Equis* sp.), peccary (*Platygonus*), camel (*Camelops*), and bison (*Bison* sp.)
LACM 3822	East of I-405 and Sepulveda Dam flood control basin; at depths of 14 to 100 feet below existing ground surface.	Fossil remains of extinct horse (*Equis* sp.), peccary (*Platygonus*), camel (*Camelops*), and bison (*Bison* sp.).
LACM 6208	East of I-405 and Sepulveda Dam flood control basin; at depths of 14 to 100 feet below existing ground surface.	Fossil remains of extinct horse (*Equis* sp.), peccary (*Platygonus*), camel (*Camelops*), and bison (*Bison* sp.)
LACM 6970	Along Lankershim Boulevard at SR 134; at depths of 60 to 80 feet below existing ground surface.	Fossil remains of extinct giant ground sloth (*Paramylodon harlani*), large camel (*Camelops hesternus*), and ancestral bison (*Bison antiquus*).

Notes:
1. LACM; Los Angeles County Museum of Natural History.
2. The exact location of fossil localities is not generally stated to the public in order to avoid loss of paleontological resources.
3. Pleistocene: approximately 10,000 to 1,6000,000 years ago.

Source: Los Angeles County Natural History Museum Vertebrate Paleontology Section, 2002.

Determinations of paleontologic sensitivity must therefore consider not only the potential for yielding abundant vertebrate fossils but also the potential for production of a few significant fossils, large or small, vertebrate or invertebrate, that may provide new and significant taxonomic, phylogenetic, and/or stratigraphic data. Areas that may contain datable organic remains older than Recent alluvium and areas that may contain unique new vertebrate deposits, traces, and/or trackways must also be considered paleontologically sensitive.

Fossils can be considered to be of significant scientific interest if one or more of the following criteria apply:

1. The fossils provide data on the evolutionary relationships and developmental trends among organisms, both living and extinct;

2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;

3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;

4. The fossils demonstrate unusual or spectacular circumstances in the history of life; and

5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

b. Impacts Discussion

Because operation of the project would have no effect on the geologic environment, the following discussion of impacts is limited to the construction phase of the project.

Based upon the results of previous paleontologic studies in the immediate vicinity of the campus, Los Angeles Valley College contains Pleistocene sediments at depths ranging from +/-14 to 100 feet below the existing ground surface. Because there is a moderately high probability that paleontological resources exist at a minimum depth of +/-14 feet in such locations, paleontological resources are not likely to be encountered during project-related excavations that would be less than 14 feet deep. However, if project plans do entail excavations deeper than +/-14 feet, it is likely that subsurface Pleistocene older alluvium would be encountered that may contain paleontological resources.

Therefore, excavation into the Pleistocene sediments could result in the destruction of unique fossil resources—a potentially significant impact. Should unique paleontologic resources be encountered, the mitigation measures below will reduce impacts to a level of insignificance.

3-6.3 Mitigation Measures

The following measures shall be implemented to ensure that potential impacts to any unique paleontologic resources that may be present would be reduced to a level of insignificance.

PR-1 A qualified paleontologic monitor shall monitor excavation in areas identified as likely to contain paleontologic resources (i.e., areas where excavation extends into subsurface Pleistocene older alluvium, as identified in the geotechnical investigations for the Master Plan projects). The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays and shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units, previously described, are not found to be present or, if present, are determined by qualified paleontologic personnel to have low potential to contain fossil resources.

PR-2 Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates.

PR-3 Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage.

PR-4 A report of findings, with an appended itemized inventory of specimens, shall be prepared. The report and inventory, when submitted to Los Angeles Valley College, would signify completion of the program to mitigate impacts to paleontologic resources.

3-6.4 Unavoidable Significant Adverse Impacts

There would be no unavoidable adverse impacts to paleontologic resources after implementation of the mitigation measures specified above.

3-7 GEOLOGY/SOILS/SEISMICITY

3-7.1 Environmental Setting

a. Regional Setting

Valley College is located near the eastern end of the San Fernando Valley. The San Fernando Valley is an east-west structural trough within the Transverse Ranges geologic province of southern California. The mountains that bound the trough are actively deforming anticlinal ranges bounded on their south sides by thrust faults. As these ranges have risen and deformed, the San Fernando Valley has subsided and been filled with sediment. The eastern portion of the valley has primarily received sediment in the form of broad alluvial fans deposited by the Pacoima and Tujunga washes. These washes are associated with large river systems with their sources in the San Gabriel Mountains along the northern edge of the valley. The southeastern portion of the valley is covered by small alluvial fans deposited by local streams that drain the Santa Monica Mountains.

The seismicity of southern California is dominated by the intersection of the north-northwest trending San Andreas fault system and the east-west trending Transverse Ranges fault system. Both systems are responding to strain produced by the relative motions of the Pacific and North American Tectonic Plates. This strain is relieved by right-lateral[5] strike-slip faulting on the San Andreas and related faults and by vertical, reverse-slip or left-lateral strike-slip displacement on faults in the Transverse Ranges. The effects of this deformation include mountain building; basin development; deformation of Quaternary marine terraces; widespread regional uplift; and generation of earthquakes.

b. Project Site

Physiography

Valley College is located in a fully developed urban area, in the Valley Glen area of the city of Los Angeles. Current land uses in the area include educational, residential, light industrial, commercial, and service-oriented businesses. The area is typically characterized by low relief, with elevations within the Valley College campus ranging from approximately 660 feet (mean sea level datum) near the southeastern corner of the campus to 685 feet near the northwestern corner of the campus. Valley College is located on the USGS 7.5-Minute Van Nuys topographic quadrangle.

[5] A *strike-slip fault* is a fault separating blocks of rock that slide past each other horizontally. A *right-lateral* strike-slip fault is a strike-slip fault on which the displacement of the more distant block is to the right when viewed from either side. On a *left-lateral* fault the displacement is in the opposite direction. A *reverse-slip* fault is a fault that dips at an angle below the surface on which the overhanging block of rock slides upward over the underlying block.

Geology

The project area is underlain predominantly by Holocene (<11,000 years old) Younger alluvium. Localized areas of artificial fill are expected to underlie the developed portion of the campus (buildings, roads, etc.). The Younger alluvium generally consists of alluvial fan deposits and channel wash deposits (Hitchcock and Wills, 2000). Alluvial fan and channel wash deposits in the project area consist largely of loose to medium dense sand and silty sand with lesser quantities of silt and gravel (California Division of Mine and Geology, 2001).

Previous Geotechnical Studies

A *Preliminary Geotechnical Investigation for Master Planning Study* report was prepared by MACTEC Engineering and Consulting (MACTEC, 2002) to provide preliminary geotechnical information and foundation design recommendations at Valley College. The investigation for this report consisted of advancing four soil borings and five cone penetrometer tests (CPTs) to determine subsurface characteristics. The borings were drilled to depths ranging from 19 to 50 feet and the CPTs were advanced to a depth of 50 feet.

Material encountered in the borings consisted of a thin layer of artificial fill locally, and alluvium. Artificial fill was encountered in one boring to a depth of 2.5 feet and consists of medium dense silty sand. The alluvial deposits encountered consist predominantly of interbedded layers of loose to dense silty sand and sand, medium stiff to very stiff clayey silt, and sandy silt with gravel. Groundwater was not encountered in the soil borings or CPTs.

Based on the soil characteristics, seismicity of the area, and a potential for liquefaction, MACTEC provided preliminary recommendations for foundation design. Design recommendations included driven piles, drilled piles, shallow spread foundations, virbo-replacement, jet grouting, or mat foundations, partially dependent on building size and configuration.

Soils

The U.S. Department of Agriculture's *Soil Survey of the San Fernando Valley Area* (1917) indicates that soils underlying the project area are the Hanford Fine Sandy Loam and the Tujunga Sand. The Hanford Fine Sandy Loam[6] is located mainly on broad valley slopes, has good surface drainage and is sufficiently permeable for good internal drainage. This soil typically consists of micaceous brown, light brown or grayish brown, very friable[7] fine sandy loam. In localized areas, the fine sandy loam is interbedded[8] with sandy loam or gravelly sandy loam.

The Tujunga Sand generally has a depth of 2 to 3 feet, and is excessively drained due to its porous nature. It is characterized by gray or brown gray sand. The subsoil varies widely in texture, generally finer on the lower parts of the alluvial fans. This soil is closely associated with the general courses of the channels that carry flood waters across the alluvial fans.

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[6] Loam is a soil composed of a mixture of clay, silt, sand, and organic matter.
[7] A friable material is easily crumbled.
[8] Beds of material lying between or alternating with others of different character.

Mineral Resources

No mineral resources have been identified in the proposed project area (County of Los Angeles General Plan 1993).

Seismicity

The project area will be subject to ground shaking associated with earthquakes on faults of both the San Andreas and Transverse Ranges fault systems. Active faults of the San Andreas system are predominantly strike-slip faults accommodating translational[9] movement. The Transverse Ranges fault system consists primarily of blind reverse and thrust faults accommodating tectonic compressional stresses in the region. Blind faults have no surface expression and have been located using subsurface geologic and geophysical methods. This combination of translational and compressional stresses gives rise to diffuse seismicity across the region.

Active reverse or thrust faults[10] in the Transverse Ranges include blind thrust faults[11] responsible for the 1987 Whittier Narrows Earthquake and 1994 Northridge Earthquake, and the range-front faults[12] responsible for uplift of the Santa Monica and San Gabriel Mountains. The range-front faults include the Malibu Coast, Santa Monica-Hollywood, Raymond, Verdugo, and San Fernando-Sierra Madre faults. Active right lateral strike slip faults in the San Fernando Valley area include the San Andreas, Palos Verdes, Newport-Inglewood, and San Gabriel faults, all associated with the San Andreas fault system.

Both the Transverse Ranges and northern Los Angeles area are characterized by numerous geologically young faults. These faults can be classified as historically active, active, potentially active, or inactive, based on the following criteria (CGS 1999):

- Faults that have generated earthquakes accompanied by surface rupture during historic time (approximately the last 200 years) and faults that exhibit aseismic fault creep[13] are defined as Historically Active.
- Faults that show geologic evidence of movement within Holocene time (approximately the last 11,000 years) are defined as Active.
- Faults that show geologic evidence of movement within the Quaternary (approximately the last 2,000,000 years) are defined as Potentially Active.
- Faults that show direct geologic evidence of inactivity during all of Holocene time or longer may be classified as Inactive.

Although it is difficult to quantify the probability that an earthquake will occur on a specific fault, this classification is based on the assumption that if a fault has moved during the Holocene

[9] Fault block movement in which the blocks have no rotational component, parallel features remain so after movement.
[10] A fault with predominantly vertical movement in which the upper block moves upward in relation to the lower block, a thrust fault is a low angle reverse fault.
[11] Blind thrust faults are low-angled subterranean faults that have no surface expression.
[12] Faults along the front of mountain ranges responsible for the uplift of the mountains.
[13] Movement along a fault that does not entail earthquake activity.

epoch, it is likely to produce earthquakes in the future. Blind thrust faults do not intersect the ground surface, and thus they are not classified as active or potentially active in the same manner as faults that are present at the earth's surface. Blind thrust faults are seismogenic structures[14] and thus the activity classification of these faults is predominantly based on historic earthquakes and microseismic activity along the fault.

The Valley College campus is located in an area with many major active faults in the vicinity. The major active faults in the project area include the Northridge Thrust, Verdugo, Hollywood, and Santa Monica. These faults, along with other faults considered to be potentially significant seismic sources, are listed in Table 3-11. Data presented in this table include the type of fault, estimated earthquake magnitude, estimated site intensity, and distance between the fault and the project area. The locations of these faults are shown on Figure 3-33.

Approximately 3 miles to the northwest, the closest fault to the project area is the Northridge Thrust, a southwest-dipping deep thrust fault considered to be the eastern extension of the Oak Ridge fault. The Northridge thrust is located beneath most of the northern San Fernando Valley and was responsible for the January 17, 1994 M 6.7 Northridge Earthquake. This fault is not exposed at the surface and is not a hazard for surface rupture. Peterson et al. (1996) estimates a slip rate of 1.5 mm/yr. and a maximum earthquake magnitude of 6.9 for this fault.

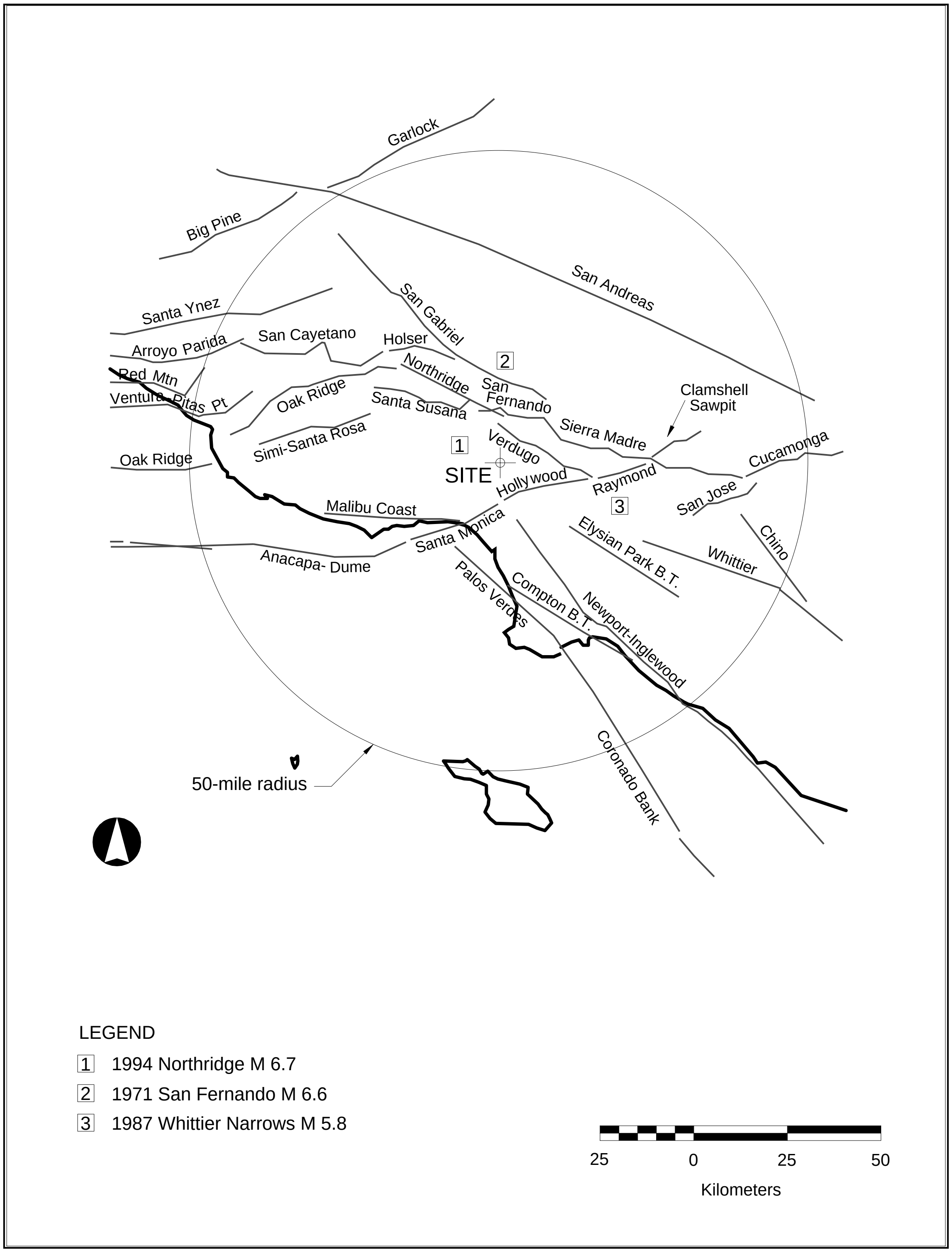
The east-west trending Hollywood and Santa Monica faults are known active faults with predominantly left lateral motion with a component of reverse slip. The Hollywood and Santa Monica faults are part of a larger fault system that also includes the Raymond fault. This fault system forms the southern margin of the western Transverse Ranges.

The Verdugo fault is part of the Verdugo Fault System, comprised of the Verdugo, Eagle Rock, and San Rafael faults, which extends in a southeasterly direction along the western edge of the Verdugo Mountains. The Verdugo is an active fault that dips steeply to the north. Although not an Alquist-Priolo Zoned fault, this fault is considered active by the State Geologist (Jennings, 1994) and a fault rupture hazard zone has been designated for it by the city of Burbank (MACTEC, 2002).

Two unnamed inferred faults are mapped within 1 mile to the south of the project site. These faults have been inferred based on an apparent topographic linear break on historic topographic maps and apparent deformation of Tujunga Wash sediments within a subsidence trough. However there is no conclusive evidence that either inferred fault has experienced Holocene fault movement. These unnamed faults are not included in a City of Los Angeles Fault Rupture Study Area or a State of California Alquist-Priolo Earthquake Fault Zone (MACTEC, 2002), and thus are not considered significant active earthquake sources.

[14] A geologic structure that has or is capable of generating an earthquake.

Figure 3-33: Fault Map



Source: Geotechnical Consultants, Inc., 2003.

Table 3-11: Significant Active Faults				
Fault Name	**Fault Type**	**Approximate Distance from Site (miles)**[1]	**Maximum Earthquake Magnitude**[2]	**Estimated Site Intensity (MM)**[3]
Northridge Thrust	Blind Thrust	3	6.9	X
Hollywood	Left-Lateral Strike Slip with a reverse component	3	6.4	X
Verdugo	Reverse	4.5	6.7	X
Santa Monica	Left-Lateral Strike Slip with a reverse component	5	6.6	IX
Sierra Madre	Reverse	8	6.7	IX
Malibu Coast	Reverse	10	6.7	IX
Newport-Inglewood	Right-Lateral Strike Slip	10	6.9	IX
Raymond	Left-Lateral Strike Slip with a reverse component	11	6.5	VIII
San Gabriel	Right-Lateral Strike Slip	13	7.0	VIII
Compton Thrust	Blind Thrust	14	6.8	VIII
Elysian Park Thrust	Blind Thrust	15	6.7	VIII
Palos Verdes	Right-Reverse	16	7.1	VIII
Anacapa-Dume	Reverse	20	7.3	VIII
Oak Ridge	Thrust	22	6.9	VIII
Simi-Santa Rosa	Reverse	23	6.7	VIII
San Cayentano	Thrust	27	6.8	VIII
San Andreas	Right-Lateral Strike Slip	31	7.8	VIII

Notes:
1. Fault distances obtained using the EQFault computer program (Blake 2000), based on digitized data adapted and modified from the CGS fault database.
2. Maximum Earthquake Magnitude – the maximum earthquake that appears capable of occurring under the presently known tectonic framework, using the Richter scale.
3. Estimated Site Intensity – a measure of surface intensity and damage from an earthquake, measured using the Modified Mercalli Scale (MM) (see Table 3-2).

Source: Geotechnical Consultants, Inc, 2003.

Strong Ground Shaking. An earthquake is classified by the amount of energy released, which traditionally has been quantified using the Richter scale. Recently, seismologists have begun using a Moment Magnitude (M) scale, because it provides a more accurate measurement of the size of major and great earthquakes. For earthquakes of less than M 7.0, the Moment and Richter Magnitude scales are nearly identical. For earthquake magnitudes greater than 7.0, readings on the Moment Magnitude scale are slightly greater than a corresponding Richter Magnitude.

Seismic analyses generally include discussions of design level and upper bound earthquakes. An upper bound earthquake is defined as an event that has a 10 percent probability of occurrence in 100 years. The design level earthquake is defined as an event that has a 10 percent probability of occurrence in 50 years.

The intensity of the seismic shaking, or strong ground motion, during an earthquake is dependent on the distance between the project area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the project area. Earthquakes occurring on faults closest to the project area would most likely generate the largest ground motions. The Modified Mercalli Scale is commonly used to indicate the site intensity of an earthquake as a subjective measure of the strength of an earthquake at a particular place as determined by its effects on persons, structures, and earth materials. The Modified Mercalli Scale for Earthquake Intensity is presented in Table 3-12.

Table 3-12: Modified Mercalli Scale for Earthquake Intensity

Intensity Scale (MM)	Effects
XII	Damage total or nearly total, practically all works of construction are greatly damaged or destroyed. Roads, rails, and underground utilities severely damaged.
XI	
X	Major damage, including partial to complete collapse of weak masonry and frame buildings and moderate damage of stronger structures.
IX	
VIII	Moderate damage including toppled chimneys, cracked stucco, frames shifted on foundations. Damage more severe to weak walls and masonry.
VII	
VI	Minor damage including cracks in chimneys and walls. Furniture moved and items knocked off shelves.
V	Felt by most people, some awakened from sleep. Some objects are moved. No structural damage.
IV	
III	Felt indoors by some people.
II	Not generally felt by people.
I	

Source: Modified from Iacopi, 1981.

A review of historic earthquake activity from 1800 to 1999 indicates that nine earthquakes of magnitude M 6.0 or greater have occurred within 50 miles (80 kilometers) of the proposed project area. Distance from the project area, magnitude, and site intensity for each of these nine earthquake events is presented in Table 3-13. The M 5.9 Whittier Narrows earthquake of 1987 is also included in the table because it was a significantly damaging earthquake within 25 miles of the project site. There have been nine additional earthquakes with magnitudes between M 5.5 and M 6.0 within 50 miles of the project area between 1800 and 1999.

Three significant damaging historic earthquakes have occurred in the last century within 25 miles of Valley College. The closest and most recent significant earthquake near the project site was the January 17, 1994, M 6.7 Northridge Earthquake. This earthquake was located approximately 33 miles north of the project site and resulted in 60 deaths and approximately $15 billion in property damage (National Earthquake Information Center 2000; Southern California Earthquake Center 2000). Damage was significant and widespread, including collapsed freeway overpasses and more than 40,000 damaged buildings in Los Angeles, Ventura, Orange, and San Bernardino Counties. This earthquake occurred on a blind thrust fault and produced the strongest ground motions ever instrumentally recorded in an urban setting in North America. The maximum recorded acceleration exceeded 1.0g (g is the acceleration due to gravity) at several sites, with the largest recorded (1.8g) at Tarzana, about 4 miles south of the epicenter (National Earthquake Information Center, 2000).

Table 3-13: Historic Earthquakes

Date	Approx. Distance to Site (miles)	Earthquake Magnitude (M)	Approx. Site Intensity (MM)
December 8, 1812	46	7.0	VII
September 21, 1827	35	7.0	VII
November 11, 1852	49	7.0	VII
July 11, 1855	19	6.3	VIII
April 4, 1893	14	6.0	VIII
July 30, 1894	48	6.0	VI
March 11, 1933	46	6.3	VI
February 9, 1971	16	6.4	VIII
October 1, 1987	21	5.9	VII
January 17, 1994	7	6.7	IX

Source: EQSearch, v. 3.0 – Thomas F. Blake, 2000.

The next closest significant earthquake was the February 9, 1971 M 6.4 San Fernando Earthquake, also known as the Sylmar Earthquake. Located approximately 16 miles north of the project site, this earthquake caused over $500 million in property damage and 65 deaths. Most of the deaths occurred when the Veteran's Administration Hospital collapsed. In response to this earthquake, building codes were strengthened and the Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 (Southern California Earthquake Center, 2003).

The October 1, 1987 M 5.9 Whittier Narrows earthquake caused significant damage in the Los Angeles region. This earthquake was located approximately 23 miles southeast of the project site and resulted in eight deaths and $358 million in property damage. The Whittier Narrows earthquake occurred on a previously unknown blind thrust fault, the Puente Hills fault, located just northwest of the northern terminus of the Whittier fault (Southern California Earthquake Center, 2000). This fault was previously thought to be part of the Elysian Park Thrust, however recent studies (Dolan et al., 2003) have shown that the Puente Hills Fault is a distinct blind thrust fault.

3-7.2 Environmental Impacts

a. Significance Criteria

For the purposes of the analyses in this EIR, the proposed project would have a significant impact of the geologic environment if it would:

- destroy unique geologic features or geologic features of unusual scientific value for study or interpretation;

- result in the loss of accessibility of known mineral and/or energy resources of local, regional, or statewide value;
- substantially accelerate geologic processes, such as erosion; or
- substantially alter topography beyond what would result from natural erosion and deposition.

For the purposes of the analyses in this EIR, the geologic environment would have a significant impact on the proposed project if it would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death resulting from:

- ground rupture due to presence of an active earthquake fault in the project area;
- earthquake-induced strong ground shaking and/or seismic-related ground failure including liquefaction, settlement, lateral spreading and/or surface cracking;
- exposure to corrosive soils;
- earthquake-induced flooding; or
- slope failure or landslides.

b. Impacts Discussion

Construction Impacts

Geologic and Mineral Resources. The project area is a fully developed urban area and is underlain by artificial fill and Younger Alluvium throughout. Thus, construction of proposed Master Plan improvements is not expected to affect any unique geologic features. No mineral resources are located in the project area.

Accelerated Erosion. As a result of grading and excavation activities during construction periods, soils on the project site would be exposed to wind and water erosion. The implementation of industry standard storm water pollution control Best Management Practices would reduce soil erosion impacts to a less than significant level. Erosion control measures that shall be implemented as part of Best Management Practices would include the placement of sandbags around basins; use of proper grading techniques; appropriate sloping, shoring, and bracing of the construction site; and covering or stabilizing topsoil stockpiles. Construction industry standard storm water Best Management Practices can be found in the *State of California Storm Water Best Management Practice Handbook*, Construction Activity.

Alteration of Topography. The project area is relatively flat and, as a result, substantial alteration of the topography is not anticipated.

Unstable Slopes/Landslides. The Valley College Campus is relatively flat. Any temporary slopes created by construction would be stabilized by appropriate temporary measures during construction, in compliance with current building codes and OSHA standards, thereby reducing the impact to less than significant. The Valley College campus is not located in an area susceptible to landslides.

Operational Impacts

Ground Rupture. The project area is not located within an Alquist-Priolo Earthquake Fault Zone (CGS 2001) and no known active faults cross through the project area or within the immediate vicinity of the project area; therefore, primary ground rupture is not anticipated.

Strong Ground Shaking. The estimated site intensity of between X and VIII for the estimated maximum earthquake on any of the faults within 29 miles of the project area (see Table 3-11) is very high. Seismic shaking intensity of X to VIII could cause significant damage to all aboveground structures and moderate damage to pavement, roads, and underground utilities. Strong earthquake-induced ground shaking could be triggered by seismic activity on any of the faults listed in Table 3-11, resulting in significant damage to structures in the proposed project area.

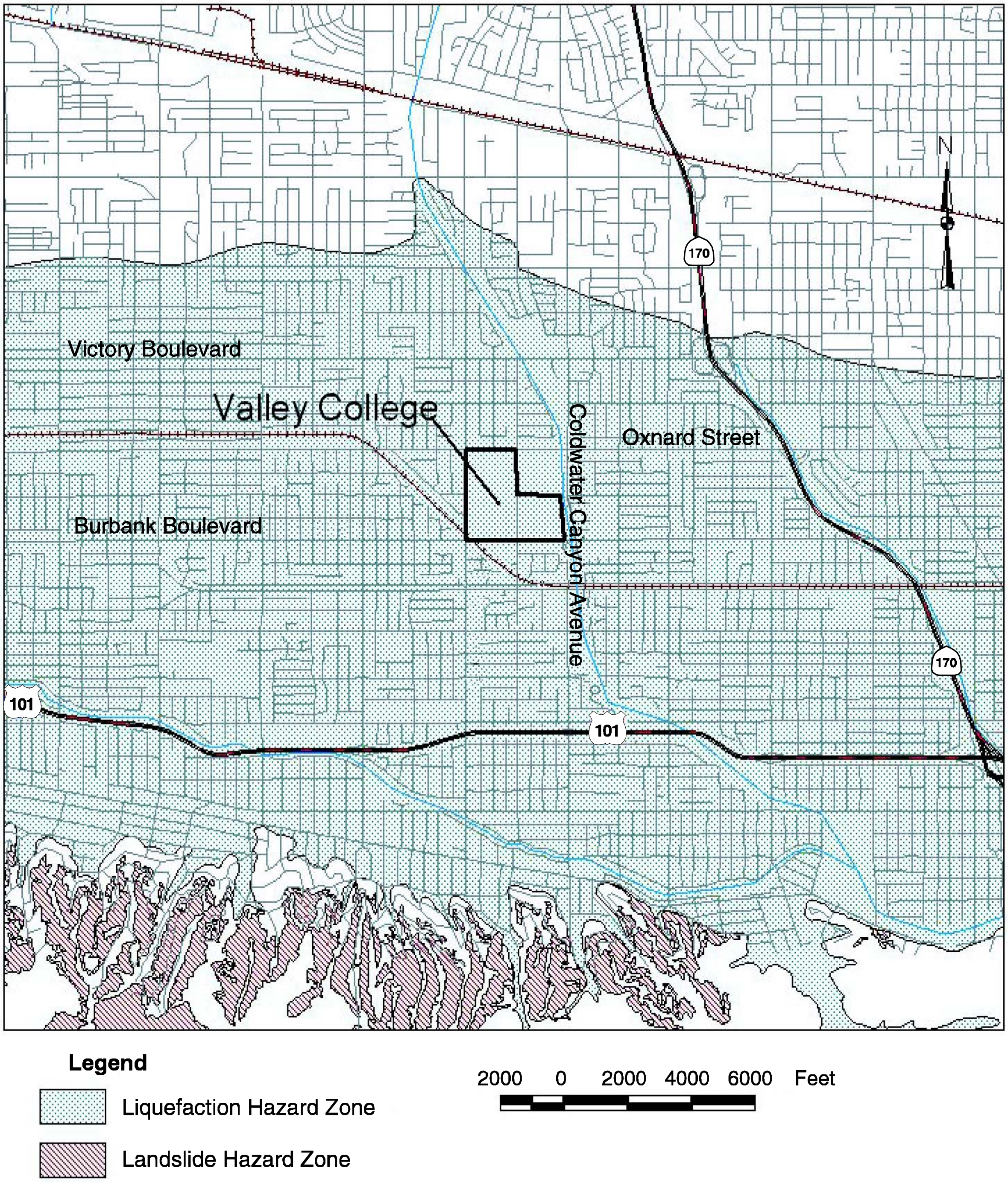
The ground motion hazard described above is not unusual for the Los Angeles area. This hazard would represent a less than significant impact provided that design and construction of the proposed project conforms to all applicable provisions of the California State Architect, which follows guidelines set forth in the 1998 California Building Code (CBC). The CBC is based on the 1997 Uniform Building Code (UBC) and sets forth regulations concerning proper earthquake design and engineering. In addition, construction shall conform to the 1997 UBC earthquake design criteria for Seismic Zone 4.

Liquefaction Potential. Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of granular sediments, and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silt, sand, and silty sand within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction-related phenomena may include lateral spreading, ground oscillation, loss of bearing strength, subsidence, and buoyancy effects (Tinsley et al. 1986). Lateral spreading comprises the movement of surficial blocks of sediment due to liquefaction, and commonly occurs on gentle slopes of 0.3 to 3 degrees.

The project area is within a California Geological Survey (CGS) Seismic Hazard Mapping Program liquefaction hazard zone (CGS 1998), as shown on Figure 3-34. Historical liquefaction-related phenomena occurred within the Van Nuys Quadrangle during the 1994 Northridge earthquake. The one noted incidence of liquefaction-related phenomena was in Studio City.

Data from the *Preliminary Geotechnical Investigation for Master Planning Study* conducted by MACTEC indicate that the subsurface soils may be subject to liquefaction if groundwater levels rise to historic high levels of approximately 10 feet in depth (CGS, 2001). However, with current water levels at greater than 50 feet in depth, liquefaction–related phenomena pose only a potential threat. Consequently, the impact from potentially liquefiable soils would pose a less than significant impact provided that appropriate mitigation measures are implemented in design and construction of the proposed facilities. Mitigation measures would be determined on an individual project basis relying on information obtained from site-specific geotechnical investigations.

Figure 3-34: Liquefaction Map



Source: California Geological Survey, 1998.

Unsuitable Soil Conditions. Soil characteristics that could have a significant impact on design of new buildings and facilities for the project include corrosion, compaction, and expansion. Corrosive soils could damage buried utilities and foundations. Loose alluvial soils and undocumented fills may be subject to compaction or settlement due to changes in foundation loads or in soil moisture content. Changes in soil moisture could result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater.

Expansion potential of soil within the project area could vary from very low for soils developed in sandy materials to very high for soils developed on lean clay units. Expansive soils are characterized by their ability to undergo significant volume change (shrink and swell) due to variation in soil moisture content. Potential impacts could include unacceptable settlement or heave of structures, concrete slabs supported-on-grade, and pavements supported on these types of soil. The impact from unsuitable soils would pose a less than significant impact provided that appropriate mitigation measures are implemented in design and construction of proposed projects. Mitigation measures would be determined on an individual project basis relying on information obtained from site-specific geotechnical investigations.

Slope Failure/Landslides. The areas on campus proposed for new and redevelopment projects do not contain any slopes and no significant slopes are proposed for the project; therefore, slope failures are not anticipated.

Earthquake-Induced Flooding. According to the City of Los Angeles Safety Element (1996), the project area is located within a potential inundation hazard zone from earthquake-induced dam failure of the Lopez, Pacoima, and Hansen Dams. However, these dams are continuously monitored by various agencies and current design, construction, and retrofit practices reduces the potential for inundation at the site to less than significant.

3-7.3 Mitigation Measures

a. Construction Mitigation

To minimize hazards to construction workers from unstable temporary slopes, the following measures shall be implemented by the construction contractor(s):

GE-1 All earthwork and grading shall meet the requirements of State of California Building Code, Title 24, part 2, volume 1 and shall be performed in accordance with the recommendations in the Geotechnical Investigation conducted for each proposed project at the Valley College campus.

GE-2 All excavation and shoring systems shall meet the minimum requirements of the Occupational Safety and Health Administration (OSHA) standards.

b. Operational Mitigation

Because of the potential for strong seismic ground shaking, unsuitable soils, and soil liquefaction, the following mitigation measures shall be implemented

GS-1 Geotechnical investigations shall be performed by qualified licensed professionals before final design of any structures and recommendations provided in these reports should be implemented, as appropriate.

GS-2 **Ground Shaking.** Design and construction of structures for the proposed project shall conform to all applicable provisions of the California State Architect, which follow guidelines set forth in the 2001 California Building Code (CBC). The CBC is based on the 1997 Uniform Building Code (UBC) and sets forth regulations concerning proper earthquake design and engineering. In addition, design and construction shall conform to the 1997 UBC's earthquake design criteria for Seismic Zone 4.

GS-3 **Liquefaction.** If liquefiable soils are identified by geotechnical investigations for project structures, then mitigation shall be implemented. Appropriate mitigation, which could include the use of piles, deep foundations, dynamic densification, ground improvement, grouting, or removal of suspect soils, is dependent on site-specific conditions that will be identified by the geotechnical investigation.

GS-4 **Unsuitable Soil Conditions.** The geotechnical investigation of proposed facilities shall fully characterize the presence and extent of corrosive, expansive, or loose compactable soil. Based on the collected data, appropriate mitigation shall be designed. Mitigation options could include the following: removal of unsuitable subgrade soils and replacement with engineered fill, installation of cathodic protection systems to protect buried metal utilities, use of coated or nonmetallic (i.e., concrete or PVC) pipes not susceptible to corrosion, construction of foundations using sulfate-resistant concrete, support of structures on deep pile foundation systems, densification of compactable subgrade soils with in-situ techniques, and placement of moisture barriers above and around expansive subgrade soils to help prevent variations in soil moisture content.

3-7.4 Unavoidable Significant Adverse Impacts

There are no unavoidable significant geologic or seismic impacts. Proper design of the planned facilities can mitigate the impacts of strong ground shaking, unsuitable soils, and liquefaction potential. Additionally, the proposed project would have a beneficial effect because older buildings would be replaced with newer facilities that will comply with current, more stringent code requirements for seismic safety.

3-8 HAZARDOUS MATERIALS

This section discusses the potential for the discharge of hazardous materials as a result of the proposed project. A review of public records was conducted, an environmental database was prepared by Environmental Data Resources, Inc. (2003), and a site reconnaissance and interviews were performed by Geotechnical Consultants, Inc. to verify current conditions and potential impacts at the project site and from nearby properties.

3-8.1 Environmental Setting

Existing and past land use activities are used as potential indicators of hazardous material storage and use at individual sites. For example, many industrial sites, historic and current, are known or suspected to have soil or groundwater contamination by hazardous substances. Other hazardous materials sources include leaking underground tanks; surface runoff and migration of contaminated groundwater plumes from contaminated sites; and application of pesticides and herbicides on agricultural land.

The primary issue in identifying potential environmental contamination is worker health and safety, and public exposure to hazardous materials during construction and waste handling. Potential impacts on air quality and traffic during waste transport must also be considered. Where encountered, contaminated soil may qualify as hazardous waste and thus require handling and disposal according to local, state, and federal regulations.

a. Land Use/Site Conditions

Historic Land Use

Research of historic area land use was conducted using historic aerial photographs (1928 through 1994) and historic topographic maps (1898 through 1972). The review of the aerial photographs and topographic maps indicates that project area was primarily agricultural until the early 1940's. Through the remainder of the 1940's and the 1950's, residential housing tracts began to replace agricultural land. Urban density and sprawl continued to increase in the following decades, and the area now consists primarily of dense residential housing tracts, with commercial and light industrial businesses located along the major streets.

The Valley College campus was first established in 1949, and moved to its current location in 1951. The campus buildings originally consisted of temporary bungalow structures located in the southern portion of what is the current campus. From the 1950's through the early 1970's, permanent classroom and campus facilities were built in three phases of construction. These permanent buildings replaced many, but not all, of the temporary bungalows. By 1965 the adjacent Grant High School had been built, and has not appeared to change significantly over time.

Current Site Conditions/Land Use

Field reconnaissance of the project site and surrounding project area was conducted to verify current conditions. The field reconnaissance component of the study relied on a visual survey of surface conditions by an environmental geologist to identify sites where storage containers (chemicals, paint, oil) were present or evidence of stained soil or corroded pavement was visible, suggesting chemical spillage to the ground. This survey concentrated on the project site and sites identified in the Environmental Data Resources database. A site reconnaissance of the Valley College campus was conducted in the presence of Valley College personnel familiar with campus hazardous material use, storage, and disposal. Reconnaissance of the area surrounding the campus was limited to viewing properties from adjacent public streets and alleys; no attempt was made to gain access to any properties except the open parking lot areas.

Valley College Campus. Land use on the Valley College campus includes educational, recreational/athletic, plant facilities, and parking. The campus is approximately 'L' shaped, with the bottom of the 'L' to the south. The western portion of the campus contains most of the educational facilities and consists primarily of one-story classrooms and administrative buildings. Also located in the western portion of the campus are the Cafeteria, Library, and Campus Center. The campus center is currently the only two-story building on campus. Classroom buildings used for science education contain laboratories that use and store a variety of chemicals and other hazardous materials. Other buildings in the western portion of the campus include various plant facilities buildings and industrial technology buildings, which also use and store hazardous materials. Parking lots are located around the periphery of the campus. The central and eastern parts of the campus are occupied primarily by physical education facilities including a stadium, athletic fields, tennis courts, and gyms.

Surrounding Area. Valley College occupies three quadrants (northwest, southwest, and southeast quadrants) of the area bounded by Burbank Boulevard on the south, Oxnard Street on the north, Fulton Avenue on the west, and Coldwater Canyon Extension on the east. The northeastern boundaries consist of Ethel Avenue and Hatteras Street. Grant High School (LAUSD) occupies the northeast quadrant of this area, north of Hatteras Street and east of Ethel Avenue. The predominant land use in the vicinity of College, with the exception of the high school, is residential and consists of single-family homes and some apartment buildings. Commercial and light industrial businesses are located along the major streets.

Environmental Database Review

An electronic database search of listings maintained by federal, state, and local agencies of sites with known or suspected hazardous material contamination, use of hazardous or toxic materials and regulated wastes, discharge or spillage incidents, discharge permits, landfills, and storage tanks was performed by Environmental Data Resources Inc. in 2003 (see Appendix D). The database was reviewed for sites listed as potential or known dischargers of hazardous materials that could potentially affect the project site. The database search included sites within a 1-mile radius of an approximate center point for the Valley College campus. A total of approximately 170 sites were identified within the search radius, although only a total of 37 sites occur within 1/4 mile of the project site boundaries. The principal regulatory directories reviewed by

Environmental Data Resources, Inc., including the date last updated, are listed below in Table 3-14.

Table 3-14: Principal Regulatory Agency Databases Searched

Regulatory Agency Database	Date Last Updated
Federal	
National Priority List (NPL)	October 2002
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	December 2002
Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned (CERCLIS-NFRAP)	December 2002
Resource Conservation and Recovery Act Information System (RCRIS), (includes RCRA Generators)	September 2002
RCRA Corrective Action Sites (CORRACTS)	September 2002
California State	
Annual Work Plan (AWP, formerly Bond Expenditure Plan, by Cal EPA)	January 2003
CALSITES (formerly ASPIS, by Cal EPA)	November 2002
CORTESE – Hazardous Waste Substance Site List	April 2001
Leaking Underground Storage Tanks Information System (LUST, by SWRCB)	January 2003
Underground Storage Tank Registration Database (UST, by SWQCB; and FID, by Cal EPA)	January 2003 and October 1994
Aboveground Petroleum Storage Tank Facilities (AST)	November 2002
Solid Waste Information System (SWIS)	December 2002
Hazardous Waste Information System (HAZNET, by Cal EPA)	December 2001
Local	
Site Mitigation List (by Community Health Services)	February 2002
Underground Storage Tank Leak List (LUST, by RWQCB Region 4)	August 2001
Spill, Leaks, Investigation, and Clean-Up Cost Recovery Listing (SLIC, by RWQCB Region 4	February 2003

Source: Environmental Data Resources, Inc., 2003.

b. Applicable Regulation, Plans and Standards

Hazardous substances are defined by state and federal regulations to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be considered hazardous. The California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261 provides the following definition:

> A hazardous material is a substance or combination of substances which, 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 reversible, 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.

According to Title 22 (Chapter 11 Article 3, CCR), substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, contaminated, or is being stored prior to proper disposal.

Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances are hazardous because of their flammable properties. Gasoline, hexane, and natural gas are examples of ignitable substances. Corrosive substances are chemically active and can damage other materials or cause severe burns upon contact. Examples include strong acids and bases such as sulfuric (battery) acid or lye. Reactive substances may cause explosions or generate gases or fumes. Explosives, pressurized canisters, and pure sodium metal (which reacts violently with water) are examples of reactive materials.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as “mixed wastes.” Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents, such as bacteria or viruses.

Soil that is excavated from a site containing hazardous materials would be a hazardous waste if it exceeded specific CCR Title 22 criteria. Remediation (cleanup and safe removal/disposal) of hazardous wastes found at a site is required if excavation of these materials is performed; it may also be required if certain other activities are proposed. Even if soil or groundwater at a contaminated site do not have the characteristics required to be defined as hazardous wastes, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking lead jurisdiction. California Environmental Protection Agency (Cal EPA) – Department of Toxic Substances Control administers a voluntary cleanup program (VCP) to allow project developers to implement remedial measures prior to site development regardless of responsibility for the contamination or cleanup.

Hazardous Waste Requirements. The federal Resource Conservation and Recovery Act of 1976 established a program administered by the U.S. Environmental Protection Agency (EPA) to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The Resource Conservation and Recovery Act was amended in 1984 by the Hazardous and Solid

Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act.

Individual states may implement hazardous waste programs under the Resource Conservation and Recovery Act with EPA approval. California has not yet received this EPA approval; instead, the California Hazardous Waste Control Law is administered by the California Environmental Protection Agency (Cal EPA) to regulate hazardous wastes. While the California Hazardous Waste Control Law is generally more stringent than Resource Conservation and Recovery Act, until the EPA approves the California program, both the state and federal laws apply in California.

The California Hazardous Waste Control Law lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

Hazardous Material Worker Safety. The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

❑ Storage and Use of Hazardous Materials at Valley College

Various types of hazardous materials and hazardous waste are stored on campus. A number of different types of chemicals used for instructional purposes are stored in the Life Sciences Building and in the Chemistry Building. Chemical storage areas in these buildings are kept locked when not in use. Larger quantities of chemicals and chemical waste are stored in a small locked storage bunker adjacent to the Chemistry Building. Limited amounts of paints and solvents in immediate use are stored in the various classrooms and workshops around campus. The machine shop at the southern end of the Engineering Building uses and stores small amounts of oils and lubricants.

The Plant Facilities area on campus uses and stores many different types of chemicals. Motor oil and waste motor oil are used/stored within the auto maintenance area in the Plant Facilities yard. The waste oil is stored in within secondary containment. An underground storage tank (UST) and pump for unleaded fuel is located within the Plant Facilities yard. The Paint Shop is located south of Plant Facilities in one of the old bungalow structures and uses and stores paints and solvents.

❑ Pesticide and/or Herbicide Use at Valley College

Small amounts of pesticides and herbicides are stored and used by the campus gardeners. Pesticides and herbicides not in immediate use are stored in a locked storage room located in the

Plant Facilities area. These pesticides and herbicides are used in limited amounts as needed for landscaping concerns.

❑ **Asbestos and Lead Containing Material**

Based on the age of many of the buildings on campus, there is a potential that asbestos-containing material and lead-based paint may be present in the structures. Personal communication with campus staff (Jose Ornellas, Interim Facilities Manager; 2003) indicates that remediation for asbestos-containing material has occurred in some, if not all campus buildings. However, he does not believe that any lead-based paint remediation has occurred in any of the buildings on campus.

3-8.2 Environmental Impacts

The principal environmental impacts involving hazardous waste are the mobilization of contaminants resulting in exposure of workers and the general public, i.e., excavation and handling of contaminated soil and removal and handling of asbestos-containing material. Hazardous materials in the construction area may require special handling as hazardous waste can create an exposure risk to workers and the general public during excavation and transport. Contaminated soil exceeding regulatory limits for construction backfill will require onsite treatment or transport to offsite processing facilities. Contaminated soil removed from the construction area must be transported according to state and federal regulations and be replaced by import soil approved for backfill. Similar issues pertain to contaminated groundwater.

a. Significance Criteria

For the purposes of this EIR, impacts of the project on the environment would be considered significant if:

- Construction of the proposed project causes soil contamination, including flammable or toxic gases, at levels exceeding federal, State and local hazardous waste limits established by 40 CFR Part 261 and Title 22 CCR 66261.21, 66261.22, 66261.23 and 66261.24.

- Construction activities would result in mobilizing contaminants, creating potential pathways of exposure to humans and/or other sensitive receptors.

- Operation of the project would generate hazardous waste in sufficient quantities to pose a substantial hazard to the public or environment.

The presence of contaminated soils and/or groundwater within the proposed project site would be considered significant if:

- Workers and/or the public would be exposed to contaminated or hazardous materials during project construction activities and such exposure exceeds permissible exposure levels set by the California Occupational Safety and Health Agency (CAL-OSHA) in

CCR Title B and the Federal Occupational Safety and Health Administration (OSHA) in Title 29 CFR Part 1910.

b. Impacts Discussion

Site conditions with potential environmental impacts are presented in Table 3-15.

Table 3-15: Potential Environmental Impacts

Condition	Notes
Use and storage of hazardous materials and waste at Valley College.	One UST is located at Plant Facilities. Various chemicals and chemical wastes are stored and used on campus.
Asbestos and lead-based paints in older buildings on campus to be demolished or remodeled.	Due to the age of many of the buildings on campus, there is a potential that they contain asbestos and lead-based paint.
Contamination spread to campus from offsite sources.	One site with moderate potential to adversely affect the campus was identified in the Environmental Data Resources, Inc. database.

Source: Geotechnical Consultants, Inc., 2003.

Construction Impacts

The impact from use and storage of hazardous materials at Valley College would be less than significant if anticipated areas of construction and ground disturbance do not overlap with hazardous material storage and use areas. If construction overlaps with hazardous material areas, the impact could be potentially significant. However, if a site inspection is performed prior to construction to determine if leaks or spills may have caused potential environmental contamination and if present, remediated as indicated in Mitigation Measure HM-3, the impacts would be reduced to less than significant.

Relocation of the Plant Facilities structures would require removal of their existing UST. This could result in a potentially significant impact if contamination is encountered during tank removal. Implementation of Mitigation Measure HM-2 would verify whether contamination were present and if present, remediated as indicated in Mitigation Measure HM-3.

Demolition or remodeling of older structures on the campus could potentially result in exposure and mobilization of asbestos-containing material and/or lead-based paint contaminants, a potentially significant impact. Confirmation of previous remediation or remediation of asbestos-containing material and lead-based paint would be completed before any construction on or demolition of existing buildings, as specified in mitigation measure HM-4, reducing the potential impact to less than significant.

Listed Hazardous Material Sites

Properties listed in the Environmental Data Resources, Inc. environmental database were reviewed for potential to affect the project. Potentially contaminated properties identified within a ¼-mile "buffer zone" of the campus boundary were screened for potential large-scale contamination that may have spread beyond individual property boundaries.

Table 3-16 presents the criteria used to evaluate the potential environmental impact from listed sites within and immediately adjacent to the project area. Sites that are physically separated from the proposed sites by great distances or significant physical barriers would have little or no potential to affect the project. The remaining adjacent sites are ranked as high, medium, or low potential to affect construction according to site conditions, regulatory status, and review of agency records.

Table 3-16: Contaminated Properties Impact Criteria

Impact Potential	Criteria
High	• Sites within or immediately adjacent to the project site with leaking underground storage tanks that are reported as no action taken. • Sites within or immediately adjacent to the project site where site assessment efforts are reported to be in progress. • Sites within or immediately adjacent to the project site where remediation/cleanup efforts are reported to be in progress. • Areas within the project site with known soil or groundwater contamination.
Moderate	• Sites within or immediately adjacent to the project site where the number and/or status of underground storage tanks on site is not reported. • Sites within or immediately adjacent to the project site with active or inactive underground storage tanks.
Low	• Sites within or immediately adjacent to the project site where underground storage tanks have been removed. • Sites within ¼-mile of the project site with active underground storage tanks. • Sites within or immediately adjacent to the project site which generate large quantities of hazardous materials. • Sites within or immediately adjacent to the project site where historic or current use may be associated with large quantities of hazardous materials.
None	• Generator or UST sites located greater than ¼-mile from the project site. • Sites within or immediately adjacent to the project site which generate small amounts of hazardous materials. • Sites within or immediately adjacent to the project site where no further action is required. • Sites within or immediately adjacent to the project site where case has been closed following site remediation/cleanup.

Source: Geotechnical Consultants, Inc., 2003.

Properties listed in the Environmental Data Resources, Inc. database were screened and assigned potentials to adversely affect the project of none, low, moderate, or high. Properties with no or low potential impact would have no impact or an insignificant impact on the project and are not discussed further in this document. No properties with high potential to adversely affect the project were identified. Properties within ¼-mile of the project site with moderate potential to affect the project are listed in Table 3-17.

Table 3-17: Properties within ¼-Mile of the Campus Boundary with a Moderate Potential to Affect the Project					
I.D. Number	**Site Name**	**Address**	**List**	**Potential to Affect Project**	**Notes**
A1-A2, 3	Los Angeles Valley College	5701 Ethel Blvd.	UST GEN	Moderate	One active tank listed, tank and pump located in Plant Facilities yard. UST leak tested and inspected on 3/13/03, (Jose Ornellas, verbal communication). Campus uses and stores misc. chemicals, pesticides, herbicides, oils, and solvents.
B4-B8	Los Angeles Fire Station 102	13200 Burbank Blvd.	UST GEN	Moderate	One active tank listed. Diesel pump located on west side of bldg. near street, located directly across from College campus. Small quantity generator.

Notes:
Environmental Data Resources, Inc. - Environmental Information Data Site I.D. Number.
Regulatory Agency Listing:
UST = Registered Underground Storage Tanks, including tanks listed with state and local agencies.
GEN = Hazardous Waste Generator, includes RCRIS, CORTESE, HAZNET, and other local agency hazardous waste listings.

Source: Geotechnical Consultants, Inc.; Environmental Data Resources, Inc., 2003.

Operational Impacts

Routine use of pesticides and/or herbicides in proposed landscape areas adjacent to structures should not pose a significant hazard to workers or the public. Hazardous materials are and will be stored in designated storage areas in compliance with local, state, and federal safety regulations. No significant hazardous materials impacts are predicted as a result of operation of the proposed Master Plan projects.

3-8.3 Mitigation Measures

Two sites with moderate potential to affect the proposed project were identified. A mitigation measure was developed for the moderate potential sites identified in Table 3-17. Mitigation Measure HM-2 was developed for the removal and relocation of the campuses existing UST. The potential presence and contamination from asbestos-containing materials and lead-based paint is addressed in Mitigation Measure HM-3.

The presence of hazardous waste sites within and adjacent to the proposed project site represents a potential significant impact due to the potential health hazards to construction workers and the public. The following mitigation measures would provide an assessment of actual or potential site contamination, resulting in the development of appropriate safeguards and methods to reduce potential risk prior to construction. The mitigation measures outlined below must be accomplished prior to construction of each proposed project to allow development of appropriate worker protection and waste management plans that discuss proper handling, treatment, and storage of hazardous waste from the proposed projects (prior to construction).

HM-1 Moderate Potential Sites. A thorough review of available environmental records, a thorough historical land use assessment, and a site-specific inspection shall be completed. Record review shall identify data confirming remediation of onsite and offsite contamination of known contaminated sites, or agency certified closure of the site. Sites with USTs shall undergo further record review to determine the status, condition, contents, and number of tanks. At sites with inactive or improperly abandoned USTs, the tanks may be old and in poor condition and, therefore, shall be thoroughly evaluated for condition and possible leaks. A detailed site inspection of hazardous material storage areas in or near proposed project areas shall be performed to determine if leaks or spills may have caused potential environmental contamination. Results of the record review or visual inspection that indicate contamination may be present in a proposed project area shall result in implementation of Mitigation Measure HM-3.

HM-2 Relocation of Plant Facilities Buildings. Relocation of the Plant Facilities Buildings and appurtenances will require removal and relocation of their UST. Removal of the active UST in the Plant Facilities area shall be monitored by a qualified professional for evidence of leaks. If any evidence of leakage is noted, a site assessment shall be performed and appropriate remediation completed.

HM-3 Unknown Soil or Groundwater Contamination. During excavation for the proposed structures, the contractor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during excavation or grading activities, all work shall stop and an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall perform the review and investigation. Results shall be reviewed and approved by the Los Angeles County Fire Department, Health Hazardous Materials Division or Department of Toxic Substances Control prior to construction. The investigation shall include collecting samples for laboratory analysis and quantification of contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site.

Construction activities that require dewatering may require treatment of contaminated groundwater prior to discharge. Appropriate regulatory agencies, such as California EPA, the Regional Water Quality Control Board (RWQCB), and the Los Angeles County Fire Department, Health Hazardous Materials Division shall be notified in advance of construction and discharge permits identifying discharge points, quantities, and groundwater treatment (if necessary) shall be identified and obtained.

Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained through the OSHA-recommended 40-hour safety program (29CFR1910.120) with an approved plan for excavation, control of contaminant releases to the air, and offsite transport or onsite treatment. Health and safety plans prepared by a qualified and approved industrial hygienist shall be developed to protect the public and all workers in the construction area. Health and safety plans shall be reviewed and approved by the appropriate agencies, such as the Los Angeles County Fire Department, Health Hazardous Materials Division or California Department of Toxic Substances Control.

HM-4 Asbestos-Containing Material and Lead-Based Paint. Records of any previously completed asbestos-containing material and lead-based paint surveys and remediation efforts at the College shall be reviewed. Based on these findings appropriate measures for handling, removal, and disposal of these materials can be developed by a qualified and approved environmental specialist prior to final project design. Asbestos-containing material and lead-based paint surveys shall be completed for any buildings not previously surveyed. Remediation of asbestos-containing material and/or lead-based paint shall be conducted prior to any construction on or demolition of existing structures. Regulatory agencies for the State of California and Los Angeles County shall be contacted to plan handling, treatment, and/or disposal options.

3-8.4 Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse hazardous material impacts. Proper handling, disposal, and remediation of hazardous materials can mitigate the impacts of on-campus use of miscellaneous chemicals and of pesticides and herbicides, asbestos-containing material and lead-based paint, and contamination from offsite sources.

3-9 HYDROLOGY AND WATER QUALITY

3-9.1 Environmental Setting

a. Regional Setting

The city of Los Angeles and its surrounding basin lies within a climatic zone characterized by seasonal rainfall, predominantly during the winter months. Precipitation can vary from year to year, but on average the Los Angeles Basin receives 10 to 11 inches of rainfall. In the spring, summer, and fall seasons there is typically no more than a trace amount of precipitation. Mountains surrounding the basin reach elevations that, in the winter months, can be capped with snow. Snowmelt from mountains in the Angeles National Forest and the San Gabriel and San Bernardino Mountains contribute to recharging of the basin's groundwater and replenish the numerous reservoirs built to hold the seasonal runoff.

Surface Waters

Surface waters that drain the surrounding mountains and the upper basin range from small creeks to large rivers such as the Los Angeles and the San Gabriel Rivers (See Figure 3-35). Historically, the major rivers of the basin were prone to flooding, causing damage to towns built nearby. To control the flooding, the United States Army Corp of Engineers (ACOE) channelized the Los Angeles River in 1938, which set in motion the channelization of many of its larger tributaries. Today, most of the surface waters of Los Angeles County are either fully channelized or controlled by some flood control measure.

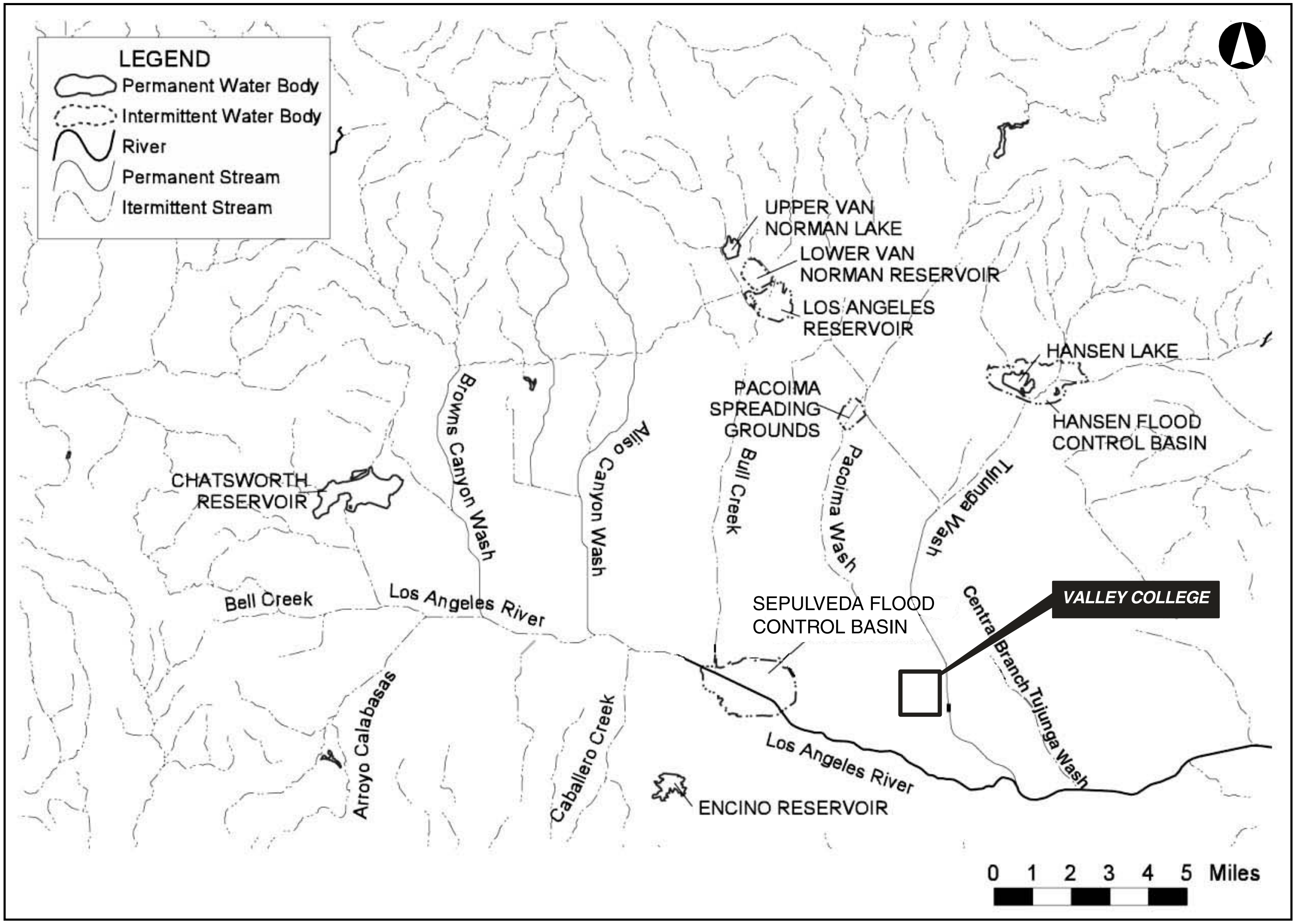
Los Angeles Valley College is located within the Los Angeles-San Gabriel Hydrologic Unit designated by the Los Angeles Regional Water Quality Control Board (RWQCB) Los Angeles Region Water Quality Control Plan (1994). This hydrologic unit covers 1,608 square miles and is drained by three major rivers—the Los Angeles, the Rio Hondo, the San Gabriel—and Ballona Creek. Within this hydrologic unit, the plan designates Watershed Management Areas (WMAs) and Valley College is located within the Los Angeles River Watershed (LARW).

According to the Los Angeles River WMA Summary (December 2001) prepared by the RWQCB, the receiving waters for the watershed are impaired due to the large number of point and non-point source discharges. Dischargers permitted under the city of Los Angeles National Pollutant Discharge Elimination System (NPDES) general permit or individual permits for discharging to the watershed include the following:

- 147 NPDES discharges including: 7 major dischargers (POTWs), 30 minor permits,[15] and 110 dischargers covered by the general permit;

[15] Minor permits cover miscellaneous wastes such as groundwater dewatering, recreational lake overflow, swimming pool wastes, and groundwater seepage. Other permits are for discharge of treated contaminated groundwater, noncontact cooling water, and stormwater.

Figure 3-35: Local Water Resources



Sources: Los Angeles Regional Water Quality Control Board, 1986; Myra L. Frank & Associates, Inc., 2003.

- Two municipal storm water permits;
- 1,307 dischargers covered under an industrial stormwater permit; and
- 204 dischargers covered under a construction stormwater permit.

Of the 147 NPDES discharges, a majority of those point sources' flows go directly into the Los Angeles River. Compton Creek receives five, Burbank Western Channel receives four, and Eaton Wash receives three. General industrial stormwater permits cover activities such as warehousing, auto wrecking, and recycling. Most of the 1,307 permitted discharges are located in Sun Valley, Vernon, South Gate, Long Beach, Compton, and Commerce. Construction stormwater permits are generally concentrated in the San Fernando Valley and other parts of the upper watershed. The cumulative effect of these discharges has impaired the Los Angeles River Watershed and the water bodies in the watershed are on the 303(d) list for pollutants including ammonia, organics, inorganics, metals, coliform, trash, algae, oil, and volatile organic compounds (VOCs). Valley College is located adjacent to Tujunga Wash, which is a major tributary of the Los Angeles River. Tujunga Wash is the receiving water body for irrigation and stormwater runoff from the campus. According to the RWQCB, Tujunga Wash is impaired due to elevated levels of several pollutants listed in Table 3-18.

Table 3-18: Tujunga Wash Impairments and Applicable Objectives

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment
Scum, odors	Basin Plan narrative objective	
Coliform	Basin Plan narrative objective	ND– 93,000 mpn/100ml
	Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-0day period and not more than 10 percent of samples exceed 400 mpn/100ml. *Beaches:* total coliform not to exceed 1,000 mpn/100ml in more than 20 percent of samples in 30 days and not more than 10,000 mpn.100ml at any time.	
Copper	USEPA water quality criteria: varies based on hardness but typically 12-47 ug/l	63 ug/l (maximum)
Ammonia	Basin Plan narrative objective	500 - 1,000 ng/g (sediment)
	Basin Plan numeric objective varies depending on pH and temperature but the general range is 0.53 to 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3 to 28.0 mg/l to protect against acute toxicity.	42.5 – 90.7 ng/g (tissue)
Trash	Basin Plan narrative objective	

Source: Los Angeles River WMA Summary, December 2001.

The United States Environmental Protection Agency (USEPA) and the RWQCB are required to assess the impaired water bodies and determine a Total Maximum Daily Load (TMDL) for each pollutant that is impairing that water body. The TMDL is a number that represents the capacity a receiving water has to absorb various pollutants and still meet water quality standards. The TMDL is the sum of all point and non-point sources that discharge into a receiving water. The USEPA oversees the 303(d) program and is responsible for issuance of a state's compliance with a TMDL. A consent decree between the USEPA, Santa Monica BayKeeper, and Heal the Bay, Inc., was signed in March 1999. The consent decree requires that all TMDLs for the Los Angeles Region be met within 13 years.

Within the LARW, three pollutants have been scheduled and all discharge permits have waste load allocations (WLAs) or BMPs incorporated into the permit that must be implemented to reduce trash, nitrogen, and coliform to the greatest extent possible.

Groundwater

Groundwater resources are the result of water percolation through the soil layer. Water will continue to permeate through the soil until it meets an impervious surface such as clay or bedrock. The rate of percolation depends on the soil structure. Clayey soils and those with high organic compositions tend to pond or saturate with minimal levels of precipitation. Sandy coarse-grained soils percolate water quickly and, consequently, provide little filtration. Groundwater resources, or aquifers, can be independent structures divided from other aquifers by faults or fissures generally created by seismic activity. Aquifers are formed by percolation of natural rainfall and seepage from rivers and washes, but modern levels of water extraction can lead to groundwater overdraft. Urban areas artificially recharge aquifers to maintain water quality, reduce risk of subsidence, and preserve emergency water sources.

The Los Angeles Department of Water and Power defines the San Fernando Valley as the Upper Los Angeles River Area Groundwater Unit. It is comprised of four groundwater basins: the San Fernando, Sylmar, Verdugo, and Eagle Rock Basins. The proposed project site is located over the middle portion of the San Fernando groundwater basin.

Groundwater resources within the LARW have also been adversely affected by point and nonpoint source discharges. The watershed has hundreds of known leaking underground storage tanks (LUSTs) that are contaminating groundwater resources with petroleum hydrocarbons and Volatile Organic Compounds (VOCs). There are a number of refineries and tank farms that have also been documented for hazardous material spills that have contaminated soils and groundwater. In the southern portion of the watershed, groundwater pumping has led to aquifer overdraft that has led to seawater intrusion. Injection wells, blending, or complete groundwater well closure has resulted. Additionally, several wells in the watershed have been closed due to nitrate contamination from septic tanks.

Floodplains

A review of Floodplain Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA) reveals that the project site lies within an area delineated as Zone

X. Zone X is defined by FEMA as an area outside of the 500-year floodplain, which means there is less than a 0.2 percent chance every year over a 500-year period that this area may be inundated by a flood. However, the Tujunga Wash is mapped as 100-year floodplains, or Zone A. The floodplain is completely contained within the flood control channel.

3-9.2 Environmental Impacts

Construction and operational impacts on surface water were assessed based on the potential for degradation of water quality and increased runoff that may result in flooding. Adverse effects on water quality were determined through review of local, state, and federal guidelines and permit requirements. Federal regulations for discharge of pollutants into surface waters are defined under the Clean Water Act, Sections 401 and 305(b). Projects that would contribute polluted runoff are required to obtain NPDES permits, which are granted by the State Water Resources Control Board and the Los Angeles Regional Water Quality Control Board (RWQCB).

Previously prepared environmental documents and reports produced by the Los Angeles Department of Public Works (LADPW) and RWQCB provided information to determine the local groundwater setting. FEMA maps revealed floodplain information necessary to assess potential adverse effects.

a. Significance Criteria

For the purposes of this EIR and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed project would have a significant effect on water quality if it:

- Produces substantial amounts of polluted runoff;
- Violates any water quality standards or waste discharge requirements;
- Substantially degrades the water quality of surface or groundwater resources;
- Interferes with groundwater recharge resulting in a substantial lowering of the local groundwater table level or aquifer volume;
- Places structures within a 100-year flood zone, or;
- Substantially increases surface runoff that results in flooding onsite or offsite.

Surface Waters

This section evaluates the proposed project's impacts, in accordance with the first three significance criteria identified above, on the water quality of surface water resources.

❑ Construction Impacts

Valley College currently discharges landscape irrigation and stormwater runoff into Tujunga Wash. Discharges include runoff from athletic fields, common areas, impervious surfaces (e.g., buildings and walkways), and parking lots. The Master Plan proposes to demolish several structures, build new facilities, reconfigure and increase the amount of open space and athletic fields, and reconfigure and construct new parking lots.

The county of Los Angeles and the incorporated cities therein (except the city of Long Beach) are permittees under a Municipal Separate Storm Sewer System (MS4) permit, number CAS004001, (Los Angeles Large MS4 Permit) from the Los Angeles Regional Water Quality Control Board. The city of Los Angeles is one of the permittees covered by this permit. According to the Los Angeles Large MS4 Permit, each permittee must have amended its codes and ordinances to require that construction of parking lots of 5,000 square feet or more, or with 25 or more parking spaces, become subject to a Standard Urban Storm Water Mitigation Plan (SUSMP). Additionally, the redevelopment of buildings, creating an addition of at least 5,000 square feet of impervious surfaces, would also be subject to a SUSMP. Implementation of a SUSMP minimizes, to the maximum extent possible, polluted discharge to receiving waters from new or redevelopment projects. The Los Angeles Large MS4 Permit also requires that permittees impose Local Storm Water Pollution Prevention Plans (SWPPP) prior to receiving grading permits.

The Master Plan proposes to expand several of the existing parking lots and remove or downsize others. The gross total of parking would go from the existing 3,863 spaces to 4,170 spaces. This constitutes an increase of 307 spaces. Additionally, 289,500 square feet of new facilities would also be constructed, hence, adding impervious surfaces to the campus. Valley College would be required to implement several Best Management Practices (BMPs) to comply with the SUSMP requirements that may be imposed on it by the relevant permittees under the Los Angeles Large MS4 Permit.

The Large MS4 Permit requires implementation of a SWPPP to discuss BMPs for the construction phase and construction-related activities require implementation of the state-approved BMPs to be in compliance with the General Construction Permit. These construction BMPs would be incorporated into all areas where proposed new and redevelopment construction would involve earth-moving activities of 1 acre or more. Valley College would comply with and incorporate all requirements of related construction permits for discharge of waters to Tujunga Wash. Therefore, construction of the Master Plan would have no adverse impacts on water quality.

Small Municipal Separate Storm Sewer System NPDES Permit

The State Water Resources Control Board (SWRCB) is considering adopting a Small Municipal Separate Storm Sewer System NPDES Permit (Small MS4 Permit). Should the Small MS4 Permit be adopted, the District is listed as a public entity that will become subject to its requirements. The Small MS4 Permit imposes requirements on construction site storm water runoff controls that are very similar to those imposed by the Los Angeles County Large MS4 Permit and the General Construction NPDES Permit. The Small MS4 Permit imposes further requirements of: (1) a public education campaign, (2) requiring public participation in the storm water regulation process, (3) illicit discharge detection and elimination, (4) post construction storm water management, and (5) pollution prevention/good housekeeping for internal operations. All of the Small MS4 Permit requirements will be implemented through a Storm

Water Management Plan (SWMP). Until the SWMP is approved by the SWRCB, this document cannot meaningfully discuss any of the SWMP requirements that may be imposed on the Master Plan. However, should the SWRCB approve a SWMP, the Master Plan would comply with any additional mitigation or storm water controls as directed by the Regional Board.

❑ Operational Impacts

New parking lots and structures, resulting in new impervious surfaces, would contribute pollutants to runoff from these facilities. To minimize impacts, the Master Plan would comply with the following SUSMP design guidelines to reduce polluted runoff from new parking lots and impervious surfaces:

- Reduce impervious land coverage of parking area.
- Filter runoff before it reaches the storm drain system.
- Treat runoff before it reaches the storm drain system.
- Ensure adequate operation and maintenance of treatment systems, particularly sludge and oil removal.

In compliance with these guidelines, the College would implement BMPs outlined in the California Storm Water Best Management Practices Handbooks (1993) produced by the Los Angeles County Department of Public Works. All redevelopment would also be subject to BMPs as required by the SUSMP. Examples of BMPs are use of oil/water separators, infiltration basins, catch basins, and vegetated swales and strips.

Implementation of suggested BMPs for both the new parking lots and the increased redevelopment surfaces would minimize the amount of polluted stormwater to the maximum extent practicable. This would bring the proposed Master Plan into compliance with any storm water requirements imposed on it by any of the permittees covered by the Los Angeles Large MS4 Permit. In addition, because Tujunga Wash, which is a 303(d) listed impaired water body, is the receiving water for stormwater runoff from the College, design measures required to treat polluted stormwater from the campus would also need to comply with the RWQCB trash, nitrogen, and coliform TMDLs.

Groundwater

This section evaluates the impacts of the project, in accordance with the first four significance criteria identified above, on groundwater resources and water quality.

❑ Construction Impacts

Development of the Master Plan would not require the pumping of groundwater resources for construction of the Master Plan. Water, both current and future allocations, is and will be provided to the College by the city of Los Angeles.

Portions of the watershed's groundwater resources have been contaminated by organic and inorganic pollutants via percolation into the groundwater from the surface. The Master Plan would meet all requirements of the county NPDES permit and construction permit to abate any groundwater impacts. Recommended BMPs would treat any polluted runoff from campus that might otherwise be allowed to percolate into the ground. Adherence to permit requirements would reduce the amount of polluted waters from the College campus that would leach into groundwater resources to the maximum extent practicable. Therefore, based on the identified significance criteria, the Master Plan would have no adverse effects on groundwater resources.

❑ **Operational Impacts**

Adherence to all applicable permits under the operational phase and implementation of required BMPs should treat all runoff from the campus to remove pollutants to the greatest extent possible. Therefore, the Master Plan would have no adverse impact on groundwater resources.

Floodplains

The full extent of the Valley College campus is located outside of a designated floodplain, hence, neither the construction nor operational phases of the Master Plan would have any effect on a 100-year floodplain.

3-9.3 Mitigation Measures

a. Surface Water

To mitigate adverse effects from construction and/or operation of the proposed projects under the Valley College Master Plan, the following measures shall be implemented:

SW-1 A Standard Urban Stormwater Mitigation Plan (SUSMP) shall be developed in accordance with Los Angeles County Stormwater permit requirements.

SW-2 Best Management Practices (BMPs) shall be implemented to capture and treat polluted runoff from parking lots.

These mitigation measures would be sufficient to ensure that adverse effects to surface waters would be less than significant.

b. Groundwater

The mitigation measures discussed under Surface Water would also be applicable to reduce the potential for groundwater contamination from construction or operational activities. It is anticipated that compliance to all permit requirements would result in no significant adverse effects on groundwater quality or levels.

c. Floodplains

No mitigation is required.

3-9.4 Unavoidable Significant Adverse Impacts

There would be no unavoidable significant adverse water quality impacts due to the proposed Master Plan improvements. Implementation of the above mitigation measures will ensure that hydrology and water quality impacts would be less than significant.

3-10 LAND USE AND PLANNING

3-10.1 Environmental Setting

Valley College is located just north of the Valley Glen area of the San Fernando Valley in the city and county of Los Angeles. The College campus encompasses a total land area of approximately 105 acres. The campus is generally bounded to the north by Oxnard Street and Hatteras Street, to the east by Ethel Avenue and Coldwater Canyon Avenue, to the south by Burbank Boulevard, and to the west by Fulton Avenue.

a. Existing Land Use

Existing land uses on the Valley College campus include educational and administration facilities, surface parking lots, athletic fields and sports facilities, and open space. Most of the College's educational buildings are located in the western half of the campus. The athletic fields and facilities are located to the east of the academic buildings. Parking is located on the northern half, in the southwest corner, and on the eastern portion of the campus.

The area in the immediate vicinity of Valley College contains primarily single-family and multi-family residential neighborhoods. Commercial uses are located southwest of the College, across Burbank Boulevard and Fulton Avenue. In addition, a fast food restaurant is located at the northeast corner of Burbank Boulevard and Fulton Avenue, adjacent to the campus parking lot. Ulysses S. Grant High School is located immediately northeast of the College. A railroad right-of-way owned by the Los Angeles County Metropolitan Transportation Authority is located west and south of the campus. The Tujunga Wash extension of the Los Angeles River is located just east of the southeast portion of the campus (see Figure 3-36).

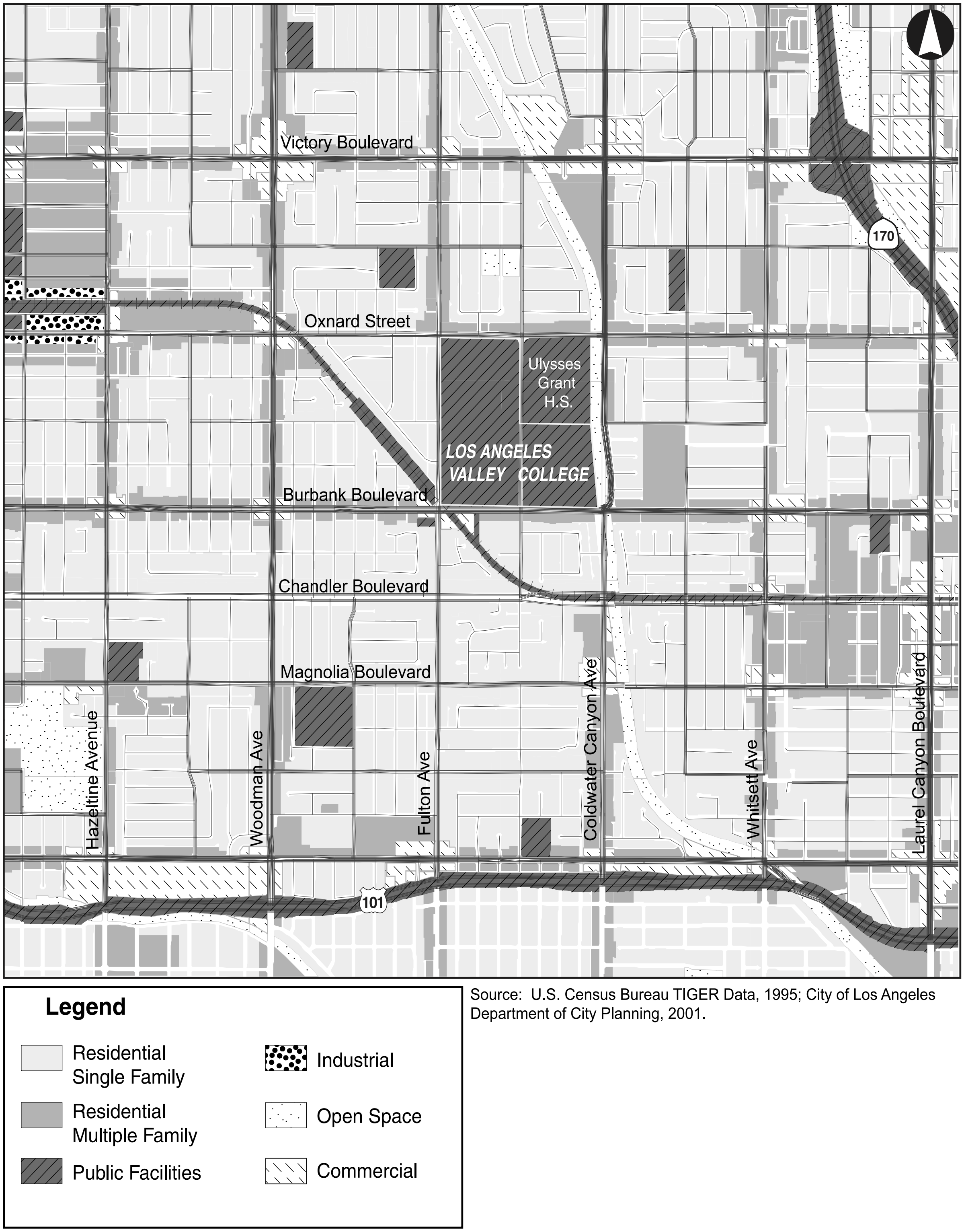
b. Land Use Plans and Policies

Several land use plans are applicable to the land use study area for the proposed project. A brief description of the purposes, goals, and policies for each of these planning documents follows. A map of the relevant boundaries for the various planning areas is provided on Figure 3-37.

SCAG Regional Comprehensive Plan and Guide

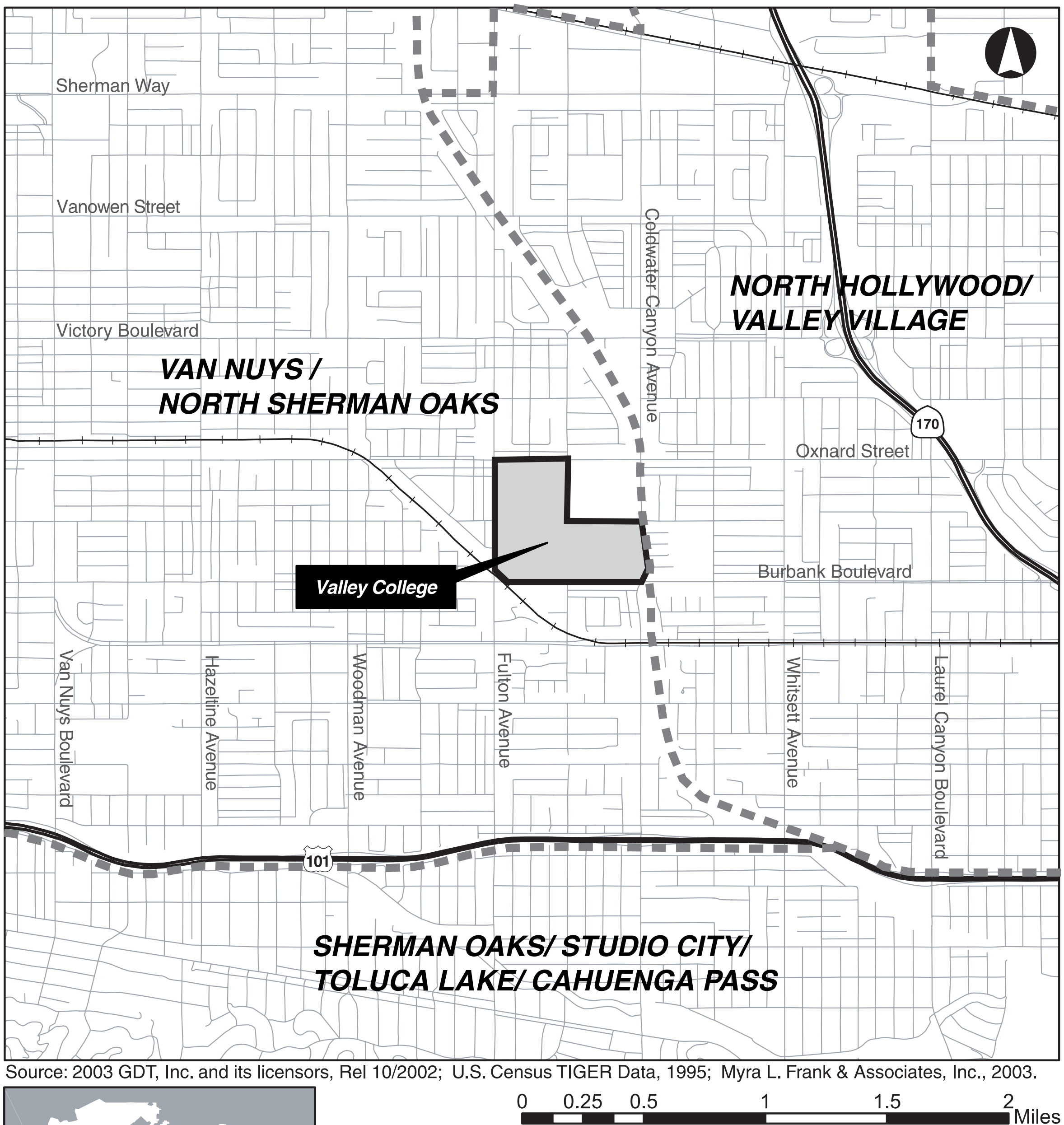
The Regional Comprehensive Plan and Guide was developed by the Southern California Association of Governments (SCAG) in partnership with 13 subregions and was adopted in March 1996. A bottom-up planning process was used to reflect local concerns in regional planning. The plan is designed to serve as a regional framework for local and regional decision making with respect to anticipated growth over the next 20 years. SCAG projects that there will be 22 million people living in the Southern California Region by the Year 2015. The fastest growth is anticipated in the outlying areas of the region, specifically north Los Angeles County and the Inland Empire. The plan sets forth strategies for meeting federal and state requirements with respect to transportation, growth management, air quality, housing, hazardous waste management, and water quality management.

Figure 3-36: Project Area Land Uses

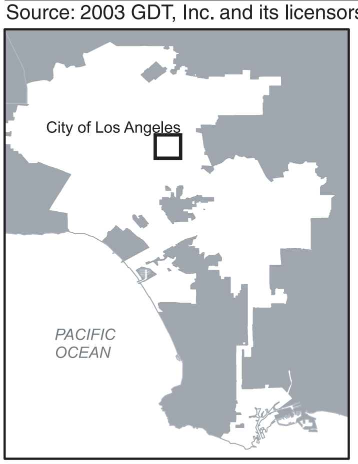


Source: U.S. Census Bureau TIGER Data, 1995; City of Los Angeles Department of City Planning, 2001.

Figure 3-37: Community Plan Map



Source: 2003 GDT, Inc. and its licensors, Rel 10/2002; U.S. Census TIGER Data, 1995; Myra L. Frank & Associates, Inc., 2003.



The plan aims to achieve growth management through encouraging local land use actions, which will lead to the development of an urban form that will minimize development costs, save natural resources, and enhance the quality of life. The plan recommends projects that meet the following goals: increased mixed land uses, more efficient use of existing infrastructure, reduced environmental impacts, more transit use, higher densities in strategic mass transit and urban centers, and more affordable housing.

Regional Transportation Plan

The Southern California Association of Governments Regional Transportation Plan (RTP) was adopted in 2001. All regional transportation plans, programs, and projects must conform to the policies set out in the RTP and the Air Quality Management Plan (which are required to be consistent with each other). The RTP presents an assessment of overall growth and economic trends in the SCAG region for the years 2001 to 2025, and provides recommendations for transportation investments during this time. Key recommendations contained in the RTP include: major funding increases in the existing regional transportation system, High Occupancy Vehicle lane connectors and gap closures, transit improvements, and strategic arterial investments. These projects are designed to increase mobility and accessibility within the region, while mitigating for noise and air quality impacts. Implementation of the RTP will make 6 percent more jobs accessible regionally and will decrease congestion in Los Angeles County by 24 percent.

South Coast Air Quality Management Plan

The 1999 Air Quality Management Plan (AQMP) was prepared by SCAG and the South Coast Air Quality Management District to meet state and federal air quality standards for the South Coast Air Basin. The South Coast Air Basin encompasses 6,600 square miles and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Air pollution in the region has been significantly reduced as a result of pollution control measures. Future pollution emissions forecasts are based on SCAG economic growth projections and California Energy Commission forecasts. The 2010 pollution projections are all substantially less than the 1990 levels. Projected future reductions in pollutant emissions will be achieved through a series of stationary and mobile source controls.

2001 Long Range Transportation Plan for Los Angeles County

The 2001 Long Range Transportation Plan for Los Angeles County (LRTP) was developed by the Los Angeles County Metropolitan Transportation Authority (MTA) to provide a countywide transportation system that meets the needs of Los Angeles through the Year 2025. The LRTP uses the 1998 SCAG adopted socio-economic forecasts to assess where people will live and work; the population of Los Angeles County is projected to increase by 2.7 to 3.5 million people and daily trips are projected to increase by 30 percent.

City of Los Angeles General Plan

The City of Los Angeles General Plan, adopted in 2000, serves as a policy document describing types and distribution of land uses necessary to support the projected population within a 20-year time frame. There are 12 elements in the General Plan including: the Framework Element (establishes the broad overall policies for the entire General Plan which are implemented through community planning areas), the Transportation Element, the Infrastructure Systems Element, the Public Facilities and Services Element, the Housing Element, the Safety Element, the Air Quality Element, the Open Space Element, the Conservation Element, the Noise Element, the Historic Preservation Element, and the Land Use Element. The Land Use Element is comprised of 35 Community Planning Areas. Within each community plan area, the city of Los Angeles establishes goals regarding the long-term intensity and mix of desired land uses. The community planning area adjacent to Valley College is the Van Nuys-North Sherman Oaks Community Planning Area.

Van Nuys-North Sherman Oaks Community Plan

Valley College is located within the Van Nuys-North Sherman Oaks Community Plan Area (CPA), which is situated approximately 16 miles northwest of downtown Los Angeles in the southwest quadrant of the San Fernando Valley. The Plan Area is surrounded by the Mission Hills-Panorama City-Sepulveda Plan on the north, Sherman Oaks-Studio City-Toluca Lake Plan to the south, Reseda-West Van Nuys and Encino-Tarzana Plans to the west and North Hollywood Plan to the east.

The Van Nuys-North Sherman Oaks CPA is generally bounded by the Southern Pacific Railroad on the north, the Tujunga Wash Channel on the east, the Ventura Freeway on the south, and Gloria Avenue, Valjean Avenue, and the San Diego Freeway on the west.

The Van Nuys-North Sherman Oaks CPA contains approximately 8,221 net acres. The area's topography is relatively level. Land uses consist primarily of low- to low-medium density residential, with commercial uses concentrated near the transit corridors of Van Nuys Boulevard, Sepulveda Boulevard, and Sherman Way, as well as major intersections throughout the planning area. During the 1970s the community population increased by 5,245 residents, a growth rate of 5.1 percent. Between 1980 and 1990, the community's population grew by 28,556 residents. This represented a growth of 26.4 percent, which far exceeded that of the city of Los Angeles as a whole during the same period. The two communities that comprise the CPA are Van Nuys and North Sherman Oaks. Projected growth from 2000 through the year 2010 for the Van Nuys-North Sherman Oaks CPA is estimated to be 165,973 residents.

The quality of life and stability of neighborhoods throughout the Van Nuys and North Sherman Oaks CPA depends on providing infrastructure resources (i.e., police, fire, water, sewerage, parks, and traffic circulation) commensurate with the needs of the population. To ensure population growth doesn't occur faster than projected and without needed infrastructure improvements, the Community Plan has adopted three fundamental premises. The first is limiting residential densities in various neighborhoods to the prevailing density of development in these neighborhoods. Second is the monitoring of population growth and infrastructure improvements through the city's *Annual Report on Growth and Infrastructure*, with a report of the City Planning Commission every 5 years on the Van Nuys-North Sherman Oaks Community. Third, if this monitoring finds that population in the CPA is occurring faster than projected, that infrastructure resources capacities are threatened, particularly critical resources (i.e., water and sewerage), and that there is not a clear commitment to at least begin the necessary improvements within 12 months, then building controls should be put into effect, for all or portions of the Van Nuys-North Sherman Oaks community, until land use designations for the Community Plan and corresponding zoning are revised to limit development.

Development of public facilities such as fire stations, libraries, parks, schools, and police stations should be sequenced and timed to provide a workable, efficient, and adequate balance between land use and service facilities. The Transportation Improvement and Mitigation Program (TIMP) was prepared for the Van Nuys-North Sherman Oaks Community Plan and establishes a program of specific measures that are recommended to be undertaken during the life of the Community Plan. The Transportation Demand Management (TDM) program has been adopted in the community to help sustain the current traffic level of service (LOS) on the street system and fulfill the city's objective of not exceeding LOS D in the community. The Community Plan also encourages Transportation System Management (TSM) in order to improve the flow of traffic through low capital cost projects and minor construction that can be implemented in a short time frame.

The Van Nuys-North Sherman Oaks Community Plan sets forth goals to maintain the community's individuality by:

- Preserving and enhancing the positive characteristics of existing residential neighborhoods while providing a variety of housing opportunities with compatible new housing.
- Improving the function, design, and economic vitality of the commercial corridors.
- Preserving and enhancing the positive characteristics of existing uses which provide the foundation for community identity, such as scale, height, bulk, setbacks and appearance.
- Planning the remaining commercial and industrial development opportunity sites for needed job-producing uses that improve the economic and physical condition of the Van Nuys-North Sherman Oaks Community Plan Area.

Los Angeles Planning and Zoning Code

The Los Angeles Planning and Zoning Code regulates land use and development throughout the city. It is intended to be the means by which the general land use policies in the various plans are implemented. The Zoning Code identifies the uses that are allowed on parcels within the city and is required by California law to be consistent with the land use element of the city's general and community plans.

According to the Zoning Code, the campus is zoned PF-1XL for public facilities use in Height District 1, Extra Limited Height. No building or structure in Height District 1XL shall exceed 2 stories nor shall the highest point of the roof of any building or structure located in such district exceed 30 feet in height.

Under state law, buildings and facilities at Valley College are generally subject to zoning limitations imposed by the city of Los Angeles. By two-thirds vote of the District's Board of Trustees, however, the District may elect to exempt classroom facilities from local zoning control. Any new facilities that would not fully comply with current zoning and that are not exempted by the District Board will require a variance, conditional use permit, or zone modification from the city of Los Angeles.

3-10.2 Environmental Impacts

a. Significance Criteria

For the purposes of the analysis in this EIR, the proposed Master Plan would have a significant environmental impact on land use and planning if it would:

- Result in new land uses that are substantially incompatible with land uses and development in the vicinity; or
- Materially conflict with any applicable adopted land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

b. Impacts Discussion

Compatibility with Existing Land Uses

As detailed in the project description, Chapter 2 of this EIR, construction associated with the implementation of the Master Plan is expected to occur through the 2008-2009 academic year. Construction activities would include demolition of various existing structures, excavation and grading of specific sites on campus, construction of new facilities, and renovation and modernization of existing facilities. These types of construction activities would result in some temporary, localized, site-specific disruptions to land uses in the area, primarily related to: construction-related traffic from trucks and equipment in the area; possible partial and/or full street closures; access disruptions to facilities and parking; increased noise and vibration; and increased air pollutant emissions.

Academic land uses and other sensitive uses such as residential would be most susceptible to the temporary construction impacts. However, with the exception of construction noise impacts on the students at the College and Grant High School and air quality impacts on children attending the Child Development Center and susceptible students at Grant High School, these are not considered to be significant adverse impacts, because they are short-term and are commonly experienced in an urban setting such as the proposed project area. If, however, the construction activities were to become protracted, then the corresponding impacts would likely be considered more substantial.

The following sections of this document provide more detailed information on potential construction impacts, if any, as they may affect land uses in the proposed project area: 3-3 Air Quality; 3-11 Noise; and 3-13 Public Services.

Development under the proposed Master Plan would include new and enhanced classrooms and resources, administrative and faculty offices, maintenance and operations facilities, athletic fields and facilities, new open space, and surface parking lots.

Surrounding land uses include residential and commercial. Development of the Master Plan projects would be compatible with these surrounding uses since the Master Plan proposes to construct new and expanded academic and recreational/athletic facilities that are consistent with and not substantially different from existing facilities on the campus. Additionally, the new and improved facilities would serve and provide benefits to both the campus and surrounding community.

Consistency with Local Plans

Valley College is an important part of the Community Plan Area's history. The consistency of the Master Plan with the Community Plan and the SCAG Regional Comprehensive Plan and Guide policies and objectives is summarized in Table 3-19. As shown in the table, the Master Plan would be supportive of, or consistent with, the relevant policies and objectives in the aforementioned plans.

Table 3-19: Comparison of the Proposed Project with Local Plans

Objectives and Policies	Finding	Discussion
Van Nuys – North Sherman Oaks Community Plan		
Objective 4-1: To conserve, maintain and better utilize existing recreation and park facilities which promote the recreational experience	Consistent with this objective.	The Master Plan would enhance and add new recreational fields and facilities on the campus.
Objective 5-1: To preserve existing open space resources and, where possible, develop new open spaces.	Consistent with this objective.	The Master Plan would enhance and add new recreational fields and facilities on the campus.
Objective 7-2: Maximize the use of local schools for community facilities and local open space and parks for school activities where needed to address service deficiencies.	Consistent with this objective.	The proposed new and renovated recreational fields and facilities would serve both the student population and the community.
Objective 14-7: To ensure that location, intensity and timing of development is consistent with the provision of adequate transportation infrastructure utilizing the city's streets and highways standards.	Consistent with this objective.	The proposed Master Plan EIR includes measures to mitigate impacts to the transportation system. See Section 3-14 of this Draft EIR.
Objective 16-1: To provide parking in appropriate locations in accordance with citywide standards and community needs.	Consistent with this objective.	The proposed Master Plan would provide for an additional 307 parking spaces at the College.
Objective 17-1: To ensure that that community's historically significant resources are protected, preserved, and/or enhanced.	No conflict with this policy.	New development would not have a significant adverse impact on the original campus master plan. See Section 3-4, Historical Resources, of this Draft EIR.
SCAG Regional Comprehensive Plan and Guide		
Policy 3.03: The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.	Consistent with this policy	The proposed project includes the development, expansion of, and improvements to educational facilities and onsite utility systems.

Table 3-19: Comparison of the Proposed Project with Local Plans

Objectives and Policies	Finding	Discussion
Policy 3.05: Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.	Consistent with this policy	The proposed project includes within an urbanized area, with an extensive network of infrastructure in place. Any new development would remain on the campus, and a major component of the proposed project is the renovation of existing facilities.
Policy 3.09: Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and provision of services.	Consistent with this policy	See the discussion of Policy 3.05 above.
Policy 3.10: Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	Consistent with this policy	The Master Plan planning and approval process would streamline the development process for future projects under the Master Plan.
Policy 3.12: Encourage existing or proposed local jurisdictions' programs aimed at designing land uses that encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	Consistent with this policy	The Master Plan consists of renovation and expansion of educational facilities located near existing and future bus corridors.
Policy 3.13: Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.	Consistent with this policy	The proposed project consists of several new construction projects as well as renovation of existing facilities to maximize use of the campus.
Policy 3.14: Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.	Consistent with this policy	The Master Plan proposes new, expanded, and renovated facilities near existing and future bus corridors.
Policy 3.16: Encourage development in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.	Consistent with this policy	The proposed project is located near several existing and future bus transit routes.
Policy 3.18: Encourage planned development in locations least likely to cause environmental impact.	Consistent with this policy	Development is confined to the proposed project on the existing College campus, in an urban area with few sensitive natural resources.
Policy 3.21: Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	No conflicts with this policy	New buildings would not be incompatible with the historic campus setting.

Table 3-19: Comparison of the Proposed Project with Local Plans		
Objectives and Policies	**Finding**	**Discussion**
Policy 3.23: Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards and minimize earthquake damage, and development of emergency response and recovery plans.	Consistent with this policy	See Summary of Impacts and Mitigation Measures in the Summary Chapter of this EIR.
Policy 3.27: Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.	Consistent with this policy	The Master Plan consists of renovation and expansion of existing educational facilities to meet future needs of the community. These projects meet and fulfill the College's educational mission to serve a variety of populations.
Policy 4.04: Transportation Control Measures shall be a priority.	Consistent with this policy	Proposed traffic mitigation measures include installation of traffic signals, restriping of intersections, and implementation of Transportation Demand Measures to reduce vehicle trips. See Section 3-14 of this Draft EIR.
Policy 4.16: Maintaining and operating the existing transportation system will be a priority over expanding capacity.	Consistent with this policy	The proposed project includes measures to mitigate impacts to the transportation system. See Section 3-15 of this Draft EIR.
Policy 5.07: Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle miles traveled emission fees) so that options to command and control regulations can be assessed.	Consistent with this policy	See Section 3-14 of this Draft EIR.
Policy 5.11: Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	Consistent with this policy	See relevant sections of this Draft EIR.

Source: Myra L. Frank & Associates, Inc., 2003.

Consistency with Zoning

The College campus is zoned for Public Facilities use. The Public Facilities zone permits uses such as government buildings, offices, and service facilities, including maintenance yards; agricultural uses including field crops, garden, and nurseries; and police stations. Because the proposed projects (academic facilities, maintenance facilities, open space, landscaping, athletic fields and facilities, and parking) under the new Master Plan would be for academic and educational purposes, the new facilities would fulfill the College's educational mission and goals. For purposes of the zoning code, these facilities are governmental buildings and structures and, therefore, would not conflict with the existing zoning designation. In addition, because the proposed renovation and modernization projects would not change the existing use of the facilities, these projects would be consistent with existing and permitted land uses.

The proposed new academic, maintenance, and athletic facilities, which would generally be one- to two-story buildings, would be compatible with the height restrictions for the campus. However, the proposed Library/Learning Resource Center, Allied Health/Sciences Center, and Computer-Business-Technology Center Buildings may be three stories and the Fire/Life/Safety Training Tower would be four to five stories and consequently would exceed the height limit in the zoning code of two stories or 30 feet and may require variances or conditional use permits. Given the location of these structures and their distance from off-campus residential uses, these structures would not materially conflict with the intent of the zoning code.

3-10.3 Mitigation Measures

Since the proposed project is generally consistent with existing zoning and land use policies and is compatible with existing land uses, no mitigation measures would be required. However, Sections 3-3, Air Quality, and 3-12, Noise, provide specific measures to minimize construction air quality and noise impacts on nearby sensitive receptors.

3-10.4 Unavoidable Significant Adverse Impacts

Implementation of the Master Plan would result in no significant adverse impacts to existing land use and planning.

3-11 NOISE

3-11.1 Environmental Setting

a. Fundamentals of Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Sound ranges in intensity by more than one million times within the range of human hearing. The intensity of sound is quantified using a logarithmic scale. When sound becomes excessive or unwanted, it is referred to as noise.

In order to evaluate the sensitivity of noise, an A-weighted decibel scale is used to calculate noise levels in terms of dBA. Because the human ear is more sensitive to high frequencies, the dBA scale de-emphasizes low frequencies. Human hearing extends from approximately 3 dBA to 140 dBA. A 10-dBA increase is judged by most people as a doubling of the perceived noise level. The smallest change that can be heard by most people is about 2 to 3 dBA. Table 3-20 shows typical noise levels for common outdoor activities at specified distances. Note that the typical noise level of a noisy urban area is about 80-dBA.

Table 3-20: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet Flyover at 1,000 ft.	110
Gas Lawn Mower at 3 ft.	100
Diesel Truck at 50ft.[1]	90
Noisy Urban Area, Daytime	80
Commercial Area	70
Heavy Traffic at 300 ft.	60
Quiet Urban Area, Daytime	50
Quiet Urban Area, Nighttime	40
Quiet Rural Area, Nighttime	30

Note:
[1] Diesel Truck is assumed to be traveling at 50 mph.

Sources: Caltrans, 1998; Myra L. Frank & Associates, Inc., 2002.

To account for fluctuations over time, noise levels are commonly evaluated using two time-average noise descriptors: L_{eq} and CNEL. L_{eq}, the equivalent steady state sound level over a given period of time, accounts for moment-to-moment fluctuations in A-weighted sound levels associated with noise sources during a given period of time. The Community Noise Equivalent Level (CNEL) represents an energy average of the A-weighted noise levels (usually L_{eq} levels) over a 24-hour period. Evening and nighttime noise levels are given more weight to account for the increased human sensitivity to noise during these normally quiet periods of the day. Evening (7 p.m. to 10 p.m.) L_{eq} levels are adjusted by 5 dBA. Nighttime (10 p.m. to 7 a.m.) L_{eq} noise levels are adjusted by 10 dBA. Daytime (7 a.m. to 7 p.m.) noise levels are not adjusted when calculating CNEL.

b. Existing Conditions

Valley College is generally surrounded by residential, educational, and commercial uses in a developed urban area in the city of Los Angeles. Noise levels along major streets that border the campus, i.e., Burbank Boulevard, Oxnard Street, and Fulton Avenue are high due to relatively high volumes of traffic on these streets. All three streets provide two lanes in each direction and have posted speed limits of 35 miles per hour. Existing ambient and background noise levels within the interior of the Valley College campus are lower due to shielding provided by campus buildings and distance separating the interior of the campus from adjacent city streets.

In order to document existing noise levels, field measurements were taken at three sensitive receptor locations in the immediate vicinity of the campus. Noise-sensitive uses[16] in the project area include single-family residences west of the campus on the west side of Fulton Avenue, multi-family residences on the north side of Oxnard Street and south side of Burbank Boulevard, and Grant High School, which borders the campus on the northeast. The measurements were taken using the Rion NL-15 Precision Integrating Sound Level Meter (Serial No. 00591106) and were calibrated at 94-dBA. The measurement sites were selected as representative of the existing exterior noise conditions at sensitive locations (residences and high school) near the campus. All measurements were taken approximately 5 feet above the ground surface. Traffic counts along the respective roadways were taken simultaneously with the noise measurements (See Figure 3-38 for a map of the measurement sites).

The existing measured ambient noise levels at residences in the vicinity of the campus ranged from 69 dBA to 70 dBA (L_{eq}), higher than the presumed ambient noise level for a residential area yet significantly lower than 80 dBA, the typical noise level of an urban area.[17] The recorded noise levels are dominated by noise from traffic on local streets in the immediate vicinity of the measurement sites. Table 3-21 below shows the noise readings taken at each of the measurement sites.

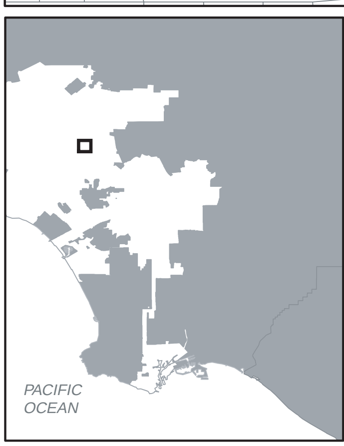
3-11.2 Environmental Impacts

a. Significance Criteria

For the purposes of the analyses in this EIR, the proposed Master Plan would have a significant impact if it:

[16] Noise-sensitive uses are typically defined as land uses where sleep or speech interference is a concern and include residences, motels, hotels, hospitals, schools, libraries, concert halls, etc.
[17] City of Los Angeles Municipal Code Section 111.03.

Figure 3-38: Noise Measurement and Sensitive Receptor Locations



Sources: U.S. Census Bureau TIGER Data, 1995; Myra L. Frank & Associates, Inc., 2003.

0 0.1 0.2 0.4 0.6 0.8 Miles

Noise Measurement Locations

1 5801 Fulton Avenue

2 13115 Oxnard Street

3 13060 Burbank Boulevard

Table 3-21: Noise Measurement at Noise Sensitive Uses Noise

Measurement Site Number	Location	Time and Duration of Measurement	L_{eq} Noise Levels (dBA) [2]
1	Single-family residence at 5801 Fulton Ave.	3:50 – 4:05 p.m., 15 minutes	69.5
2	Multi-family apartments at 13115 Oxnard St.	4:20 – 4:35 p.m., 15 minutes	68.9
3	Multi-family apartments at 13060 Burbank Blvd.	4:53 – 5:12 p.m., 15 minutes	70.0

Notes:
[1] Measurements were taken on April 22, 2003.
[2] Leq Noise Levels represent average noise levels for the duration of the measurement.
[3] Measurements were taken using the Rion NL-15 Precision Integrating Sound Level Meter (Serial No. 00591106) calibrated at 94 dBA using the calibration button on the meter.

Source: Myra L. Frank & Associates, Inc., 2003.

Construction

- results in construction noise that violates Section 112.03[18] of the city of Los Angeles noise ordinance;
- exposes students in classrooms to increases in noise levels that are greater than 5 dBA and would adversely affect academic activities; or

Operation

- causes the ambient noise levels measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (see Table 3-22 below), or any 5-dBA or greater noise increase.

[18] Prior to 7:00 a.m. and after 9:00 p.m. of any day, in any residence zone of the City or within 500 feet thereof, no person shall perform any construction or repair work on any building or structure, or perform any excavation work, which work entails the use of any power driven hoist, scraper, or shovel, pneumatic hammer, pile driver or other construction type device in such manner that the noise created thereby is loud, unnecessary and unusual and substantially exceeds the noise customarily and necessarily attendant to the reasonable and efficient performance of such work (Section 112.03 of the City of Los Angeles Noise Ordinance).

Table 3-22: Community Noise Levels (Exterior) and Land Use Compatibility

Land Use	Community Noise Exposure Level CNEL, dBA			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Single Family Residence	50-60	55-70	70-75	Above 70
Multi-Family Residence	50-65	60-70	70-75	Above 70
Hotel/Motel	50-65	60-70	70-80	Above 80
Auditorium	-	50-70	-	Above 65
Sports Arena	-	50-75	-	Above 70
Parks	50-70	-	67-75	Above 72
Office Building/Commercial	50-70	67-77	Above 75	-
Industrial/Manufacturing	50-75	70-80	Above 75	-

Notes:
Normally Acceptable: Development is acceptable.
Conditionally Acceptable: Noise abatement should be considered as part of the development.
Normally Unacceptable: Development should generally be discouraged.
Clearly Unacceptable: Development should generally not be built.

Source: City of Los Angeles, *Draft LA CEQA Thresholds Guide*, 1998.

b. Impacts Discussion

Construction Impacts

In general, demolition and construction activities associated with the Master Plan would result in increases in ambient noise levels in the vicinity of the construction site. Noise levels would fluctuate depending on the construction location, phase, equipment type and duration of use, distance between noise source and listener, and presence or absence of barriers between the noise source and listener. Construction noise at a distance of 50 feet from the construction activity could reach intermittent highs of 90 dBA depending upon the activity. Average noise levels are generally less than the equipment levels indicate because the equipment is operated intermittently. Construction of certain projects could require the use of diesel-powered heavy equipment, such as haul trucks, cement trucks, and bulldozers, all of which would generate high noise levels. Most-earth moving equipment (i.e., compactors, front loaders, backhoes, tractors, graders, and pavers) produce noise levels of 75 to 89 dBA (decibels) at distances of 50 feet. Material handling equipment (i.e., concrete mixers, concrete pumps, and cranes) produces noise levels of 83 to 89 dBA at a distance of 50 feet. Stationary equipment (i.e., pumps, generators, and compressors) produces noise levels of 70 to 85 dBA at a distance of 50 feet. Jackhammers, which would be used during demolition activities, would generate noise levels in the range of 81 to 98 dBA at a distance of 50 feet. Construction of some new buildings would require pile driving. To minimize potential noise impacts, the College is investigating use of drilled or static driven piles. Table 3-23 illustrates typical construction noise levels at 50 feet.

Table 3-23: Typical Construction Noise Levels	
Equipment	**Noise Level Range (dBA)**
Front Loader	73-76
Trucks	82-95
Cranes (moveable)	75-88
Cranes (derrick)	86-89
Vibrator	68-82
Saws	72-82
Pneumatic Impact Equipment	83-88
Jackhammers	81-98
Pumps	68-72
Generators	71-83
Compressors	75-87
Concrete Mixers	75-88
Concrete Pumps	81-85
Back Hoe	73-95
Pile Driving (peaks)	95-107
Tractor	77-98
Scraper / Grader	80-93
Paver	85-88
Note: Noise level ranges are estimated noise levels at a distance of 50 feet from the noise source.	

Sources: City of Los Angeles, 1998; Myra L. Frank & Associates, Inc., 2002.

Any off-campus noise-sensitive uses that are located within several hundred feet of a construction site, such as the single-family residences along Fulton Avenue, multi-family residences along Burbank Boulevard and Oxnard Street, and Grant High School immediately northeast of the campus, could be adversely affected by construction noise. However, because most construction would take place within the interior of campus and since noise level increases would be limited to daytime hours in compliance with the city's noise ordinance and would be temporary and intermittent, significant construction noise impacts on off-campus noise-sensitive residential uses would not occur. On-campus academic facilities, i.e., classrooms, in the immediate vicinity of construction sites, and Grant High School could, however, experience significant short-term increases in noise levels due to construction activities.

Operational Impacts

Implementation of the Master Plan and anticipated increases in student enrollment and employment would result in increased traffic on local streets. This increased traffic may increase community noise levels in the vicinity. Generally, noise levels increase approximately 3 dBA for each doubling of roadway traffic volume as long as vehicle speeds remain constant.[19] Under the Master Plan, PM peak hour traffic volumes on nearby streets would not increase by more than 3 percent as compared to future cumulative base volumes (i.e., future conditions without the project). Consequently, the resulting noise level increases would not be substantial and would not exceed the 3-dBA significance criterion. Thus, implementation of the Master Plan would

[19] *LA City CEQA Thresholds Guide*, City of Los Angeles, 1998.

result in a less than significant increase in traffic noise levels at noise-sensitive uses in the vicinity of the campus.

In general, in the future (i.e., through the year 2008), it is not anticipated that campus activities would differ substantially from activities that occur today. Therefore, noise from the campus would result in a less than significant increase in ambient and background noise levels at off-campus noise-sensitive receptors.

3-11.3 Mitigation Measures

To mitigate the significant, short-term construction noise impacts on campus academic facilities, the following measures are proposed.

N-1 When feasible, construction shall be scheduled, in consultation with Academic Affairs, so that louder activities (e.g., demolition, excavation/grading) occur during school vacations or holidays, or at other times when school is not in session.

N-2 Sound barriers, such as particle board fencing, shall be constructed along the perimeter of construction sites that are within 200 feet of academic classroom facilities in use.

N-3 Other noise control devices, such as equipment mufflers and enclosures, shall be used where feasible.

N-4 All sound-reducing devices and restrictions shall be maintained throughout the construction period.

3-11.4 Unavoidable Significant Adverse Impacts

With implementation of the mitigation measures identified above, the proposed project would not result in any unavoidable significant adverse noise impacts.

3-12 POPULATION AND HOUSING

The population and housing study area that has been delineated for the proposed project area encompasses those census tracts from the 2000 Census of Population and Housing (U.S. Department of Commerce, Bureau of the Census 2000) that include and surround the Valley College Campus. Figure 3-39 illustrates the location of the census tracts in the study area in relation to the proposed project.

Data from the 2000 Census have been aggregated at the census tract level in order to assess the general characteristics of the study area. Regional comparisons have been made to the county and city of Los Angeles 2000 Census data. In addition, projected population and housing forecasts in the city of Los Angeles generated by the Southern California Association of Governments (SCAG) have been reviewed.

3-12.1 Environmental Setting

a. Population

The proposed project is located within the existing boundaries of the Valley College campus, north of the Valley Glen area of the San Fernando Valley in the city of Los Angeles (city) and county of Los Angeles. The population of the city totaled 3,694,834 persons in the 2000 Census. Persons of Hispanic or Latino origin represented the largest segment of the city's population at 1,719,916 persons, or about 46.5 percent of the total. This is somewhat higher than the proportion of the second largest group in the city, white non-Hispanic persons, which totaled 1,093,447 persons, or 29.6 percent.

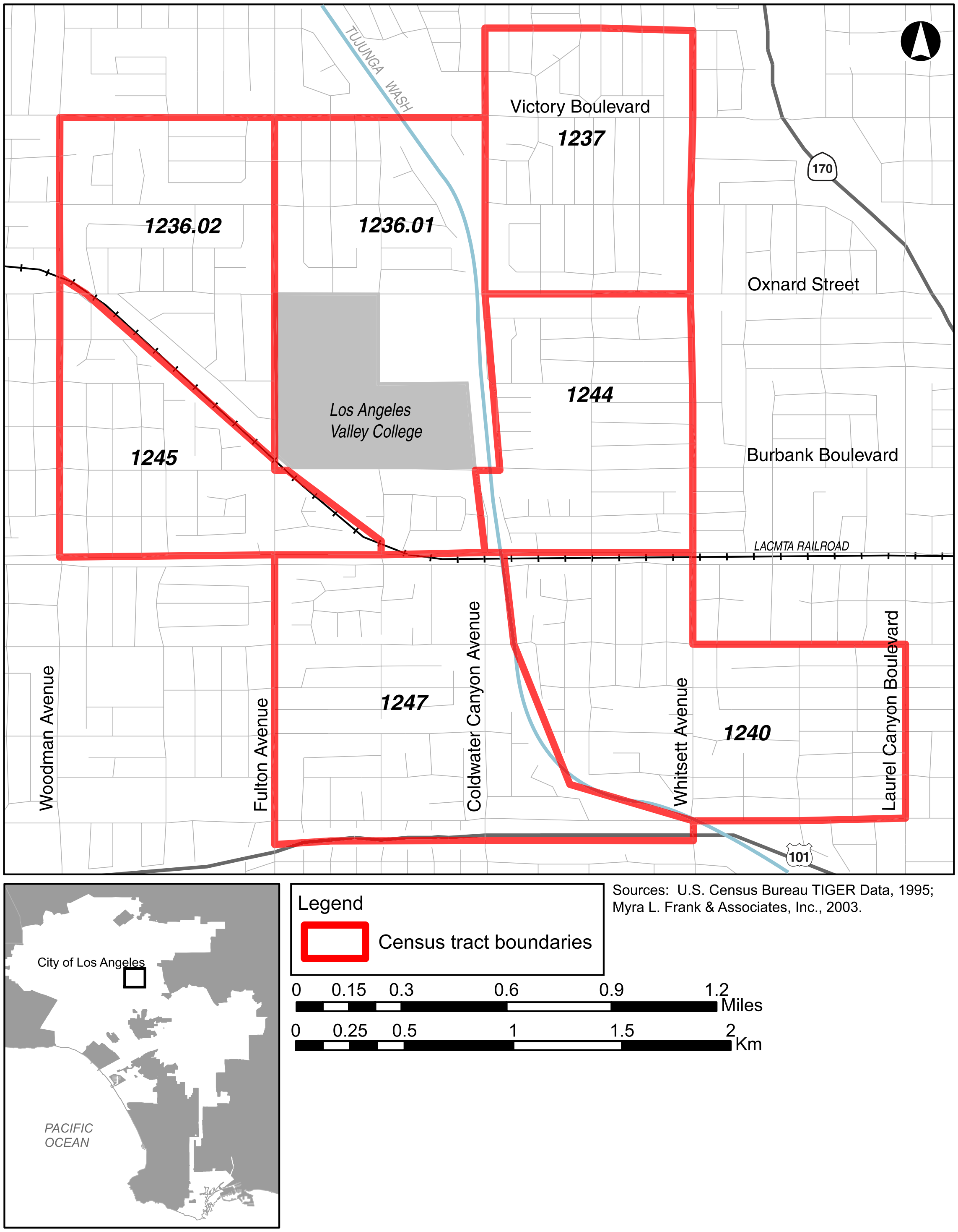
Table 3-24 summarizes the characteristics of the existing regional population in 2000.

The population of the project study area in the 2000 Census totaled approximately 28,645 persons and was predominantly white non-Hispanic. It represented approximately 62.2 percent of the total population in the study area, which is about 32 percent higher than found in the city as a whole. The next largest group was persons of Hispanic/Latino descent, at approximately 23 percent of the total population in the study area. This percentage is about 23 percent lower than the city as a whole. The African American population, at 4.3 percent within the study area, was found to be at a lower proportion than in the city overall, at 10.8 percent.

Table 3-24 summarizes the characteristics of the existing study area population in 2000 as compared to the city as a whole.

According to the SCAG 2001 Regional Transportation Plan, the population of the city of Los Angeles in 2010 is projected to be 4,164,597, an increase of about 12.7 percent over the current population. Due to changes in the geographic boundaries for some of the 2000 census tracts, SCAG projections are not yet available for the project study area. This information will be provided in a subsequent version of this document, in the event that it becomes available.

Figure 3-39: Study Area Census Tracts



Sources: U.S. Census Bureau TIGER Data, 1995; Myra L. Frank & Associates, Inc., 2003.

Table 3-24: Existing Regional and Local Population Characteristics – Race/Ethnicity (2000)

Area	Total Population	White	%	Black	%	Native American	%	Asian	%	Native Hawaiian/ Pacific Islander	%	Other Race	%	Two or More Races	%	Hispanic/ Latino	%
County of Los Angeles	9,519,338	2,946,145	30.9	891,194	9.4	26,141	0.27	1,123,964	11.8	24,376	0.26	18,859	0.2	245,172	2.6	4,243,487	44.6
City of Los Angeles	3,694,834	1,093,447	29.6	399,057	10.8	9,613	0.26	365,077	9.9	5,212	0.14	8,158	0.22	94,354	2.6	1,719,916	46.5
Study Area	*28,645*	*17,816*	*62.2*	*1,241*	*4.3*	*75*	*0.3*	*1,272*	*4.4*	*40*	*0.1*	*166*	*0.6*	*1,433*	*5.0*	*6,602*	*23.0*
Census Tract 1236.01	4,988	2,558	51.3	260	5.2	30	0.6	202	4.0	13	0.3	33	0.7	277	5.5	1,615	32.4
Census Tract 1236.02	3,461	1,659	47.9	171	4.9	12	0.3	169	4.9	8	0.2	22	0.6	195	5.6	1,225	35.4
Census Tract 1237	4,145	2,154	52.0	94	2.3	17	0.4	344	8.3	0	0	7	0.2	366	8.8	1,163	28.1
Census Tract 1240	4,376	3,398	77.7	165	3.8	14	0.3	98	2.2	0	0	26	0.6	167	3.8	508	11.6
Census Tract 1244	4,157	2,661	64.0	213	5.1	0	0	114	2.7	0	0	4	0.1	253	6.1	912	21.9
Census Tract 1245	2,882	1,821	62.9	129	4.5	2	0.1	132	4.6	8	0.3	20	0.7	78	2.7	692	24.0
Census Tract 1247	4,636	3,565	76.9	209	4.5	0	0	213	4.6	11	0.2	54	1.2	97	2.1	487	10.5

*Study Area consists of the seven Census Tracts within and adjacent to the proposed project area (See Figure 3-1).

Sources: U.S. Census Bureau, Census of Population and Housing, Summary File 3, 2000; Myra L. Frank & Associates, Inc., 2003.

b. Housing

According to the 2000 Census, there were 1,337,668 housing units in the city of Los Angeles in the year 2000. About 95.3 percent of the units were occupied. An average of 2.83 persons resided in each occupied unit. Of the total occupied units in the city, 61.4 percent were renter-occupied and the remaining 38.6 percent were owner-occupied. Table 3-25 and Table 3-26 summarize the characteristics of the existing regional housing in 2000.

Table 3-25: Existing Regional and Local Housing Characteristics – Occupancy (2000)

Area	Total Units	Occupied Units	%	Vacant Units	%	Persons Per Household
County of Los Angeles	3,270,909	3,133,774	95.8	137,135	4.2	2.98
City of Los Angeles	1,337,668	1,275,358	95.3	62,310	4.7	2.83
*Study Area**	*11,780*	*11,483*	*97.5*	*297*	*2.5*	*2.50*
Census Tract 1236.01	1,852	1,799	97.1	53	2.9	2.73
Census Tract 1236.02	1,312	1,289	98.2	23	1.8	2.69
Census Tract 1237	1,513	1,478	97.7	35	2.3	2.80
Census Tract 1240	2,041	1,978	96.9	63	3.1	2.18
Census Tract 1244	1,688	1,653	97.9	35	2.1	2.51
Census Tract 1245	1,188	1,160	97.6	28	2.4	2.48
Census Tract 1247	2,186	2,126	97.3	60	2.7	2.13
Note: *Study Area consists of the 7 Census Tracts within and adjacent to the project site (See Figure 3-1).						

Sources: U.S. Census Bureau, Census of Population and Housing, Summary File 3, 2000; Myra L. Frank & Associates, Inc., 2003.

Table 3-26: Existing Regional and Local Housing Characteristics – Tenure (2000)

Area	Occupied Units	Owner Occupied Units	%	Renter Occupied Units	%
County of Los Angeles	3,133,774	1,499,694	47.9	1,634,080	52.1
City of Los Angeles	1,275,358	491,836	38.6	783,522	61.4
*Study Area**	*11,483*	*5,492*	*47.8*	*5,991*	*52.2*
Census Tract 1236.01	1,799	739	41.1	1,060	58.9
Census Tract 1236.02	1,289	575	44.6	714	55.4
Census Tract 1237	1,478	784	53.0	694	47.0
Census Tract 1240	1.978	1,023	51.7	955	48.3
Census Tract 1244	1,653	743	44.9	910	55.1
Census Tract 1245	1,160	584	50.3	576	49.7
Census Tract 1247	2,126	1,044	49.1	1,082	50.9
Note: *Study Area consists of the 7 Census Tracts within and adjacent to the project site (See Figure 3-1).					

Sources: U.S. Census Bureau, Census of Population and Housing, Summary File 3, 2000; Myra L. Frank & Associates, Inc., 2003.

The 2000 Census documented a total of 11,780 housing units in the project study area. Approximately 97 percent of all the housing units in this area were occupied, leaving approximately 3 percent of the units vacant. The average number of persons per household within the study area (2.5 persons) was slightly lower than the city as a whole. Approximately 48 percent of the occupied units were owner-occupied, a higher proportion than in the city as a whole. Table 3-25 and Table 3-26, above, summarize the characteristics of the existing housing within the study area in 2000.

According to the SCAG 2001 Regional Transportation Plan, the number of households in the city of Los Angeles is projected to be 1,405,464 in 2010. This is about 5.1 percent greater than in 2000. As stated above, SCAG projections of local housing are not yet available for the project study area. In the event that it becomes available, this information will be provided in a subsequent version of this document.

c. Study Area Context

The Van Nuys-North Sherman Oaks Community Plan Area is located north of the Valley Glen area of the San Fernando Valley and is one of 35 District Planning Areas within the city of Los Angeles. The Van Nuys-North Sherman Oaks Community Plan contains development and growth policies that reflect a commitment to maintain the current quality of life and the stability of neighborhoods within its planning area, while providing new housing opportunities. One of the fundamental premises of the Community Plan is to monitor population growth and infrastructure improvements. If the population is seen to be growing faster than projected, the plan states that necessary steps will be taken to protect infrastructure resources.

3-12.2 Environmental Impacts

a. Significance Criteria

For the purposes of this Draft EIR, a significant impact to population and housing would potentially occur if the proposed project would:

- Substantially increase the population or employment so as to require new infrastructure and/or housing, the construction of which could cause significant environmental impacts; or
- Induce growth that exceeds levels anticipated under local land use plans and results in a substantial adverse physical change in the environment.

b. Impacts Discussion

Construction Impacts

Construction of the proposed Master Plan improvement projects are expected to take place over the next 6 years, through 2009. The number of construction workers employed and working on-site would vary over the course of the construction period. However, based on the $165 million in Proposition A monies, it is estimated that total construction employment would be approximately 2,760 full-time 1-year jobs over the course of 5 years.

Because construction workers commute to a job site that often changes many times throughout the course of a year, they are not likely to relocate their households as a consequence of construction work opportunities to any significant degree. In addition, many workers are highly specialized and move among job sites as dictated by the need for their skills. Also because of the highly specialized nature of most construction projects, workers are likely to be employed on the job site only as long as their skills are needed to complete a particular phase of the construction process.

The Los Angeles metropolitan area has a large pool of construction labor from which to draw. Therefore, it is reasonable to assume that most project-related construction workers would not relocate their households as a result of working on the proposed Master Plan improvement projects. Construction-phase employment, therefore, would not result in a significant increase to the local or regional population. Thus, no significant adverse environmental impacts are expected as a result of construction employment.

Operational Impacts

❑ Population and Housing Growth

Currently, there are 324 full-time-equivalent (FTE) employees at the College. Under the proposed Master Plan, the number of College employees would increase by an estimated 57 persons, for a total of 381 FTE employees in 2008.

The approximately 57 additional on-campus employees anticipated as a result of the proposed project would not substantially increase the demand for housing in the study area or in the city of Los Angeles. Therefore, the proposed project would not require the construction of new infrastructure or housing that would have a significant effect on the environment.

One of the primary objectives of the proposed project is to provide facilities to allow Valley College to support anticipated increased enrollment through the 2008-2009 academic year. During the 2001-2002 academic year, there were 14,154 FTE students enrolled at the College. The projected number of FTE students for the 2002-2003 academic year fell to 13,393 students. The projected enrollment for the 2008-2009 academic year is approximately 15,693 FTE students. This is an increase of 1,539 FTE students over the 2001-2002 academic year enrollment.

Because no on-campus housing is currently provided, all students commute to the College, primarily from the San Fernando Valley area, as well as other areas of the city of Los Angeles. Because no student housing is proposed as part of the Master Plan, it is anticipated that students in the 2008-2009 academic year would continue to commute to the College from their existing residences in the Valley area. Therefore, the proposed project would not have a significant effect upon housing demand within the study area, nor would it require the construction of new housing.

This proposed project is neither intended, nor expected, to induce any significant change in the location, distribution, or rate of either local or regional population and housing growth. Rather, it is designed to provide additional educational facilities to accommodate anticipated increases in enrollment over the next 5 years. Therefore, the proposed project would not induce substantial development that would not otherwise occur and would not cause a significant impact to the environment as a result of increases in employment, population, or housing demand. The proposed project also would not induce growth that exceeds levels anticipated under the Van Nuys-North Sherman Oaks Community Plan.

3-12.3 Mitigation Measures

Because the proposed Master Plan would not result in any adverse impacts to population and housing, no mitigation measures would be required.

3-12.4 Unavoidable Significant Adverse Impacts

The proposed project would not create any unavoidable significant adverse population and housing impacts.

3-13 PUBLIC SERVICES

3-13.1 Environmental Setting

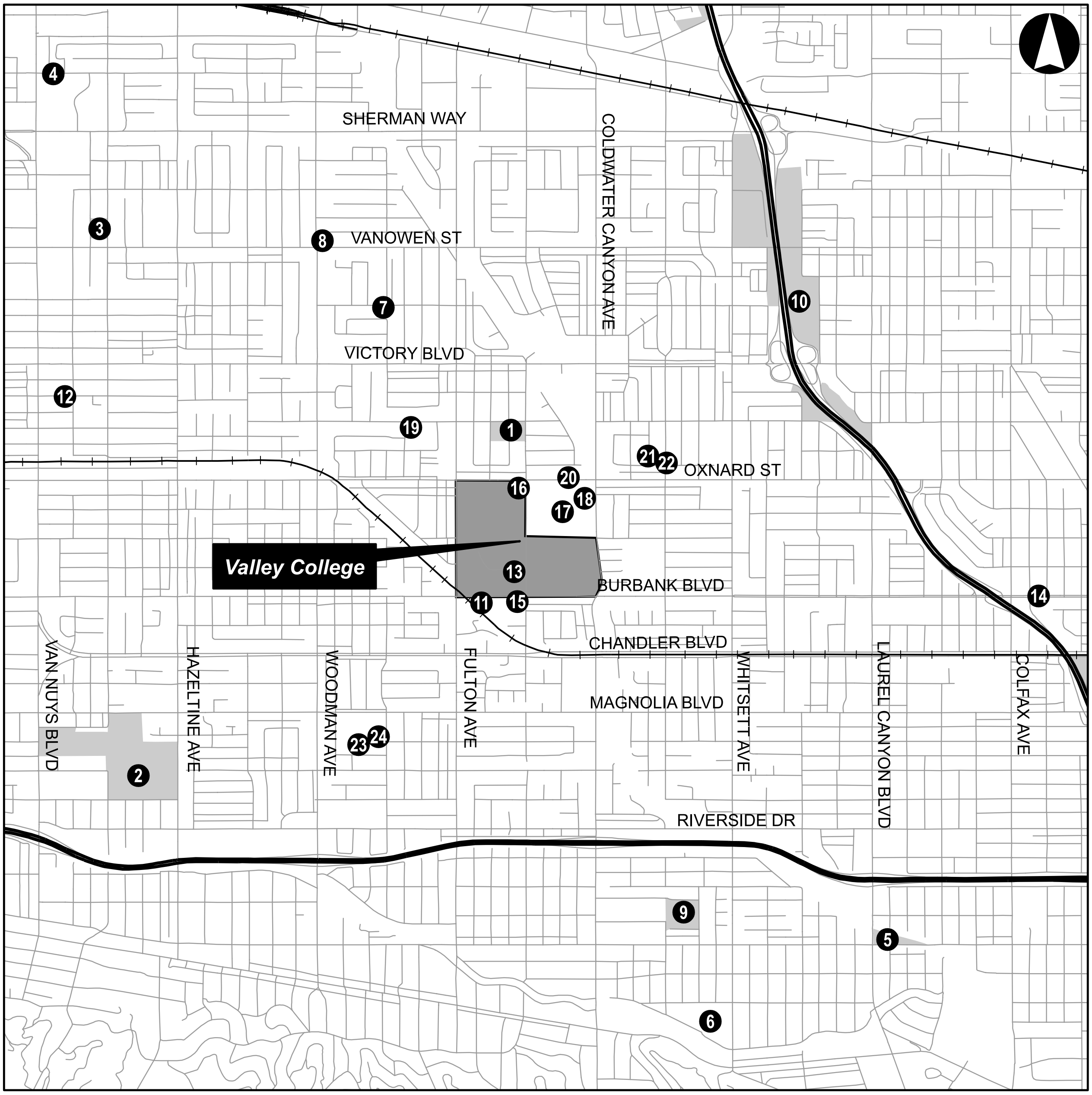
Table 3-27 lists public service facilities located within 2 miles of Valley College. Figure 3-40 shows the locations of these facilities.

Table 3-27: Public Service Facilities Located within 2 Miles of Valley College

ID No.	Facility Name	Address	Distance from College (miles)
Parks			
1	Erwin Park	Erwin St. and Ethel Ave., Van Nuys	0.5
2	Van Nuys / Sherman Oaks Park	14201 Huston St., Van Nuys	1.25
3	Van Nuys Park Recreation Center	14301 Vanowen, Van Nuys	1.5
4	Mid-Valley Senior Citizens Center	14450 Valerio St., Van Nuys	1.5
5	Moorpark Park	12601 Moorpark St.	1.75
6	Studio City Golf Course	4141 Whitsett Ave., Studio City	2
7	Kittridge Mini Park	13500 Kittridge St, Van Nuys	0.8
8	Hartland Mini Park	6800 Woodman Ave.	1.15
9	Valley Plaza Park and Recreation Center	12240 Archwood St, North Hollywood	1.1
10	Studio City Recreation Center	12621 Rye Street, Studio City	1.72
Fire Protection			
11	Fire Station 102	13200 Burbank Blvd., Van Nuys	Adjacent
12	Fire Station 39	14415 Sylvan St.	1.5
Police Services			
13	Valley College Sheriff's Station	Valley College, Bungalow #59	On-Campus
14	North Hollywood Community Police Station	11640 Burbank Blvd, North Hollywood	1.6
Educational Facilities			
15	New School for Child Development	13130-50 Burbank Blvd., Sherman Oaks	0.2
16	Valley College Child Development Center	In parking lot, northeast corner	On-Campus
17	Ulysses S. Grant Senior High School	13000 Oxnard St., Van Nuys	Adjacent
18	Ulysses S. Grant Senior High Communications Magnet	13000 Oxnard St., Van Nuys	0.25
19	Erwin Elementary	13400 Erwin St., Van Nuys	0.14
20	London Continuation High School	12924 Oxnard St., Van Nuys	0.5
21	Monlux Elementary School	6051 Bellaire Ave., North Hollywood	0.5
22	Monlux Math/Science Magnet	6051 Bellaire Ave., North Hollywood	0.5
23	Millikan Middle School	5041 Sunnyslope Ave., Sherman Oaks	0.5
24	Millikan Performing Arts Magnet	5041 Sunnyslope Ave., Sherman Oaks	0.5

Source: Myra L Frank & Associates, Inc. 2003, www.lausd.net 2003, www.lacity.org 2003, www.greatschools.net 2003.

Figure 3-40: Public Service Facilities



Source: 2003 GDT, Inc. and its licensors, Rel 10/2002; US Census TIGER Data, 1995; Myra L. Frank & Associates, Inc., 2003.

0 0.25 0.5 1 1.5 2 Miles

0 0.4 0.8 1.6 2.4 3.2 Kilometers

a. Police Protection

Security and law enforcement for Los Angeles Valley College is provided by the Los Angeles County Sheriff's Department (LASD), as it is for the other eight campuses of the Los Angeles Community College District. Approximately 229 Sheriff's personnel comprise the Community College Bureau, which polices the 9 college campuses. Each campus throughout the District utilizes a combination of Deputy Sheriffs and armed Sheriff's Security Officers to provide security and law enforcement services. Security Officers provide the core of security services, while Deputy Sheriffs provide police services and oversight. Deputies and Security Officers utilize bicycle, vehicle, and foot patrols on a daily basis.

The 229 officers comprising the Community College Bureau include 1 Captain, 2 Lieutenants, 11 Sergeants, 9 College Sheriffs, 19 Deputies, 97 Security Officers, and 90 cadets.

Valley College has one Sheriff's station staffed by 2 Sergeants, 1 Team Leader, 2 Deputies, 13 Security Officers, and 9 cadets on campus.

During 2002, the majority of campus offenses fell under the categories of moving violations, injury, burglary, and petty theft. The total number of arrests made for the year was 4.[20] There were 15 vehicle collisions in 2002.

Police protection for areas outside of the campus is provided by the Los Angeles Police Department's (LAPD) North Hollywood Community Police Station, which is 1.6 miles from the campus. The North Hollywood Community Police Station is under the jurisdiction of the Operations – Valley Bureau, which polices the communities of Devonshire, Foothill, North Hollywood, Van Nuys, and West Valley. The 25-square-mile service area contains a population of approximately 220,000 persons.

b. Fire Protection

Fire protection services for Los Angeles Valley College are provided by the City of Los Angeles Fire Department (LAFD) in accordance with the Los Angeles Fire Code, the Los Angeles Municipal Code, and the General Plan of Los Angeles. The City of Los Angeles Fire Code, Municipal Code, and General Plan serve to guide the city departments, other governmental agencies, private developers, and the public in reference to the construction, maintenance, and operation of fire protection facilities in the city. In addition, standards for the distribution, design, construction, and location of fire protection facilities are established. These standards specify fire-flow criteria, minimum distances to fire stations, hydrant specifications, and access provisions for fire-fighting vehicles and personnel.

Los Angeles Valley College is located within the service area of Division 3, Fire Battalion 14, which includes 7 fire stations. The nearest fire station, Number 102, is directly across from the campus on the south side of Burbank Boulevard. Fire Station Number 39 is located 1.5 miles from campus. The two fire stations are listed below in addition to being shown on Figure 3-40.

[20] LASD – Valley College Crime and Arrest Statistics, 2002.

- Fire Station No. 102
  13200 Burbank Blvd.
  Van Nuys, CA 91401
  Light Force Company
  Paramedic Rescue Ambulance
  Distance from campus – Across the street
- Fire Station No. 39
  14415 Sylvan St.
  Van Nuys, CA 91401
  Task Force, Rescue Ambulance, HazMat Squad
  Distance from campus – 2.1 miles

According to the LAFD, the adequacy of fire protection for a given area is based on required fire-flow levels, initial response distances from existing fire stations, and the LAFD's judgment for needs in the area. In general, the required fire-flow is closely related to land use. The quantity necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard. Fire-flow requirements vary from 2,000 gallons per minute (gpm) in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. A minimum residual water pressure of 20 pounds per square inch is to remain in the water system, with the required gallons per minute flowing. The required fire-flow for Los Angeles Valley College has been set at 4,000 gpm.

c. Schools

There are 10 educational facilities located either on the Los Angeles Valley College Campus, or within ½ mile from it. Eight of them are part of the Los Angeles Unified School District, one is a private pre-school, and one is a child care facility serving parents who attend school at Valley College.

Of the eight schools that are within the Los Angeles Unified School District, four are traditional schools: two elementary, one middle, and one high school. The other four schools have a specialty component, that is, there is one elementary magnet school, one magnet middle school, one magnet high school, and one continuation high school.

The Los Angeles Unified School District

The Los Angeles Unified School District (LAUSD) is one of the largest public school districts in the nation. Located in Los Angeles County, California, it serves the city of Los Angeles, all or portions of 16 other cities in the county, and numerous unincorporated areas of the county that surround the city of Los Angeles. The District comprises an area of over 700 square miles, with an estimated population of over 4.6 million. Approximately two-thirds of the District's land area, and 82 percent of the population residing in it, falls within the city of Los Angeles.

The LAUSD provides kindergarten through high school (K-12) education as well as adult and special education programs to approximately 905,020 students in 959 schools and centers. It employs about 78,085 personnel, about half (36,721) of whom are teachers. The LAUSD's fiscal year 2001-2002 operating budget was over $9.786 billion.

As of October 2002, LAUSD's total K-12 enrollment was an estimated 746,831 students. Approximately 50 percent of these students attended the elementary school (K-6) level, 43 percent attended the middle/junior and high school levels, and 8 percent attended magnet schools and centers or other facilities throughout the District.

As shown in Table 3-28, enrollment, both in total and by school type, generally has been growing steadily over the last 3 years. Growth in the overall K-12 school system has been over 1 percent in the last 3 years. The elementary school category is the only area in which enrollment has dropped and still not recovered to the 2000-2001 fiscal year totals.

Table 3-28: LAUSD K-12 Enrollment, FY 2000-2001 and FY 2001–2002

Grade Level	2000-2001	2001-2002	2002-2003
Senior High School	152,060	157,499	163,449
Junior High School	144,519	151,055	156,334
Elementary School	367,265	366,755	364,906
Magnet Schools, Centers and Other Facilities	58,883	61,416	62,142
Total (K-12) Enrollment	722,727	736,675	746,831

Source: LAUSD Fingertip Facts, 2001-2002 and 2002-2003.

Valley College is located in LAUSD District C, in the northwestern portion of the city of Los Angeles known as the San Fernando Valley, and includes the following communities: Reseda, Van Nuys, North Hollywood, and Woodland Hills. Table 3-29 lists the public schools operated by LAUSD that are within approximately 0.5 mile of Valley College.

Other Educational Facilities

In addition to the public schools identified above, there is a private school, the New School for Child Development, located with 0.5 miles of campus. Also, the Valley College campus has a Child Development Center (pre-school) that is available for students that are taking classes there.

The Valley College Child Development Center offers low-cost child care to parents with pre-school and school-age children. Priority is given to Valley College student-parents while they are on campus attending classes. Unit load and the fee schedule determines the amount of service student-parents are eligible to receive. Fees are calculated on a sliding scale based on family size and gross monthly income. Space in various programs are made available to the public after on-campus childcare needs have been met. The program is currently at capacity, and thus not open to the public at this time.

Hours of operation for the Child Development Center range from 7:45 a.m. to 10:20 p.m., from Monday through Thursday. The center is open from 7:45 a.m. to 5:00 p.m. on Friday. There are three main programs that are offered by the center. They are day pre-school for ages 3 and 4 and afternoon after kindergarten and evening school-age programs for ages 5 to 13. Waiting lists exist for all programs. The average wait is 6 months to 1 year before space becomes available.

Table 3-29: LAUSD Public Schools within Approximately 0.5 Mile of Valley College

School	Location	Distance (Miles)	2001-2002 Enrollment	Capacity	Percent Capacity
Grant Senior High School	13000 Oxnard St, Van Nuys	Adjacent	2,953	3,542	83
Grant Senior High Communications Magnet	13000 Oxnard St, Van Nuys	Adjacent	385	393	98
London Continuation High School	12924 Oxnard St, Van Nuys	Adjacent to Grant Senior High School	61*	75	81
Erwin Elementary	13400 Erwin St, Van Nuys	0.25	1,085	1,096	99
Monlux Elementary	6051 Bellaire Ave, North Hollywood	0.5	629	715	88
Monlux Math/Science Magnet	6051 Bellaire Ave, North Hollywood	0.5	187	192	97
Millikan Middle School	5041 Sunnyslope Ave, Sherman Oaks	0.5	1,782	2,104	85
Millikan Performing Arts Magnet	5041 Sunnyslope Ave, Sherman Oaks	0.5	388	406	96
Note: Most current data available is for 2000-2001 academic year.					

Source: www.lausd.k12.ca.us, March 2003.

The Los Angeles County Office of Education

The Los Angeles County Office of Education (COE) is a regional provider of services to students within the proposed project area and throughout the county of Los Angeles. The COE operates educational programs and supports local school districts with academic, business, administrative, and consulting services. Services include but are not limited to: regionalized special education transportation services, updating and improving business techniques, computer applications, teaching strategies, and administration. The COE also represents school districts on appropriate matters before state government and may also provide other education and/or support services as required or deemed necessary.

In addition to providing education services to the county's general population, the COE administers programs that are of benefit to those who are unable to attend conventional school facilities, such as the physically and mentally disabled, wards of the Juvenile Court, preschool children, and students in job training programs.

d. Recreational Facilities and Parks

The Public Recreation Plan (PRP), an element of the City of Los Angeles General Plan, recommends providing 10 acres of park land per 1,000 persons. The PRP also calls for park space to consist of neighborhood, community, regional, state and national parks providing both active and passive recreational activities for groups of all ages within service radii of 2 miles.

The City of Los Angeles Department of Recreation and Parks maintains 10 parks within 2 miles of Valley College, which are listed below.

- Erwin Park
  Erwin St. and Ethel Ave.
  Van Nuys, CA 91401
  0.5 mile

- Kittridge Mini Park
  13500 Kittridge St.
  Van Nuys, Ca 91401
  0.75 mile

- Hartland Mini Park
  6800 Woodman Ave
  Van Nuys, CA 91401
  1 mile

- Van Nuys/Sherman Oaks Park
  14201 Huston St.
  Van Nuys, CA 91423
  1.25 miles

- Van Nuys Park Recreation Center
  14301 Vanowen
  Van Nuys, CA 91405
  1.5 miles

- Mid-Valley Senior Citizens Center
  14450 Valerio Street
  Van Nuys, CA 91406
  1.5 miles

- Moorpark Park
  12061 Moorpark St.
  Los Angeles, CA 91607
  1.75 miles

- Studio City Golf Course Inc
  4141 Whitsett Ave
  Studio City, CA 91604-2474
  2.0 miles

- Valley Plaza Park and Recreation Center
  12240 Archwood St
  North Hollywood, CA 91606-1419
  1.1 miles

- Studio City Recreation Center
  12621 Rye St
  Studio City, CA 91604-1348
  1.7 miles

3-13.2 Environmental Impacts

a. Significance Criteria

Police Protection

For the purposes of the analyses in this EIR, and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed Master Plan would have a significant environmental impact if it:

- Creates a substantial need for additional police services requiring new or altered police facilities to maintain acceptable service ratios or response times, the construction of which would cause a substantial adverse physical change in the environment; or

- Substantially diminishes the level of police protection services, thereby posing a significant hazard to public safety and security.

Fire Protection

For the purposes of the analyses in this EIR, and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed Master Plan would have a significant environmental impact if it:

- Creates a substantial need for additional fire protection services requiring new or altered fire department facilities to maintain acceptable service ratios or response times, the construction of which would cause a substantial adverse physical change in the environment; or

- Substantially diminishes the level of fire protection services or results in inadequate emergency access, thereby posing a significant hazard to persons or property.

Schools

For the purposes of the analyses in this EIR, and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed Master Plan would have a significant environmental impact if:

- the students generated by the project exceed existing enrollment capacities, thereby creating a substantial need for new or altered facilities, the construction of which would cause a substantial adverse physical change in the environment; or

- the physical effects of the project substantially affect the health, safety, or education of students at local schools.

Recreational Facilities and Parks

For purposes of the analyses in this EIR, and in accordance with Appendix G of the *State CEQA Guidelines*, the proposed Facilities Master Plan would have a significant environmental impact if it:

- creates a substantial need for additional recreational facilities and/or parks to keep current facilities from becoming overburdened, the construction of which would cause a substantial adverse physical change in the environment; or

- increases the use of existing neighborhood or regional parks or other recreation facilities such that the substantial physical deterioration of the facility would occur or be accelerated.

b. Impacts Discussion

Police Protection

Los Angeles Valley College is one of nine colleges that comprise the Los Angeles Community College District (LACCD). As of March 2003, police protection services for the LACCD are provided by the Los Angeles County Sheriff's Department. As such, LASD has jurisdiction within the boundaries of Valley College.

The proposed Master Plan includes new construction projects, renovation projects, and demolition projects. During construction, renovation, or demolition, police protection services could be adversely affected due to diminished access as a result of possible lane or street closures or restriction of pedestrian access to those areas of the campus under construction. However, given that potential impacts would be temporary and the fact that the LASD has a facility located on campus, impacts would not be significant.

The LASD will be relocated to a new building to be constructed under the Master Plan. The new Sheriff's Center/Plant Facilities Building would be built at the south end of Parking Lot D. Construction is expected to begin in the fourth quarter of 2002 and continue until January 2005. The existing Sheriff's Department Building is scheduled to be demolished in 2006.

Given the fact that all construction, renovation, and demolition activities would occur within campus boundaries, impacts to adjacent streets and neighboring communities serviced by the LAPD would be limited to increased traffic from construction vehicles. This potential traffic increase due to construction vehicles would be temporary and intermittent. Consequently, impacts would not be significant.

In the fall 2001-2002 academic year there were 14,154 full-time-equivalent (FTE) enrolled students at Valley College and 246 FTE employed staff members. In the 2008-2009 academic year, the Master Plan would accommodate an approximate enrollment of 15,693 FTE students and 381 FTE employees. Future security needs will be evaluated by the LASD in coordination with the LAPD. Determination of future needs will be based on future student enrollment and employment numbers. For existing needs, 13 officers and 9 cadets have been determined to be appropriate to provide sufficient police protection services.

In 2002, four arrests were made on campus. Based on the 2001-2002 academic year FTE of 14,154 students, there were 0.0003 arrests per FTE student per year. Applying this generation factor of 0.0003 arrests per student to the 2008 FTE of 15,693 students, it is projected that there would be approximately 5 arrests on campus in the 2008-2009 academic year. This increase of 1 arrest per year would not create a significant demand on police protection services and therefore it is not expected that major new or expanded facilities would be required beyond what is contemplated in the Master Plan.

Given this minimal increase in demand for police protection services generated from increased student enrollment and full-time-equivalent employees through the 2008-2009 academic year and the proposed improvements and new Campus Sheriff's Department Station that are included in the Master Plan, it is unlikely additional new or altered police protection facilities would be required to accommodate implementation of the Master Plan. Additionally, the Master Plan could have a beneficial effect on campus safety by providing new and renovated buildings with better lighting and improved access.

Increased enrollment and employment at Valley College could generate additional traffic and increase congestion and initial response times in the area. Intersections that operate at a level of service (LOS) E or F (90 percent of capacity or greater) decrease the level of police protection that can be provided by the LAPD to surrounding areas of the campus. The traffic analyses indicate that as a result of traffic growth due to other proposed and planned development in the area, 21 of 40 study intersections would operate at LOS E or F in one or both peak hours in the year 2008. Implementation of the Master Plan would increase the number of study intersections that would operate at LOS E or F by only one intersection. Therefore, impacts to emergency vehicle response time due to project implementation would be less than significant.

Fire Protection

Adequacy of fire protection for a given area is based on required fire-flow levels, initial response distances from existing fire stations, and the LAFD's judgment for needs in the area.

However, adverse impacts to fire protection services could occur if response times are significantly increased. The response times are dependent on both the distance of the nearest fire station to a given location and the level of traffic congestion on local roads.

During construction of Master Plan projects, fire protection services could be adversely affected if emergency vehicle access is impeded due to street or lane closures within the campus boundaries. There is also the possibility of temporary disruption of water service during construction activities. However, given that the potential impacts would be temporary, construction would comply with local fire code requirements, and the closest fire station is located directly across the street from campus, impacts would not be significant.

Implementation of the Master Plan would accommodate an enrollment in the 2008-2009 academic year of 15,693 FTE students and 381 FTE employees. Increased enrollment and employment at Valley College could generate additional traffic and increase congestion and initial response times in the area. Intersections that operate at a level of service (LOS) E or F (90 percent of capacity or greater) decrease the level of fire protection services and response times that can be provided by the LAFD to the campus and surrounding areas. The traffic analyses indicate that as a result of traffic growth due to other proposed and planned development in the area, 21 of 40 study intersections would operate at LOS E or F in one or both peak hours in the year 2008. Implementation of the Master Plan would increase the number of study intersections that would operate at LOS E or F by only one intersection. Therefore, impacts to emergency vehicle response time due to project implementation would be less than significant.

Implementation of the Master Plan could increase the number of fire emergencies and place additional demands on existing fire protection services since the Master Plan proposes an increase of approximately 289,500 total gross square feet of new building space. However, the increase in fire emergencies and demand for fire protection services is not expected to be substantial for several reasons. Implementation of the Master Plan would provide new or renovated buildings that would be designed and constructed in compliance with the most current building and fire, life, and safety standards specified by state and city codes. Access to and from the campus would not be substantially altered.

Consequently, it is not anticipated that the addition of approximately 289,500 total gross square feet of building floor space would create a substantial need for additional fire protection services requiring new or altered fire department facilities, the construction of which would have a significant impact on the environment.

Schools

The public school enrollment due to a proposed development is a function of the number of households resulting from a project's proposed residential development or the number of households associated with a project's direct, net new employees.

Full buildout of the Master Plan through 2008-2009 would increase employment at Valley College by approximately 57 FTE employees. LAUSD estimates that each new job would generate a demand for 0.489 residential units within the District.[21] Accordingly, 57 new jobs could result in 28 new residential units. Based on LAUSD student generation factors, implementation of the Master Plan could indirectly generate 6 to 7 elementary students, 3 middle school students, and 3 to 4 high school students[22] by 2008. Since new employees could live anywhere within a large area that is within commuting distance to the site and the above-stated

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[21] *Los Angeles Unified School District, School Facilities Fee Plan, Documentation for Imposition of School Impact Fees,* February 1994.

[22] Los Angeles Unified School District Generation Factors, November 1994. The following student generation factors were used in calculating the number of potential additional students generated by new households: 0.22 (low), 0.25 (high) elementary; 0.10 middle school; and 0.10 (low), 0.14 (high) high school.

increase would occur over a period of approximately 6 years (2002-2008), no one school is likely to experience a substantial increase in enrollment due to implementation of the Master Plan.

Construction activities would not create a significant impact to most schools located off-campus because of their distance from Valley College. However, on-campus academic facilities, such as the Child Development Center and the adjacent high school, could be adversely affected by noise and air pollution generated by construction activities. As discussed in Section 3-3, Air Quality, construction pollutant emissions could have a significant but mitigable impact on children enrolled at the Child Development Center and Grant High School. Noise impacts on students attending classes at Valley College and Grant High School would also be a significant but mitigable temporary impact (see Section 3-12, Noise, of this EIR). Construction truck traffic could pose a safety hazard to Grant High School students walking to and from school. This would be an adverse but less than significant impact, since most truck traffic would occur outside of the hours students travel to and from school and alternative truck haul routes that avoid streets adjacent to Grant High School would be identified.

Recreational Facilities and Parks

Implementation of the Master Plan would increase enrollment by approximately 2,300 FTE students and employment by 57 FTE staff members by the 2008-2009 academic year semester. Since students and employees would likely use on-campus recreational facilities rather than off-campus facilities, it is not expected that recreational facilities and parks located in the vicinity of Valley College would be overburdened or experience an increase in use that would cause acceleration in the deterioration of these parks.

Additionally, implementation of the Master Plan includes projects that would renovate and modernize existing recreational and athletic facilities on the campus, providing students and employees, as well as other members of the community, with improved recreational opportunities.

3-13.3 Mitigation Measures

a. Police Protection

Although no significant impacts to police protection services are anticipated, the following measure shall be implemented to minimize potential construction impacts.

PS-1 Prior to initiation of any construction activities that may interfere with emergency service and access, the construction contractor shall consult and coordinate with the LASD and LAPD to ensure disruption is minimized and to identify alternative routes for emergency vehicles.

b. Fire Protection

The following measures shall be implemented to ensure that potential impacts would remain below a level of insignificance:

FPS-1 The College shall consult with the City Engineer and the City of Los Angeles Fire Department regarding appropriate standards (e.g., lane widths, grades, cut corners, etc.) for private streets and entry gates to ensure adequate access for Fire Department vehicles and equipment.

FPS-2 Sprinkler systems shall be required throughout any structure to be built, in accordance with state codes and standards established by the State Architect and State Fire Marshal.

FPS-3 The proposed project shall comply with all applicable codes and regulations administered by the State Architect and State Fire Marshall.

FPS-4 Prior to initiation of any construction activities that may interfere with emergency service and access, the construction contractor shall consult and coordinate with the City of Los Angeles Fire Department to ensure disruption is minimized and to identify alternative routes for emergency vehicles.

c. Schools

Please see Section 3-3, Air Quality, and Section 3-12, Noise, for measures to mitigate construction air quality and noise impacts on on-campus educational facilities.

SPS–1 Los Angeles Valley College and the contractor shall coordinate with Grant High School prior to construction to ensure that there are minimal disruptions to the school during the construction process.

SPS-2 LAUSD Transportation branch shall be contacted regarding the potential impact, if any, upon existing pedestrian and school bus routes.

SPS-3 Contractors shall ensure that safe and convenient pedestrian routes to schools are maintained during construction.

d. Recreational Facilities and Parks

No significant impacts would occur. Consequently, no mitigation measures are necessary.

3-13.4 Unavoidable Significant Adverse Impacts

a. Police Protection

Implementation of the Master Plan would result in no significant adverse impacts to police protection services. Implementation of the mitigation measures above would ensure that impacts remain below a level of significance.

b. Fire Protection

Implementation of the Master Plan would result in no significant adverse impacts to fire protection services. Implementation of the mitigation measures above would ensure that impacts remain below a level of significance.

c. Schools

Implementation of the Master Plan would result in no significant adverse impacts to school services. Implementation of the mitigation measures above and the mitigation measures identified in Section 3-3, Air Quality, and 3-12, Noise, would ensure that impacts remain below a level of significance.

d. Recreational Facilities and Parks

Implementation of the Master Plan would result in no significant adverse impacts to recreational facilities and parks.

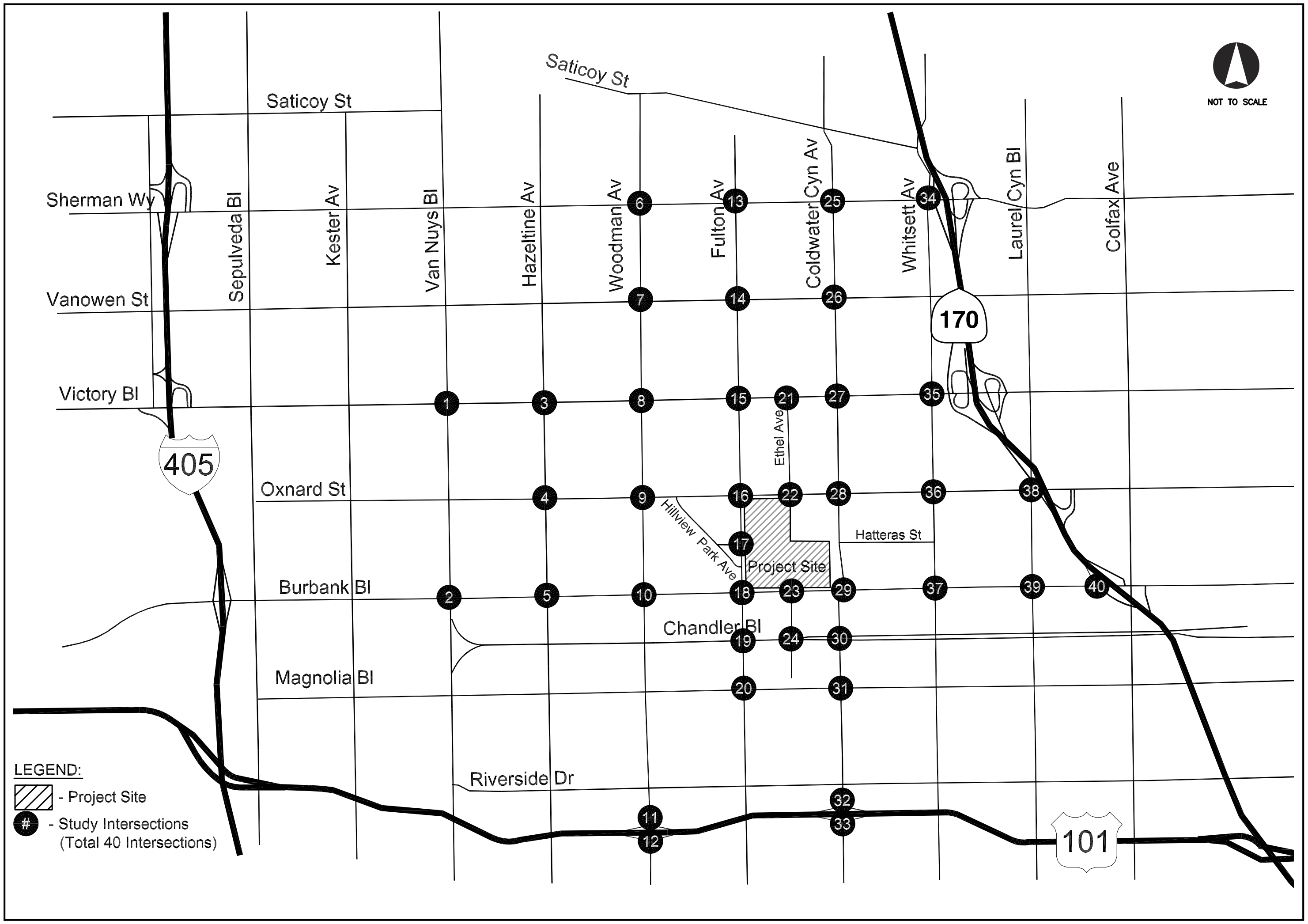
3-14 TRANSPORTATION, TRAFFIC, AND PARKING

This section documents the results of a study conducted by Kaku Associates, Inc. evaluating potential traffic and parking impacts of the proposed Master Plan. The complete traffic study is contained in Appendix E of this EIR.

The potential for project impacts are evaluated in the traffic study for the weekday AM and PM peak hours of traffic at 40 intersections in the vicinity of the Valley College campus. The analysis locations are illustrated on Figure 3-41 and are as follows:

1. Van Nuys Boulevard & Victory Boulevard
2. Van Nuys Boulevard & Burbank Boulevard
3. Hazeltine Avenue & Victory Boulevard
4. Hazeltine Avenue & Oxnard Street
5. Hazeltine Avenue & Burbank Boulevard
6. Woodman Avenue & Sherman Way
7. Woodman Avenue & Vanowen Street
8. Woodman Avenue & Victory Boulevard
9. Woodman Avenue & Oxnard Street
10. Woodman Avenue & Burbank Boulevard
11. Woodman Avenue & US 101 westbound ramps
12. Woodman Avenue & US 101 eastbound ramps
13. Fulton Avenue & Sherman Way
14. Fulton Avenue & Vanowen Street
15. Fulton Avenue & Victory Boulevard
16. Fulton Avenue & Oxnard Street
17. Fulton Avenue & Hatteras Street
18. Fulton Avenue & Burbank Boulevard
19. Fulton Avenue & Chandler Boulevard

Figure 3-41: Project Location and Study Area for the Traffic Analysis



Source: Kaku Associates, Inc., 2003.

20. Fulton Avenue & Magnolia Boulevard
21. Ethel Avenue & Victory Boulevard
22. Ethel Avenue & Oxnard Street
23. Ethel Avenue & Burbank Boulevard
24. Ethel Avenue & Chandler Boulevard
25. Coldwater Canyon Avenue & Sherman Way
26. Coldwater Canyon Avenue & Vanowen Street
27. Coldwater Canyon Avenue & Victory Boulevard
28. Coldwater Canyon Avenue & Oxnard Street
29. Coldwater Canyon Avenue & Burbank Boulevard
30. Coldwater Canyon Avenue & Chandler Boulevard
31. Coldwater Canyon Avenue & Magnolia Boulevard
32. Coldwater Canyon Avenue & US 101 westbound ramps
33. Coldwater Canyon Avenue & US 101 eastbound ramps
34. Whitsett Avenue & Sherman Way
35. Whitsett Avenue & Victory Boulevard
36. Whitsett Avenue & Oxnard Street
37. Whitsett Avenue & Burbank Boulevard
38. Laurel Canyon Boulevard & Oxnard Street
39. Laurel Canyon Boulevard & Burbank Boulevard
40. 170 southbound ramp & Burbank Boulevard

The traffic study also evaluates the potential for neighborhood intrusion impacts on the following three neighborhood street segments:

1. Ethel Avenue, north of Oxnard Street
2. Ethel Avenue, south of Burbank Boulevard
3. Hillview Park Avenue, between Hatteras Street and Oxnard Street

The traffic study includes an analysis of potential project impacts on the regional highway and transit systems in accordance with requirements of the Los Angeles County Congestion Management Program (CMP).

Finally, the traffic study evaluates the adequacy of the proposed future on-campus parking supply to accommodate projected campus parking demands.

3-14.1 Environmental Setting

A comprehensive data collection effort was undertaken to develop a detailed description of existing transportation and parking conditions within and adjacent to the Valley College campus. The assessment of existing conditions relevant to this study included street system, traffic volumes and operating conditions, public transit service, campus access system, and existing parking conditions on the Valley College campus.

a. Existing Street System

The street system within the study area is illustrated on Figure 3-41. The Valley College campus is bounded by Oxnard Street and Hatteras Street on the north, Coldwater Canyon Extension and Ethel Avenue on the east, Burbank Boulevard on the south, and Fulton Avenue on the west. The street system around the campus is a north-south/east-west grid system.

Primary regional access to the area is provided by the following freeways:

- Ventura Freeway (U.S. 101) - The Ventura Freeway runs east-west approximately 1 mile south of the campus. Woodman Avenue to the west of the campus and Coldwater Canyon Avenue to the east of the campus are north-south arterial facilities providing access to the Ventura Freeway.

- San Diego Freeway (I-405) - The San Diego Freeway runs north-south approximately 3.5 miles west of the campus. Sherman Way and Victory Boulevard to the north of the campus and Burbank Boulevard along the south side of the campus are east-west arterial facilities providing access to the San Diego Freeway.

- Hollywood Freeway (State Route 170) - The Hollywood Freeway runs north-south approximately 2 miles east of the campus. Sherman Way, Victory Boulevard, and Oxnard Street to the north of the campus, and Burbank Boulevard along the south side of the campus, are east-west arterial facilities providing access to the Hollywood Freeway.

Arterial facilities serving the study area include Van Nuys Boulevard, Hazeltine Avenue, Woodman Avenue, Fulton Avenue, Coldwater Canyon Avenue, Whitsett Avenue, and Laurel Canyon Avenue running north-south and Sherman Way, Vanowen Street, Victory Boulevard, Oxnard Street, Burbank Boulevard, Magnolia Boulevard, and Riverside Drive running east-west.

Table 3-30 provides further descriptions of key streets within the study area. Diagrams of the existing lane configurations at the study intersections are provided in Appendix A of the traffic study (see Appendix E of this EIR).

Table 3-30: Existing Surface Street Characteristics								
Segment	**From**	**To**	**Lane**		**Median Type**	**Parking Restrictions**		**Speed Limit**
			NB/EB	**SB/WB**		**NB/EB**	**SB/WB**	
East/West Streets								
Magnolia Bl	Van Nuys Bl	Tilden Av	2	2	DY	2hr 8A-6P	2hr 8A-6P	35
	Tilden Av	Hazeltine Av	2	2	DY	2hr 8A-6P	PA	35
	Hazeltine Av	Matilija Av	1	1	DY	Temp NPAT	Temp T-A NSAT	Temp 25
	Matilija Av	Woodman Av	2	2	DY	PA	Temp T-A NSAT	35
	Woodman Av	Allott Av	2	2	DY	PA	NSAT	35
	Allott Av	Sunnyslope Av	2	2	DY	NS 7A-5P	PA	35
	Sunnyslope Av	Greenbush Av	2	2	DY	NSAT	PA	35
	Greenbush Av	Fulton Av	2	2	DY	PA	NSAT	35
	Fulton Av	Coldwater Canyon Av	2	2	2LT	PA	PA	35
	Coldwater Canyon Av	Goodland Av	2	2	2LT	NSAT	NSAT	35
	Goodland Av	Whitsett Av	2	2	DY	NSAT	PA	35
	Whitsett Av	Wilkinson Av	1	1	2LT	1hr 8A-6P	1hr 8A-6P	35
	Wilkinson Av	Bellingham Av	1	1	2LT	PA	PA	35
	Bellingham Av	Laurel Canyon Bl	1	1	2LT	2hr 8A-4P	2hr 9A-6P/ NS 7A-9A	35
	Laurel Canyon Bl	Agnes Av	1	1	2LT	NP 8A-4P	2hr 9A-6P	35
	Agnes Av	Ben Av	1	1	2LT	NS 4P-6P	PA	35
	Ben Av	Radford Av	1	1	2LT	PA	PA	35
	Radford Av	Colfax Av	1	1	2LT	2hr 8A-6P	2hr 8A-6P	35
Chandler Bl	Hazeltine Av	Woodman Av	2	2	RM	PA	PA	35
	Woodman Av	Fulton Av	2	2	RM	PA	PA	35
	Fulton Av	Ethel Av	2	2	RM	PA	PA	35
	Ethel Av	Coldwater Canyon Av	2	2	RM	PA	PA	35
	Coldwater Canyon Av	Alcove Av	2	2	RM	PA	PA	35
	Alcove Av	Bellaire Av	2	2	RM	NSAT	PA	35
	Bellaire Av	Whitsett Av	2	2	RM	PA	PA	35
	Whitsett Av	Laurel Canyon Bl	2	2	RM	PA	PA	35
Burbank Bl	Van Nuys Bl	Stansbury Av	2	2	2LT	PA	PA	35
	Stansbury Av	Hazeltine Av	2	2	2LT	PA	2hr 8A-6P	35
	Hazeltine Av	Murietta Av	2	2	2LT	2hr 8A-6P	PA	35
	Murietta Av	Mammoth Av	2	2	2LT	PA	PA	35
	Mammoth Av	Woodman Av	2	2	2LT	PA	2hr 8A-6P	35
	Woodman Av	Buffalo Av	2	2	2LT	1hr 8A-6P	1hr 8A-6P	35
	Buffalo Av	Varna St	2	2	2LT	PA	PA	35
	Varna St	Fulton Av	2	2	2LT	1hr 8A-6P	1hr 8A-6P	35
	Fulton Av	Coldwater Canyon Av	2	2	2LT	PA	PA	35
	Coldwater Canyon Av	Whitsett Av	2	2	2LT	PA	PA	35
	Whitsett Av	Vantage Av	2	2	2LT	PA	PA	35
	Vantage Av	Laurel Canyon Bl	2	2	2LT	1hr 8A-6P	PA	35
	Laurel Canyon Bl	Frwy 170 South	2	2	2LT	PA	PA	35
	Frwy 170 South	Colfax Av	2	2	2LT	NPAT	NPAT	35

Table 3-30: Existing Surface Street Characteristics

Segment	From	To	Lane		Median Type	Parking Restrictions		Speed Limit
			NB/EB	SB/WB		NB/EB	SB/WB	
Hatteras St	Whitsett Av	Coldwater Canyon Av	1	1	UD	PA	PA	25
	Fulton Av	Hillview Park Av	1	1	UD	NP 8A-10P	NP 8A-10P	25
Hillview Park Av	Fulton Av	Hatteras St	1	1	UD	NP 8A-10P	NP 8A-10P	25
	Hatteras St	Tiara St	1	1	UD	NP 8A-10P	NP 8A-10P	25
	Tiara St	Oxnard St	1	1	UD	PA	PA	25
Oxnard St	Van Nuys Bl	Tyrone Av	2	2	2LT	PA	T-A NSAT	35
	Tyrone Av	Hazeltine Av	2	2	2LT	PA	PA	35
	Hazeltine Av	Woodman Av	2	2	2LT	PA	PA	35
	Woodman Av	Nagle Av	2	2	2LT	PA	T-A NSAT	35
	Nagle Av	Fulton Av	2	2	2LT	NSAT	NSAT	35
	Fulton Av	Ethel Av	2	2	2LT	NSAT	PA	35
	Ethel Av	Coldwater Canyon Av	2	2	2LT	NP 7A-5P	PA	35
	Coldwater Canyon Av	Goodland Av	2	2	2LT	PA	T-A NSAT	35
	Goodland Av	Beeman Av	2	2	2LT	PA	PA	35
	Beeman Av	Whitsett Av	2	2	2LT	PA	NP 8A-6P	35
	Whitsett Av	Wilkinson Av	2	2	2LT	1hr 8A-6P	1hr 8A-6P	35
	Wilkinson Av	Rhodes Av	2	2	2LT	1hr 8A-6P	PA	35
	Rhodes Av	Vantage Av	2	2	2LT	PA	PA	35
	Vantage Av	Laurel Canyon Bl	2	2	2LT	NPAT	NPAT	35
	Laurel Canyon Bl	Radford Av	2	2	2LT	NPAT	T-A NSAT	35
	Radford Av	Colfax Av	2	2	2LT	PA	PA	35
Victory Bl	Van Nuys Bl	Hazeltine Av	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	T-A NS 4-7P / 2hr 8A-4P	35
	Hazeltine Av	Woodman Av	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	T-A NS 4-7P / 2hr 8A-4P	35
	Woodman Av	Fulton Av	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	T-A NS 4-7P / 2hr 8A-4P	35
	Fulton Av	Ethel Av	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	T-A NS 4-7P / 2hr 8A-4P	35
	Ethel Av	Coldwater Canyon Av	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	T-A NSAT	35
	Coldwater Canyon Av	Goodland Av	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	2hr 9A-4P / NS 7-9A, 4-7P	35
	Goodland Av	Whitsett Av	3	3	2LT	NSAT	NSAT	35
	Whitsett Av	Frwy 170 South	3	3	2LT	2hr 9A-4P / NS 7-9A, 4-7P	2hr 9A-4P / NS 7-9A, 4-7P	35
	Frwy 170 South	Bellingham Av	3	3	2LT	NSAT	T-A NSAT	35
	Bellingham Av	Laurel Canyon Bl	3	3	2LT	NS 7-9A, 4-6P	2hr 9A-4P / NS 7-9A, 4-7P	35

Table 3-30: Existing Surface Street Characteristics

Segment	From	To	Lane		Median Type	Parking Restrictions		Speed Limit
			NB/EB	SB/WB		NB/EB	SB/WB	
North/South Streets								
Woodman Av	Frwy 101 East	Frwy 101 West	2	2	2LT	NPAT	NSAT	35
	Frwy 101 West	Riverside Dr	2	2	2LT	1hr 8A-4P / T-A NS 4-6P	NSAT	35
	Riverside Dr	Magnolia Bl	2	2	2LT	PA	PA	35
	Magnolia Bl	Chandler Bl	2	2	2LT	PA	PA	35
	Chandler Bl	Burbank Bl	2	2	2LT	PA	PA	35
	Burbank Bl	Oxnard St	2	2	2LT	PA	PA	35
	Oxnard St	Victory Bl	2	2	2LT	PA	PA	35
	Victory Bl	Vanowen St	2	2	2LT	PA	PA	35
	Vanowen St	Sherman Way	2	2	2LT	PA	PA	35
Fulton Av	Riverside Dr	Addison St	1	1	2LT	PA	PA	35
	Addison St	Otsego St	1	1	2LT	NSAT	PA	35
	Otsego St	Magnolia Bl	1	1	2LT	PA	PA	35
	Magnolia Bl	Chandler Bl	2	2	2LT	PA	PA	35
	Chandler Bl	Burbank Bl	2	2	2LT	PA	PA	35
	Burbank Bl	Oxnard St	2	2	2LT	PA	NP 8A-10P	35
	Oxnard St	Victory Bl	2	1	2LT	PA	PA	35
	Victory Bl	Vanowen St	1	1	2LT	PA	PA	35
	Vanowen St	Sherman Way	2	1	2LT	PA	PA	35
Ethel Av	End near Magnolia	Chandler Bl	1	1	UD	PA	PA	25
	Chandler Bl	Albers St	1	1	SDY	PA	PA	25
	Albers St	Killion St	1	1	SDY	1hr 8A-6P	1hr 8A-6P	25
	Killion St	Burbank Bl	1	1	SDY	NPAT	NPAT	25
	Burbank Bl	Oxnard St	-	-	-	-	-	-
	Oxnard St	Aetna St	1	1	UD	NSAT	NSAT	30
	Aetna St	Victory Bl	1	1	UD	PA	PA	30
Coldwater Canyon Av	Frwy 101 East	Frwy 101 West	2	2	DY	NSAT	NSAT	35
	Frwy 101 West	Riverside Dr	2	2	DY	PA	NSAT	35
	Riverside Dr	Magnolia Bl	2	2	DY	PA	PA	35
	Magnolia Bl	Chandler Bl	2	2	2LT	PA	PA	35
	Chandler Bl	Burbank Bl	2	2	2LT	T-A NSAT	PA	35
	Burbank Bl	Tiara St	2	2	DY	PA	PA	35
	Tiara St	Oxnard St	2	2	2LT	NPAT	NPAT	35
	Oxnard St	Victory Bl	2	2	DY	PA	PA	35
	Victory Bl	Hamlin St	2	2	DY	1hr 8A-6P	1hr 8A-6P	35
	Hamlin St	Vanowen St	2	2	DY	PA	PA	35
	Vanowen St	Sherman Way	2	2	2LT	PA	PA	35
Whitsett Av	Riverside Dr	Otsego St	2	2	DY	PA	PA	35
	Otsego St	Magnolia Bl	2	2	DY	NPAT	PA	35
	Magnolia Bl	Chandler Bl	2	2	DY	PA	NSAT	35
	Chandler Bl	Burbank Bl	2	2	2LT	NSAT	PA	35
	Burbank Bl	Oxnard St	2	2	2LT	PA	PA	35
	Oxnard St	Erwin St	2	2	2LT	PA	PA	35
	Erwin St	Victory Bl	2	2	DY	PA	PA	35
	Victory Bl	Kittridge St	2	2	DY	PA	NSAT	35
	Kittridge St	Vanowen St	2	2	2LT	PA	PA	35
	Vanowen St	Sherman Way	2	2	DY	PA	PA	35

Notes:

Median Type:
- DY = Double Yellow Centerline
- SDY = Single Dashed Yellow Centerline
- 2LT = Two-Way Left-Turn Centerline
- RM = Raised Median
- UD = Undivided Lane

Parking:
- PA = Parking Allowed
- NSAT = No Stopping Anytime
- GZ = Green zone – Passenger loading/unloading
- RZ = Red zone - No parking allowed

Lanes: # = Number of lanes

Source: Kaku Associates, Inc., 2003.

b. Existing Traffic Volumes And Operating Conditions

The following sections present the existing peak hour traffic volumes at the study intersections, a description of the methodology used to analyze intersection operating conditions, and the resulting level of service at each location under existing conditions.

Existing Peak Hour Traffic Volumes

Weekday AM and PM peak period intersection turning movement counts were conducted at the 40 study intersections in October of 2002 and February of 2003. The existing weekday peak hour turning movements at the analyzed intersections are summarized in Tables B-1a and B-1b of Appendix B of the traffic study (see Appendix E of this EIR).

Intersection Level of Service Standards and Methodology

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. The city of Los Angeles typically uses LOS D as a standard, meaning that LOS D or better is considered to represent satisfactory conditions, while LOS E or F is generally considered to be substandard. Level of service definitions for signalized intersections are provided in Table 3-31.

Table 3-31: Level of Service Definitions for Signalized Intersections

Level of Service	Average Control Delay per Vehicle (seconds/vehicle)	Definition
A	<10.0	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>10.0 and <20.0	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>20.0 and <35.0	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>35.0 and <55.0	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>55.0 and <80.0	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>80.0	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Kaku Associates, Inc., 2003.

All of the study intersections are currently controlled by traffic signals. The City of Los Angeles Department of Transportation (LADOT) requires that the “Critical Movement Analysis” (CMA) method (Transportation Research Board, 1980) of intersection capacity analysis be used to determine the intersection volume to capacity (V/C) ratio and corresponding level of service for the given turning movements and intersection characteristics at signalized intersections. The CALCADB software package developed by LADOT was used to implement the CMA methodology in this study.

All of the study intersections except those along Sherman Way and Vanowen Street are currently controlled by the city of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) system. In accordance with LADOT procedures, a capacity increase of 7 percent (0.07 V/C adjustment) was applied to reflect the benefits of ATSAC control at these intersections.[23]

c. Existing Peak Hour Intersection Levels of Service

The existing weekday AM and PM peak hour turning movements summarized in Appendix B of the traffic study (see Appendix E of this EIR) were used in conjunction with the level of service methodology described above to determine existing operating conditions at each of the study intersections. Level of service calculation worksheets are included in Appendix C of the traffic study (see Appendix E of this EIR).

Table 3-32 summarizes the existing AM and PM peak hour V/C ratios and corresponding levels of service at each of the study intersections. As can be seen, 18 of the 40 intersections currently operate at LOS E or F during one or both of the AM and PM peak hours. These intersections are:

- Van Nuys Boulevard & Burbank Boulevard
- Hazeltine Avenue & Victory Boulevard
- Hazeltine Avenue & Oxnard Street
- Hazeltine Avenue & Burbank Boulevard
- Woodman Avenue & Sherman Way
- Woodman Avenue & Vanowen Street
- Woodman Avenue & Victory Boulevard
- Woodman Avenue & Oxnard Street
- Woodman Avenue & Burbank Boulevard
- Coldwater Canyon Avenue & Sherman Way

[23] ATSAC is a PC-based traffic control program that provides fully traffic-responsive signal control based on real-time traffic conditions. Based on internal studies, LADOT estimates that the ATSAC system improves intersection capacity by an average of 7 percent.

Table 3-32: Existing Intersection Levels of Service

No.	Intersection	Peak Hour	Existing	
			V/C	LOS
1.	Van Nuys Bl & Victory Bl	AM	0.836	D
		PM	0.891	D
2.	Van Nuys Bl & Burbank Bl	AM	0.924	E
		PM	0.769	C
3.	Hazeltine Av & Victory Bl	AM	1.136	F
		PM	1.188	F
4.	Hazeltine Av & Oxnard St	AM	1.180	F
		PM	1.217	F
5.	Hazeltine Av & Burbank Bl	AM	1.255	F
		PM	1.048	F
6.	Woodman Av & Sherman Way	AM	1.123	F
		PM	1.246	F
7.	Woodman Av & Vanowen St	AM	1.267	F
		PM	1.273	F
8.	Woodman Av & Victory Bl	AM	1.016	F
		PM	1.073	F
9.	Woodman Av & Oxnard St	AM	1.077	F
		PM	1.332	F
10.	Woodman Av & Burbank Bl	AM	1.022	F
		PM	0.836	D
11.	Woodman Av & US 101 Westbound Ramps	AM	0.774	C
		PM	0.655	B
12.	Woodman Av & US 101 Eastbound Ramps	AM	0.671	B
		PM	0.582	A
13.	Fulton Av & Sherman Way	AM	0.802	D
		PM	0.821	D
14.	Fulton Av & Vanowen St	AM	0.858	D
		PM	0.871	D
15.	Fulton Av & Victory Bl	AM	0.761	C
		PM	0.761	C
16.	Fulton Av & Oxnard St	AM	0.683	B
		PM	0.660	B
17.	Fulton Av & Hatteras St	AM	0.341	A
		PM	0.335	A
18.	Fulton Av & Burbank Bl	AM	0.721	C
		PM	0.709	C
19.	Fulton Av & Chandler Bl	AM	0.569	A
		PM	0.511	A
20.	Fulton Av & Magnolia Bl	AM	0.743	C
		PM	0.559	A
21.	Ethel Av & Victory Bl	AM	0.538	A
		PM	0.675	B
22.	Ethel Av & Oxnard St	AM	0.618	B
		PM	0.509	A

Table 3-32: Existing Intersection Levels of Service

No.	Intersection	Peak Hour	Existing	
			V/C	LOS
23.	Ethel Av & Burbank Bl	AM	0.547	A
		PM	0.412	A
24.	Ethel Av & Chandler Bl	AM	0.347	A
		PM	0.241	A
25.	Coldwater Cyn Av & Sherman Way	AM	0.913	E
		PM	0.995	E
26.	Coldwater Cyn Av & Vanowen St	AM	0.951	E
		PM	0.973	E
27.	Coldwater Cyn Av & Victory Bl	AM	0.808	D
		PM	0.907	E
28.	Coldwater Cyn Av & Oxnard St	AM	0.862	D
		PM	0.775	C
29.	Coldwater Cyn Av & Burbank Bl	AM	0.842	D
		PM	0.680	B
30.	Coldwater Cyn Av & Chandler Bl	AM	0.991	E
		PM	0.685	B
31.	Coldwater Cyn Av & Magnolia Bl	AM	0.773	C
		PM	0.735	C
32.	Coldwater Cyn Av & US 101 Westbound Ramps	AM	0.595	A
		PM	0.595	A
33.	Coldwater Cyn Av & US 101 Eastbound Ramps	AM	0.558	A
		PM	0.583	A
34.	Whitsett Av & Sherman Way	AM	0.887	D
		PM	0.989	E
35.	Whitsett Av & Victory Bl	AM	1.007	F
		PM	1.125	F
36.	Whitsett Av & Oxnard St	AM	0.915	E
		PM	0.863	D
37.	Whitsett Av & Burbank Bl	AM	0.749	C
		PM	0.773	C
38.	Laurel Cyn Bl & Oxnard St	AM	1.054	F
		PM	1.055	F
39.	Laurel Cyn Bl & Burbank Bl	AM	0.933	E
		PM	0.825	D
40.	SR 170 Southbound Ramp & Burbank Bl	AM	0.716	C
		PM	0.513	A

Source: Kaku Associates, Inc., 2003.

- Coldwater Canyon Avenue & Vanowen Street
- Coldwater Canyon Avenue & Victory Boulevard
- Coldwater Canyon Avenue & Chandler Boulevard
- Whitsett Avenue & Sherman Way
- Whitsett Avenue & Victory Boulevard
- Whitsett Avenue & Oxnard Street
- Laurel Canyon Boulevard & Oxnard Street
- Laurel Canyon Boulevard & Burbank Boulevard

The remaining study intersections operate at fair to good levels of service (LOS D or better) during both the AM and PM peak hours.

d. Existing Public Transit Service

The Valley College campus is currently served by bus service provided by the Los Angeles County Metropolitan Transportation Authority (LACMTA) and the City of Los Angeles Department of Transportation (LADOT). Existing bus routes providing direct service along Burbank Boulevard, Coldwater Canyon Avenue, Fulton Avenue, and Oxnard Street adjacent to the campus include:

- LACMTA Line 154 - Line 154 provides local service between Porter Ranch, Reseda, Tarzana, Van Nuys, and Burbank. Service is provided 6 days per week (no service on Sunday). In the vicinity of the Valley College campus, Line 154 travels on Oxnard Street along the north side of the campus.
- LACMTA Line 156 - Line 156 provides local service between Los Angeles City College, Hollywood, Van Nuys, and Panorama City. Service is provided 7 days per week. In the vicinity of the Valley College campus, Line 156 travels on Burbank Boulevard along the south side of the campus.
- LACMTA Line 167 - Line 167 provides local service between Chatsworth, Northridge, Panorama City, North Hollywood, and Studio City. Service is provided 7 days per week. In the vicinity of the Valley College campus, Line 167 travels on Coldwater Canyon Avenue to the east of the campus.
- LADOT Commuter Express (LX) Route 549 - This line provides express service between Encino, the Burbank Media District, Glendale, and Pasadena. Service is provided 5 days per week (Monday through Friday) during peak periods only. In the vicinity of the Valley College campus, LX 549 travels on Burbank Boulevard along the south side of campus and has stops on Burbank Boulevard east of Fulton Avenue and west of Coldwater Canyon Avenue.

- LADOT Dash (LDVAN) - This line provides local shuttle service between Van Nuys and Studio City. Service is provided 6 days per week (Monday through Saturday). In the vicinity of the Valley College campus, Dash travels along an "L" shaped route that includes both Fulton Avenue and Burbank Boulevard on two sides of Valley College. Stops are located on Burbank Boulevard and Fulton Avenue adjacent to the campus main entrance and driveways.

e. Existing Valley College Campus Parking And Access System

Parking is a critical component of Valley College's transportation system since the majority of students, faculty, staff, and visitors access the campus by vehicle. This section discusses the existing campus parking supply and compares it to the existing demand for parking in order to assess the ability of the current parking supply to serve the campus community.

Existing Campus Parking Supply

This section describes the current inventory of parking on the Valley College campus, including location, amount, and type of existing parking. This information was either provided by the College, gathered through field investigation, or both. Specifically, the field investigation involved counting the number and type of spaces at each campus lot and adjacent on-street parking locations in the fall of 2002.

Parking for Valley College is provided through numerous surface parking lots and street parking on adjacent frontages of Fulton Avenue, Hatteras Street, Burbank Boulevard, Coldwater Canyon Extension, and campus internal streets. As summarized in Table 3-33, a total of approximately 3,863 parking spaces are available on the Valley College campus. This includes about 3,228 spaces in parking lots A through H, 419 spaces along College Road, 182 spaces on internal streets, and 34 spaces in front of school buildings. The locations of these lots are illustrated on Figure 3-42.

In addition to the on-campus parking supply, it is estimated that there are approximately 219 off-campus curbside unmarked parking spaces along Fulton Avenue, Burbank Boulevard, Coldwater Canyon Extension, and Hatteras Street immediately fronting the campus. This includes about 89 spaces on both sides of Coldwater Canyon Extension between Burbank Boulevard and Hatteras Street, about 25 spaces on the south side of Hatteras Street between Coldwater Canyon Extension and Ethel Avenue, about 29 spaces on the east side of Fulton Avenue between Oxnard Street and Burbank Boulevard, and about 76 spaces on the north side of Burbank Boulevard between Fulton Avenue and Coldwater Canyon Extension.

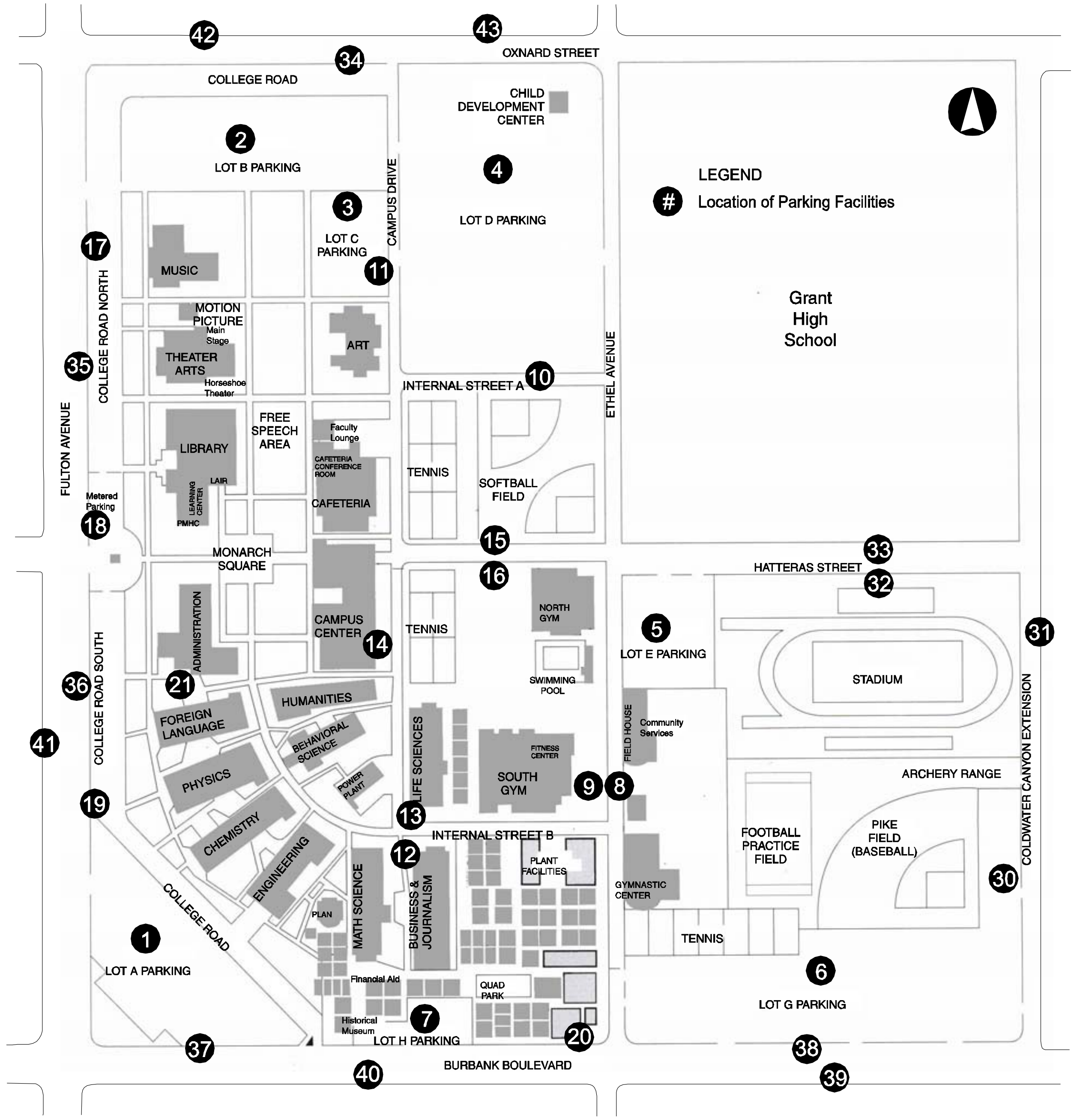
Table 3-33: Los Angeles Valley College Existing Parking Inventory (Fall 2002) [a]

Map Number	Lot #	Type	Inventory (No. of Spaces)	Location/Notes
On-Campus Parking				
1	Lot A	Regular	397	
2	Lot B	Regular	612	
		Handicap	3	
3	Lot C	Regular	102	
		Faculty	15	
		Handicap	3	
4	Lot D	Regular	848	
		Handicap	6	
5	Lot E	Regular	270	
		Handicap	8	
		Metered	22	
6	Lot G	Regular	878	
		Handicap	4	
7	Lot H	Regular	40	
		Faculty	18	
		Handicap	2	
8		On Street ES	37	Ethel Av west side (between Burbank Bl & Hatteras St)
9		On Street WS	30	Ethel Av east side (between Burbank Bl & Hatteras St)
10		On Street NS	12	Internal St A north side (between Campus Dr & Ethel Av)
11		On Street WS	26	Campus Dr west side (between Internal St A & Oxnard St)
12		On Street SS	10	Internal St B south side (between Campus Dr & Ethel Av), estimate
13		On Street NS	14	Internal St B north side (between Campus Dr & Ethel Av), estimate
14		Faculty	5	Campus Dr (between Internal St B & Hatteras St)
15		On Street NS	27	Hatteras St north side (between Campus Dr & Ethel Av)
16		On Street SS	21	Hatteras St south side (between Campus Dr & Ethel Av)
17		Faculty	116	College Rd North
		Handicap	5	
18		Metered	27	College Rd at Hatteras St
19		Faculty	260	College Rd South
		Handicap	11	
20		Faculty	24	Physical Plant (corner of Burbank Bl & Ethel Av)
21		Faculty	10	Administration Building
On Campus Subtotal			3,863	
Public Street Parking Adjacent to Campus				
30		On Street WS	35	Coldwater Cyn Extension east side (between Burbank Bl & Hatteras St)
31		On Street ES	54	Coldwater Cyn Extension west side (between Burbank Bl & Hatteras St)
32		On Street SS	25	Hatteras St south side (between Ethel Av & Coldwater Cyn Ext)
34		On Street SS	0	Oxnard St south side (between Fulton Av & Ethel Av), NSAT
35		On Street ES	18	Fulton Av east side (between Hatteras St & Oxnard St)
36		On Street ES	11	Fulton Av east side (between Burbank Bl & Hatteras St)
37		On Street NS	35	Burbank Bl north side (between Fulton Av & Ethel Av)
38		On Street NS	41	Burbank Bl north side (between Ethel Av & Coldwater Cyn Ext)
Public Street Subtotal			219	
Grand Total			4,082	

Note: [a] Kaku Associates, Inc. fieldwork was conducted in September 2002.

Source: Kaku Associates, Inc., 2002.

Figure 3-42: Locations of Existing Parking Facilities Serving Valley College



Source: Kaku Associates, Inc., 2003.

Existing Campus Parking Demand

A parking utilization survey was conducted as part of this study on Wednesday, October 2nd, 2002, to assess the utilization of the various parking facilities throughout a typical weekday with school in session. The survey was conducted during the fifth week of classes for the fall 2002 semester, after campus activity levels had stabilized. The survey was conducted hourly throughout the day from 8 a.m. to 7 p.m. in each of the on-campus parking facilities as well as for the adjacent street parking.

Table 3-34 summarizes the results of the utilization survey, while Figure 3-43 illustrates the hourly variation of existing parking demand. As can be seen, a maximum of 3,251 parking spaces were observed to be utilized between 10 a.m. to 11 a.m., including 3,064 on-campus spaces and 187 off-campus/on-street spaces. A maximum of 2,722 parking spaces were observed to be utilized between 7 p.m. to 8 p.m., including 2,564 on-campus spaces and 158 off-campus/on-street spaces.

The peak demand-to-supply ratio for the entire system is around 80 percent between 10 a.m. and 11 a.m. The morning hours between 10 a.m. and 12 noon experience the highest demand levels, ranging from 77 percent to 80 percent of the spaces utilized. The hour between 7 p.m. and 8 p.m., with 67 percent of the spaces utilized, is the third highest demand hour of the day, due to attendance at evening classes.

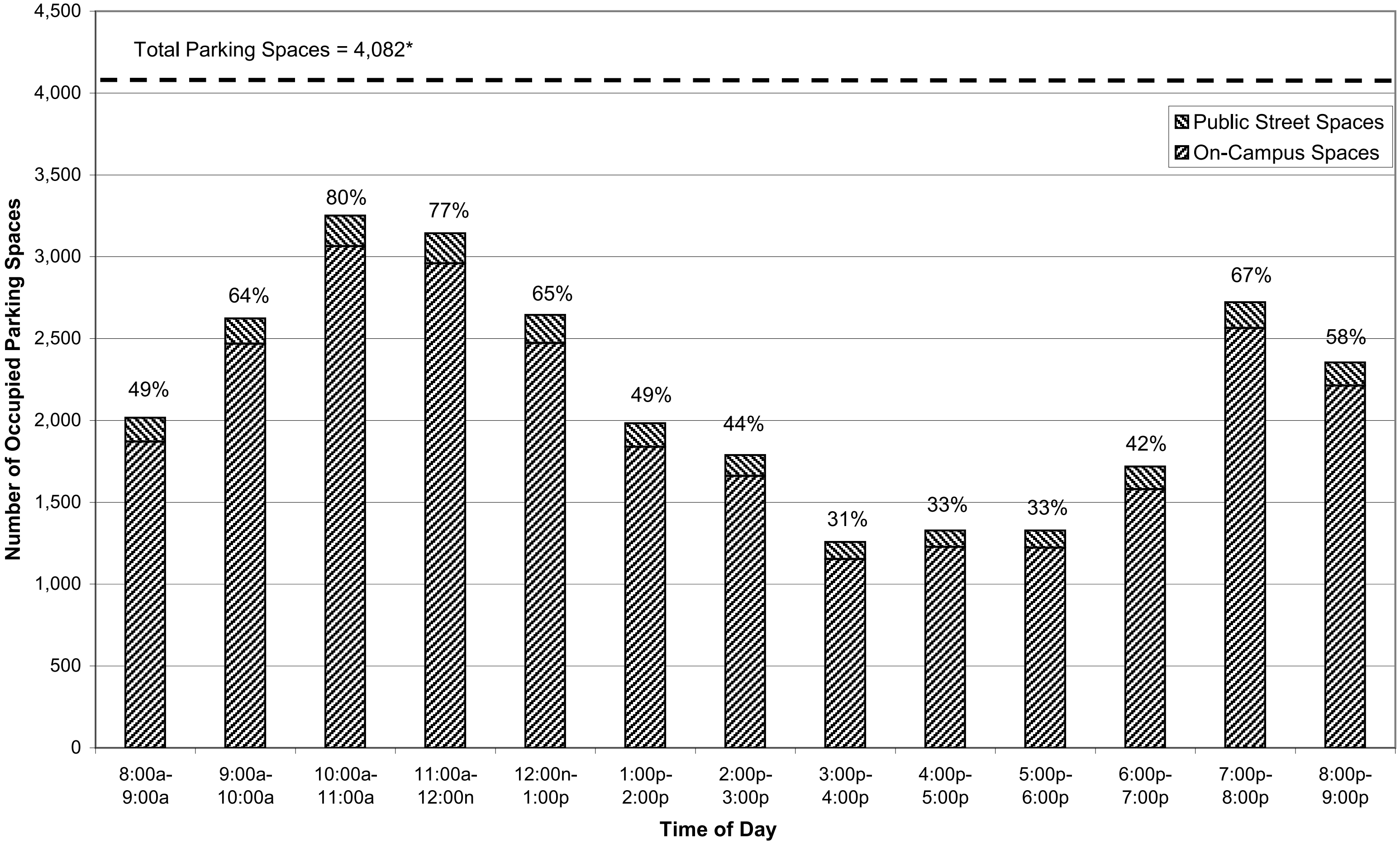
Typically, demand/supply ratios of 85 percent to 90 percent are considered to indicate a fully-utilized parking supply. A parking area would be considered effectively full despite the 10 percent to 15 percent remaining capacity since the time to find an empty space would be excessive. Since utilization of the existing Valley College parking system currently peaks at about 80 percent, there is presently excess capacity in the system as a whole. Certain individual lots, however, have demand/supply ratios of greater than 90 percent at certain times of the day, including student Lots A, C, E, and H.

Vehicular Access

Vehicular access to the Valley College campus is provided at following locations:

- Ethel Avenue - Ethel Avenue provides access into the campus from Oxnard Street on the north side of the campus and from Burbank Boulevard on the south side of the campus. Its intersections with both Oxnard Street and Burbank Boulevard are controlled by traffic signals. Within the campus, Ethel Avenue provides access to Lots D, E, and G. It also connects to internal streets providing circulation within the campus and to Hatteras Street.
- Hatteras Street - Hatteras Street provides access into the campus from Fulton Avenue on the west side of the campus and from Coldwater Canyon Extension on the east side of the campus. On the west side of campus, Hatteras Street connects immediately to the internal College Road, which runs north-south parallel to Fulton Avenue and provides metered parking, faculty parking, and access to parking Lots A and B. The intersection of Hatteras Street with Fulton Avenue is signalized. On the east side of the campus, Hatteras Street provides access to parking Lot E and connects to Ethel Avenue, which in turn connects to Oxnard Street and Burbank Boulevard.

Figure 3-43: Existing Valley College Parking Utilization by Time of Day - Wednesday, October 2, 2002



* 3,863 on-campus spaces plus 219 on-street spaces fronting campus.

Source: Kaku Associates, Inc., 2003.

Table 3-34: Los Angeles Valley College Existing Parking Utilization, Wednesday, October 2, 2002

Map No.	Lot #	Type [c]	Inventory (No. of Spaces)	Location/ Notes	Number and Percent of Parking Spaces Occupied by Time of Day [b]																									
					8:00a-9:00a		9:00a-10:00a		10:00a-11:00a		11:00a-12:00n		12:00n-1:00p		1:00p-2:00p		2:00p-3:00p		3:00p-4:00p		4:00p-5:00p		5:00p-6:00p		6:00p-7:00p		7:00p-8:00p		8:00p-9:00p	
					#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
On-Campus Parking																														
1	Lot A	Regular	397		400	101%	401	101%	399	101%	395	99%	361	91%	292	74%	249	63%	178	45%	245	62%	286	72%	381	96%	400	101%	338	85%
2	Lot B	Regular	612		91	15%	238	39%	401	66%	380	62%	285	47%	207	34%	170	28%	98	16%	82	13%	64	10%	116	19%	293	48%	252	41%
		Handicap	3		2	67%	2	67%	3	100%	3	100%	3	100%	2	67%	1	33%	0	0%	1	33%	1	33%	0	0%	2	67%	2	67%
3	Lot C	Regular	102		58	57%	101	99%	100	98%	100	98%	89	87%	64	63%	70	69%	45	44%	39	38%	41	40%	98	96%	91	89%	72	71%
		Faculty	15		0	0%	3	20%	11	73%	13	87%	8	53%	9	60%	7	47%	3	20%	2	13%	2	13%	5	33%	7	47%	6	40%
		Handicap	3		2	67%	2	67%	0	0%	2	67%	1	33%	3	100%	2	67%	1	33%	1	33%	1	33%	1	33%	2	67%	1	33%
4	Lot D	Regular	848		186	22%	324	38%	607	72%	539	64%	432	51%	238	28%	202	24%	139	16%	118	14%	123	15%	171	20%	456	54%	402	47%
		Handicap	6		1	17%	2	33%	2	33%	1	17%	1	17%	1	17%	2	33%	1	17%	0	0%	1	17%	2	33%	2	33%	1	17%
5	Lot E	Regular	270		231	86%	280	104%	276	102%	255	94%	225	83%	173	64%	172	64%	102	38%	153	57%	206	76%	242	90%	267	99%	256	95%
		Handicap	8		0	0%	2	25%	8	100%	6	75%	4	50%	3	38%	2	25%	2	25%	3	38%	3	38%	3	38%	5	63%	3	38%
		Metered	22		4	18%	3	14%	5	23%	7	32%	7	32%	2	9%	0	0%	2	9%	7	32%	5	23%	7	32%	9	41%	2	9%
6	Lot G	Regular	878		522	59%	629	72%	669	76%	658	75%	502	57%	350	40%	308	35%	205	23%	227	26%	190	22%	229	26%	591	67%	524	60%
		Handicap	4		3	75%	3	75%	3	75%	5	125%	4	100%	4	100%	3	75%	3	75%	1	25%	1	25%	1	25%	2	50%	3	75%
7	Lot H	Regular	40		40	100%	40	100%	37	93%	41	103%	37	93%	39	98%	39	98%	21	53%	38	95%	37	93%	38	95%	37	93%	31	78%
		Faculty	18		7	39%	18	100%	17	94%	15	83%	13	72%	15	83%	17	94%	16	89%	15	83%	12	67%	12	67%	17	94%	13	72%
		Handicap	2		1	50%	2	100%	2	100%	2	100%	2	100%	2	100%	2	100%	2	100%	1	50%	1	50%	1	50%	2	100%	2	100%
8	Ethel	On Street WS	37	Burbank to Hatteras	12	32%	16	43%	26	70%	28	76%	21	57%	20	54%	24	65%	22	59%	29	78%	23	62%	21	57%	26	70%	23	62%
9	Ethel	On Street ES	30	Burbank to Hatteras	16	53%	20	67%	19	63%	24	80%	23	77%	25	83%	27	90%	27	90%	24	80%	16	53%	15	50%	19	63%	12	40%
10	Internal St A	On Street NS	12	Campus Dr to Ethel	9	75%	9	75%	12	100%	12	100%	7	58%	6	50%	4	33%	1	8%	3	25%	3	25%	6	50%	11	92%	9	75%
11	Campus Dr	On Street WS	26	Internal St A to Oxnard	10	38%	17	65%	23	88%	22	85%	18	69%	12	46%	11	42%	5	19%	6	23%	6	23%	13	50%	18	69%	17	65%
12	Internal St B	On Street SS	10	Campus Dr to Ethel, est.	8	80%	10	100%	15	150%	12	120%	11	110%	12	120%	12	120%	10	100%	6	60%	4	40%	3	30%	4	40%	3	30%
13	Internal St B	On Street NS	14	Campus Dr to Ethel, est.	0	0%	0	0%	0	0%	1	7%	0	0%	0	0%	0	0%	1	7%	1	7%	0	0%	0	0%	0	0%	0	0%
14	Campus Dr	Faculty	5	Internal St B to Hatteras	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
15	Hatteras	On Street NS	27	Campus Dr to Ethel	15	56%	20	74%	20	74%	20	74%	22	81%	23	85%	18	67%	18	67%	20	74%	18	67%	18	67%	19	70%	13	48%
16	Hatteras	On Street SS	21	Campus Dr to Ethel	20	95%	23	110%	23	110%	24	114%	23	110%	21	100%	22	105%	16	76%	14	67%	15	71%	14	67%	17	81%	15	71%
17	College Rd N	Faculty	116	College Rd North	41	35%	61	53%	102	88%	102	88%	100	86%	81	70%	73	63%	48	41%	45	39%	38	33%	31	27%	82	71%	68	59%
		Handicap	5		2	40%	2	40%	1	20%	2	40%	3	60%	3	60%	1	20%	2	40%	0	0%	1	20%	2	40%	1	20%	1	20%
18	College Rd	Metered	27	College Rd at Hatteras	12	44%	8	30%	20	74%	27	100%	21	78%	17	63%	18	67%	9	33%	13	48%	17	63%	22	81%	27	100%	16	59%
19	College Rd S	Faculty	260	College Rd South	149	57%	198	76%	228	88%	230	88%	213	82%	182	70%	169	65%	143	55%	126	48%	100	38%	119	46%	145	56%	116	45%
		Handicap	11		5	45%	6	55%	9	82%	8	73%	6	55%	8	73%	9	82%	3	27%	2	18%	2	18%	4	36%	5	45%	4	36%

Table 3-34: Los Angeles Valley College Existing Parking Utilization, Wednesday, October 2, 2002

Map No.	Lot #	Type [c]	Inventory (No. of Spaces)	Location/ Notes	Number and Percent of Parking Spaces Occupied by Time of Day [b]																									
					8:00a-9:00a		9:00a-10:00a		10:00a-11:00a		11:00a-12:00n		12:00n-1:00p		1:00p-2:00p		2:00p-3:00p		3:00p-4:00p		4:00p-5:00p		5:00p-6:00p		6:00p-7:00p		7:00p-8:00p		8:00p-9:00p	
					#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
20	Physical Plant	Faculty	24		20	83%	20	83%	20	83%	21	88%	23	96%	20	83%	21	88%	21	88%	3	13%	2	8%	2	8%	3	13%	3	13%
21	Admin Bldg	Faculty	10		3	30%	8	80%	6	60%	5	50%	8	80%	5	50%	6	60%	8	80%	3	30%	4	40%	3	30%	4	40%	5	50%
On Campus Subtotal			3,863		1870	48%	2468	64%	3064	79%	2960	77%	2473	64%	1839	48%	1661	43%	1152	30%	1228	32%	1223	32%	1580	41%	2564	66%	2213	57%
Public Street Parking Adjacent to Campus																														
30	Cold-water Ext	On Street WS	35	Burbank to Hatteras [d]	5	14%	8	23%	8	23%	3	9%	9	26%	7	20%	3	9%	5	14%	0	0%	1	3%	3	9%	2	6%	1	3%
31	Cold-water Ext	On Street ES	54	Burbank to Hatteras	36	67%	36	67%	51	94%	50	93%	59	109%	39	72%	26	48%	17	31%	7	13%	9	17%	13	24%	30	56%	39	72%
32	Hatteras	On Street SS	25	Ethel to Coldwater Ext	23	92%	23	92%	23	92%	23	92%	23	92%	20	80%	23	92%	14	56%	14	56%	18	72%	25	100%	25	100%	20	80%
34	Oxnard	On Street SS	0	Fulton to Ethel Av [e]	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a
35	Fulton	On Street ES	18	Hatteras to Oxnard	17	94%	16	89%	18	100%	18	100%	16	89%	13	72%	13	72%	14	78%	13	72%	14	78%	14	78%	14	78%	14	78%
36	Fulton	On Street ES	11	Burbank to Hatteras	10	91%	10	91%	11	100%	11	100%	8	73%	10	91%	9	82%	8	73%	11	100%	9	82%	10	91%	11	100%	10	91%
37	Burbank	On Street NS	35	Fulton to Ethel	28	80%	34	97%	35	100%	35	100%	34	97%	35	100%	33	94%	30	86%	35	100%	35	100%	35	100%	36	103%	32	91%
38	Burbank	On Street NS	41	Ethel to Coldwater Ext	27	66%	29	71%	41	100%	43	105%	22	54%	20	49%	20	49%	17	41%	20	49%	19	46%	39	95%	40	98%	25	61%
Public Street Subtotal			219		146	67%	156	71%	187	85%	183	84%	171	78%	144	66%	127	58%	105	48%	100	46%	105	48%	139	63%	158	72%	141	64%
Grand Total			4082		2016	49%	2624	64%	3251	80%	3143	77%	2644	65%	1983	49%	1788	44%	1257	31%	1328	33%	1328	33%	1719	42%	2722	67%	2354	58

Notes:
- a. Source: Kaku Associates fieldwork conducted September 2002.
- b. Source: Parking utilization surveys conducted Wednesday, October 2, 2002.
- c. Codes for on street parking location: ES = east side; NS = north side; SS = south side; WS = west side.
- d. Cineworks movie trailers parked on west side of street all day on survey day.
- e. Oxnard south side between Fulton and Ethel: No stopping anytime.

Source: Kaku Associates, Inc., 2003.

- Campus Drive - Campus Drive is an internal street providing access from an unsignalized intersection with Oxnard Street on the north side of the campus. Within the campus, Campus Drive provides access to parking Lots B and D and connects to Hatteras Street.
- Lot B Driveway - There is an unsignalized driveway from parking Lot B directly onto Fulton Avenue, south of Oxnard Street.
- Lot A Driveway - There is an unsignalized driveway from parking Lot A directly onto Fulton Avenue, north of Burbank Boulevard.
- Lot H Driveway - There is an unsignalized driveway from parking Lot H directly onto Burbank Boulevard, between Fulton Avenue and Ethel Avenue.
- Lot G Driveways - There are three unsignalized driveways from parking Lot G directly onto Burbank Boulevard between Ethel Avenue and Coldwater Canyon Extension, and three driveways directly onto Coldwater Canyon Extension between Burbank Boulevard and Hatteras Street.

3-14.2 Environmental Impacts

In order to properly evaluate potential impacts of the proposed project on the street system, it was necessary to develop estimates of future traffic conditions in the study area both with and without the project. Future traffic volumes were first estimated for the study area without the project. These future forecasts reflect traffic increases due to general regional growth and traffic expected to be generated by other specific developments in the vicinity of the project and represent cumulative base (no project) conditions. Incremental project traffic was then estimated and separately assigned to the surrounding street system. The sum of the cumulative base and project-generated traffic represents the cumulative plus project conditions. Development of each of these future traffic scenarios is described in this chapter.

a. Cumulative Base Traffic Projections

The cumulative base traffic projections reflect growth in traffic over existing conditions from two primary sources: growth in existing traffic volumes to reflect the effects of overall regional growth and development outside of the study area and traffic generated by specific related projects located within, or in the vicinity of, the study area. In addition, the proposed San Fernando Valley East-West Bus Rapid Transit (BRT) project will travel through the study area, providing rapid east-west bus service through and beyond the study area. These factors are described below.

Areawide Traffic Growth

The background regional growth in traffic was estimated by adjusting the existing traffic volumes upwards using a growth factor. A factor of 1 percent per year was used in this analysis, based on general traffic volume growth factors suggested in the 2002 Congestion Management Program for Los Angeles County (Los Angeles County Metropolitan Transportation Authority, June 2002) for the San Fernando Valley. Using this growth rate, the existing (year 2002-2003) traffic volumes would be adjusted upwards by 6 percent to reflect 6 years of background growth to the 2008-2009 academic year. However, the growth rate was also adjusted to reflect the potential effect of the San Fernando Valley East-West BRT, as discussed in the next section.

San Fernando Valley East-West Transit Corridor Bus Rapid Transit Project

The Los Angeles County Metropolitan Transportation Authority has begun initial construction of the San Fernando Valley East-West Transit Corridor Bus Rapid Transit (BRT) project. The San Fernando Valley BRT will connect the North Hollywood Metro Red Line station to the east with the Warner Center Transit Hub to the west, traveling along the former Southern Pacific Burbank-Chandler branch right-of-way and Victory Boulevard. Within the Valley College study area, the BRT alignment will run within the former railroad right-of-way along Chandler Boulevard east of Ethel Avenue, angling to the northwest from that point to north of Oxnard Street at Woodman Avenue, and along the north side of Oxnard Street west of Woodman Avenue. Within the study area, stations are proposed at Chandler Boulevard/Laurel Canyon Boulevard, Burbank Boulevard/Fulton Avenue, Oxnard Street/Woodman Avenue, and Oxnard Street/Van Nuys Boulevard. A park-and-ride lot is proposed at the Oxnard Street/Van Nuys Boulevard station. The Burbank Boulevard/Fulton Avenue station would be located adjacent to the southwest corner of the Valley College campus.

Information from the *San Fernando Valley East-West Transit Corridor Final Environmental Impact Report* (LACMTA, February 2002) suggests that implementation of the BRT would reduce future peak hour traffic volumes along the corridor by an average of about 1 percent. Therefore, the background traffic growth rate used in this study was adjusted downward from 6 percent to 5 percent to reflect the projected effect of the BRT.

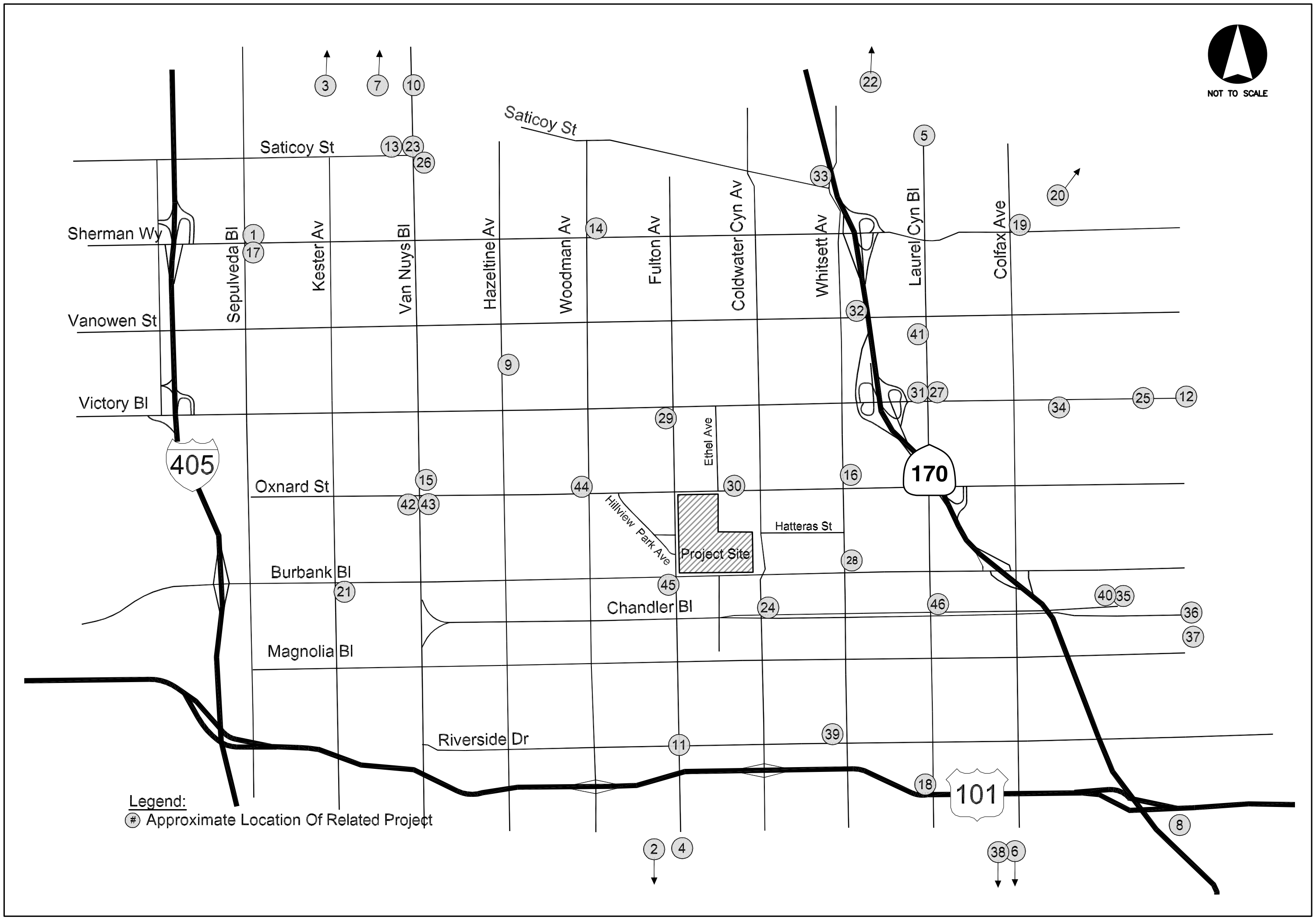
In addition, data regarding projected auto access trips to/from the proposed San Fernando Valley BRT stations in the study area (particularly those related to the proposed park-and-ride lot at the Oxnard Street/Van Nuys Boulevard station) were obtained from the BRT EIR and considered in the cumulative base analysis.

Traffic Generation of Cumulative Development Projects

Traffic expected to be generated by specific development projects within, or with the potential to affect, the study area was also considered. Information regarding future projects that are either under construction, planned, or proposed for development was obtained from several sources including the City of Los Angeles Department of Transportation (LADOT), Myra L. Frank & Associates, Inc., and traffic studies conducted for other projects in the area. A total of 46 related projects were identified for inclusion in the analysis, including 41 development projects plus auto access trips to BRT stations. The locations of these projects are illustrated on Figure 3-44.

The 46 related projects, and the estimated trip generation for each, are listed in Table 3-35. Trip generation estimates for the related projects were either prepared using standard trip generation rates/equations contained in Trip Generation, Sixth Edition (Institute of Transportation Engineers [ITE], 1997) or were obtained from LADOT from various relevant traffic studies for specific

Figure 3-44: Locations of Related Projects for the Traffic Analysis



Source: Kaku Associates, Inc., 2003.

Table 3-35: Trip Generation Estimates for Related Projects

Project Name	Project Description	Project Location	Daily Trips	AM Peak Hour Trips		Total	PM Peak Hour Trips		Total	Source
				Inbound	Outbound		Inbound	Outbound		
Fast food restaurant with service station	2,340 sf fast food restaurant; service station	7161 Sepulveda Bl	798	-9	-8	-17	58	53	111	[1]
Food Store	1,175 sf food market	12500 Ventura Bl	313	12	12	24	12	13	25	[1]
ABC Little School	Expansion of Existing School	14822 Roscoe Bl	307	32	21	53	15	42	57	[1]
Proposed Child Day Care Facility	9,600 sf Facility for 90 Children	4538 Fulton Av	307	27	24	51	25	28	53	[1]
Mixed Use Development	Retail with Multiple Residential Use	7526 Laurel Canyon Bl	329	14	30	44	22	14	36	[1]
Blue Ventura Plaza	Proposed Mini-Shopping Center	11570 Ventura Bl	1,761	27	17	44	76	83	159	[1]
Hollywood Video Store	Video Store in Panorama Mall	14650 Roscoe Bl	905	0	0	0	42	49	91	[1]
Fast food restaurant w/drive-thru	2,816 sf fast food w/drive thru	10934 Riverside Dr	1,397	71	69	140	49	45	94	[1]
Apartment Building	29,000 sf, 30-unit apartment building	14429 Kittridge St	314	3	15	18	23	12	35	[1]
Mini-market station	1,140 sf mini-market station	6171 Van Nuys Bl	750	31	30	61	37	38	75	[1]
Gas Station/Convenience Store	Convert gas station/repair to gas/conv. store	13256 Riverside Dr	1,086	30	29	59	33	33	66	[1]
Auto Repair Shop	10,350sf auto body and demo existing bldg	10529 Victory Bl	350	20	10	30	18	17	35	[1]
Commercial bldg w/ fast food and auto repair center	31,300sf bldg w/ two fast food and auto repair	14533 Saticoy St	776	49	28	77	37	36	73	[1]
Used Car Sales and Repair	Convert existing 3,417 sf assembly lodge to used car sales	13506 Sherman Wy	392	21	10	31	18	21	39	[1]
Commercial retail center with fast food	15,000 sf retail w/ a 2,500 sf fast food	8015 Van Nuys Bl	5,166	197	214	411	221	281	502	[1]
Private Elementary School	16,000 sf private elementary school	12409 Sylvan St	537	84	54	138	16	47	63	[1]
Self Storage Facility	101,566 sf self storage facility	7346 Sepulveda Bl	733	0	84	84	0	76	76	[1]
Del Taco w/ gas station, car wash and convenience store	2,135 sf Del Taco, 700 sf convenience. store, 764 sf	4647 Laurel Canyon Bl	2,893	119	115	234	115	114	229	[1]
McDonald's Restaurant and Lucy's Laundromat	3,695 sf McDonald's and 4,343 sf Lucy's Laundry	7201 Lankershim Bl	2,723	138	133	271	111	102	213	[1]
Private School & Day Care	Expand existing to 416 elementary school students and 72 pre-school/day w/239 on-site parking spaces	11134 Saticoy St	1,781	265	176	441	69	168	237	[1]
Gas Station w/convenience market	Convert repair shop to 1,722 sf convenience market in existing gas station	14850 Burbank Bl	711	29	29	58	36	35	71	[1]
Cabinet shop & wholesale dress maker	Construct a 48,000 sf cabinet shop & wholesale dress maker on 17,750 sf lot w/18 parking spaces	12700 Sheldon St	195	0	0	0	5	7	12	[1]

Table 3-35: Trip Generation Estimates for Related Projects

Project Name	Project Description	Project Location	Daily Trips	AM Peak Hour Trips		Total	PM Peak Hour Trips		Total	Source
				Inbound	Outbound		Inbound	Outbound		
3 story apt. complex with child care center	Construct 3 story apt complex with 30-35 units with child care center totaling 35,000 sf	14649 Saticoy St	452	34	35	69	36	37	73	[1]
Self storage warehouse	Demolish existing health club & construct 60,250 sf self storage facility with 26 parking spaces	5300 Coldwater Canyon Av	-729	0	-74	-74	0	-72	-72	[1]
McDonald's Restaurant & Gas Station	Construct McDonalds restaurant (2,914 sf) w/drive-thru & gas station w/mini-mart (1,789 sf)	11000 Victory Bl	1,538	93	90	183	69	67	136	[1]
Auto repair, fast food restaurant & retail	Demolish existing family home & construct auto repair shop, fast food restaurant w/no drive thru & retail store (14,966 sf)	14533 Saticoy St	1,033	41	29	70	36	31	67	[1]
LAUSD Middle School	Construction of an 180,000 sf middle school on a 9 to 9.75 acre site.	Victory Blvd	2,146	425	320	745	122	137	259	[2]
Multi-Family Residence	Construction of approximately 20 apartments 20,000 sf	5716 Whitsett Av	133	2	8	10	8	4	12	[2]
Multi-Family Residence	Construction of approximately 5-10 apartments 10,000 sf	6346 Fulton AV	66	1	4	5	4	2	6	[2]
Multi-Family Residence	Construction of approximately 12 apartments 10,000 sf	13041 Oxnard St	80	1	5	6	5	2	7	[2]
Valley Plaza Revitalization	832,100 sf Shopping center, 46,000 sf High turnover restaurants, 13,000sf Fast food restaurants, 58,900 sf Supermarket, 4,000 seat movie theatre and a 104,000 sf Office	Victory Blvd	14045	482	332	814	416	272	688	[1]
Senior Housing	402 Senior Housing Dwelling Units	12400 Vanowen	1,399	25	44	69	70	39	109	[1]
Auto repair, office & Auto storage	34,560 sf Auto repair, 7,800 sf Office & 32,760 sf Auto Storage	12580 Saticoy	913	33	19	52	42	41	83	[1]
Elementary School	670 sf Elementary School	Califa St bet. Lankershim Blvd, Tujunga & Tiara St	683	114	80	194	80	94	174	[3]
NOHO Commons	NOHO Commons	Lankershim Blvd	12777	451	384	835	657	682	1,339	[3]
High School	1,392 sf High School	Chandler Blvd	2492	448	192	640	84	125	209	[3]
Apartment & Office	103 du Apartments & 3,025 sf Office	11023 McCormick St	716	12	46	58	44	25	69	[3]
Specialty Retail Center	11,800 sf Specialty Retail Center	11555 Ventura Bl	480	8	6	14	13	18	31	[4]
Synagogue	19,800 sf Synagogue	12326 Riverside Dr	211	4	3	7	29	33	62	[3]
Lankershim/Cumpston Project	16,750 sf Pharmacy & 191 du apts	11324 Cumpston	1666	17	74	91	90	58	148	[3]

Table 3-35: Trip Generation Estimates for Related Projects

Project Name	Project Description	Project Location	Daily Trips	AM Peak Hour Trips		Total	PM Peak Hour Trips		Total	Source
				Inbound	Outbound		Inbound	Outbound		
Elementary School	380 seat Elementary School	East side of Bellingham north of Archwood	388	117	82	199	45	54	99	[1]
San Fernando Valley E-W BRT (Oxnard/Van Nuys station)	Park & Ride trips to BRT station at Oxnard/Van Nuys	Van Nuys Bl at Oxnard St	989	99	0	99	99	0	99	[5]
San Fernando Valley E-W BRT (Oxnard/Van Nuys station)	Kiss & Ride trips to BRT station at Oxnard/Van Nuys	Van Nuys Bl at Oxnard St	227	12	12	24	12	12	24	[5]
San Fernando Valley E-W BRT (Oxnard/Woodman station)	Kiss & Ride trips to BRT station at Oxnard/Woodman	Woodman Av at Oxnard St	70	4	4	8	4	4	8	[5]
San Fernando Valley E-W BRT (Burbank/Fulton station)	Kiss & Ride trips to BRT station at Burbank/Fulton	Fulton Av at Burbank Bl	53	3	3	6	3	3	6	[5]
San Fernando Valley E-W BRT (Chandler/Laurel Canyon station)	Kiss & Ride trips to BRT station at Chandler/Laurel Canyon	Laurel Canyon Bl at Chandler Bl	73	4	4	8	4	4	8	[5]
Total			66424	3590	2794	6384	3010	2987	5997	

Sources:

[1] Trip generation data obtained from LADOT related project database.
[2] Myra Frank & Associates.
[3] Lankershim/Cumpston Traffic Study, 2003. Crain & Associates.
[4] 11023 McCormick Street Apartment Project, 2002. Kaku Associates, Inc.
[5] San Fernando Valley East-West Transit Corridor, 2002. Metropolitan Transit Authority.

Source: Kaku Associates, Inc., 2003.

projects. As shown in Table 3-35, the related projects are projected to generate a combined total of approximately 66,424 daily trips, including about 6,384 and 5,997 trips during the weekday AM and PM peak hours, respectively.

The geographic distribution of traffic generated by developments such as those included in this analysis depends on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of the population from which employees and/or patrons of proposed commercial developments may be drawn, the geographic distribution of activity centers (employment, commercial, and other) to which residents of proposed residential projects may be drawn, and the location of the project in relation to the surrounding street system. Trip distribution patterns were developed for each related project based on the above factors.

Cumulative Base Traffic Volumes

Using the estimated trip generation and trip distribution patterns, traffic generated by the related projects was assigned to the street network and added to the adjusted ambient background increase of 5 percent. The resulting traffic volumes, representing cumulative base conditions without the project, are presented in Tables B-2a and B-2b in Appendix B of the traffic study (see Appendix E of this EIR).

b. Project Traffic Projections

Project Trip Generation

Future traffic volumes were projected for the Valley College campus for buildout (academic year 2008-2009) of the campus Master Plan. The methodology for development of the volume projections is described herein.

The Master Plan envisions academic growth to 15,693 full-time equivalent (FTE) students by the 2008-2009 academic year. Growth in trips generated by students, faculty/staff, and campus visitors related to this projected academic growth were estimated by applying empirical trip generation rates derived from existing Valley College conditions.

Traffic counts were conducted in fall 2002 at each of the driveways serving the campus. Empirical trip generation rates per FTE students were derived through comparison of the total number of existing vehicles destined to/from the campus to the existing (fall 2002) FTE students. The rates were adjusted to include estimated trips generated by Valley College students parking on immediately adjacent street frontages that were otherwise not caught in the driveway in/out counts. Based on this analysis, it is estimated that, on average, the number of vehicle trips currently generated per FTE on the Valley College campus is as follows:

Vehicle Trips Per Student FTE

Daily	AM Peak Hour	PM Peak Hour
2.48	0.23 (75% in/25% out)	0.15 (51% in/49% out)

These trip generation rates were applied to the projected future FTE student population to project the increase in future trips generated by academic purposes through the 2008-2009 academic year. Table 3-36 presents the results of this analysis, including both the derivation of the empirical trip rates and the projection of future trip increases. As can be seen, a net increase of approximately 5,700 daily trips is projected, including about 538 trips during the AM peak hour and 332 trips during the PM peak hour. This is an increase of about 17 percent over the estimated existing level of campus-generated trips.

Table 3-36: Valley College Master Plan Trip Generation Estimates: Academic Growth [a]

	Student Enrollment (FTE) [A]	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Existing Valley College In/Out Trips (Fall 2002)								
Total Campus Driveway Trips [b]		31,290	2,198	743	2,941	949	899	1,848
Estimate for On-Street Parkers [c]		1,880	132	45	177	57	54	111
Estimated Total Existing Trips	13,393	33,170	2,330	788	3,118	1,006	953	1,959
Empirical Trip Rates (Fall 2002)								
Trip Generation Rate per FTE [d]		2.477	74.7%	25.3%	0.233	51.4%	48.6%	0.146
Future Condition (Year 2008)	15,693	38,870	2,731	925	3,656	1,178	1,113	2,291
Net Increase	2,300	5,700	401	137	538	172	160	332

Notes:

a. Source: Valley College, February and March, 2003.

b. Source: Manual in/out traffic counts conducted at Valley College campus access points in fall 2002.

c. Estimated existing trips generated by Valley College students parked on surrounding street frontages (Coldwater Canyon Extension, Hatteras Street, Oxnard Street, Fulton Avenue, and Burbank Boulevard). Assumed to be 6% addition to driveway trips, based on percent of existing peak parking demands that are on-street versus on-campus.

d. Empirical trip generation rates estimated from existing count data. Rate = Existing Trips / Existing FTE Students.

Source: Kaku Associates, Inc., 2003.

Project Traffic Distribution and Assignment

A trip distribution pattern was developed for the Valley College campus based on consideration of the following data points: zip code distribution of existing Valley College student residences (supplied by Valley College for the fall 2000 semester), locations of existing and future campus access points and parking lots, and existing volumes and turning movements at the campus access points on Fulton Avenue, Oxnard Street, Burbank Street, and Coldwater Canyon Extension. The latter served as an indication of both the existing split of traffic accessing the campus between the various access points and the existing direction of travel of these trips at the access points.

The distribution of Valley College student residences by zip code is summarized in Table 3-37. Taking this data into consideration along with the direction of travel at the campus access points, a trip distribution pattern was developed for project trips, as illustrated on Figure 3-45.

Table 3-37: Distribution of Zip Codes of Residence for Valley College Students

Area	Students	Percentage
North Hollywood	3,402	19%
Van Nuys	3,105	17%
Burbank	1,192	7%
Pacoima	1,005	6%
Sherman Oaks	966	5%
Panorama City	902	5%
Valley Village	781	4%
Sun Valley	701	4%
North Hills	469	3%
Studio City	392	2%
Sylmar	327	2%
Northridge	316	2%
Granada Hills	291	2%
Reseda	290	2%
Los Angeles	200	1%
Encino	166	1%
San Fernando	166	1%
Mission Hills	155	1%
Tarzana	126	1%
Other	2,851	16%
Total	17,803	100%

Source: LAVC Office of Research & Planning.

Source: Kaku Associates, Inc., 2003.

Tables B-3a and B-3b in Appendix B of the traffic study (see Appendix E of this EIR) present the net incremental traffic generated by the buildout of the proposed Master Plan at the 40 study intersections.

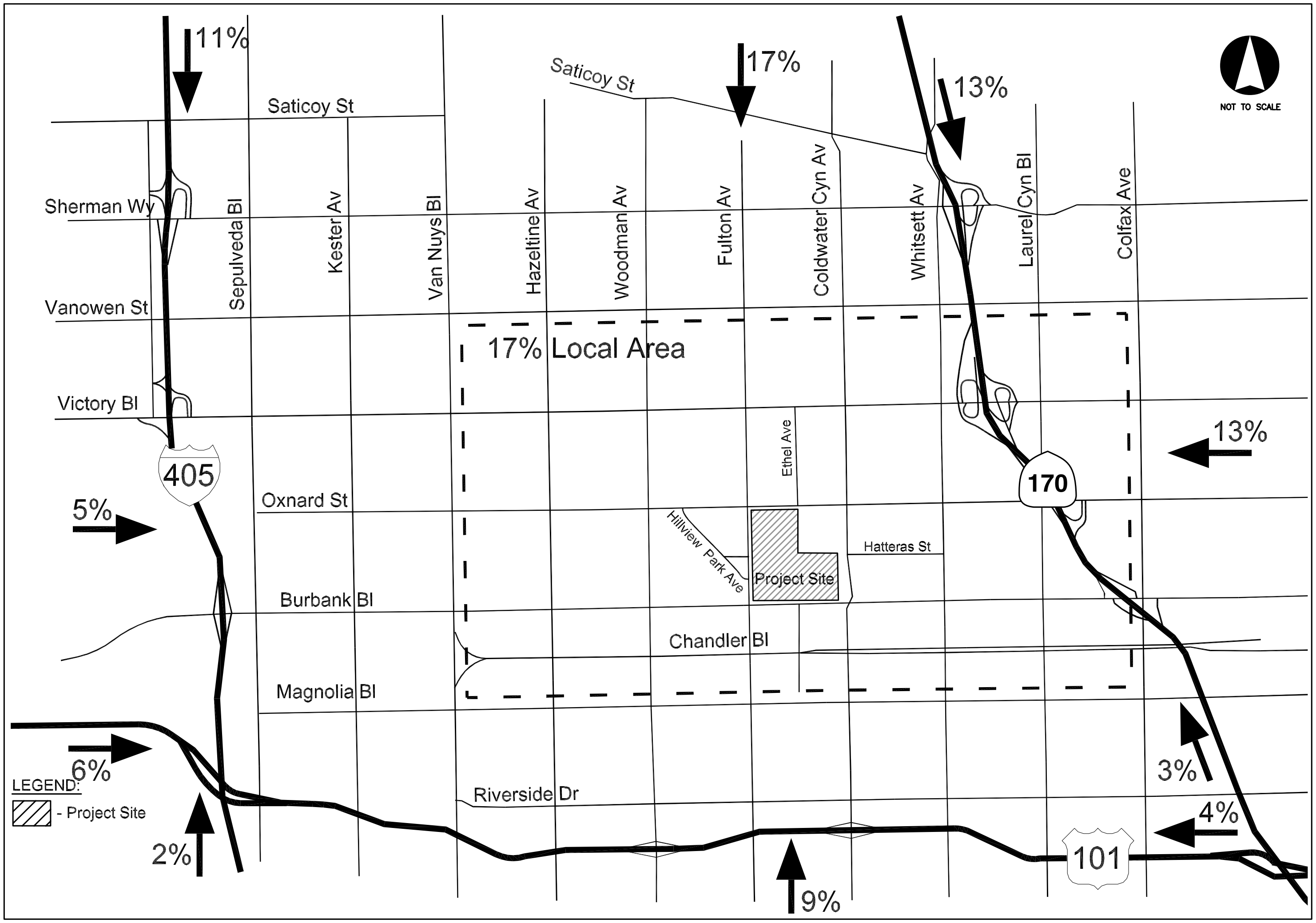
c. Cumulative Plus Project Traffic Projections

The project-generated traffic volumes were then added to the cumulative base traffic projections to yield the cumulative plus project traffic forecasts. The resulting projected cumulative plus project peak hour traffic volumes are presented in Tables B-4a and B-4b in Appendix B of the traffic study (see Appendix E of this EIR).

d. Significance Criteria

The City of Los Angeles Department of Transportation has established threshold criteria that determine if a project has a significant traffic impact at a specific intersection. Therefore, for the purposes of the analyses in this EIR and in accordance with the LADOT criteria, the proposed project would have a significant impact if the following conditions were met:

Figure 3-45: Generalized Project Trip Distribution



Source: Kaku Associates, Inc., 2003.

Intersection Condition With Project Traffic		Project-Related Increase
LOS	V/C Ratio	in V/C Ratio
C	0.701 - 0.800	Equal to or greater than 0.040
D	0.801 - 0.900	Equal to or greater than 0.020
E, F	> 0.901	Equal to or greater than 0.010

e. Impacts Discussion

This section presents an analysis of the potential impacts of the traffic generated by buildout of the Master Plan project on the local street system. The analysis compares the projected levels of service at each study location under cumulative conditions both with and without the project to determine potential impacts, using significance criteria identified above established by the city of Los Angeles.

Cumulative Base Intersection Operating Conditions

This section presents an analysis of potential future traffic conditions under year 2008-2009 cumulative base conditions if no growth were to occur on the Valley College campus. The cumulative base traffic volumes projected in a previous section were analyzed using the level of service methodologies previously described to forecast cumulative base peak hour levels of service at the study locations.

Table 3-38 summarizes the results of this analysis. As can be seen, the following 21 study intersections are projected to operate at LOS E or F during one or both peak hours under cumulative base conditions:

- Van Nuys Boulevard & Victory Boulevard
- Van Nuys Boulevard & Burbank Boulevard
- Hazeltine Avenue & Victory Boulevard
- Hazeltine Avenue & Oxnard Street
- Hazeltine Avenue & Burbank Boulevard
- Woodman Avenue & Sherman Way
- Woodman Avenue & Vanowen Street
- Woodman Avenue & Victory Boulevard
- Woodman Avenue & Oxnard Street
- Woodman Avenue & Burbank Boulevard

Table 3-38: Intersection Level of Service Analysis Cumulative Base and Cumulative Plus Project Conditions

	Intersection	Peak Hour	Existing		Cumulative Base		Cumulative +Project		Project Increase in V/C	Significant Project Impact	With Mitigation Program [a]		Project Increase in V/C	Residual Impact
			V/C	LOS	V/C	LOS	V/C	LOS			V/C	LOS		
1.	Van Nuys Bl & Victory Bl	AM	0.836	D	0.894	D	0.903	E	0.009	NO				
		PM	0.891	D	0.959	E	0.962	E	0.003	NO				
2.	Van Nuys Bl & Burbank Bl	AM	0.924	E	0.978	E	0.984	E	0.006	NO				
		PM	0.769	C	0.820	D	0.826	D	0.006	NO				
3.	Hazeltine Av & Victory Bl	AM	1.136	F	1.253	F	1.257	F	0.004	NO				
		PM	1.188	F	1.289	F	1.290	F	0.001	NO				
4.	Hazeltine Av & Oxnard St	AM	1.180	F	1.247	F	1.251	F	0.004	NO				
		PM	1.217	F	1.285	F	1.289	F	0.004	NO				
5.	Hazeltine Av & Burbank Bl	AM	1.255	F	1.320	F	1.325	F	0.005	NO				
		PM	1.048	F	1.103	F	1.110	F	0.007	NO				
6.	Woodman Av & Sherman Way	AM	1.123	F	1.189	F	1.197	F	0.008	NO				
		PM	1.246	F	1.319	F	1.324	F	0.005	NO				
7.	Woodman Av & Vanowen St	AM	1.267	F	1.331	F	1.339	F	0.008	NO				
		PM	1.273	F	1.337	F	1.340	F	0.003	NO				
8.	Woodman Av & Victory Bl	AM	1.016	F	1.130	F	1.145	F	0.015	YES	1.138	F	0.008	NO
		PM	1.073	F	1.169	F	1.175	F	0.006	NO	1.172	F	0.003	NO
9.	Woodman Av & Oxnard St	AM	1.077	F	1.139	F	1.159	F	0.020	YES	1.119	F	-0.020	NO
		PM	1.332	F	1.406	F	1.418	F	0.012	YES	1.382	F	-0.024	NO
10.	Woodman Av & Burbank Bl	AM	1.022	F	1.077	F	1.083	F	0.006	NO				
		PM	0.836	D	0.882	D	0.894	D	0.012	NO				
11.	Woodman Av & US 101 WB Ramps	AM	0.774	C	0.818	D	0.821	D	0.003	NO				
		PM	0.655	B	0.694	B	0.698	B	0.004	NO				
12.	Woodman Av & US 101 EB Ramps	AM	0.671	B	0.709	C	0.713	C	0.004	NO				
		PM	0.582	A	0.616	B	0.618	B	0.002	NO				
13.	Fulton Av & Sherman Way	AM	0.802	D	0.858	D	0.869	D	0.011	NO				
		PM	0.821	D	0.883	D	0.888	D	0.005	NO				
14.	Fulton Av & Vanowen St	AM	0.858	D	0.912	E	0.913	E	0.001	NO				
		PM	0.871	D	0.923	E	0.925	E	0.002	NO				
15.	Fulton Av & Victory Bl	AM	0.761	C	0.841	D	0.861	D	0.020	YES	0.851	D	0.010	NO
		PM	0.761	C	0.834	D	0.841	D	0.007	NO	0.838	D	0.004	NO
16.	Fulton Av & Oxnard St	AM	0.683	B	0.721	C	0.749	C	0.028	NO				
		PM	0.660	B	0.698	B	0.715	C	0.017	NO				
17.	Fulton Av & Hatteras St	AM	0.341	A	0.363	A	0.409	A	0.046	NO				
		PM	0.335	A	0.356	A	0.388	A	0.032	NO				

Table 3-38: Intersection Level of Service Analysis Cumulative Base and Cumulative Plus Project Conditions														
	Intersection	**Peak Hour**	**Existing**		**Cumulative Base**		**Cumulative +Project**		**Project Increase in V/C**	**Significant Project Impact**	**With Mitigation Program [a]**		**Project Increase in V/C**	**Residual Impact**
			V/C	**LOS**	**V/C**	**LOS**	**V/C**	**LOS**			**V/C**	**LOS**		
18.	Fulton Av & Burbank Bl	AM	0.721	C	0.759	C	0.777	C	0.018	NO				
		PM	0.709	C	0.746	C	0.760	C	0.014	NO				
19.	Fulton Av & Chandler Bl	AM	0.569	A	0.607	B	0.609	B	0.002	NO				
		PM	0.511	A	0.545	A	0.548	A	0.003	NO				
20.	Fulton Av & Magnolia Bl	AM	0.743	C	0.803	D	0.804	D	0.001	NO				
		PM	0.559	A	0.607	B	0.609	B	0.002	NO				
21.	Ethel Av & Victory Bl	AM	0.538	A	0.608	B	0.612	B	0.004	NO				
		PM	0.675	B	0.748	C	0.757	C	0.009	NO				
22.	Ethel Av & Oxnard St	AM	0.618	B	0.653	B	0.694	B	0.041	NO				
		PM	0.509	A	0.539	A	0.559	A	0.020	NO				
23.	Ethel Av & Burbank Bl	AM	0.547	A	0.573	A	0.602	B	0.029	NO				
		PM	0.412	A	0.431	A	0.451	A	0.020	NO				
24.	Ethel Av & Chandler Bl	AM	0.347	A	0.373	A	0.377	A	0.004	NO				
		PM	0.241	A	0.265	A	0.267	A	0.002	NO				
25.	Coldwater Cyn Av & Sherman Way	AM	0.913	E	0.972	E	0.979	E	0.007	NO				
		PM	0.995	E	1.063	F	1.066	F	0.003	NO				
26.	Coldwater Cyn Av & Vanowen St	AM	0.951	E	1.011	F	1.016	F	0.005	NO				
		PM	0.973	E	1.024	F	1.027	F	0.003	NO				
27.	Coldwater Cyn Av & Victory Bl	AM	0.808	D	0.908	E	0.929	E	0.021	YES	0.889	D	-0.019	NO
		PM	0.907	E	0.979	E	0.987	E	0.008	NO	0.953	E	-0.026	NO
28.	Coldwater Cyn Av & Oxnard St	AM	0.862	D	0.910	E	0.953	E	0.043	YES	0.902	E	-0.008	NO
		PM	0.775	C	0.813	D	0.829	D	0.016	NO	0.791	C	-0.022	NO
29.	Coldwater Cyn Av & Burbank Bl	AM	0.842	D	0.879	D	0.917	E	0.038	YES	0.869	D	-0.010	NO
		PM	0.680	B	0.708	C	0.723	C	0.015	NO	0.686	B	-0.022	NO
30.	Coldwater Cyn Av & Chandler Bl	AM	0.991	E	1.061	F	1.063	F	0.002	NO				
		PM	0.685	B	0.734	C	0.738	C	0.004	NO				
31.	Coldwater Cyn Av & Magnolia Bl	AM	0.773	C	0.815	D	0.819	D	0.004	NO				
		PM	0.735	C	0.780	C	0.783	C	0.003	NO				
32.	Coldwater Cyn Av & US 101 Westbound Ramps	AM	0.595	A	0.628	B	0.632	B	0.004	NO				
		PM	0.595	A	0.628	B	0.630	B	0.002	NO				
33.	Coldwater Cyn Av & US 101 Eastbound Ramps	AM	0.558	A	0.590	A	0.595	A	0.005	NO				
		PM	0.583	A	0.619	B	0.623	B	0.004	NO				
34.	Whitsett Av & Sherman Way	AM	0.887	D	1.021	F	1.022	F	0.001	NO				
		PM	0.989	E	1.054	F	1.055	F	0.001	NO				

Table 3-38: Intersection Level of Service Analysis Cumulative Base and Cumulative Plus Project Conditions

	Intersection	Peak Hour	Existing		Cumulative Base		Cumulative +Project		Project Increase in V/C	Significant Project Impact	With Mitigation Program [a]		Project Increase in V/C	Residual Impact
			V/C	LOS	V/C	LOS	V/C	LOS			V/C	LOS		
35.	Whitsett Av & Victory Bl	AM	1.007	F	1.127	F	1.138	F	0.011	YES	1.133	F	0.006	NO
		PM	1.125	F	1.240	F	1.244	F	0.004	NO	1.242	F	0.002	NO
36.	Whitsett Av & Oxnard St	AM	0.915	E	0.973	E	0.991	E	0.018	YES	0.982	E	0.009	NO
		PM	0.863	D	0.915	E	0.924	E	0.009	NO	0.920	E	0.005	NO
37.	Whitsett Av & Burbank Bl	AM	0.749	C	0.791	C	0.819	D	0.028	YES	0.806	D	0.015	NO
		PM	0.773	C	0.818	D	0.826	D	0.008	NO	0.822	D	0.004	NO
38.	Laurel Cyn Bl & Oxnard St	AM	1.054	F	1.181	F	1.190	F	0.009	NO				
		PM	1.055	F	1.172	F	1.178	F	0.006	NO				
39.	Laurel Cyn Bl & Burbank Bl	AM	0.933	E	0.985	E	1.003	F	0.018	YES	0.994	E	0.009	NO
		PM	0.825	D	0.945	E	0.953	E	0.008	NO	0.949	E	0.004	NO
40.	SR 170 Southbound Ramp & Burbank Bl	AM	0.716	C	0.759	C	0.771	C	0.012	NO				
		PM	0.513	A	0.545	A	0.551	A	0.006	NO				

Notes:

a. Mitigation Program includes trip reduction due to additional TDM measures plus ATCS at four intersections: Woodman/Oxnard, Coldwater Canyon/Victory, Coldwater Canyon/Oxnard, and Coldwater Canyon/Burbank.

Source: Kaku Associates, Inc., 2003.

- Fulton Avenue & Vanowen Street
- Coldwater Canyon Avenue & Sherman Way
- Coldwater Canyon Avenue & Vanowen Street
- Coldwater Canyon Avenue & Victory Boulevard
- Coldwater Canyon Avenue & Oxnard Street
- Coldwater Canyon Avenue & Chandler Boulevard
- Whitsett Avenue & Sherman Way
- Whitsett Avenue & Victory Boulevard
- Whitsett Avenue & Oxnard Street
- Laurel Canyon Boulevard & Oxnard Street
- Laurel Canyon Boulevard & Burbank Boulevard

This represents a deterioration in operating conditions from existing conditions since, as discussed previously, only 18 of the intersections currently operate at LOS E or F during one or both peak hours. Thus, background traffic growth and traffic generated by related projects is expected to adversely affect operating conditions in the study area even without consideration of potential growth on the Valley College campus.

Project Traffic Impact Analysis

The cumulative plus project traffic volumes as projected in the previous section were analyzed to determine potential future operating conditions and traffic impacts with the addition of incremental project-generated traffic associated with buildout of the Valley College Master Plan through the 2008-2009 academic year. The middle columns in Table 3-38 show the results of this analysis.

As indicated in the table, 22 of the study intersections are projected to operate at LOS E or F during one or both peak hours under cumulative plus project conditions. Application of the significance criteria described previously indicates that the project would create significant traffic impacts at the following 10 study intersections:

- Woodman Avenue & Victory Boulevard
- Woodman Avenue & Oxnard Street
- Fulton Avenue & Victory Boulevard

- Coldwater Canyon Avenue & Victory Boulevard
- Coldwater Canyon Avenue & Oxnard Street
- Coldwater Canyon Avenue & Burbank Boulevard
- Whitsett Avenue & Victory Boulevard
- Whitsett Avenue & Oxnard Street
- Whitsett Avenue & Burbank Boulevard
- Laurel Canyon Boulevard & Burbank Boulevard

Neighborhood Street Impact Analysis

Three neighborhood street segments were selected for analysis of potential neighborhood intrusion impacts of the proposed project. The three street segments include:

- Ethel Avenue, north of Oxnard Street
- Ethel Avenue, south of Burbank Boulevard
- Hillview Park Avenue, between Hatteras Street and Oxnard Street

❑ Daily Traffic Projections

Existing 24-hour machine counts were conducted at the three neighborhood street segments in February 2003. Future daily traffic volumes were projected in a manner similar to that used for the AM/PM peak hour analysis of the 40 intersections. A 5 percent ambient growth factor and related project daily trips were added to the year 2002-2003 existing volumes to obtain year 2008-2009 cumulative base projections.

New daily project trips were added to the cumulative base projections to obtain cumulative plus project projections. The distribution of daily project volumes was based on the project trip distribution pattern discussed in a previous section and used for the AM and PM peak hour analysis. The daily traffic volumes for both the existing and future conditions are summarized in Table 3-39.

The existing daily traffic volumes on weekdays vary from a low of about 495 vehicles per day (vpd) on Hillview Park Avenue to a high of about 4,050 vpd on Ethel Avenue north of Oxnard Street. The proposed project is projected to add approximately 58 to 286 vpd on the three segments.

Table 3-39: Neighborhood Street Impact Analysis							
Street Segment	Weekday Two-Way Daily Volume				Impact Analysis		
	Existing	Cumulative Base	Project Only	Cumulative Plus Project	Project %	Impact Criteria	Significant Impact?
Ethel Avenue, between Victory Bl. & Oxnard St.	4,052	4,255	286	4,541	6.3%	8%	No
Ethel Avenue, between Burbank Bl. & Chandler Bl.	1,708	2,065	116	2,181	5.3%	10%	No
Hillview Park Avenue, between Hatteras St. & Oxnard St.	495	520	58	578	10.0%	16%	No

Source: Kaku Associates, Inc., 2003.

❑ Neighborhood Impact Significance Criteria

The city of Los Angeles has established criteria for determining significant impacts on neighborhood streets. Therefore, for the purposes of the analyses in this EIR and in accordance with the city of Los Angeles criteria, the proposed project would have a significant impact on a local residential street if it contributes to projected average daily traffic (ADT) volumes as follows:

Projected Daily Traffic with Project	Project-Related Increase in Daily Traffic
0 to 999	16 percent or more of final ADT
1,000 or more	12 percent or more of final ADT
2,000 or more	10 percent or more of final ADT
3,000 or more	8 percent or more of final ADT

The threshold for significance decreases as the volume on the residential street increases. An 8 percent increase would be significant if a segment's volume was over 3,000 vpd, but it would not be significant if the volume was less than 3,000 vpd.

❑ Assessment of Significant Traffic Impact

The potential impacts of the proposed project traffic on the adjacent neighborhood impacts were assessed by applying the city's significance criteria to the projected traffic volumes. The results of the analysis, which are summarized in Table 3-39, indicate that the proposed project would not have a significant impact on any of the three neighborhood street segments studied.

Congestion Management Program Analysis

This section presents the Congestion Management Program (CMP) transportation impact analysis for the proposed project. This analysis was conducted in accordance with the transportation impact analysis (TIA) procedures outlined in the 2002 Congestion Management Program for Los Angeles County (Los Angeles County Metropolitan Transportation Authority, June 2002). The CMP requires that, when an environmental impact report is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to utilize these facilities.

❑ CMP Traffic Impact Analysis

The CMP guidelines for determining the study area of the analysis for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project is expected to add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project is expected to add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The cumulative plus project traffic projections described in a previous section were used to track the locations where the incremental additional project-generated trips at buildout may exceed these thresholds.

Based on this evaluation, one CMP arterial monitoring intersection was identified where the project may add 50 or more trips per hour:

- Woodman Avenue & Victory Boulevard

The nearest CMP freeway monitoring locations to the project site are the Ventura Freeway (US 101) at Coldwater Canyon Avenue, the Hollywood Freeway (SR 170) south of Sherman Way, and the San Diego Freeway (I-405) at Victory Boulevard. Based on the project trip assignments developed previously, the proposed project is not expected to add sufficient new traffic to exceed the CMP freeway analysis criteria at these locations. Neither would the added project traffic exceed the CMP freeway analysis criteria on other freeway segments closer to the project site (e.g., the Hollywood Freeway in the vicinity of Victory Boulevard, Oxnard Street, and Burbank Boulevard nor the San Diego Freeway at Burbank Boulevard). Since incremental project-related traffic in any direction during either peak hour is projected to be less than the minimum criteria of 150 vehicles per hour, no further CMP freeway analysis is required.

❑ CMP Arterial Intersection Impact Analysis

Level of Service Methodology

The "Critical Movement Analysis" (CMA) method of intersection capacity analysis was used to determine the intersection volume to capacity ratio and corresponding level of service for the single CMP arterial monitoring station being studied. Existing, cumulative base, and cumulative plus project conditions were analyzed using the turning movement volumes and intersection characteristics described in previous sections with LADOT's CALCADB CMA software. The intersection of Woodman Avenue/Victory Boulevard is currently controlled by ATSAC. In accordance with LADOT procedures, a capacity increase of 7 percent (0.07 V/C adjustment) was applied to reflect the benefits of ATSAC control at those intersections included in the ATSAC program.

Existing Conditions

Weekday AM and PM peak period intersection turning movement counts were conducted at the single CMP analysis intersection in February of 2003. The existing weekday peak hour turning movements at the analyzed intersection are summarized in Tables B-1a and B-1b of Appendix B of the traffic study (see Appendix E of this EIR).

These volumes were analyzed utilizing the CMA methodology described above. Table 3-40 presents the results of this analysis. As can be seen, the analysis indicates that the intersection (Woodman Avenue & Victory Boulevard) currently operates at LOS F conditions during the AM and PM peak hours.

Table 3-40: CMP Arterial Intersection Impact Analysis

	Intersection	Peak Hour	Existing		Cumulative Base		Cumulative + Project		Project Increase in V/C	Significant Project Impact
			V/C	LOS	V/C	LOS	V/C	LOS		
8.	Woodman Av & Victory Bl	AM	1.016	F	1.130	F	1.145	F	0.015	NO
		PM	1.073	F	1.169	F	1.175	F	0.006	NO

Source: Kaku Associates, Inc., 2003.

CMP Significance Criteria

For the purposes of the analyses in this EIR and in accordance with the CMP TIA, the proposed project would have a significant impact if it increases demand at a CMP facility by 2 percent of capacity (i.e., V/C increase >0.020), causing or worsening LOS F (V/C >1.000) operating conditions.

Arterial Intersection Impact Analysis

Year 2008 projected traffic volumes at the analyzed CMP arterial monitoring intersection with and without the proposed project were analyzed utilizing the V/C methodology described above. As shown in Table 3-40, under the CMP significance criteria, the project is not expected to create a regionally significant impact at the CMP arterial monitoring intersection.

❑ CMP Transit Impact Analysis

Summary of Existing and Proposed Transit Services

Existing Transit Services. As discussed previously, Valley College is currently served by bus service provided by the Los Angeles County Metropolitan Transportation Authority (LACMTA) and the City of Los Angeles Department of Transportation. Five bus routes currently provide direct service along Oxnard Street, Burbank Boulevard, Coldwater Canyon, and Fulton Avenue adjacent to the campus: LACMTA Lines 154, 156 and 167, LADOT Commuter Express (LX) Route 549, and LADOT Dash (LDVAN).

Current schedules indicate that LACMTA Line 154 operates 18 buses north/west and 19 buses south/east per weekday. During the AM peak hour (defined as 7:30 to 8:30 a.m. by the CMP), Line 154 operates three buses in total. During the PM peak hour (defined as 4:30 to 5:30 p.m. by the CMP), Line 154 operates three buses in total.

LACMTA Line 156 operates 88 buses northbound and 96 buses southbound per weekday. During the AM peak hour, Line 156 operates 17 buses in total. During the PM peak, Line 154 operates 13 buses in total.

LACMTA Line 167 operates 26 buses per direction per weekday. During the AM peak hour, Line 167 operates two buses per direction. During the PM peak hour, Line 167 operates two buses per direction.

LADOT Commuter Express (LX) Route 549 operates nine buses between Burbank and Pasadena, and eight buses between Glendale and Encino per weekday. During the AM peak hour, Route 549 operates three buses in total. During the PM peak hour, Route 549 operates two buses per direction.

Currently, LADOT Dash (LDVAN) operates 34 buses per direction per day. Of these buses, three operate during the AM peak hour and three during the PM peak hour per direction.

The bus routes combined currently provide 358 bus trips per weekday in the vicinity of the Valley College campus, of which 33 operate during the AM peak hour and 30 operate during the PM peak hour.

Future Transit Services. The proposed San Fernando Valley East-West Transit Corridor Project will enhance transit access to Valley College in the future. The proposed dedicated transit corridor would extend from North Hollywood to Warner Center, with a station to be located immediately adjacent to Valley College campus at the intersection of Fulton Avenue and Burbank Boulevard.

The operating scenario described in the *San Fernando Valley East-West Transit Corridor Final Environmental Impact Report* (Metropolitan Transportation Authority, February 2002) projects that in the immediate future the bus rapid transit (BRT) project would provide 10-minute bus frequencies during peak periods (5 buses per hour in each direction) along the BRT alignment in the vicinity of Valley College. By the year 2020, this is projected to fall to frequencies of 2½ to 5 minutes. In addition to the BRT, there would also be improved frequencies on north-south streets such as Woodman Avenue. Many of the surrounding and parallel transit routes/corridors will also be improved. The frequencies on many routes would be decreased to 30 or 40 minutes from the current 60 minutes. The San Fernando Valley would benefit from transit service improvements both east-west and north-south. The frequencies along major transit corridors such as Sherman Way, Vanowen Street, Van Nuys Boulevard and Sepulveda Boulevard will also be improved to 10 minutes.

These anticipated increases in service levels translate to a large increase in east-west bus frequencies serving the Valley College campus. The proportional increase in bus system passenger capacity would be even greater, since a substantial portion of the BRT buses are proposed to be articulated buses (i.e., buses that are longer than a standard bus and bend in the middle).

Significance Criteria

For the purposes of the analyses in this EIR, the proposed project would have a significant impact on public transit services if it results in a substantial increase in ridership on the existing public transit system, creating capacity shortages on the system and thereby necessitating system improvements to accommodate additional transit service.

Projected Valley College Transit Trip Increases

Potential increases in transit person trips generated at the Valley College campus were estimated as follows. Section D.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) of 1.4 in order to estimate the number of person trips to and from the project and then provides guidance regarding the percentage of person trips assigned to public transit depending on the type of use (commercial/other versus residential) and the proximity to transit services. The nearest designated CMP transit corridor is the San Fernando/Downtown Los Angeles Corridor.

Since the campus is located in the proximity of these services, the CMP guidelines provide that an estimated 3.5 percent of person project trips may use public transit to travel to and from the site.

As shown in Table 3-41, application of these guidelines to the projected increase in campus vehicle tripmaking results in the conclusion that the project could add approximately 279 new transit trips over the day, 26 new transit trips in the AM peak hour and 16 new transit trips in the PM peak hour.

However, as discussed previously, the College campus is located immediately adjacent to the future San Fernando Valley East-West bus rapid transit project, with a station proposed where Burbank Boulevard intersects with Fulton Avenue. Also, as discussed in the mitigation measures section that follows, vehicular trip reductions due to enhanced transportation demand management (TDM) measures are one of the proposed traffic mitigation strategies. Therefore, to present a more conservative analysis, the potential future increase in transit person trips generated on the Valley College campus was also estimated assuming a doubling of the existing transit mode split consistent with the anticipated vehicular trip reductions and to reflect proximity to the BRT. The increase in transit patronage would apply to both existing and future persons on the campus, not just the net growth in persons. As shown in Table 3-41, under this scenario, projected net increases in transit trips generated on the campus are about 2,184 daily, 206 AM peak hour, and 129 PM peak hour trips.

Transit Impact Analysis

With the proposed addition of the San Fernando Valley East-West Transit Corridor, future transit service levels and capacity would be increased substantially in the vicinity of the Valley College. While transit trips generated on the Valley College campus are projected to increase, significant impacts on transit system capacity are not anticipated given the number of new transit trips projected relative to the planned substantial increases in future transit system capacity.

Table 3-41: CMP Transit Analysis

	Factor	Daily	AM Peak Hour	PM Peak Hour
Existing Trips				
Vehicle Trips [a]		33,170	3,118	1,959
Person Trips [b]	1.4	46,438	4,365	2,743
Transit Person Trips [c]	3.5%	1,625	153	96
Future Trips				
Vehicle Trips		38,870	3,656	2,291
Person Trips	1.4	54,418	5,118	3,207
Transit Person Trips				
Existing Mode Split	3.5%	1,905	179	112
Increased Transit Use	7.0%	3,809	358	225
Net New Trips				
Vehicle Trips		5,700	538	332
Person Trips		7,980	753	465
Transit Person Trips:				
Existing Mode Split		279	26	16
Increased Transit Use		2,184	206	129

Notes:
a. Estimated existing and future vehicle trips from Table 7.
b. Person trips estimated from vehicle trips via application of 1.4 person to vehicle ratio from CMP 2002.
c. Transit mode split from CMP 2002.
d. Assumes continuation of exiting mode splits and AVR.
e. Future transit person trips assuming doubling of existing transit mode split due to enhanced TDM/trip reduction measures and proximity of the San Fernando Valley East-West BRT.

Source: Kaku Associates, Inc., 2003.

Parking Impact Analysis

This section presents an analysis of the projected future parking supply and peak parking demands associated with buildout of the proposed Valley College Facilities Master Plan, to ensure that the plan provides sufficient parking supply to accommodate the projected needs.

❑ Future Parking Supply

The Master Plan proposes a variety of changes to the future parking supply serving the Valley College campus. Major proposed changes include:

- Lots A, B, and D and parking along College Road would be reconfigured and reduced in size.
- Lot C would be eliminated.
- Lots E and G would be reconfigured and enlarged.

- Several internal streets currently providing parking would be eliminated.
- A new surface parking lot would be developed on the northwest corner of Burbank Boulevard/Ethel Avenue, replacing Lot H and existing bungalows and connecting with Lot A.
- A new surface parking lot would be developed between the Campus Center Building and the North Gym Building.

The existing and proposed on-campus parking supply is summarized in Table 3-42. As indicated in the table, the proposed number of parking spaces on the Valley College campus would increase from approximately 3,863 existing to about 4,170 at buildout of the Master Plan. In addition, it is anticipated that the approximately 219 on-street spaces on Coldwater Canyon Extension, Hatteras Street, Fulton Avenue, and Burbank Boulevard fronting the campus would remain available for use.

Table 3-42: Existing and Proposed On-Campus Parking Supply

Parking Facility	Number of Parking Spaces	
	Existing [a]	Proposed [b]
Lot A & College Road South	668	620
Lot B	615	595
Lot C	120	[c]
Lot D	854	745
Lot E	300	440
Lot G	882	1,015
Lot H	60	450
College Road North	148	140
Internal Street	182	[c]
Building Front	34	[c]
New Lot b/w Campus Center & North Gym	[d]	165
Campus Total	3,863	4,170

Notes:
b. Source: Kaku Associates fieldwork conducted in fall 2002 (see Table 4).
c. Proposed future supply per 12/17/02 Valley College Recommended Master Plan. Source: tBP/Architecture, March 2003.
d. Existing parking to be eliminated.
e. Proposed future lot.

Source: Kaku Associates, Inc., 2003.

❑ Projected Peak Parking Needs

Future peak parking needs were projected for buildout of the Master Plan. The methodology used to develop the parking demand projections is described herein.

The Master Plan envisions academic growth to 15,693 FTE students by the 2008-2009 academic year. Growth in parking need generated by students, faculty/staff, and campus visitors related to this projected academic growth was estimated by applying empirical parking requirement ratios derived from existing Valley College conditions.

Empirical parking requirement ratios per FTE were derived through comparison of the total number of existing vehicles parked on the campus at the 10 to 11 a.m. weekday daytime peak and at the 7 to 8 p.m. weekday evening peak to the existing (fall 2003) student FTE. For planning purposes, the observed peak parking demands were adjusted upward by a 10 percent circulation factor, since parking facilities are typically considered to be fully utilized when used at 85 to 90 percent of capacity. Based on this analysis, it is estimated that, on average, the peak parking requirement ratio currently generated per FTE on the Valley College campus is as follows:

Peak Parking Requirement – Spaces Per Student FTE	
Weekday Daytime Peak	Weekday Evening Peak
0.27 spaces per FTE	0.22 spaces per FTE

These parking requirement ratios were applied to the projected future FTE to project the future peak parking requirement generated by academic purposes at buildout. Table 3-43 presents the results of this analysis, including both the derivation of the empirical parking ratios and the projection of future peak parking requirements. As can be seen, peak requirements for about 4,190 parking spaces during the weekday daytime peak and 3,515 spaces during the weekday evening peak are projected at buildout, including the 10 percent circulation factor.

❑ Parking Supply And Demand Analysis

Table 3-43 shows that the estimated future supply of parking (4,389 spaces, including 4,170 on campus and 219 street spaces fronting the campus) would be adequate to accommodate the projected peak academic parking needs at buildout (4,190 spaces weekday daytime and 3,515 spaces weeknight). Surpluses of about 199 spaces (weekday peak) and 874 spaces (weeknight peak) are projected.

The projected parking needs shown in Table 3-43 assume continuation of existing mode splits and AVRs. To the extent that the College is successful in implementing additional transportation demand management measures (as discussed in the previous chapter), increased ridesharing and/or transit use could reduce projected future parking demands below those projected herein.

Thus, with implementation of the parking supply proposed as part of the campus Master Plan, projected campus parking demands could be accommodated on campus and along immediate adjacent street frontages, and no significant parking impacts would be anticipated.

3-14.3 Mitigation Measures

The traffic impact analysis presented above determined that buildout of the Valley College Master Plan would result in significant impacts on operating conditions at 10 study intersections. To mitigate these impacts, the following mitigation program elements shall be implemented:

T-1 transportation demand management (TDM) measures to reduce vehicular tripmaking, and

T-2 intersection improvements at four specific intersections.

These program elements are described in greater detail below.

Table 3-43: Peak Parking Analysis, Valley College Master Plan Academic Growth

	Existing Condition (2002/2003)		Future Projection (2008/2009)	
	Weekday Daytime Peak (10-11 a.m.)	Weekday Evening Peak (7-8 p.m.)	Weekday Daytime Peak (10-11 a.m.)	Weekday Evening Peak (7-8 p.m.)
Student Population				
FTE [a]	13,393		15,693	
Parking Demand & Requirement				
Peak Parking Demand [a]				
On Campus	3,064	2,564		
Off Campus Adjacent Street Parking	187	158		
Subtotal	3,251	2,722		
Contingency/Circulation Factor	10%	10%		
Parking Requirement [c]	3,576	2,994	4,190	3,515
Parking Requirement Ratio (Space per FTE)	0.267	0.224		
Parking Supply & Adequacy				
Parking Supply [b,c]				
On-Campus Spaces [d]	3,863	3,863	4,170	4,170
Off-Campus Spaces	219	219	219	219
Total	4,082	4,082	4,389	4,389
Surplus/(Shortfall) Relative to Requirement	506	1,088	199	874

Notes:
a. Source: Valley College, February and March, 2003.
b. Source for existing peak parking demand: parking utilization surveys conducted 10/2/02 (see Table 3-34).
c. Parking requirement is demand plus contingency/circulation factor. Future parking requirement estimated using ratios empirically derived from surveys, applied to future FTE.
d. Source for existing parking supply: Kaku Associates parking inventory conducted fall 2002 (Table 3-33). Source for future campus parking supply: tBP/Architecture, March 2003.

Source: Kaku Associates, Inc., 2003.

a. Transportation Demand Management Measures

Existing TDM Program

Valley College has an ongoing rideshare program to encourage the use of alternative travel modes. Valley College currently implements various transportation demand management measures in compliance with the South Coast Air Quality Management District (SCAQMD) Rule 2202. These measures encourage reductions in vehicle commute trips through the use of alternative travel modes, primarily on the part of faculty and staff employees. According to the Valley College Triennial Employee Commute Reduction Program (approved by the SCAQMD in December 2002), measures currently implemented by the campus include the following:

- Trip reduction program marketing
- Various on-site services and amenities (e.g., cafeteria/lunch room, vending machines, ATM, fitness center, day care center, student store, showers, bike racks, clothes lockers)
- Bicycle program
- Compressed work week
- Direct financial rewards for participation in trip reduction program ($1.00 per day)
- Guaranteed return trip for employees
- Personalized commute assistance offered by on-site employee transportation coordinator
- Rideshare matching service for employees
- Transit display rack

In addition, the campus is serviced by three LACMTA bus routes, one LADOT commuter express route, and one LADOT DASH route, and a proposed San Fernando Valley East-West Bus Rapid Transit station would be located adjacent to the campus at the Burbank Boulevard/Fulton Avenue intersection.

Information from the Valley College 2002 employee survey indicates that approximately 83 percent of faculty and staff currently drive alone, 11 percent carpool, 3 percent use public transit, 1 percent walk, 1 percent bicycle, and 1 percent have compressed work week schedules. These mode splits imply an existing average vehicle ridership (AVR) of 1.13.

TDM as Part of Mitigation Program

The College shall develop and implement additional measures to further encourage alternative modes and reduce tripmaking and parking demands, for both faculty/staff and students. Examples of such measures could include: enhanced trip reduction program marketing, recruitment, and incentives; provision of preferential parking spaces for employees and students; provision of rideshare matching services for students; provision of transit passes at discounted rates; and/or modification of parking rates (e.g., reduced parking fees for carpool drivers, raised parking fees for solo drivers, permits that allowing parking for a reduced number of days in a month for persons using alternative modes but needing the flexibility to drive to the campus on certain days).

As an example of the extent to which increased ridesharing and/or transit use could reduce projected future campus tripmaking, if the College were to be successful in increasing the faculty/staff AVR from 1.13 to 1.21 and in increasing the student AVR similarly, the total future vehicle trip generation of campus students and faculty/staff could be reduced approximately 7 percent. As this reduction would apply to all student and faculty/staff trips generated on the campus, including existing students and faculty/staff (not just to the incremental new trips generated by future population increases), the net effect would be to reduce the projected net growth in campus-generated trips from 17 percent to 9 percent. For the purposes of this mitigation analysis, Mitigation Strategy A assumes that this level of trip reduction would be achieved via implementation of additional TDM measures.

Monitoring shall be conducted of the College's progress towards achieving the TDM goals established in the employee commute reduction program and achieving the 7 percent level of trip reduction discussed herein to mitigate traffic impacts. In accordance with SCAQMD Rule 2202 requirements, Valley College would conduct periodic surveys of Valley College faculty and staff to assess changes in employee average vehicle ridership over time. In addition, since students are not covered by Rule 2202, similar surveys will also be conducted of Valley College students. An initial survey would be conducted of Valley College students to establish the current student AVR for baseline purposes at the outset of the mitigation monitoring program, and periodic student surveys will be conducted along with the employee surveys.

Two years after start of construction, Valley College would submit the first report on the mitigation monitoring program. Subsequent reports will be prepared every 2 years until 2008. Each report would describe the then-current faculty/staff AVR and student AVR based on surveying and changes from the baseline and prior years' AVRs. The reports would also analyze the progress of the project in reaching the AVR goals of the campus, proportional to the level of buildout of the Master Plan at the time of the report. If the goals are not being met, proportional to the buildout of the plan, than identification and implementation of additional TDM measures may be required.

b. Intersection Improvements

Fair share contributions shall be made towards implementation of LADOT's Adaptive Traffic Control System at the following four intersections:

- Woodman Avenue & Oxnard Street
- Coldwater Canyon Avenue & Victory Boulevard
- Coldwater Canyon Avenue & Oxnard Street
- Coldwater Canyon Avenue & Burbank Boulevard

LADOT estimates that the ATCS system provides an additional capacity increase of about 3 percent (0.03 V/C adjustment) beyond the 7 percent increase related to the precursor ATSAC system.

c. Effectiveness of Mitigation Program

Projected cumulative plus project intersection operating conditions with the mitigation strategy described above are shown in Table 3-38. As indicated in the table, the proposed TDM trip reductions and ATCS implementation at four intersections would fully mitigate the project impacts at all 10 affected intersections. Thus, no unavoidable significant impacts are anticipated.

It should be noted that the city of Los Angeles has ownership of the study intersections. Although the proposed mitigation measures appear feasible based on preliminary field review conducted at the time of the Draft EIR preparation, their implementation depends on factors outside of the control of Valley College. If, during the project development and review process, the mitigation measure(s) at particular intersection(s) are determined to be infeasible by the responsible agency(ies), the project impact identified herein at any such intersection(s) would remain significant and unavoidable.

3-14.4 Unavoidable Significant Adverse Impacts

Implementation of the proposed mitigation measures above would reduce impacts at all 10 affected intersections to a less than significant level. However, as also noted above, if responsible agencies with jurisdiction over the affected intersections determine, based on further review, that mitigation measures at a particular intersection are infeasible, the impacts at that intersection would be significant and unavoidable.

3-15 PUBLIC UTILITIES

3-15.1 Environmental Setting

a. Water Supply

The capacity to supply water is a function both of available sources (which are typically controlled by a utility and not directly by the project proponent) and conveyance (which typically is a pressurized underground pipeline system) capacity. In the case of water, there are two kinds of supply sources: natural resources and reclamation. Water is used for fire control purposes as well as drinking (potable water), washing, flushing, recreational purposes, and other domestic consumption. For the proposed project, some portion of the private water conveyance system would be dedicated to fire control purposes and other portions would be dedicated to potable domestic uses. Reclaimed water is wastewater that has been treated to a sufficient degree for certain types of uses. Reclaimed water is non-potable and must be conveyed in a separate system from potable water to avoid the possibility of direct human consumption.

Regional Conditions

Water is supplied to the project area by the City of Los Angeles Department of Water and Power (LADWP). As the major purveyor of water in Los Angeles County, LADWP is the largest water retailer in Southern California. The existing capacity of LADWP's water system (as a function of total supply, water mains, pumping stations, etc.) to deliver water to LADWP's customers is in excess of 1.117 billion gallons per day. LADWP estimates that the long-term safe yield of its water supplies is approximately 1.098 billion gallons per day.

Annual water demand in Los Angeles is approximately 660,000 acre-feet (AF) with an average per capita use of 150 gallons per day. The city's water demand is expected to grow to 756,000 AF per year by 2015, an increase to support the projected population of 4,550,000.[24]

In the 2001-2002 fiscal year, the Los Angeles Aqueduct provided approximately 228,396 AF or 34 percent of the city's water. An additional 73,387 AF or 11 percent was groundwater from local wells, and the remaining 372,357 or 55 percent was water purchased from the Metropolitan Water District of Southern California.[25]

The San Fernando Valley area's water is obtained from Metropolitan Water District (MWD), the Los Angeles Aqueduct, and the San Fernando water basin. It is treated at the Los Angeles Aqueduct Filtration Plant before being delivered to customers.

[24] LADWP Water Supply Fact Sheet, February 2002.
[25] *The Los Angeles Department of Water and Power Water Urban Management Plan,* 2001-2002.

Local and Onsite Conditions

A 6-inch domestic water line that serves the campus connects to a 16-inch city water line in Burbank Boulevard at a location approximately 600 feet east of Fulton Avenue. A second 6-inch water line on the campus provides water to campus fire sprinklers and is connected to a 16-inch city water line on Oxnard Street at a location just east of Campus Drive.

b. Wastewater

Utilities include both consumption aspects, where a resource is consumed by a project, and generation aspects, where a waste product is created that requires disposal. Sewage is an example where water is the consumption aspect and wastewater is the generation aspect. Wastewater flows are therefore directly proportionate to water usage. In the case of sewage, the capacity to dispose of the material is a function both of wastewater treatment capacity (which may occur by law prior to ultimate disposal) and conveyance (which usually is a gravity-driven underground pipeline system) capacity.

Regional Conditions

The city of Los Angeles wastewater system serves over 4 million people in the city and 27 contract cities. It is comprised of more than 6,500 miles of sewer pipelines, 54 pump plants, and 4 wastewater treatment plants that can process approximately 550 million gallons of flow each day. Wastewater in the project area flows to and is treated at the Hyperion Treatment Plant (HTP). The HTP presently provides primary treatment for all influent flow. Hyperion also has the capacity to provide secondary treatment for 450 million gallons per day (mgd) of wastewater. After secondary treatment is completed, the water is discharged into Santa Monica Bay via a 5-mile-long outfall pipe. The sludge generated during the treatment process is collected in tanks at the plant and is anaerobically digested in order to reduce volume and to produce valuable methane gas for energy recovery. Presently, 100 percent of the resultant sludge is beneficially reused, either as an agricultural soil additive, as compost, as a fuel source, or as a chemically treated soil substitute. No sludge is dumped into the Pacific Ocean.

Based on flow data,[26] the HTP treats an average flow of 362 mgd with a capacity of 450 mgd for both primary and secondary treatment. Based on city projections of the capacity or service life of HTP, it is expected that treatment capacity will not be exceeded before the year 2010.

In order to ease treatment capacity demand on the HTP, the City operates two additional wastewater treatment plants: the Donald C. Tillman Water Reclamation Plant (Tillman Plant) and the Glendale Water Reclamation Plant (Glendale Plant). The Tillman Plant serves the western San Fernando Valley area and several communities and contract agencies of the northeastern San Fernando Valley. The Tillman Plant has a current capacity of 80 mgd. The Glendale Plant, which serves the southwestern corner of the Glendale area, is designed to treat an average dry weather flow of 20 mgd. All waste (sludge) from the Tillman Plant and the Glendale Plant is transported to the Hyperion Treatment Plant for final treatment. Future

[26] *www.ladwp.com/water/supply/facts/index.htm*, February 2003.

proposed increases in treatment capacities at the Tillman Plant and Glendale Plant would reduce wastewater flows at the Hyperion Treatment Plant.

Local and Onsite Conditions

There are two 8-inch sewer lines on the campus, which connect to offsite city sewer lines. One 8-inch campus sewer line connects to an 18-inch city sewer line in Fulton Avenue at a location approximately 710 feet north of Burbank Boulevard. The second 8-inch campus sewer line connects to a 10-inch city sewer line on Ethel Avenue at a point approximately 660 feet north of Burbank Boulevard. Most of the wastewater in the city sewer lines flows to a 48-inch diameter sewer line in Chandler Avenue.

c. Solid Waste

Solid waste generated within the boundaries of the city of Los Angeles is collected and disposed of by the Bureau of Sanitation or by private haulers. The city provides collection services for single-family residences, some smaller multi-family residences, parks, City Hall and other public buildings (including Valley College). Multi-family residences, such as apartment complexes, condominiums, commercial and industrial buildings, contract with private companies to collect and transport their solid waste for disposal or recycling. In 1994, in response to diminishing landfill capacity in the county, the city of Los Angeles adopted a long-range, 30-year Solid Waste Management Policy Plan for managing the city's solid waste. An objective of the plan was to maximize waste diversion through source reduction and recycling.

The city of Los Angeles used to own and operate several landfills; however, it is now focused on closure, maintenance, and restoration of six inactive landfills. It also contracts with several material recovery facilities in order to receive, clean, process and market recyclables (includes "green" material to turn into compost).

The County Sanitation Districts of Los Angeles County (Districts) are a confederation of 25 independent special districts serving the solid waste management needs of about 5.3 million people in Los Angeles County. The Districts' service area covers approximately 810 square miles and encompasses 78 cities and unincorporated territory within the county. The role of the Districts is to provide for disposal and management of solid wastes, including refuse transfer and resource recovery. The solid waste system operated by the county includes sanitary landfills, recycling centers, a materials recovery facility, transfer stations, gas-to-energy facilities, and refuse-to-energy facilities. Individual cities and private companies also operate landfills and transfer stations. Availability at each landfill and transfer station is limited by several factors, some of which include the following: 1) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or waste-shed boundary; 2) tonnage permit limitations; 3) operational constraints; and 4) corporate objectives of landfill owners and operators. Three active sanitary landfills within the county currently handle approximately 20,000 tons per day (tpd), of which 16,000 tpd are disposed of and 4,000 tpd are recycled.

Table 3-44 identifies active landfills and recycling centers in Los Angeles County. While there are a number of landfills in the county, the Sanitation District's Board of Directors prohibits the District from accepting waste generated within the city of Los Angeles.[27]

Table 3-44: Active Landfills and Recycling Centers

Landfill Site	Operator	Availability and Restrictions
Antelope Valley Landfill	Waste Management Inc.	No restrictions stated.
Bradley Landfill and Recycling Center	Waste Management Inc.	Bradley West Landfill handles approximately 7,200 tons of solid waste per day. The landfill is nearing capacity and will be closed in 2 to 3 years. The closure of Bradley West Landfill may affect other landfills. This landfill is operated by Waste Management, Inc. In 2000, the Bradley landfill collected approximately 36% of the solid waste originating in the city of Los Angeles.
Calabasas Landfill	LA County Sanitation Districts	Calabasas is operated by LA County Sanitation Districts. The landfill can accept approximately 3,500 tons per day.
Chiquita Canyon Landfill	Consolidated Disposal Service	Chiquita Canyon currently handles 5,000 to 6,000 tons of solid waste per day. Closure is not expected until 2019. In 2000, Chiquita Canyon accepted about 14% of the solid waste originating in the city of Los Angeles.
Commerce Refuse-To-Energy Facility	LA County Sanitation Districts; City of Commerce	The Commerce Refuse-To-Energy Facility is operated by LA County Sanitation Districts. The facility can accept about 1,000 tons of solid waste per day.
Downey Area Recycling & Transfer Facility	LA County Sanitation Districts	No restrictions stated.
Lancaster Landfill	Waste Management Inc.	No restrictions stated.
Palos Verdes Recycling Center	LA County Sanitation Districts	No restrictions stated.
Puente Hills Landfill	LA County Sanitation Districts	Puente Hills, operated by LA County Sanitation Districts, can handle 13,200 tons of solid waste per day. The landfill is prohibited, by the Sanitation Districts "Board of Directors" ordinance, from accepting waste generated within the city of Los Angeles and the county of Orange.

[27] The following landfills in the county of Los Angeles do not accept solid waste collected by the City of Los Angeles: Scholl Canyon Landfill, Southeast Resource Recovery Facility, South Gate Transfer Center, Antelope Valley Landfill Center, Puente Hills, Calabasas (only accepts solid waste generated west of the I-405 freeway).

Table 3-44: Active Landfills and Recycling Centers

Landfill Site	Operator	Availability and Restrictions
Puente Hills Recycling Center	LA County Sanitation Districts	No restrictions stated.
Scholl Canyon Landfill	LA County Sanitation Districts	Scholl Canyon Landfill, operated by LA County Sanitation Districts, handles up to 3,400 tons of solid waste per day.
Southeast Resource Recovery Facility	LA County Sanitation Districts; city of Long Beach	The Southeast Resource Recovery Facility (SERRF) is operated by the city of Long Beach. The facility can handle 2,240 tons per day of solid waste.
South Gate Transfer Center	LA County Sanitation Districts	No restrictions stated.
Sunshine Canyon Landfill	Browning Ferris Industries	Sunshine Canyon Landfill is expected to remain open for approximately 2 to 4 more years with an unlimited capacity. This landfill will then remain open for an estimated 10 years with a restricted capacity unless expansion proposals are approved. With expansion, Sunshine Canyon expects to remain open for another 26 years. It accepts approximately 25% of the solid waste collected from the city of Los Angeles.

Source: Myra L. Frank & Associates, Inc., 2003; Los Angeles County Department of Public Works, Environmental Programs Division, 2003; *www.ladpw.org/epd/solidwaste/main.cfm*, 2003.

Valley College is located in the East Valley Collection solids collection district for the city of Los Angeles. In 2001 the College diverted approximately 52.1 percent of its total tonnage of solid waste generated for that year.

d. Energy

Electricity and Natural Gas

Conserving energy has become an increasingly important issue within the State of California. Some electric providers in recent years implemented rolling blackout programs in an effort to conserve electricity resources while others continue to operate within planning parameters. The most recent rotating outage occurred in March 2001. Due to conservation efforts implemented throughout the state, no outages were necessary during the Summer of 2001. By October 2001, 42 projects representing 2,236 megawatts (MW) of new generation became operational. About 60 percent of these new additions were four large generation facilities licensed by the California Energy Commission. Other additions included the California Independent System Operator peaker projects, several biomass projects that came back online, a peaker facility approved by the

Energy Commission, new renewable facilities, and re-rate projects.[28] Electrical providers who have sufficient capacity to accept additional demand continue to be responsive to market demands. In either case, infrastructure is commonly already in place within a built environment (contrasting to building in an undeveloped area). The delivery of electricity involves system components that are unique to the industry, namely, substations and distribution transformers that "step-down" or lower transmission line power (voltage) to a level suitable for onsite distribution and use. The capacity of the local system, then, is typically a function of the adequacy of system components to handle distribution.

Natural gas is a combustible mixture of simple hydrocarbon compounds, primarily methane, and is used as an industrial and residential fuel. Natural gas consumed in California is tapped at naturally occurring reservoirs, primarily located outside the State, and delivered via high-pressure transmission pipelines to the consumption area. Natural gas is measured in cubic feet.

Regional Conditions

Within the city of Los Angeles, electricity is provided by the LADWP. The largest single source of LADWP's power supply is coal-burning power plants, which provide 58 percent of the city's energy. Natural gas provides about 20 percent, hydroelectricity about 5 percent, nuclear energy about 5 percent, and the remainder, which comes from purchased power, about 14 percent. The sources of coal-fired power production are power plants located outside California, in which the LADWP owns shares. These plants are located near Delta, Utah, in southern Nevada, and near Page, Arizona.

In 2000, LADWP customers in the city consumed electricity at a rate of approximately 22,535 gigawatt-hours (Gwh) per year and had sales of approximately 4,800 (Gwh) to other utilities.[29] Most of LADWP's nearly 1.2 million customers are residential. Business and industry customers, however, consume about 70 percent of the electricity. As a result of increasing demand resulting from economic growth and the ramifications of deregulation of the power industry, in 2000, California experienced an energy shortage, with rolling blackouts occurring in parts of the state. As noted above, the last required rolling outages were in March 2001. During this time, LADWP experienced no electricity shortfalls and had sufficient generating capacity to meet its customers' needs and also provide surplus energy to other parts of the state.

The Southern California Gas Company (The Gas Company) provides natural gas service throughout Los Angeles County. Several other natural gas providers also serve the region. The Gas Company receives its supplies from production fields in the southwestern United States, the Rocky Mountain area, and western Canada. Natural gas consumption is expected to grow at a slow rate over the next 10 years. Industrial use is forecast to grow from about 6,400 million therms to 7,225 million therms by 2010 (a 1.1 percent annual increase). Industrial consumption of natural gas is expected to increase from about 44 percent to 46 percent by 2010. [30]

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[28] California Energy Commission, *2002-2012 Electricity Outlook Report,* February 2002. Typically, "peaker" power plants are designed to be constructed in a relatively small area, can readily connect to the existing transmission and natural gas systems, and have minimal environmental impacts. Such plants are called on to produce power during the peak demand periods of the day, usually the late afternoon.

[29] LADWP, *Energy Services Facts*, May, 2002.

[30] California Energy Commission *2000-2010 California Energy Demand*, June 2000.

Local and Onsite Conditions

Electrical service is provided to the campus by LADWP and natural gas is provided by the Southern California Gas Company.

e. Storm Drains

The city of Los Angeles storm drain system carries water runoff from city streets and routes it into curb side catch basins and then into the municipal storm drain system. This system ultimately drains into the Santa Monica and San Pedro Bays. There are city of Los Angeles owned stormwater drainage structures and outlets along the perimeter of the campus running parallel with Fulton Avenue, Oxnard Street, Coldwater Canyon Avenue, and Burbank Boulevard. There are additional stormwater drainage facilities running down the middle of the campus within Ethel Street. Stormwater runoff from the campus is conveyed via sheet flows into these storm drainage facilities, which drain into the Tujunga Wash.

3-15.2 Environmental Impacts

a. Significance Criteria

Water Supply

For the purposes of the analyses in this EIR, the proposed Los Angeles Valley College Facilities Master Plan would have a significant environmental impact if it:

- substantially depletes water supplies; or
- requires new water supply or distribution facilities or expansion of existing facilities, the construction of which would cause a substantial adverse physical change in the environment; or
- requires new or expanded water entitlements.

Wastewater

For the purposes of the analyses in this EIR, the proposed Los Angeles Valley College Facilities Master Plan would have a significant impact if project-generated wastewater flows would:

- exceed the capacity of the existing sanitary sewer system or treatment plant that serves the project site, thereby requiring new or expanded facilities, the construction of which would cause a substantial physical adverse change in the environment; or
- exceed the capacity of the existing sanitary sewer system or treatment plant resulting in sewage spills or overflows that would have a substantial physical adverse effect on public health or the physical environment.

Solid Waste

For the purposes of the analyses in this EIR, the proposed Los Angeles Valley College Facilities Master Plan would have a significant environmental impact if it generated solid waste that:

- exceeded the capacity of the landfill(s) serving the project site; or
- required or resulted in new or expanded solid waste disposal facilities, the construction of which would cause a substantial adverse physical change in the environment.

Energy

For the purposes of the analyses in this EIR, the proposed Los Angeles Valley College Facilities Master Plan would have a significant environmental impact if it:

- requires or results in the need for new or expanded offsite distribution systems or power generating facilities, the construction of which would cause a substantial adverse physical change in the environment; or
- requires or results in the need for new or expanded natural gas infrastructure, the construction of which would cause a substantial adverse physical change in the environment; or
- conflicts with adopted energy conservation plans; or
- results in wasteful, inefficient, and unnecessary consumption of energy.

Storm Drains

For the purposes of the analyses in this EIR, the proposed Los Angeles Valley College Facilities Master Plan would have a significant environmental impact if it:

- requires or results in the need for new or expanded water drainage facilities, the construction of which would cause a substantial adverse physical change in the environment.

b. Impacts Discussion

Water Supply

As shown in Table 3-45, Valley College currently consumes water at an estimated rate of 214,288 gallons per day (gpd), or 149 gallons per minute (gpm). This consumption includes both domestic water demand and irrigation water demand.

Projected FTE enrollment for the 2008-2009 academic year is 15,693 students. Based on a water consumption rate of 16 gpd per FTE student, water demand on the campus would increase to approximately 251,088 gpd, or 174 gpm, a net increase of 36,800 gpd. Given that LADWP estimates that the long-term safe yield of its water supplies is approximately 1.098 billion gallons per day, this increase, which would occur over a 6-year time period, would not create a significant impact on LADWP's water supply.

Table 3-45: Estimated Current and Future Water Demand				
Measured Unit	**Estimated Existing Water Demand 2002-2003 Academic Year**		**Estimated Future Water Demand 2008-2009 Academic Year**	
	Gallons per Day (gpd)	**Gallons per Minute (gpm)**	**Gallons per Day (gpd)**	**Gallons per Minute (gpm)**
FTE Students	214,288 gpd	149 gpm	251,088 gpd[a]	174 gpm
NET INCREASE	**36,800 gpd**			
Note: [a] Based on 66.4 million gallons consumed by the campus from May 1999 through May 2000, which is equivalent to 16 gpd per FTE student.				

Source: Myra L. Frank & Associates, Inc., 2002.

The Los Angeles Community College District Board, at its March 6, 2002, meeting, voted 7-0 to adopt a sustainable building plan that requires new Proposition A buildings include "green" design features or elements to conserve resources and promote a cleaner environment. These "green" design elements are based on the national Leadership in Energy & Environmental Design (LEED™) sustainable building standards. The College intends to plant water efficient landscaping and install high efficiency fixtures. These strategies will further help reduce the demand on the water supply and system.

Wastewater

Based on the 214,288-gpd water demand for the 2002-2003 academic year, the existing average day wastewater flow for the year is approximately 171,430 gpd.[31] Based on an FTE of 13,393 students for the 2002-2003 academic year, the wastewater generation factor is approximately 13 gpd per student.

Based on these criteria, Table 3-46 shows the existing and projected average day wastewater flows for the campus.

Table 3-46: Average Wastewater Flow Rate for Year 2008				
Measured unit	**Estimated Existing Wastewater Flow 2002-2003 Academic Year**		**Estimated Projected Wastewater Flow 2008-2009 Academic Year**	
	Gallons per Day (gpd)	**Cubic Feet per Second (cfs)**	**Gallons per Day (gpd)**	**Cubic Feet per Second (cfs)**
FTE Students	171,430 gpd	0.26 cfs	200,870 gpd	0.31 cfs
INCREASE IN WASTEWATER FLOW		**29,440 gpd**		
Note: The 13 gpd/student generation factor was derived from total water usage including both domestic and irrigation. As such, the total wastewater flow for the 2008-2009 academic year is a conservative projection. Average daily flow may be lower.				

Source: Myra L. Frank & Associates, Inc., 2003.

[31] Daily water demand is generally accepted to be 125% of the average daily wastewater generation. Note also that the daily water demand includes irrigation use. As such, the estimated daily sewer flow is conservative.

By 2008, the campus will experience an increase in average daily wastewater flow rates of 29,440 gpd. Based on information in an April 24, 2003 letter from Adel Hagekhalil of the Wastewater Engineering Services Division of the City of Los Angeles Bureau of Sanitation, local sewer lines appear to have adequate capacity to accommodate this anticipated increase in wastewater flows. Additionally, the Hyperion Treatment Plant is expected to have adequate capacity through the year 2010 to treat wastewater generated by Valley College and other development in the Treatment Plant's service area.

As noted earlier in this section, implementation of the Master Plan would follow green, energy efficient, sustainable design guidelines as set forth in the LEED™ Guidelines. High efficiency wastewater fixtures will be installed during construction and renovation on the campus. These fixtures will help to decrease the amount of sewage generated by the campus.

Solid Waste

Valley College generated approximately 1057.9 tons (2,115,800 pounds) of solid waste during 2002 or approximately 150 pounds per year per FTE student. Approximately 52.1 percent (550.9 tons) of the waste generated by the College was diverted. The remaining 47.9 percent (507.0 tons) was disposed of in county landfills. Some of the waste materials that were able to be diverted include: business source reduction waste, material exchange waste, beverage containers, cardboard, mixed office paper, scrap metal, onsite composting/mulching, sludge, and concrete/asphalt/rubble.

By the 2008-2009 academic year, FTE students are projected to increase by 2,300 students to 15,693 FTE, which would result in an increase in solid waste generation of approximately 345,000 pounds per year. Assuming the College maintains its 52.1 percent diversion rate, the amount of solid waste requiring disposal would increase by approximately 165,255 pounds. This additional solid waste contribution would be negligible and area landfills are expected to have adequate capacity to accommodate this increase.

Proposed Master Plan projects would follow green, energy efficient, sustainable design guidelines as set forth in the LEED™ Guidelines. As noted above, the College has implemented successful waste diversion practices. Additionally, construction waste management plan would be adopted to recycle or salvage construction, demolition, and land clearing waste generated by construction of projects and proposed under the Master Plan.

Energy

Valley College's current yearly electricity consumption is approximately 5,436,221 kWh or approximately 483 kWh/per FTE student per year. Table 3-47 shows the anticipated future electricity consumption for the academic year 2002-2003.

As shown in Table 3-47, the electricity consumption for the 2008-2009 academic year would be approximately 7,579,719 kWh, which is an increase of approximately 2,144,398 kWh over existing (2002-2003) levels. LADWP is expected to have adequate supplies of electricity to meet the needs of its customers in the near future. Existing infrastructure should be adequate to meet the demands of the new facilities.

Table 3-47: Projected Electricity Consumption For The FALL 2008 Semester				
Measured Item (use)	**Electricity Category**	**Generation Factor**	**Estimated 2002-2003 Academic Year Usage (kWh)**	**Estimated 2008-2009 Academic Year Usage (kWh)**
FTE Students	School/College	483 kWh per year, per FTE student	5,436,221	7,579,719
NET INCREASE IN ELECTRICITY CONSUMPTION				
Note: Based on 5,436,221 kWh consumed by the campus from May 1999 through May 2000, which is equivalent to 483 kWh per year, per FTE student.				

Source: Myra L. Frank & Associates, Inc., 2003.

Proposed Master Plan projects would follow green, energy efficient, sustainable design guidelines as set forth in the LEED™ Guidelines, which would reduce the amount of electricity consumed by the College. As a result, the electricity consumption estimated identified above could be significantly reduced with the implementation of energy efficient, green, and sustainable design.

The LEED™ program encourages increasing the self-supply of energy through renewable technologies to reduce environmental impacts associated with fossil fuel energy use. Projects should be assessed for renewable energy potential including solar, wind, geothermal, biomass, hydro, and biogas strategies. The District is in the process of establishing renewable energy guidelines for use by all of its colleges, which will be incorporated into the programming and design of Valley College's future projects.

The College consumed 131,218 therms of natural gas from May 1999 through May 2000. This equates to approximately 11.7 therms per FTE student per year. Based on that consumption factor, the estimated natural gas consumption for the 2002-2003 academic year would be approximately 156,698 therms. In the 2008-2009 academic year, Valley College is projected to consume approximately 183,608 therms per year which is an increase of 26,910 therms over the estimated 2002-2003 academic year consumption levels. This increase over time would not have a significant impact on service provider supplies and the existing distribution system is adequate to meet demands. No adverse significant impacts would occur.

As noted above, implementation of renewable energy sources by the College in accordance with the LEED™ program would reduce future increases in fossil fuel energy use.

Storm Drains

The proposed Master Plan would not substantially increase the amount of impervious surfaces on the campus; therefore, significant increases in stormwater flows that would require new city storm drain facilities are not anticipated. Additionally, as part of providing new parking facilities on the campus, new stormwater treatment facilities would also be constructed. These facilities would be designed to treat the stormwater discharged from the redeveloped campus and would adhere to the city of Los Angeles Standard Urban Stormwater Management Plan requirements. Also, please see Section 3-9, Hydrology and Water Quality, for a discussion of storm water discharge impacts and requirements.

3-15.3 Mitigation Measures

a. Water Supply and Wastewater

Although no significant water supply or wastewater impacts are anticipated, the following mitigation measures shall be implemented.

WS-1 New landscaping should include drought resistant plants where appropriate and feasible.

WS-2 All new construction and renovation shall include water conservation measures, such as low flush toilets.

b. Solid Waste

No significant solid waste impacts are anticipated. Consequently, no mitigation measures are necessary.

c. Energy

No significant energy impacts are anticipated; therefore no mitigation is required.

d. Storm Drains

No significant storm drain impacts are anticipated. Consequently, no mitigation measures are necessary.

3-15.4 Unavoidable Significant Adverse Impacts

a. Water Supply

Implementation of the Master Plan would not result in any unavoidable significant adverse impacts to water supply.

b. Wastewater

Implementation of the Master Plan would result in no significant adverse impacts to wastewater services. Implementation of the mitigation measures above would ensure that impacts would be less than significant.

c. Solid Waste

Implementation of the Master Plan would not result in any unavoidable significant adverse impacts to solid waste facilities.

d. Energy

Implementation of the Master Plan would not result in any unavoidable significant adverse impacts to energy infrastructure and systems. Implementation of the mitigation measure above would ensure that impacts remain below a level of significance.

e. Storm Drains

Implementation of the Master Plan would not result in any unavoidable significant adverse impacts to the storm drain system.